IMPORTANT: You must read the following before continuing. The following applies to the listing particulars following this page and you are therefore advised to read this page carefully before reading, accessing or making any other use of the listing particulars. In accessing the listing particulars, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from the Issuer, the Borrower or any Joint Lead Manager (each as defined in the listing particulars) as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES OR ANY OTHER JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE NOTES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION, AND THE NOTES MAY NOT BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF U.S. PERSONS, EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS. THE ATTACHED LISTING PARTICULARS MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THESE LISTING PARTICULARS IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORISED AND WILL NOT BE ABLE TO PURCHASE ANY NOTES.

Confirmation of your representation: In order to be eligible to view the attached listing particulars or make an investment decision with respect to the Notes, prospective investors must be located outside the United States and not U.S. persons, in accordance with Regulation S under the Securities Act. These listing particulars are being sent to you at your request, and by accessing these listing particulars you shall be deemed to have represented to the Issuer and the Joint Lead Managers that (1) you and any customers you represent are located outside the United States and are not a U.S. person or acting for the account or benefit of a U.S. person, and the electronic mail address that you have provided and to which this email has been delivered is not located in the United States, its territories and possessions, any state of the United States or the District of Columbia and (2) you consent to delivery of such listing particulars by electronic transmission. Under no circumstances shall these listing particulars constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the securities being offered, in any jurisdiction in which such offer, solicitation or sale would be unlawful. Recipients of these listing particulars who intend to subscribe for or purchase the Notes are reminded that any subscription or purchase may only be made on the basis of the information contained in these listing particulars.

These listing particulars may only be provided to persons in the United Kingdom in circumstances where section 21(1) of the Financial Services and Markets Act 2000 does not apply to the Issuer. This communication is directed solely at (i) persons outside the United Kingdom, (ii) persons with professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 as amended (the "**Order**"), (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order and (iv) persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended) in connection with the issue or sale of any securities of the Issuer or any member of its Group (as defined in the listing particulars) may otherwise lawfully be communicated or caused to be communicated (all such persons in (i)-(iv) above being "**relevant persons**"). Any investment activity to which this communication relates will only be available to and will only be engaged with relevant persons. Any person who is not a relevant person should not act or rely on this communication.

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "**MiFID II**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**") or in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "**IMD**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently, no key information document required by Regulation (EU) No 1286/2014 (the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the United Kingdom may be unlawful under the PRIIPs Regulation.

These listing particulars or information contained therein is not an offer, or an invitation to make offers, sell, purchase, exchange or transfer any securities in the Russian Federation to or for the benefit of any Russian person or entity, and does not constitute an advertisement of offering of any securities in the Russian Federation within the meaning of Russian securities laws. Information contained in these listing particulars is not intended for any persons in the Russian Federation who are not "qualified investors"

within the meaning of Article 51.2 of the Federal Law No. 39-FZ "On the Securities Market" dated 22 April 1996, as amended ("**Russian QIs**") and must not be distributed or circulated into Russia or made available in Russia to any persons who are not Russian QIs, unless and to the extent they are otherwise permitted to access such information under Russian law.

You are reminded that these listing particulars have been delivered to you on the basis that you are a person into whose possession these listing particulars may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorised to, deliver these listing particulars to any other person. The materials relating to this offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licenced broker or dealer, and the Joint Lead Managers or any affiliate of the Joint Lead Managers is a licenced broker or dealer in the relevant jurisdiction. The attached listing particulars has been sent to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the Issuer, any Joint Lead Manager, any person who controls them or any director, officer, employee or agent of them or affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the listing particulars distributed to you in electronic format and the hard copy version available to you on request from the Joint Lead Managers.



U.S.\$500,000,000 4.3 per cent. Loan Participation Notes due 2027 issued by, but with limited recourse to, TMK CAPITAL S.A. (incorporated under the laws of Luxembourg) for the sole purpose of financing a loan to

PAO "TMK"

such loan initially, unconditionally and irrevocably guaranteed by "Volzhsky Pipe Plant", Joint stock company, and to be additionally unconditionally and irrevocably guaranteed by "Seversky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company, and "Taganrog Metallurgical Plant", Public Joint stock company

TMK Capital S.A., a company incorporated as a société anonyme existing under the laws of the Grand Duchy Luxembourg (the "Issuer"), is issuing an aggregate principal amount of U.S.S500,000,000 4.3 per cent. Loan Participation Notes due 2027 (the "Notes") for the sole purpose of financing a loan (the "Loan") to PAO "TMK", a public joint stock company existing under the laws of the Russian Federation ("TMK" or the "Borrower"), pursuant to a loan agreement dated 10 February 2020 (the "Loan Agreement") between the Issuer and the Borrower. The Loan shall be initially unconditionally and irrevocably guaranteed (the "Initial Loan Guarantee") by "Volzhsky Pipe Plant", Joint stock company, a non-public joint stock company, "Sinarsky Pipe Plant", Public Joint stock company, "Guarantees", and together with the Initial Loan Guarantees", and together with the Initial Loan Guarantees", and together with the Initial Loan Guarantees (as defined below), the "Loan Guarantees"). See "The Loan Agreement, the Borrower may be obliged to procure certain of its subsidiaries (the "Further Loan Guarantors") to give further guarantees of the Loan Agreement (the "Noteholders") to request that the Issue redeem the Notes, as set out in the Terms and Conditions. Any Further Loan Guarantees in respect of the Loan will be communicated to the Noteholders") to request that the Issuer redeem the Notes, as set out in the Terms and Conditions. Any Further Loan Guarantees in respect of the Loan will be communicated to the Noteholders") to request that the Issuer redeem the Notes, as set out in the Terms and Conditions. Any Further Loan Guarantees in respect of the Loan will be communicated to the No

Pursuant to the trust deed dated on or around 12 February 2020 (the "**Trust Deed**") relating to the Notes between the Issuer and BNY Mellon Corporate Trustee Services Limited as trustee (the "**Trustee**"), the Issuer will provide certain security for all payment obligations in respect of the Notes for the benefit of the Noteholders, including a first fixed charge in favour of the Trustee of all amounts paid and payable to it under the Loan Agreement and the Loan Guarantees and an assignment to the Trustee of the Issuer's rights, benefits and interests under the Loan Agreement and the Loan Guarantees, other than in respect of certain reserved rights (as more fully described in "*Description of the Transaction and the Security*"). Interest on the Loan will be payable at a rate of 4.3 per cent. per annum semi-annually in arrear in equal instalments on the interest payment date falling on 12 February and 12 August in each year, commencing on 12 August 2020, and, provided that the Issuer receives such payment in full, the Notes will bear interest from, and including, 12 February 2020 on such dates at the same rate.

The Notes are senior, limited recourse obligations of the Issuer. In each case where amounts of principal, interest and additional amounts (if any) are stated to be payable in respect of the Notes, the obligation of the Issuer to make any such payment shall constitute an obligation only to account to the Noteholders, on each date upon which such amounts of principal, interest and additional amounts (if any) are due, for an amount equivalent to the principal, interest and additional amounts (if any) actually received by or for the account of the Issuer from the Borrower or the Loan Guarantors pursuant to the Loan Agreement or the Loan Guarantees, as the case may be. The Issuer will have no other financial obligation under the Notes. Noteholders will be deemed to have accepted and agreed that they will be relying solely and exclusively on the credit and financial standing of the Borrower and the Loan Guarantors under the Loan Guarantoes, respectively.

Except as set forth herein, payments in respect of the Notes will be made without any deduction or withholding for, or on account of, the taxes of any relevant jurisdiction.

The Loan, and correspondingly the Notes, may be redeemed early at the option of TMK in certain circumstances, all as more fully described in the Loan Agreement and Terms and Conditions of the Notes.

AN INVESTMENT IN THE NOTES INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 1.

The Notes, the Loan and the Loan Guarantees (together, the "Securities") have not been, and will not be, registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), and, subject to certain exceptions, may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S under the Securities Act ("Regulation S")). The Notes may be offered and sold to non-U.S. persons in offshore transactions as defined in and in reliance on Regulation S. The Issuer has not been and will not be registered under the Investment Company Act. For a description of these and certain further restrictions on offers, sales and transfers of the Notes and this distribution of the Listing Particulars, see "Subscription and Sale".

Application has been made to the Irish Stock Exchange plc trading as Euronext Dublin ("**Euronext Dublin**") for the approval of this document as Listing Particulars. Application has also been made to Euronext Dublin for the Notes to be admitted to the Official List of Euronext Dublin and to trading on the Global Exchange Market which is the exchange regulated market of Euronext Dublin. The Global Exchange Market is not a regulated market for the purposes of Directive 2014/65/EU (as amended, "**MiFID II**"). References in these Listing Particulars to the Notes being listed (and all related references) shall mean that the Notes have been admitted to trading on the Global Exchange Market.

The Notes are expected to be rated "BB-" by Standard & Poor's International Services, Inc ("**Standard & Poor's**") and "B1" by Moody's Investors Service Ltd. ("**Moody's**"). TMK is rated "BB-" long-term credit rating with a stable outlook by Standard & Poor's and "B1" corporate family rating with a positive outlook by Moody's. Moody's is established in the EU and registered under Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies (the "**CRA Regulation**"). Standard & Poor's is not established in the EU and is not registered under the CRA Regulation. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation. Similar ratings on different types of notes do not necessarily mean the same thing. The ratings do not address the likelihood that the principal on the Notes will be prepaid or paid on a particular date before the Maturity Date. The ratings do not address the marketability of the Notes or any market price. Any change in the credit ratings of the Notes could adversely affect the price that a subsequent purchaser will be willing to pay for the Notes. The significance of each rating should be analysed independently from any other rating. See "*Risk Relating to the Notes, the Issuer, the Guarantees and the Trading Market – Changes to the Borrower's credit rating may adversely affect the trading price of the Notes"*.

The Notes will be offered and sold in the minimum denomination of U.S.\$200,000 and higher integral multiples of U.S.\$1,000. The Notes will initially be represented by interests in a Global Certificate in registered form (the "Global Certificate"), without interest coupons, which will be deposited with a common depositary for Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking, S.A. ("Clearstream, Luxembourg"), and registered in the name of a nominee therefor, on the Issue Date. Beneficial interests in the Global Certificate will be shown on, and transfers thereof will be effected only through records maintained by Euroclear or Clearstream, Luxembourg (as the case may be) and their respective participants. See "Clearing and Settlement". Definitive note certificates in registered form will only be available in certain limited circumstances as described herein.

Global Coordinators and Joint Bookrunners

J.P. Morgan

Lead Managers and Joint Bookrunners BofA Securities

ALFA-BANK

Sova Capital

UBS Investment Bank Lead Manager

Sovcombank

GPB Financial Services Hong Kong Limited (Gazprombank) VTB Capital

Renaissance Capital

The date of these Listing Particulars is 10 February 2020.

IMPORTANT INFORMATION ABOUT THESE LISTING PARTICULARS

These Listing Particulars do not constitute a prospectus for the purposes of Regulation (EU) 2017/1129 of the European Parliament and of the Council, as amended.

Each of TMK, the Loan Guarantors and the Issuer accepts responsibility for the information contained in these Listing Particulars. To the best of the knowledge of TMK, each of the Loan Guarantors and the Issuer, the information contained in these Listing Particulars is in accordance with the facts and does not omit anything likely to affect the import of such information.

In addition, TMK and each of the Loan Guarantors confirm that: (i) these Listing Particulars contain all information with respect to TMK and its consolidated subsidiaries taken as a whole (the "**Group**"), each of the Loan Guarantors, each member of the Group, the Loan, the Loan Guarantees and the Notes that is material in the context of the issue and offering of the Notes (the "**Offering**"); (ii) the statements contained in these Listing Particulars relating to TMK, each of the Loan Guarantors, the Group, the Loan, the Loan Guarantees and the Notes are in every material respect true and accurate and not misleading; (iii) the opinions, beliefs, expectations and intentions expressed in these Listing Particulars with regard to TMK, each of the Loan Guarantors, the Group, the Loan Guarantees and the Notes are based on reasonable assumptions; (iv) there are no other facts in relation to TMK, any of the Loan Guarantors, the Group, the Loan, the Loan Guarantees and the Notes the omission of which would make any statement in these Listing Particulars misleading in any material respect; and (v) all reasonable enquires have been made by the Issuer, TMK and each of the Loan Guarantors to ascertain such facts and to verify the accuracy of all such information and statements.

Information under the headings "Overview of the Group", "Risk Factors", "Operating and Financial Review" and "Business" includes extracts from information and data publicly released by official and other sources (including, inter alia, the Government of the Russian Federation (the "Russian Government"), the Central Bank of the Russian Federation ("CBR"), the Federal State Statistics Service ("Rosstat"), the Ministry of Economic Development of Russia, the Russian Ministry of Finance, Moody's, Standard & Poor's, Worldsteel Association and Metal Expert). The information mentioned in this paragraph has been accurately reproduced and, as far as TMK is aware and is able to ascertain from information published by the parties mentioned in this paragraph above, no facts have been omitted, which would render the reproduced information inaccurate or misleading. The Issuer, TMK and each of the Loan Guarantors accept responsibility for accurately reproducing such information and data, but accept no further responsibility in respect of such information and data. Some of the data contained in this document has been derived from the official data produced and published by the Russian Government agencies, including the CBR and Rosstat. The official data published by Russian federal, regional and local governments are substantially less complete or researched than those of Western countries. Official statistics may also be produced on different bases than those used in Western countries. Any discussion of matters relating to Russia in these Listing Particulars are, therefore, subject to uncertainty due to concerns about the completeness or reliability of available official and public information.

These Listing Particulars do not constitute an offer of, or an invitation by or on behalf of the Issuer, TMK, any of the Loan Guarantors, the Joint Lead Managers (as defined in "*Subscription and Sale*"), the Trustee or any other person to subscribe for or purchase any Notes in any jurisdiction where it is unlawful to make such an offer or invitation. The distribution of these Listing Particulars and the offering of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession these Listing Particulars come are required by the Issuer, TMK, the Loan Guarantors, the Joint Lead Managers, the Trustee and the Agents (as defined herein) to inform themselves about and to observe any such restrictions. For a description of certain further restrictions on offers and sales of Notes and distribution of these Listing Particulars, see "*Subscription and Sale*".

No person is authorised to provide any information or to make any representation not contained in or not consistent with these Listing Particulars and any information or representation not so contained must not be relied upon as having been authorised by or on behalf of the Issuer, TMK, the Loan Guarantors, the Joint Lead Managers, the Trustee or the Agents. The delivery of these Listing Particulars at any time does not imply that the information contained in it is correct as at any time subsequent to its date. Neither the delivery of these Listing Particulars nor the offering, sale or delivery of any Note shall in any circumstances create any implication that there has been no change in the affairs of the Issuer, TMK, the Loan Guarantors or the Group since the date hereof or since the date upon which these Listing Particulars have been most recently amended or supplemented or that there has been no adverse change, or any event reasonably likely to involve any adverse change, in the prospects or condition (financial or otherwise) of the Issuer, TMK, the Loan Guarantors or the Group, since the date of these Listing Particulars.

None of the Issuer, TMK, the Loan Guarantors, the Joint Lead Managers, the Trustee, the Agents or any of its or their respective representatives or affiliates makes any representation to any offeree or purchaser of the Notes offered hereby regarding the legality of an investment by such offeree or purchaser under applicable legal, investment or

similar laws. Each investor should consult with its own advisers as to the legal, tax, business, financial and related aspects of the purchase of the Notes.

Prospective purchasers must comply with all laws that apply to them in any place in which they buy, offer or sell any Notes or possess these Listing Particulars. Any consents or approvals that are needed in order to purchase any Notes must be obtained. The Issuer, TMK, the Loan Guarantors, the Joint Lead Managers, the Trustee and the Agents are not responsible for compliance with these legal requirements. The appropriate characterisation of the Notes under various legal investment restrictions, and thus the ability of investors subject to these restrictions to purchase the Notes, is subject to significant interpretative uncertainties. No representation or warranty is made as to whether, or the extent to which, the Notes constitute a legal investment for investors whose investment authority is subject to legal restrictions, and investors should consult their legal advisers regarding such matters.

In connection with the issue of the Notes, J.P. Morgan Securities plc (the "**Stabilisation Manager**") (or any person acting on behalf of the Stabilisation Manager) may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the Notes is made and, if commenced, may cease at any time and must be brought to an end no later than the earlier of 30 days after the Issue Date of the Notes and 60 days after the date of the allotment of the Notes. Any stabilisation action or over-allotment shall be conducted in accordance with all applicable laws and rules.

Any website referred to in these Listing Particulars does not form any part of these Listing Particulars and has not been scrutinised or approved by Euronext Dublin.

No representation or warranty, express or implied, is made by the Joint Lead Managers, the Trustee, the Agents or any of its or their affiliates or any person acting on their behalf as to the accuracy or completeness of the information set forth in these Listing Particulars. Nothing contained in these Listing Particulars is, or shall be relied upon as, a promise or representation, whether as to the past or the future.

Each person receiving these Listing Particulars acknowledges that such person has not relied on the Joint Lead Managers, the Trustee, the Agents or any of its or their affiliates or any person acting on their behalf in connection with its investigation of the accuracy or completeness of such information or its investment decision. Each person contemplating making an investment in the Notes from time to time must make its own investigation and analysis of the creditworthiness of the Issuer, TMK, the Loan Guarantors and the Group and its own determination of the suitability of any such investment, with particular reference to its own investment objectives and experience, and any other factors which may be relevant to it in connection with such investment.

The Issuer is not and will not be regulated by the Central Bank of Ireland (the "**Central Bank**") as a result of issuing the Notes. Any investment in the Notes does not have the status of a bank deposit and is not within the scope of the deposit protection scheme operated by the Central Bank.

The language of these Listing Particulars is English. Certain legislative references and technical terms have been cited in their original language in order that the correct technical meaning may be ascribed to them under applicable law.

This document is only being distributed to and is only directed at (1) persons who are outside the United Kingdom or (2) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "**Order**") or (3) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "**Relevant Persons**"). The Notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, the Relevant Persons. Any person who is not a Relevant Person should not act or rely on this document or any of its contents.

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in MiFID II; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA or in the United Kingdom. For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (the "**Insurance Distribution Directive**"), where

that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the United Kingdom has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the United Kingdom may be unlawful under the PRIIPs Regulation.

THE NOTES AND THE LOAN HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES. SUBJECT TO CERTAIN EXCEPTIONS, THE NOTES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT). For a description of these and certain further restrictions on offers, sales and transfers of the Notes and the distribution of these Listing Particulars, see "Subscription and Sale—United States of America".

These Listing Particulars or the information contained herein is not an offer, or an invitation to make offers, sell, purchase, exchange or transfer any securities in the Russian Federation to or for the benefit of any Russian person or entity, and does not constitute an advertisement of offering of any securities in the Russian Federation within the meaning of Russian securities laws. Information contained in these Listing Particulars is not intended for any persons in the Russian Federation who are not "qualified investors" within the meaning of Article 51.2 of the Federal Law No. 39-FZ "On the securities market", dated 22 April 1996, as amended ("**Russian QIs**") and must not be distributed or circulated into Russia or made available in Russia to any persons who are not Russian QIs, unless and to the extent they are otherwise permitted to access such information under Russian law.

Information contained in these Listing Particulars may not correspond to the risk profile of a particular investor, does not take into account one's personal preferences and expectations on risk and/or profitability and therefore does not constitute an individual investment recommendation for the purposes of Russian law.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Financial Information

The Group's consolidated financial statements include:

- the Group's audited consolidated financial statements as of and for the year ended 31 December 2018 (the "2018 Financial Statements") and the Group's audited consolidated financial statements as of and for the year ended 31 December 2017 (the "2017 Financial Statements", and together with the 2018 Financial Statements, the "Audited Financial Statements"); and
- the Group's reviewed interim condensed consolidated financial statements as of and for the nine months ended 30 September 2019 (the "Interim Financial Statements", and together with the Audited Financial Statements, the "Financial Statements").

The Group's Audited Financial Statements included in these Listing Particulars were prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board.

The Interim Financial Statements were prepared in accordance with the requirements of International Accounting Standard 34 ("**IAS 34**") "Interim Financial Reporting".

The Financial Statements are included in these Listing Particulars beginning on page F-2.

Unless otherwise stated in these Listing Particulars, information extracted from consolidated income statement for the nine months periods ended 30 September 2019 and 2018 set out in the Interim Financial Statements and included in these Listing Particulars comprises both continuing and discontinued operations. For the details, please see "*Operating and Financial Review—Segments*".

Non-IFRS Financial Information

These Listing Particulars include certain financial measures that are not measures of performance specifically defined by IFRS. These include Adjusted EBITDA, Adjusted EBITDA margin, Adjusted EBITDA (last 12 months), Net Debt and Net Debt/Adjusted EBITDA (last 12 months), Gross profit margin percentage and Total capitalisation. For the definition of, disclaimers relating to and reconciliation of non-IFRS measures for the relevant reporting periods, see "Summary Consolidated Financial and Operating Information—Selected Non-IFRS Measures", "Operating and Financial Review—Cost of Sales and Gross Profit—Gross Profit" and "Capitalisation".

TMK has included these measures because it believes that they enhance an investor's understanding of the Group's financial performance. Further, TMK uses the non-IFRS measures disclosed in these Listing Particulars in the Group's business operations to, among other things, evaluate the performance of operations and develop budgets and measure performance against those budgets. TMK also believes that these non-IFRS measures are commonly reported by comparable businesses and used by investors in comparing the performance of businesses. In addition, certain of the Group's financing facilities contain financial covenants that are based on similarly titled measures, calculated using the methodology set out in those facilities.

The non-IFRS measures disclosed in these Listing Particulars are unaudited supplementary measures of the Group's performance and liquidity that are not required by, or presented in accordance with, IFRS. These measures are not defined by IFRS and TMK's use and definition of these metrics may vary from other companies in its industry due to differences in accounting policies or differences in the calculation methodology. These non-IFRS measures have limitations as analytical tools and should not be considered in isolation, or as substitutes for financial information as reported under IFRS. Accordingly, undue reliance should not be placed on the non-IFRS measures presented in these Listing Particulars.

Currencies

The functional currency of the Group's entities is the currency of their primary economic environment and includes the Russian rouble, US dollar, Euro and others. The Group's presentation currency is the US dollar, which is convenient for the major current and potential users of the Group's financial statements. Solely for the convenience of the reader, certain amounts included in these Listing Particulars have been translated from Roubles into U.S. dollars, as set forth under "*Exchange Rate Information*". Investors in the Notes should not construe those translations as a representation that those amounts could be converted from one currency to another at any particular rate or at all. In these Listing Particulars, all references to:

- "EUR", "euro", "Euro" and "€" are to the currency of the participating member states in the third stage of the Economic and Monetary Union of the Treaty establishing the European Community;
- "RUB", "Russian rouble" and "Rouble" are to the currency of the Russian Federation; and
- "USD", "U.S. dollar", "U.S.\$" and "\$" are to the currency of the United States of America.

Rounding

Certain figures included in these Listing Particulars have been subject to rounding adjustments, accordingly, figures shown for the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that precede them.

Certain Definitions

Solely for the purposes of the "Use of Proceeds" section of these Listing Particulars, all references in that section to:

- "Activity subject to Sanctions" are to any activity specified or referenced in the United States' Ukraine Freedom Support Act of 2014 and/or Sovereignty, Integrity, Democracy, and Economic Stability of Ukraine Act of 2014 and/or Countering America's Adversaries Through Sanctions Act of 2017 (the "CAATSA"), as a basis for the imposition of sanctions or penalties on any person as a result of such person engaging in such activity;
- "Sanctions" are to any sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), the U.S. Department of State, the Security Council of the United Nations, the respective governmental institutions and agencies of the U.S., the United Kingdom, the European Union or a member state of the European Union including, without limitation, the United States Department of Commerce and Her Majesty's Treasury, or any other equivalent governmental or regulatory department, agency or authority with the power to administer economic, financial or trade sanctions; and
- "Sanctioned Country" are to a country or territory that is the subject or the target of country-wide or territory-wide Sanctions, including, without limitation, Crimea, Cuba, Iran, North Korea, South Sudan, Sudan and Syria.

Certain Jurisdictions

In these Listing Particulars, all references to:

- "China" are to the People's Republic of China;
- "CIS" are to the Commonwealth of Independent States and its member states as at the date of these Listing Particulars: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan (as an associate member), Ukraine and Uzbekistan;
- "EEA" are to the European Economic Area;
- "**EU**" are to the European Union;
- "Germany" are to the Federal Republic of Germany;
- "Italy" are to the Italian Republic;
- "Kazakhstan" are to the Republic of Kazakhstan;
- "Romania" are to the Republic of Romania;
- "**Russia**" are to the Russian Federation;
- "Singapore" are to the Republic of Singapore;
- "U.K." and "United Kingdom" are to the United Kingdom of Great Britain and Northern Ireland; and
- "U.S." and "United States" are to the United States of America.

EXCHANGE RATE INFORMATION

The following tables set forth, for the periods indicated, certain information regarding the exchange rate between the Rouble and the U.S. dollar, based on the official exchange rate quoted by the CBR. These rates differ from the actual rates used in the preparation of the Group's financial statements and other financial information appearing in these Listing Particulars.

	Roubles per U.S. dollar			
Year ended 31 December	High	Low	Average ⁽¹⁾	Period end ⁽²⁾
2014	67.79	32.66	38.60	56.26
2015	72.88	49.18	61.32	72.88
2016	83.59	60.27	66.83	60.66
2017	60.75	55.85	58.30	57.63
2018	69.97	55.67	62.93	69.47
2019	67.19	61.72	64.62	61.91
Month	High	Low	Average ⁽¹⁾	Period end
January 2020	63.04	60.95	61.81	63.04
February 2020 (up to and including 10 February 2020)	63.91	62.80	63.32	63.47

⁽¹⁾ The average of the exchange rates for each day during the year or period, as applicable.

⁽²⁾ The period end rates are quoted for the last business day of the relevant period.

Source: CBR

The Rouble/U.S. dollar exchange rate as quoted by the CBR on 10 February 2020 was 63.47 Roubles per 1 U.S. dollar.

As a result of legislation in force in Russia relating to investments by foreign companies, Russian regulators may impose from time to time certain currency control limitations on the ability of the Group's companies to convert Roubles into U.S. dollars or other hard currencies or to convert U.S. dollars or other hard currencies into Roubles.

ENFORCEABILITY OF JUDGMENTS IN THE RUSSIAN FEDERATION

TMK, the Initial Loan Guarantor and the Additional Loan Guarantors exist under the laws of the Russian Federation in accordance with the Civil Code and the Federal Law No. 208-FZ "On Joint Stock Companies", dated 26 December 1995, as amended (the "**JSC Law**") and substantially all of the assets of TMK, the Initial Loan Guarantor and the Additional Loan Guarantors and the assets of most of the Group's consolidated subsidiaries are located outside the United Kingdom and the United States. In addition, all of the directors and executive officers of TMK, the Initial Loan Guarantor and the Additional Loan Guarantors are residents of countries other than the United Kingdom or the United States, principally the Russian Federation. As a result, it may not be possible for Noteholders and/or the Trustee to:

- effect service of process within the United Kingdom or the United States upon TMK or the Loan Guarantors or any of the directors or executive officers of TMK or the Loan Guarantors named in these Listing Particulars; or
- enforce, in the English or U.S. courts, judgments obtained outside English or U.S. courts against TMK and the Loan Guarantors or any of their respective directors and executive officers named in these Listing Particulars.

In addition, it may be difficult for the Noteholders and/or the Trustee to enforce, in original actions brought in courts in jurisdictions located outside the United Kingdom and the United States, liabilities predicated upon English laws or U.S. federal securities laws. Courts in the Russian Federation will generally recognise and enforce judgments rendered by a court in any jurisdiction outside the Russian Federation if (i) an international treaty providing for the recognition and enforcement of judgments in civil cases exists between the Russian Federation and the country where the judgment is rendered (ii) a federal law is adopted in the Russian Federation providing for the recognition and enforcement of foreign court judgments and/or (iii) on the basis of reciprocity. No such treaty for the reciprocal recognition and enforcement of foreign court judgments in civil and commercial matters exists between the Russian Federation and certain other jurisdictions (including the United Kingdom and the United States), and no relevant federal law on enforcement of foreign court judgments of such jurisdictions has been adopted in the Russian Federation. Although on 2 July 2019 the Russian Federation signed the final act of the 2019 Convention on the Recognition and Enforcement of Foreign Judgments in Civil or Commercial Matters (the "Hague Judgments Convention"), neither the Russian Federation nor any other state (except for Uruguay) has signed the Hague Judgments Convention as at the date of these Listing Particulars. Besides, the Hague Judgments Convention has not entered into force yet. Consequently, as at the date of these Listing Particulars the Russian Federation is not a party to any international treaty providing for the recognition and enforcement of judgments in civil cases rendered by the courts of the United Kingdom or the United States. As a result, new proceedings may have to be brought in the Russian Federation against TMK or the Loan Guarantors or their officers or directors.

In the absence of an applicable treaty, enforcement of a final judgment rendered by a foreign court may still be recognised by a Russian court on the basis of reciprocity, if courts of the country where the foreign judgment is rendered have previously enforced judgments issued by Russian courts. While there have been instances when Russian courts have recognised and enforced English court judgments on grounds of reciprocity, the existence of reciprocity must be established at the time the recognition and enforcement of a foreign judgment is sought, and it is not possible to predict whether a Russian court will in the future recognise and enforce on the basis of reciprocity a judgment issued by a foreign court, including an English or a United States court.

Even if an applicable international treaty is in effect or a foreign judgment might otherwise be recognised and enforced on the basis of reciprocity, the recognition and enforcement of a foreign judgment will in all events be subject to exceptions and limitations provided for in Russian law. For example, a Russian court may refuse to recognise or enforce a foreign judgment if its recognition or enforcement would contradict Russian public policy.

In addition, in the absence of established court practice, it is difficult to predict whether a Russian court will be inclined in any particular instance to recognise and enforce an English court judgment on these grounds. Furthermore, Russian courts have limited experience in the enforcement of foreign court judgments. The limitations described above, including the general procedural grounds set out in Russian legislation for the refusal to recognise and enforce foreign court judgments in Russia, may significantly delay the enforcement of such judgment, or completely deprive the Issuer, the Noteholders or the Trustee of effective legal recourse for claims under the Notes or the relevant Loan.

The Loan Agreement, the Loan Guarantees and any non-contractual obligations arising out of or in connection with them will be governed by English law and will provide for disputes, controversies and causes of action brought by any party thereto to be settled by arbitration in accordance with the rules of the LCIA (formerly the London Court of International Arbitration) (the "LCIA Rules"). The place of such arbitration shall be London, England. The Russian Federation and the United Kingdom are parties to the United Nations (New York) Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "New York Convention"). Consequently, Russian courts should

generally recognise and enforce in the Russian Federation an arbitral award from an arbitral tribunal in the United Kingdom on the basis of the rules of the New York Convention (subject to qualifications provided for in the New York Convention and compliance with Russian procedural regulations and other procedures and requirements established by Russian legislation).

The Arbitrazh Procedural Code of the Russian Federation (the "**Arbitrazh Procedural Code**") sets out the procedure for the recognition and enforcement of foreign arbitral awards by Russian courts. The Arbitrazh Procedural Code also contains an exhaustive list of grounds for the refusal of recognition and enforcement of foreign arbitral awards by Russian courts, which grounds are broadly similar to those provided by the New York Convention.

The Arbitrazh Procedural Code and other Russian procedural legislation could change, and other grounds for Russian courts to refuse the recognition and enforcement of foreign courts' judgments and foreign arbitral awards could arise in the future. In practice, reliance upon international treaties may meet with resistance or a lack of understanding on the part of a Russian court or other officials, thereby introducing delay and unpredictability into the process of enforcing any foreign judgment or any foreign arbitral award in the Russian Federation.

Furthermore, a Russian court may refuse to recognise or enforce an arbitral award under the LCIA Rules, if its recognition or enforcement would contradict Russian public policy and the application of English law to each Loan Agreement, the Loan Guarantees and any non-contractual obligations arising out of or in connection with any Loan Agreement or the Loan Guarantees may be limited or precluded by the mandatory provisions of Russian laws relating to the exclusive jurisdiction of Russian courts and the application of mandatory provisions of Russian laws with respect to bankruptcy, winding up or liquidation of Russian companies.

DOCUMENTS INCORPORATED BY REFERENCE

The audited financial statements of the Issuer prepared in accordance with Luxembourg legal and regulatory requirements relating to the preparation and presentation of the annual accounts for the years ended 31 December 2018 and 2017 together with the audit report thereon (the "Issuer Financial Statements"), have been filed with Euronext Dublin and shall be deemed to be incorporated in, and to form part of, these Listing Particulars. The financial statements for the years ended 31 December 2018 and 2017 may be obtained from the website of Euronext Dublin at: https://direct.euronext.com/AnnouncementRNSDetails.aspx?id=14268696 and https://direct.euronext.com/AnnouncementRNSDetails.aspx?id=14310719.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in these Listing Particulars are not historical facts but constitute "forward-looking statements" within the meaning of section 27A of the Securities Act. Such forward-looking statements are set forth in "*Risk Factors*", "*Operating and Financial Review*" and "*Business*" and elsewhere in these Listing Particulars. Forward-looking statements include statements concerning plans, objectives, goals, strategies, future events or performance, and underlying assumptions and other statements, which are other than statements of historical facts. TMK may from time to time make written or oral forward-looking statements in reports to shareholders, holders of debt securities and in other communications. Examples of such forward-looking statements include, but are not limited to:

- the Group's target Net Debt to Adjusted EBITDA ratio;
- the valuation of the Group's resources and production (including, but not limited to, the sufficiency of the Group's raw materials, electricity, capacity of the production facilities);
- strategies, objectives, outlook and growth prospects;
- future plans, financial position, expectations, projections and potential for future growth;
- future revenues and performance;
- integration of the Group's businesses;
- liquidity, capital resources and capital expenditures;
- growth in demand for the Group's products;
- economic outlook and industry trends;
- developments of the Group's markets;
- the impact of regulatory initiatives;
- the Group's competitive strengths and weaknesses;
- plans or intentions relating to acquisitions; and
- the strengths of the Group's competitors.

In particular, included throughout these Listing Particulars are statements relating to the Group's current and future investment plans. While such statements accurately reflect TMK's current expectations, such expectations are based on a number of assumptions, which may prove to be incorrect or which may change, thereby causing the Group to revise its investment plans. Further, except where otherwise specifically indicated, the Group is not contractually or otherwise committed to making such investments or expenditures, and consequently the Group may choose to invest less than the amounts stated herein, or not at all.

Forward-looking statements that may be made by the Group from time to time (but that are not included in these Listing Particulars) may also include projections or expectations of revenues, income (or loss), earnings (or loss) per share, dividends, capital structure or other financial items or ratios.

Words such as "targets", "believes", "anticipates", "expects", "estimates", "intends", "plans", "will", "may", "could" or "should" and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. In addition to these important factors and matters discussed elsewhere herein, important factors that, in the TMK's view, could cause actual results to differ materially from those discussed in the forward-looking statements include:

• changes in the demand for oil country tubular goods ("**OCTG**"), line pipes and large diameter welded pipes;

- changes in the supply of, or demand for raw materials, including scrap metal, ferroalloys, steel billets and steel plate;
- railroad and other transportation performance and costs;
- inflation, interest rate and exchange rate fluctuations;
- the Group's future expansion plans and capital expenditure;
- the Group's ability to fund its future operations and capital needs through borrowing or otherwise;
- the Group's ability to service its existing indebtedness;
- the effects of changes in laws, regulations, taxation or accounting standards or practices;
- the effects of, and changes in, the policy of the Russian Government, in particular with respect to the regulation of the Group's core business;
- changes in political, social, legal or economic conditions in Russia or the Group's export markets;
- the impact of general business and economic conditions in Russia and abroad;
- technological changes; and
- the effects of competition in the geographic and business areas in which the Group conducts its operations.

This list of important factors is not exhaustive. When relying on forward-looking statements, prospective investors should carefully consider the aforementioned factors and other uncertainties and events, especially in light of the political, economic, social and legal environment in which the Group operates. Such forward-looking statements speak only as at the date on which they are made and are not subject to any continuing obligations under any guidelines issued by Euronext Dublin. Accordingly, the Issuer, TMK, the Loan Guarantors and the Joint Lead Managers do not undertake any obligation to update or review any of them, whether as a result of new information, future events or otherwise. The Issuer, TMK, the Loan Guarantors and the Joint Lead Managers do not make any representation, warranty or prediction that the results anticipated by such forward-looking statements will be achieved, and such forward-looking statements represent, in each case, only one of many possible scenarios and should not be viewed as the most likely or standard scenario.

DESCRIPTION OF THE TRANSACTION AND THE SECURITY

The following summary description should be read in conjunction with, and is qualified in its entirety by "Terms and Conditions of the Notes", "Summary of the Provisions Relating to the Notes in Global Form" and the forms of the Loan Agreement and the Deed of Loan Guarantee set out herein.

The transaction will be structured as a loan to the Borrower, as borrower, from the Issuer, as lender.

The Issuer will issue the Notes for the sole purpose of funding the Loan to the Borrower. The Initial Loan Guarantor will initially provide an unconditional and irrevocable guarantee in respect of the obligations of the Borrower under the Loan Agreement. In addition, the Loan Agreement provides that the Borrower must procure the Additional Loan Guarantors each to provide a further unconditional and irrevocable guarantee in respect of the obligations of the Borrower under the Loan Agreement within 90 days of the Issue Date, and any failure to do so will be deemed a Further Loan Guarantee Event (as defined in the Terms and Conditions of the Notes). Upon a Further Loan Guarantee Event, the Noteholders will have an option to require the Issuer to redeem their Notes, in whole or in part, at the principal amount thereof, plus accrued but unpaid interest and plus any additional amounts or other amounts that may be due thereon, up to but excluding the date of redemption and the Borrower will be required to prepay the Loan to the *Notes, the Issuer, the Guarantees and the Trading Market—TMK's subsidiaries may not approve the issuance of guarantees securing the Borrower's obligations under the Loan Agreement"*. In certain circumstances set out in the Loan Agreement, the Loan Guarantees in respect of any or all Loan Guarantors may be terminated or Further Loan Guarantees.

The Notes will have the benefit of, be subject to, and be constituted by the Trust Deed. The Issuer will not have any obligations to the Noteholders, other than the obligation to account to the Noteholders in respect of the payments of principal, interest and any increased amounts of principal interest or any other payment due under the Loan (as defined in the Loan Agreement) and any Additional Amounts (as defined in the Loan Agreement) under the Loan and the Loan Guarantees if, and only to the extent, received from the Borrower or any Loan Guarantor, less any amounts in respect of Reserved Rights (as defined in Terms and Conditions of the Notes). Accordingly, the assets backing the issue, namely the obligations of the Borrower pursuant to the Loan Agreement and the Loan Guarantees, have characteristics that demonstrate the capacity to produce funds to service any payments due and payable under the Notes.

As provided in the Trust Deed, the Issuer will charge (the "Charge") by way of security to the Trustee:

- all of its rights, title, interests and benefits in and to principal, interest and other amounts now and in the future paid and payable to it under the Loan Agreement and the Deed of Loan Guarantee;
- its right to receive amounts paid and payable to it under any claim, award or judgment relating to the Loan Agreement and the Deed of Loan Guarantee; and
- its rights, title, interest and benefit to sums held on deposit from time to time, in an Account in London in the name of the Issuer (the "Account") with the Principal Paying Agent together with the debt represented thereby (other than interest from time to time earned thereon if any),

provided that Reserved Rights and amounts relating to Reserved Rights are excluded from the Charge.

The Issuer will also assign absolutely to the Trustee all of its rights, title, interest and benefit to and under the Loan Agreement and the Deeds of Loan Guarantee (save for those rights charged or excluded above) to the Trustee upon the closing of the offering of the Notes.

The Borrower or a Loan Guarantor, as applicable, will be obliged to make payments under the Loan Agreement or the Deed of Loan Guarantee, as the case may be, to the Account. The Issuer will covenant in the Trust Deed not to agree to any amendments to, or any modification or waiver of, or authorise any breach or proposed breach of, the terms of the Loan Agreement or the Deed of Loan Guarantee unless the Trustee has given its prior written consent or unless authorised to do so by an Extraordinary Resolution or Written Resolution (each as defined in the Trust Deed) of the Noteholders (except in relation to Reserved Rights). The Issuer will further agree to act at all times in accordance with the instructions of the Trustee from time to time with respect to the Loan Agreement and the Deed of Loan Guarantee (subject to being indemnified and/or secured to its satisfaction), other than as provided in the Trust Deed and except in relation to Reserved Rights. Any amendments, modifications, waivers or authorisations made with the Trustee's consent shall be binding on the Noteholders. The Issuer will also agree in the Agency Agreement (as defined in the Trust Deed) to require that all payments made by the Borrower under the Loan Agreement or the Loan Guarantee of Loan Guarantee, as the case may be, be directed to the Account. Formal notice of the

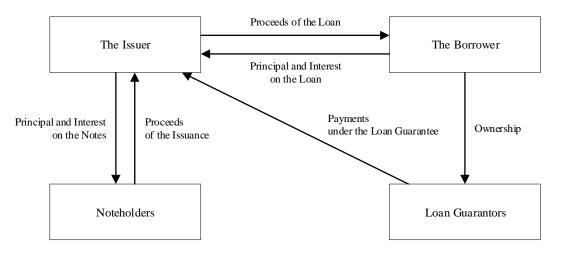
security interests created by the Trust Deed will be given to the Borrower and each of the Loan Guarantors, who will each be required to acknowledge the same. The Issuer does not intend to provide post-issuance transaction information regarding the Notes or the performance of the Loan.

In the event that the Trustee enforces the security interests granted to it, the Trustee will apply the proceeds of enforcement in accordance with the provisions of the Trust Deed. The Trustee is not obliged to enforce the security interests granted to it unless it has been indemnified and/or secured to its satisfaction and instructed to do so by the Noteholders.

Payments in respect of the Notes will be made without any deduction or withholding for or on account of Luxembourg taxes, except as required by law. See "Terms and Conditions of the Notes -8. Taxation". In the event that any deduction or withholding is required by law, the Issuer will be required, except in certain limited circumstances, to pay increased amounts of principal, interest or any other payment due thereon or Additional Amounts to the extent that it receives corresponding amounts from the Borrower or a Loan Guarantor under the Loan Agreement or Deed of Loan Guarantee, as the case may be. In addition, payments under the Loan Agreement and the Deed of Loan Guarantee shall, except in certain limited circumstances, be made without deduction or withholding for or on account of Russian or Luxembourg taxes, except as required by law. In the event that any deduction or withholding is required by law with respect to payments under the Notes or the Loan Agreement, the Borrower and the Loan Guarantors will be obliged, except in certain limited circumstances, to increase the amounts payable under the Loan Agreement and the Deed of Loan Guarantee, respectively, by an amount equivalent to the required tax payment. See "Risk Factors — Risks Relating to the Notes, the Issuer, the Guarantees and the Trading Market — TMK's payments under the Loan, the Guarantors' payments under the Guarantees and the Issuer's payments under the Notes may be subject to withholding tax" and "Risk Factors — Risks Relating to the Notes, the Issuer, the Guarantees and the Trading Market - Tax might be withheld on proceeds received from a source within Russia upon disposal of the Notes reducing their value".

In certain circumstances, the Loan may be prepaid at its principal amount, together with accrued interest, at the Borrower's option, upon the Borrower being required to increase the amount payable or to pay increased amounts of principal, interest or any other payment due thereon on account of Russian or Luxembourg taxes under the Loan Agreement or required to pay additional amounts on account of certain costs incurred by the Issuer. The Issuer may, in its own discretion, require the Loan to be prepaid if it becomes unlawful for the Loan or the Notes to remain outstanding, as set out in the Loan Agreement. In the event the Loan is repaid due to any of these circumstances, the Issuer will redeem the Notes in whole, but not in part, at the principal amount thereof, together with accrued and unpaid interest and additional amounts, if any, to the date of redemption.

The following is a diagram setting forth the transaction structure:



CONTENTS

Page

RISK FACTORS	1
OVERVIEW OF THE GROUP	
OVERVIEW OF THE OFFERING	
USE OF PROCEEDS	
CAPITALISATION	
SUMMARY CONSOLIDATED FINANCIAL AND OPERATING INFORMATION	49
OPERATING AND FINANCIAL REVIEW	
BUSINESS	
MANAGEMENT AND CORPORATE GOVERNANCE	
PRINCIPAL SHAREHOLDERS	
REGULATORY MATTERS	
RELATED PARTY TRANSACTIONS	
DESCRIPTION OF THE ISSUER AND THE INITIAL LOAN GUARANTOR	
THE LOAN AGREEMENT	
TERMS AND CONDITIONS OF THE NOTES	193
SUMMARY OF THE PROVISIONS RELATING TO THE NOTES IN GLOBAL FORM	
CLEARING AND SETTLEMENT	
SUBSCRIPTION AND SALE	
TAXATION	
GENERAL INFORMATION	
GLOSSARY OF TECHNICAL TERMS	
INDEX TO FINANCIAL STATEMENTS	F-1

RISK FACTORS

An investment in the Notes involves a high degree of risk. Prospective investors should carefully consider, amongst other things, the risks set forth below and the other information contained elsewhere in these Listing Particulars before making any investment decision with respect to the Notes. The risks highlighted below, individually or together, could have a material adverse effect on the Group's business, financial condition, results of operations, future prospects and/or the trading price of the Notes which, in turn, could have a material adverse effect on the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and, as a result, the Issuer's ability to service its payment obligations under the Notes. In addition, the value of the Notes could decline due to any of these risks, and investors may lose some or all of their investment.

Prospective investors should note that the risks described below are the principal risks inherent in investing in the Notes which the Group believes are relevant to prospective investors, but they are not the only risks that each of the Group or the Issuer, as the case may be, faces and neither the Group nor the Issuer represents that the statements below regarding the risks of holding any Notes are exhaustive. There may be additional risks that the Group or the Issuer currently consider immaterial, or of which the Group and the Issuer are currently unaware, and any of these risks could have similar effects to those set forth above.

Prospective investors should consider carefully whether an investment in the Notes is suitable for them in light of the information in these Listing Particulars and their personal circumstances.

Risks relating to the Group's Business and the Pipe Industry

The Group's business is substantially dependent on the oil and gas industry and a decline in international prices of oil and gas, and/or other factors adversely affecting the oil and gas industry globally or in Russia could have an adverse impact on the Group's business, financial condition and results of operations.

The oil and gas industry is the principal consumer of steel pipe products worldwide and accounts for most of the Group's sales, in particular sales of OCTG, line pipes and LDP. In the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group's pipes sales (by volume) to the clients in the oil and gas industry amounted to 78.8 per cent., 78.1 per cent., 76.7 per cent. and 78.4 per cent., respectively, of the Group's aggregate sales. The oil and gas industry has historically been, and continues to be, volatile, and downturns in the oil and gas markets may adversely affect demand for the Group's products, which depends, among other factors, on the number of oil and gas wells being drilled, completed and reworked, and the depth and drilling conditions of these wells, as well as on the construction and maintenance of pipelines to service these wells. In turn, the volume of such industry specific activities depends on the level of capital spending by major oil and gas companies.

The level of the oil and gas companies' capital expenditures, including with respect to OCTG and other kinds of pipes used in oil and gas exploration and drilling and production activities, is driven to a large extent by the prevailing prices for oil and gas and the perceived stability and sustainability of those prices. A decline in oil and gas exploration, drilling and production activities in Russia and the CIS, Europe, Middle East, United States and globally (including as a result of the volatility of oil and gas prices), may have a material adverse effect on the Group's business, financial condition and results of operations.

Oil and natural gas prices are subject to significant volatility due to factors beyond the Group's control, including macroeconomic conditions (including the continuous economic growth slowdown in China) and levels of oil and gas inventory in major oil and gas consumer markets, market uncertainty (stemming from, among other things, the recent attack on the oil refinery in Saudi Arabia and the trade tensions between the United States and China), regulatory control (including by the Russian Government), sanctions, political developments in petroleum-producing regions (including the ongoing tensions between the United States and Iran) and the price and availability of alternative energy sources. Although for the time being, the volatility in the oil and gas prices has had limited effect on the capital expenditures of the Group's clients, there can be no assurance that oil and gas prices will not decline or that such prices will remain at sufficiently high levels to support levels of investment in exploration, drilling and production activities that will sustain demand for the Group's products. Further, any increase in demand following such a decline may not have an immediate positive effect on the Group's business if industry-wide inventory levels of OCTG products are high, as customers can draw from inventory rather than purchase new products, which has been seen in prior periods including in relation to the Group's U.S. operations following the last global economic crisis.

The Group's business is particularly dependent on the Russian oil and gas industry. In the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, sales to customers located in Russia accounted for 58.5 per cent., 53.9 per cent., 60.7 per cent. and 72.3 per cent., respectively, of the Group's revenues. In addition, the Group's management estimates that the Group had approximately a 23 per cent. market share for tubes and pipes in Russia, a 33 per cent. market share for pipes used in the oil and gas industry in Russia, a 56 per cent.

market share for seamless pipes in Russia and a 64 per cent. market share for seamless OCTG in Russia, in each case by sales volume for the nine months ended 30 September 2019. The oil and gas industry in Russia is subject to significant political, economic and other factors which could affect the Group's business, financial condition and results of operations. In addition, the Russian oil industry is subject to substantial taxes, including resources production taxes and export customs duties, and changes to the tax regime and customs duties rates may adversely affect the level of oil and gas exploration and development in Russia. For further details see "Operating and Financial Review—Overview" and "Operating and Financial Review—Certain Factors Affecting the Group's Results of Operations—Developments in the Oil and Gas Industry, in particular in Russia".

Any decrease in the demand for, and/or a reduction of production of, oil and/or natural gas, and/or a substantial or extended decline in the global prices of crude oil and gas prices, or uncertainty regarding future prices, could limit the level of capital expenditures by the Group's customers in the oil and gas industry, either in Russia or globally, which would negatively affect demand for the Group's products and services, and could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and, as a result, the Issuer's ability to service its payment obligations under the Notes.

The Group's business is dependent on the global economic conditions.

The economic downturn which began in 2008 has had an extensive adverse impact on the industrial activity generally and, in particular, the pipe producing business resulting in the decrease in the pricing of, and demand for, the Group's products. Notwithstanding the general recovery from the 2008 financial crisis, the global economy continues to be subject to a number of uncertainties, including mounting government deficits, discontinuation of government stimulus programmes, deflation in certain markets, continuing high levels of unemployment in some countries and uncertainty caused by the departure of the United Kingdom from the European Union, as well as the continued stagnation or contraction in some markets.

According to the World Economic Outlook issued in April 2019, following growth in 2017 and early 2018, the global economic activity slowed notably in the second half of 2018, reflecting a confluence of factors affecting major economies. According to the World Economic Outlook issued in October 2019, in 2019 the global economy generally experienced a slowdown, with the growth rate decreasing to 3 per cent. In particular, China, one of the largest global economies, currently experiences a slowdown in economic growth and higher stock market volatility. In 2018, the growth of China's GDP was 6.6 per cent. year on year, which represented one of the worst results since the 1990s. In 2019, the growth of China's GDP continued a slowdown trend amounting to 6.0 per cent. year-on-year in the third quarter of 2019.

Market conditions and economic environment affect, among other things, the Group's capacity utilisation levels. To the extent the Group is required to maintain production at moderate capacity utilisation levels, including in response to market conditions, this may result in higher cost of sales per tonne, as compared to the production at higher utilisation levels, thus decreasing the Group's profit margins.

If global economic conditions deteriorate, or a similar economic contraction were to reoccur, the resulting contraction in demand for many of the Group's products and the tightening of the credit markets could have a material adverse effect on the Group's business, results of operations and financial condition, its ability to perform its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to make payments under, or the trading price of, the Notes.

Increases in the cost of raw materials may have a material adverse effect on the Group's business, financial condition and results of operations.

The Group requires substantial quantities of raw materials to produce steel pipes. The Group's principal raw material requirements include scrap metal and ferroalloys for use in its in-house steel-making operations, steel billets for the production of seamless pipes, and steel coils and plates for producing welded pipes. The demand for the principal raw materials used by the Group is generally correlated with macroeconomic fluctuations, which are, in turn, affected by global economic conditions. The prices of raw materials are also influenced by a wide range of factors, including iron ore and coal prices, crude oil and gas prices, worldwide production capacity, capacity utilisation rates, global and Russian industrial production levels, inflation and exchange rates, trade barriers and improvements in steelmaking processes.

Raw materials and consumables costs represent the Group's main production costs and accounted for 66.5 per cent., 67.1 per cent., 67.6 per cent. and 57.8 per cent. of the Group's total cost of sales in the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively.

The Group is exposed to increases in cost of raw materials. For example, the Group's cost of raw materials and consumables for the year ended 31 December 2017 increased from U.S.\$1,523.0 million to U.S.\$2,380.3 million, or by 56.3 per cent., as compared to the year ended 31 December 2016, which resulted in a significant increase in the Group's total cost of sales in the year ended 31 December 2017. In addition, the Group is subject to increases in the prices of scrap metal, which is the principal raw material used in its steel-making operations and accordingly in the production of seamless pipes. In particular, in Russia, the Group primarily purchases scrap from a single local supplier. In the nine months ended 30 September 2019 and the year ended 31 December 2018, the cost of scrap metal in Russia in Rouble terms decreased on average by 1 per cent. and increased on average by 18 per cent. year-on-year, respectively. The cost of coils remained unchanged year-on-year in the nine months ended 30 September 2019 and increased on average by 12 per cent. year-on-year in the year ended 31 December 2018.

The Group has taken certain steps to diversify its sources of raw materials and to reduce the risk of market volatility and its exposure to the scrap metal market. For example, in 2016 and 2019, TMK entered into agreements with Metalloinvest for the supply of hot-briquetted iron ("**HBI**") (which serves as an alternative raw material to scrap), which provide for a formula-based pricing mechanism. In addition, in 2019, TMK entered into a formula-based agreement with Hermes (part of Translom Group) for the supply of scrap which uses Metalexpert prices as the benchmark. Notwithstanding the Group's efforts to diversify and reduce the cost of its raw materials, the Group may experience higher scrap prices or be unable to procure scrap metal in necessary quantities in the future.

For the production of welded pipes, the Group relies heavily on the supply of steel coils and plates, which account for a significant share of the total costs of welded pipe production. The price of raw materials, such as scrap metal, steel billets and steel coils and plates, has had, and will continue to have, a significant impact on the Group's production costs. Although the quarterly or semi-annual price adjustments for the Group's customers are linked primarily to the cost of raw materials, there can be no assurance that the Group will be able to negotiate price increases for its products in response to increased raw materials costs (thus passing along increases in the cost of raw materials to its customers), in a timely manner or at all in the future.

Any material increase in the cost of raw materials could have a material adverse effect on the Group's business, results of operations, financial condition and prospects, its ability to perform its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group is significantly leveraged and is required to meet certain financial and other restrictive covenants under the terms of its indebtedness, and failure to do so could negatively affect the Group's business, financial condition and results of operations.

As at 30 September 2019, the Group's total interest-bearing loans and borrowings amounted to U.S.\$3,039.9 million, including U.S.\$1,291.3 million of current interest-bearing loans and borrowings. Certain of the Group's material loan agreements and debt securities currently include financial covenants. For example, some covenants are set in relation to leverage, total indebtedness and interest coverage ratio, in respect of TMK and/or its subsidiaries and impose financial ratios that must be maintained. These restrictions limiting the incurrence of indebtedness could prevent the Group from obtaining sufficient working capital, fund capital expenditures, make acquisitions and/or otherwise limit the ability of the Group to operate effectively. Other covenants impose restrictions in respect of certain transactions, including restrictions in respect of acquisitions, pledging of assets, material asset disposals, granting loans to third parties and guaranteeing indebtedness of third parties, dividend payments. The set of covenants is not uniform across the various debt instruments. These debt instruments do not use uniform definitions of the accounting measures to be tested and the levels at which the ratios are set vary to some extent.

Further, the Group's ability to comply with its financial covenants and make payments on its indebtedness depends upon the Group's ability to maintain its operating performance at a certain level, which is subject to general economic and market conditions and to financial, business and many other factors, some of which the Group cannot control. If the Group's cash flow from operating activities becomes insufficient, it may be required to take certain actions, including delaying or reducing capital or other expenditures, selling properties or other assets or seeking additional debt or equity capital in an attempt to restructure or refinance the Group's indebtedness. The Group may be unable to take any of these actions on favourable terms or in a timely manner. Further, such actions may not be sufficient to allow the Group to comply with its financial covenants or service its borrowing obligations in full and, in any event, may have a material adverse effect on the Group's business. In addition, many of the Group's existing debt instruments contain cross-default provisions under which a breach of a financial or other debt instruments to demand immediate payment thereof. In addition, while, in accordance with its strategy, the Group plans to continue focusing on maximising operating cash flow and reducing the leverage, endeavouring to achieve a long-term target Net Debt to Adjusted EBITDA ratio of 2.5x or lower, there can be no guarantee that such deleveraging, including the target Net Debt to Adjusted EBITDA ratio, will be achieved or sustained.

If the Group cannot service its debt, refinance existing debt as it comes due, remain in compliance with its covenants or does not achieve the target deleveraging, such failure could have a material adverse effect on the Group's business, results of operations, financial condition and prospects, its ability to perform its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group is exposed to the risks connected with TMK IPSCO disposal

On 22 March 2019, the Group entered into a stock purchase agreement with Tenaris for the sale of 100 per cent. interest in IPSCO Tubulars, Inc. ("**IPSCO Tubulars**") and its subsidiaries (together with IPSCO Tubulars, "**TMK IPSCO**") which, as at 30 September 2019, represented the Americas segment, one of the three Group's reporting segments (see "*Operating and Financial Review—Segments*"). On 17 December 2019, the U.S. Department of Justice approved the disposal of TMK IPSCO which was completed on 2 January 2020. See "*Business—Strategic Ventures—Recent Sale of TMK IPSCO*", "*Operating and Financial Review—Recent TMK IPSCO disposal*" and "*Operating and Financial Review—Segments*".

In connection with the disposal of TMK IPSCO, the Group entered into a 6-year master distribution agreement with Tenaris (the "**Master Distribution Agreement**") whereby, starting from 2 January 2020, Tenaris became the exclusive distributor of the Group's OCTG and line pipe products in the United States and Canada. The Group intends to coordinate such sales through TMK Overseas LLC.

Although, according to the Group, the disposal of TMK IPSCO is in line with the Group's strategy of monetisation of certain of its international assets, there can be no assurance that the cash flows or profits from the application of the consideration paid by Tenaris for purchase of TMK IPSCO would result in the same or higher cash flows or profits which would have been generated by TMK IPSCO should it have remained part of the Group. In addition, the Group may incur losses if Tenaris or any other indemnified party makes a claim for indemnity or a breach of warranties set out in the stock purchase agreement. Should any these events occur, the Group would incur losses which could constitute all or a significant part of profits received by the Group as a result of the sale of TMK IPSCO.

Furthermore, although, despite the disposal of TMK IPSCO, the Group's management endeavours to maintain shipments to the North American market by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement, there can be no assurance that the disposal of TMK IPSCO would not result in a loss or a significant decrease of the Group's market share in the U.S. market. To the extent such loss or decrease occurs, the Group may be required to substitute sales in the United States with sales to other markets, which may result in decreased demand and negatively affect the Group's profit margins. To the extent that the Group is successful in maintaining its share in the North American market following TMK IPSCO disposal, the Group would continue to be exposed to the risks inherent to the U.S. market a number of which is beyond the Group's control. In addition, the sale of the Group's products produced outside of the United States into the U.S. market may increase the Group's transportation costs.

Any of the foregoing could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group generates a substantial portion of its revenues from sales to a limited number of customers, and the loss of any of these customers could have a material adverse effect on the Group's business, financial condition and results of operations.

A significant portion of the Group's revenues is generated by sales to a limited amount of large customers. In the nine months ended 30 September 2019, the Group's five largest customers by sales volumes were Rosneft, Gazprom, Surgutneftegas, Gazprom Neft and B&L PIPECO SERVICES INC, accounting for 37.1 per cent. of the Group's total pipe sales volumes. In the year ended 31 December 2018, the Group's five largest customers by sales volumes were Rosneft, Gazprom, Surgutneftegas, CTAP LLC and SOONER PIPE LLC, accounting for 37.3 per cent. of total pipe sales volumes. In the nine months ended 30 September 2019, the Group's largest customer of LDP, Gazprom, accounted for 53.3 per cent. of the Group's consolidated LDP sales volumes, and in the year ended 31 December 2018, Gazprom accounted for 68.5 per cent. of the Group's consolidated LDP sales volumes. Due to the limited number of purchasers of the Group's products, the Group's management expects that these concentrations of customers will continue in the future.

Further, there can be no assurance that the Group will be able to maintain its relationships with its largest customers, or that it will be able to continue to supply products to these customers at current levels or at all. In the event that the Group's relationship with any of these major customers were to deteriorate, or these customers were to cease or curtail operations, or terminate or downsize their relationship or tighten their terms of trade with the Group, the Group may not able to obtain orders from other customers to replace any such lost sales on comparable terms or at all.

In addition, some of the Group's major customers may be similarly affected by changes in industry specific conditions given their focus on the oil and gas industry. Further, given the customer concentration, the Group is potentially exposed to large individual credit risk losses in the event one or more of its major customers experience a deterioration in financial performance or financial condition and are unable to meet their obligations to the Group.

Any of the foregoing could have a material adverse effect on the Group's business, results of operation, financial condition and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and, as a result, the Issuer's ability to service its payment obligations under the Notes.

The Group operates in competitive markets, and the inability to compete successfully may negatively affect its business, financial condition and results of operations.

The global market for steel pipe products, particularly in the oil and gas sector, is highly competitive. The Group competes with other pipe producers primarily on the basis of price, compliance with technical requirements, quality and related services. In recent years, in addition to the competition that the Group faces from the Russian competitors, the Group has experienced increasing competition from Chinese, Japanese and South Korean pipe producers in the U.S. and other international markets, and this trend may increase in the future.

In the Russian and CIS markets, the Group faces competition primarily from ChTPZ Group ("ChTPZ"), which produces both seamless and welded pipes, Joint Stock Company "United Metallurgical Company" ("OMK") which produces LDP and casing pipes, JSC Zagorsk Pipe Plant ("ZTZ") which produces LDP for oil and gas pipelines and Ukrainian pipe producers, most notably Interpipe Limited ("Interpipe"), which produces line pipes, casing and tubing and premium connections. In the LDP market, the Group faces significant competition from ChTPZ, OMK, ZTZ and Severstal, one of Russia's largest steelmakers. As a result, the prevailing market prices for the Group's LDP in Russia are significantly lower than those obtainable in Western Europe and North America. The Group's management also expects increased competition from a joint venture between Severstal and Tenaris S.A. ("Tenaris") in the market of welded pipes for the oil and gas sector, which might result in the reduction of prevailing market prices for the Group's market prices for the Group's market prices for the Group's market of welded pipes for oil and gas sector, and from a large number of Russian domestic manufacturers in the Group's industrial welded pipe business.

Outside Russia and the CIS, the Group competes against a limited number of producers of premium quality seamless steel pipe products, including Tenaris, Vallourec S.A. ("**Vallourec**"), Nippon Steel, U.S. Steel Corporation ("**U.S. Steel**"), JFE Voestalpine and a number of Chinese producers, including Shanghai Baosteel Group Corporation ("**Baosteel**"), and Tianjin Pipe International Economic and Trading Corporation ("**TPCO**").

Prior to the disposal of TMK IPSCO, the Group faced intense competition in the United States primarily from local producers, including Tenaris, U.S. Steel and Vallourec, as well as from companies importing OCTG and line pipe products, which the Group will continue to be exposed to if it maintains shipments to the North American market by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement. In response to steel import restrictions imposed in 2018 and 2019 by the U.S. President under Section 232 of the Trade Expansion Act, several domestic producers have announced capacity additions recommissioning of dormant production facilities. The Group competes with these and other U.S. domestic producers as well as certain foreign steel pipe producers, especially from South Korea and other countries, in the market for lower grade welded and industrial seamless pipe. Price is the main differentiating factor for these lower grade products, and certain foreign producers are often able to offer lower prices than the Group. While U.S. trade restrictions against Chinese seamless pipes producers have effectively closed off the market to pipes originating from China, which has benefited TMK IPSCO and other U.S. domestic producers, competition for the Group on other markets has somewhat intensified, as Chinese production has been redirected to these regions. In addition, increases in the extraction of shale gas, a form of natural gas embedded in highly impervious shale, has contributed to a general reduction in U.S. natural gas prices in recent years, and has now led to a reduction in natural gas exploration activity. Further, a significant decline in oil prices in the period from 2014 to 2018 has also resulted in considerable price competition, particularly in the North American markets. As a result, sales of OCTG pipe products in the North American markets are likely to continue to be subject to significant competition, which could lead to pricing pressure and adversely affect the Group's sales and margins. Similarly, competitors with new U.S. domestic production capacity, once completed, may seek to secure market share by offering lower prices, assisted by potentially lower production costs at these new facilities than at the Group's own facilities, which may also lead to pricing pressure and adversely affect the Group's sales and margins.

In recent years, Chinese producers, including Baosteel and TPCO, have improved the range and quality of their pipes. The Group has also experienced growing competitive pressure from Chinese manufacturers in the Middle East, Africa, Southeast Asia and CIS markets. If the Chinese pipe industry continues to consolidate and/or production increases in the global markets where the Group competes, it may adversely affect the Group's business.

Global producers of premium quality pipe products, including Tenaris and Vallourec, offer a broader mix of valueadded downstream pipe services (such as premium threading services and repair and field services) than the Group currently offers, while the Asian producers typically offer lower prices for steel pipes than the Group does, both of which may hinder the Group's ability to compete effectively. In addition, other global producers may have greater financial resources and more extensive global operations as compared to the Group or benefit from government support, which would allow them to weather economic downturns more effectively.

The Group intends to develop niche high margin products to increase its profit margins, as opposed to increasing the output of pipes and pipe products, which exposes the Group to smaller markets of few consumers. The development of these products required, and in some cases, will require significant investments and the Group may not be able to return these investments in case the newly developed product does not meet the planned demand.

The Group may not be able to compete effectively against existing or future producers and preserve its current market share in the various geographical or product markets in which the Group operates. Any failure to compete effectively in one or more of these markets could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Low levels of demand for OCTG products in North America could reduce the demand for the Group's products in North America and could cause the Group to lower prices for its products, which would decrease the Group's earnings.

The demand for OCTG in the United States increased by approximately 2 per cent. in the year ended 31 December 2018 as compared to the year ended 31 December 2017, with the moderate growth largely attributable to stagnating oil prices. The magnitude and pace of recovery in the U.S. market is uncertain and is dependent on a number of factors, including oil prices, drilling volumes, operators' capital expenditures and demand from customers that have previously reduced their current inventories. In the nine months ended 30 September 2019, the approximate number of rigs in the United States has decreased by 21 per cent. from 1,083 rigs as at 31 December 2018 to 855 as at 30 September 2019. Drilling and completion costs are decreasing, making the production of lower priced oil more attractive.

There can be no assurance that the U.S. demand for OCTG will recover in 2020. If the demand does not increase or if there is a further reduction in demand, it could increase the competition, negatively impact the Group's level of sales into the U.S. or profit margins and, accordingly, have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Anti-dumping proceedings and other import restrictions may limit sales of the Group's products in important geographical markets, particularly in Europe.

The Group faces protective non-tariff measures, which reduce its competitiveness in, and limit its access to, certain markets, in particular, the EU. In the past, producers in the EU have filed anti-dumping petitions against imports of Russian pipes, including those produced by the Group. In 2008, the European commission introduced anti-dumping measures relating to imports of small and medium diameter welded tubes and pipes from certain countries, including Russia. Since 2008, anti-dumping duties imposed with respect to seamless and welded tubes and pipes have been regularly extended. Anti-dumping measures currently applicable to imports of welded pipes originating from Russia are scheduled to expire in 2020. In 2018, the European Commission extended the anti-dumping duty on certain imports of seamless pipes and iron or steel tubes, originating from Russia and Ukraine for another five years. As a result, four of the Group's plants (namely, Volzhsky Pipe Plant ("**Volzhsky**"), Taganrog Metallurgical Plant ("**Tagmet**"), Sinarsky Pipe Plant ("**Sinarsky**") and Seversky Pipe Plant ("**Seversky**")) are subject to a 28.7 per cent. anti-dumping duty on seamless pipes and iron and steel tubes, whereas other Russian producers competing with the Group are generally subject to a 35.8 per cent. anti-dumping duty (save for ChTPZ mills that are subject to a 24.1 per cent. anti-dumping duty), whereas, Ukrainian producers are subject to an 8.1 per cent. anti-dumping duty.

In addition, on 8 March 2018, the U.S. President issued Proclamations 9704 and 9705 on Adjusting Imports of Steel and Aluminum into the United States, under Section 232 of the Trade Expansion Act of 1962, providing for additional import duties for steel mill and aluminium. The Proclamations put into place 10 per cent. tariffs on aluminium imports and 25 per cent. tariffs on steel imports, effective on 23 March 2018. Initially, several countries, including Canada, Mexico, and the EU were temporarily exempted from the tariffs, pending negotiations on potential alternative measures. Permanent tariff exemptions were granted to Brazil and South Korea for steel and to Argentina for steel and aluminium in exchange for quantitative limitations. Australia was exempted from both tariffs with no quantitative restrictions. Since 1 June 2018, imports of steel and aluminium from Canada, Mexico, and the EU are subject to the Section 232 tariffs. In May 2019, the United States, Mexico, and Canada announced a joint monitoring and consultation system to replace the tariffs. Despite the recent disposal of TMK IPSCO, the Group's management

endeavours to maintain shipments to the North American market by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement. This might, however, expose the Group to the U.S. import and anti-dumping restrictions applicable to pipe products imported into the U.S. making the Group's products less competitive as compared to those of the U.S. producers, decreasing the Group's profit margins and making it harder for the Group to maintain its share in the U.S. market. See "*—The Group is exposed to the risks connected with TMK IPSCO disposal*".

Moreover, on 2 February 2019, the EU applied definitive safeguard measures in the form of tariff quotas (with a 25 per cent. rate tariff duty for imports exceeding the respective quotas) covering 26 steel product categories, including steel tubes and pipes. With respect to LDP, which is the key product exported by the Group, the EU applies country-specific quotas (which were reallocated to the worldwide quota on 1 October 2019). Although the volume of this quota is currently sufficient to enable the Group to continue exporting its products to the EU market in accordance with the projected sales volumes, any reduction of such quota could hinder the Group's export capabilities and adversely affect its business and results of operation.

Due to the high duty level on the Group's seamless and small and medium diameter welded pipes, the Group and other Russian pipe producers face challenges when selling Russian tubes and pipes in the EU. Anti-dumping duty proceedings or any resulting penalties or any other form of import restrictions may limit the Group's access to export markets for its products, thereby adversely impacting the Group's sales or limiting its opportunities for growth.

The imposition of further restrictions on imports (such as prior surveillance of import of certain iron and steel products introduced in April 2016) by the EU or the United States, or any future extension of existing measures in respect of the Group's Russian or other non-EU operations could further impede sales of its products into those markets, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Removal or reduction of anti-dumping measures currently benefiting the Group may adversely affect the Group's business.

The Group's principal production facilities are located in Russia and the EU, where certain domestic manufacturers and/or industries (for example, the steel pipe manufacturing industry) are protected by national anti-dumping regulations from harmful effects of foreign imports that the local governments believe are priced below fair market value.

After accession to the World Trade Organisation ("**WTO**") in 2012, Russia adjusted its national legislation to comply with WTO rules and regulations that allowed Russia, as well as the Eurasian Economic Union ("**EEU**"), to use WTO trade defence mechanisms for national market protection to the full extent. However, the accession of Russia to the WTO was conditional, among other things, upon a reduction of import tariffs for steel pipe products (generally in the range of 5 to 7.5 per cent.). This resulted in the increased competition in the Russian pipe market from foreign producers. A further reduction in the levels of customs duties or the removal of other limitations on imports of steel pipe products into Russia could have a material adverse effect on the Group's sales volumes, revenue and profitability.

Currently, there are some anti-dumping measures in the EEU relating to steel tubes and pipes originating from China and Ukraine, which are the principal importers of certain steel pipes into the EEU. Between 2016 and 2018, antidumping measures imposed by the EEU included anti-dumping duties between 12.23 per cent. and 31.0 per cent. on imports of OCTG pipe originating from China, and 19.5 per cent. anti-dumping duties on imports of colddrawn stainless pipe originating from China and Malaysia (as it was discovered that Chinese exporters have been circumventing the anti-dumping measures by renting shipments through Malaysia). As a result of two anti-dumping investigations conducted against certain types of steel pipes originating from Ukraine, in 2016 the EEU imposed anti-dumping duties on imports of seamless stainless steel cold- and hot- rolled tubes and pipes originating from Ukraine, ranging from 18.9 per cent. to 18.96 per cent. anti-dumping duties on certain steel tubes and pipes ranging from 18.9 per cent. to 37.8 per cent. until June 2021. On 18 April 2019, Russia, within the framework of the EEU agreements have imposed further the non-tariff measure, which restricted the import of certain stainless steel pipes originating from Ukraine.

In the United States in 2014, anti-dumping duties were imposed in respect of OCTG at the following levels: India - in the range of 2.05 per cent. to 9.91 per cent.; Turkey - 35.86 per cent.; South Korea - in the range of 9.89 per cent. to 15.75 per cent.; Taiwan - 2.34 per cent.; Vietnam - in the range of 25.18 per cent. to 111.47 per cent., the countervailing duties were in the range of 5.67 per cent. to 19.57 per cent. for India and in the range of 2.53 per cent. to 15.89 per cent. for Turkey. In respect of Ukraine, while initially an agreement that allowed Ukrainian producers to export goods to the U.S. at minimal prices. On subsequent review, the United States have terminated the allowance and imposed anti-dumping duties in amount of 7.47 per cent. for Ukraine.

In relation to OCTG originating from China anti-dumping and countervailing duties were set in range of 32.07 per cent. to 99.14 per cent. (for Chengdu Group – 32.07 per cent.) and in the range of 10.49 per cent. to 15.78 per cent., respectively.

In 2015, the anti-dumping and countervailing duties in respect of welded line pipes from South Korea and Turkey were set at the following levels: for Turkey – in the range of 6.66 per cent. to 22.95 per cent., for South Korea – in the range of 2.53 per cent. to 6.23 per cent.; the final countervailing duties for Turkey were set in the range of 1.31 per cent. to 152.2 per cent., and for South Korea the final countervailing duties were set at a level, which is less than the de minimis level, and therefore such duties are de facto not applicable.

In the United States, in 2016, the U.S. Department of Commerce announced that it would expedite its five-year reviews of the anti-dumping and countervailing duty orders. In 2015 and 2016, the United States amended its anti-dumping and countervailing legislation. Furthermore, in 2019 the U.S. Department of Commerce announced the countervailing legislation adjustment, according to which the U.S. Department of Commerce would be able to consider currency undervaluation as a potential subsidy and to construct a "normal currency exchange rate". This amendment is primarily designed to protect the U.S. market from Chinese goods, the production of which is cheaper because of the undervalued Chinese yuan.

Although the Group is not aware of any publicly announced plans of the authorities of the EEU's member-states or the U.S. authorities to remove or reduce anti-dumping duties currently applied to steel pipes and tubes imported into the territory of the EEU and U.S. territory, if such protections prove to be insufficient, or were no longer available, whether in full or in part, the Group could face increased competition from lower-cost foreign imports into these markets from third countries, which could have a material adverse effect on the Group's sales volumes, revenue and profitability, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Failure of critical pieces of equipment may lead to production curtailments or shutdowns, which could have a material adverse effect on the Group's operations.

The Group's production capacities are subject to equipment failures and to the risk of catastrophic loss due to unanticipated events, such as fires, explosions and adverse weather conditions. The Group's manufacturing processes depend on critical pieces of steel-making and pipe-making equipment. Such equipment may, on occasion, be out of service as a result of unanticipated failures, which could require the Group to close part or all of the relevant production facility or cause the Group to reduce production on one or more of its production lines. Any interruption in production capability may require the Group to make significant and unanticipated capital expenditures to effect repairs, which could have a negative effect on the Group's profitability and cash flows. Any recoveries under insurance coverage that the Group may obtain may not offset the lost revenues or increased costs resulting from a disruption of the Group's operations. A sustained disruption to the Group's business could also result in delays to or cancellations of customer orders and contractual penalties, which may also negatively impact its reputation among the Group's customers. Any or all of these occurrences could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group depends on the Russian railroad, port and waterway infrastructure for the transportation of its raw materials and products in Russia and the CIS.

Railway transportation is the Group's principal means of transporting raw materials from third-party suppliers and Group companies to the Group's production facilities, and for transporting the Group's products to its customers in Russia and the CIS. The Group also depends upon Russian port and waterway infrastructure for the onward transportation to customers. Its operations depend heavily on the Russian railway system and rely predominantly on the rail freight network operated by JSC Russian Railways ("Russian Railways"). Russian Railways is a state-owned monopoly company handling a significant portion of all railway transportation in Russia. At the moment, the Federal Antimonopoly Service ("FAS") establishes the tariffs for access to the infrastructure and locomotive traction, which are usually increased annually, although in some cases this has occurred more frequently. Railway tariffs for freight established for 2020, 2019, 2018, 2017 and 2016 increased by 3.5 per cent., 4.1 per cent., 5.0 per cent., 5.4 per cent. and 6.0 per cent., respectively. Prices for the use of rolling stock are not regulated. Past and future increases in railway tariffs for freight have resulted, and may continue to result, in significant increases in the Group's transportation costs. The Group uses railcars provided by private operators, which charge prevailing market prices for their transportation services. The Group is not always able to pass to its customers increases in railway transportation costs associated with the delivery of raw materials to or between the Group companies, and there can be no assurance that the Group will be in a position to do so in the future. There is also a risk that railway transportation costs in Russia may continue to rise faster than the Group's product prices increase.

Furthermore, Russian Railways' network is currently subject to congestion on some of the routes and ports used by the Group to transport its products, which has in the past resulted, and may in the future result, in delays in shipments to customers. There can be no assurance that the Group will be able to re-route shipments or otherwise arrange deliveries to mitigate such congestions, and any failure to do so may result in delivery delays, order cancellations or contractual penalties. Moreover, any strike or industrial action affecting Russian Railways could also result in disruption to the transportation of the Group's raw materials and products.

In addition, much of Russia's physical infrastructure dates back to Soviet times and may not have been adequately replaced, maintained or upgraded. The rail and road networks, power generation and transmission, communications systems and building stock have been particularly affected. In the past, Russia has experienced electricity and heating shortages and blackouts, and the Russian railway system is subject to risks of disruption as a result of the declining physical condition of rail tracks and a shortage of rail cars. The poor condition or further deterioration of the physical infrastructure in Russia may disrupt the transportation of goods and supplies, increase the costs of doing business and interrupt business operations of the Group. Any of the foregoing could have a material adverse effect on Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Increased energy costs or an interruption in the Group's electricity or natural gas supply could have a material adverse effect on its business, financial condition and results of operations.

The Group's production activity requires significant amounts of energy, primarily electricity and natural gas. The Group is exposed to increases in cost of energy and utilities. For example, the Group's cost of energy and utilities for the year ended 31 December 2017 increased from U.S.\$224.4 million to U.S.\$290.8 million. or by 29.6 per cent, as compared to the year ended 31 December 2016, which resulted in a significant increase in the Group's total cost of sales in the year ended 31 December 2017.

In the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, energy and utility costs comprised 7.4 per cent., 7.2 per cent., 8.3 per cent. and 8.5 per cent. of the Group's total cost of sales, respectively. In the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group's Russian companies purchased approximately 2,250 billion, 3.115 billion, 3.023 billion and 2.908 billion kilowatt hours ("kWh") of electricity, respectively, from certain local electricity suppliers. The Russian electricity market has been the subject of reform, the primary purpose of which is to liberalise the wholesale electricity market. As from the beginning of 2011, the Russian energy sector has been fully liberalised and electricity is sold using market-based pricing. As a result of such deregulation, electricity tariffs for industrial users have risen. The Group's production subsidiaries in Russia purchase electricity primarily on the open market. In the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the average cost of electricity for the Group's plants in Russia was RUB 3,271, RUB 3,006, RUB 2,862 and RUB 2,639 per kWh, respectively. The Russian Government has also been seeking to attract private investment capital into electricity generating companies through public offerings and other means, although current investment has decreased as a result of U.S. and EU sanctions against Russia and falling oil prices. If Russia was to succeed in attracting private investment capital, particularly from outside of Russia, this may result in increases in electricity tariffs, particularly for industrial customers. The Russian electricity sector is subject to a number of regulations, notably including separate capacity market and guaranteed-return mechanisms for power generating companies, which tend to evolve over time and might result in changes to the effective price for end-customers. Further price increases for electricity may also occur in the future as the industry becomes more consolidated and competition decreases, which will increase the Group's costs and could have a material adverse effect on its business, financial condition, results of operations and prospects.

In Russia, the Group purchases significant amounts of natural gas from subsidiaries of Gazprom primarily for the production of steel and pipes as well as heating of the Group's production facilities. Gazprom is a state-controlled company and the dominant producer and monopoly transporter of natural gas within Russia. Domestic natural gas prices have been rising in recent years in line with the restructuring plan for the Russian natural gas sector aimed at levelling natural gas prices in the domestic and international markets. In the nine months ended 30 September 2019, average domestic natural gas prices (inclusive transportation costs) for the Group's plants increased by approximately 3 per cent. in Rouble terms compared to the same period of 2018. Russian domestic natural gas prices are currently below Western European levels, which, for the time being, provides the Group with a cost advantage over its international competitors, but there can be no assurance that the Group will continue to benefit from favourable natural gas prices if Russian prices increase and approach Western European levels.

In addition, any interruption in the Group's electricity or natural gas supplies would also have a significant effect on its business and results of operations. In the event of a failure in the electricity grid, production of the Group's products could only continue for a limited time. Any increases in prices of electricity and natural gas consumed by the Group, and/or any interruption in the Group's electricity or natural gas supplies could have a material adverse effect on the

Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's operations outside of Russia may be subject to greater regulation and higher costs than the Group's Russian operations.

The Group's operations outside of Russia are subject to compliance with various environmental, labour and other regulations, which result in higher relevant operating costs of the Group's facilities compared to its Russian operations. In order to comply with applicable regulations, the Group has already made substantial investments in relevant manufacturing facilities to bring them in compliance with any such regulations. However, the Group may be required to make additional investments to continue complying with such regulations in the future if the relevant regulatory authorities in jurisdictions in which the Group operates impose new environmental, labour or other regulations. The costs of complying with more stringent regulations in the relevant jurisdictions may be substantial and could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's business involves occupational hazards to its workforce, which may result in significant liabilities for the Group.

The Group's operations rely heavily on its workforce which is exposed to a wide range of operational hazards typical for the pipe-producing industry. These hazards arise from working at industrial sites, operating heavy machinery and performing other hazardous activities. Although the Group provides the workforce with occupational health and safety training and believes that its safety standards and procedures are adequate, accidents at the Group's sites and facilities have occurred in the past and may occur in the future as a result of unexpected circumstances, failure of employees to follow proper safety procedures, human error or otherwise. If any of these circumstances were to occur in the future, they could result in personal injury, business interruption, possible legal liability, damage to the Group's business reputation and corporate image and, in severe cases, fatalities, any of which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group may have its intellectual property rights infringed, or be exposed to infringement claims by third parties, and there can be no assurance that its intellectual property rights will be protected.

The Group has, and plans to continue to develop, a range of proprietary products and technologies, including in relation to its premium connections products. In addition, the Group continues to expand into e-commerce, including through the development of bespoke digital solutions, which the Group's management believes to be crucial in the implementation of the Group's strategy. In light of the above, the protection of the Group's intellectual property rights is likely to become increasingly important in the future. While the Group's takes certain steps towards protecting its intellectual property, third parties may obtain and use the Group's intellectual property without its authorisation, including through its employees who have access to it, and contractual protections or other legal remedies may not in every case be sufficient to protect the Group's rights.

Conversely, the Group may be subject to infringement claims from third parties in the future resulting from the technology and intellectual property used in the production of its products. If the Group is found liable for infringement, the Group may be required to pay significant damages, and if the Group is unable to license or develop non-infringing technology on a timely basis, it may be unable to continue offer the affected products or services without risk of liability.

Further, in Russia, intellectual property rights generally offer less protection than some of the more developed economies of North America and Europe. In addition, the Group may need to engage in litigation to enforce its intellectual property rights in the future or to determine the validity and scope of its rights and the rights of others. Any litigation could result in substantial costs and diversion of management and other resources. The unauthorised use of the Group's intellectual property, or the Group's failure to protect its intellectual property against infringement or misappropriation could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

If the Group fails to continue to innovate and develop new pipe products and production techniques, it may be unable to grow its business or maintain its market share.

The pipe industry is characterised by high levels of competition, and the Group's competitive advantages and future growth prospects depends in part on its ability to continue to develop products and improve its production techniques. In recent years, the Group has invested significant amounts into expanding its research and development ("**R&D**") facilities, including by constructing the Skolkovo Innovation Centre in Russia ("**Skolkovo Centre**"). There can be no assurance that these or future investments in R&D will provide the Group with the innovation and technological advances required to ensure that its products and production techniques remain competitive. If the Group's competitors are able to create innovative new products or production techniques that allow them to produce at a lower cost, the demand for some of the Group's pipe products may decrease, which could negatively impact its business in a number of ways, including through lower revenues from sales. Failure to continue to innovate and develop new pipe products and production techniques such and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group may be adversely affected by volatility in currency exchange rates, particularly that of the Rouble against the U.S. dollar.

The Group's products are typically priced in Roubles for Russian sales and in U.S. dollars and euros for the CIS, U.S. and other international sales. The Group's direct costs, including raw materials, labour and transportation costs, are largely incurred in Roubles, and, to a lesser degree, in U.S. dollars. Other costs, such as interest expense, are currently incurred largely in U.S. dollars and Roubles, and capital expenditures are incurred principally in Roubles, U.S. dollars and euros.

As a result, the Group is vulnerable to some degree of margin erosion if the currencies in which costs are denominated appreciate against the currencies in which revenues are denominated. The Rouble-U.S. dollar exchange rate has fluctuated significantly in recent years, ranging: from the lowest of 60.27 Roubles per 1.00 U.S. dollar to the highest of 83.59 per 1.00 U.S. dollar in 2016; from the lowest of 55.85 Roubles per 1.00 U.S. dollar to the highest of 60.75 Roubles per 1.00 U.S. dollar in 2017; from the lowest of 55.67 Roubles per 1.00 U.S. dollar to the highest of 69.97 Roubles per 1.00 U.S. dollar in 2018; and from the lowest of 62.52 Roubles per 1.00 U.S. dollar to the highest of 67.19 Roubles per 1.00 U.S. dollar in the nine months ended 30 September 2019. In addition, while the Group seeks to utilise the natural hedge by balancing the foreign currency liabilities with revenues generated in the same currency, following the disposal of TMK IPSCO, the Group may be more exposed to currency mismatches and exchange rate volatility.

The effect of movements in the U.S. dollar and euro exchange rates against the Rouble include gains or losses arising from the revaluation into Roubles (the functional currency of TMK and principal production subsidiaries in Russia) of U.S. dollar and euro denominated loans. For example, for the nine months ended 30 September 2019, the Group recognised foreign exchange gain of U.S.\$27.0 million in the consolidated income statement and U.S.\$48.5 million in the other comprehensive income. Due to the geographic diversification of the Group's sales, its revenue is nominated in U.S. dollars, Roubles and euros, which provides a natural hedge for the Group's foreign exchange position. However, because of the Group's current high levels of U.S. dollar denominated debt, real depreciation of the Rouble against the U.S. dollar in the future may have a material adverse effect on the Group's financial condition and results of operations.

In addition, fluctuations in the value of the Romanian lei, against the euro and the U.S. dollar may adversely affect the results of the Group's Romanian operations. The Group's exports from its Romanian operators are mostly priced in U.S. dollars and euro, while the Group's costs are incurred mostly in RON, and accordingly, the results of operations for the Group's Romanian operations may fluctuate with movements in the applicable exchange rates.

Any fluctuations in foreign currency exchange rates, in particular of the Rouble against the U.S. dollar and the euro, could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The costs of complying with new or more stringent environmental regulations in the countries in which the Group operates, and potentially unforeseen environmental liabilities may have a material adverse effect on the Group's operating results.

The Group operates in an industry, which has an impact on the environment and thus requires compliance with stringent regulatory requirements in the jurisdictions in which the Group operates. The operations of pipe-producing facilities involves the generation of pollutants and their decontamination, as well as storage and disposal of waste and

other hazardous materials. Under the current Russian environmental legislation, the Group is required to pay for air and water emissions and discharges as well as waste disposal, which are within specified limits and make increased payments for any excess of these limits. Further, any such payment for exceeding the pollution limits does not eliminate the need for the Group to undertake environmental protection measures and compensate any resulting damage to the environment. The expenditures necessary to remain in compliance with the applicable laws and regulations, including remediation costs, or unforeseen environmental liabilities, including potentially large fines for breaches of environmental laws, could have a material adverse effect on the Group's business, financial condition, results of operations and prospects. In addition, pollution risks and associated clean-up costs are often impossible to assess until audits of compliance with environmental standards have been performed and the extent of liability under environmental laws can be clearly determined.

Russian environmental laws and regulations are generally subject to change and new and stricter environmental requirements are imposed from time to time, which may result in increased fines and other payments, as well as other environmental obligations for the Group. In addition, the Group's operations are associated with the emission of "greenhouse" gases, and further development of Russian regulation with respect to the emission of those gases or ongoing international negotiations which aim to limit greenhouse gas emissions as well as the imposition of any new environmental laws and regulation systems may require further expenditures to modernise production operations, install pollution control equipment, perform site clean-ups and reclamation, pay fees and fines or make other payments if the Group does not comply with such new environmental laws and regulations.

The Group's management expects that the global trend towards stricter environmental laws and regulations will continue. For example, the introduction of prospective international obligations on greenhouse gases regulations may have an adverse impact on the Group's operations, including the Paris Agreement, which was officially declared binding for Russia by means of adoption thereof by the Resolution of the Russian Government of N 1228 dated 21 September 2019. In 2014, the Russian Government adopted the Federal Programme on the Protection of the Environment followed by the adoption in June 2015 of the guidelines for the determination of the amount of greenhouse gas emissions by the Ministry of Natural Resources and Environment of the Russian Federation. According to these guidelines, each company conducting business in Russia and producing greenhouse emissions should ensure the safekeeping of reports on emissions for at least five years. Furthermore, a draft Federal Law "On State Regulation of Greenhouse Gas Emissions" prepared by the Ministry of Economic Development is currently being publicly discussed, which, if passed, could impose additional obligations on the companies producing greenhouse emissions, including obligations to provide greenhouse gas emissions reporting to the Russian authorities. Should any of the Group companies fall within the scope of this law or other similar regulations, compliance with may subject the Group to increased compliance costs.

Although the Group seeks to adhere to the highest environmental compliance standards, it may be the case that some of the Group's customers may exhibit a trend towards prioritising producers with a lower carbon footprint, which may have a consequential effect on demand for the Group's products and services.

In addition, the Group may be exposed to the risk of claims from governmental authorities and other parties to the extent that the Group's past and current operations led to environmental and/or health and safety incidents resulting in damages to property and/or personal injuries. Any such claim may lead to the imposition of substantial fines, penalties, other civil or criminal sanctions, the curtailment or cessation of operations, orders to pay compensation, orders to remedy the effects of violations and/or orders to take preventative steps against possible future violations.

In addition to the Group's Russian operations, it has operations in the EU, and Kazakhstan and must comply with the environmental regulations in those jurisdictions.

All of the foregoing could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's products are used in applications that are inherently hazardous, which could lead to potential environmental, product liability and other claims which, in turn, may have a material adverse effect on the Group's business, financial condition and results of operations.

The Group sells its LDP, OCTG, line pipes and pipeline bends and hubs to the oil and gas industry primarily for use in oil and gas drilling, extraction and transportation activities. These activities are subject to inherent hazards and risks, including well failures, pipe leaks and fires, which could result in death, personal injury, property damage, environmental pollution or loss of production. Similarly, many of the Group's welded and seamless industrial pipe products are used for transportation of liquids and natural gas under high pressure, which is subject to similar hazards and risks. Any of these hazards and risks can result in the release of hydrocarbons, environmental liabilities, personal injury claims and property damage.

In addition, the Group certifies products to be in accordance with customer specifications and fit for their intended purpose. Actual or claimed defects in the Group's products may give rise to claims against the Group for losses and expose it to claims for material amounts of damages, which may not be covered by product liability insurance according to the Group's insurance policy. Any such claim, regardless of merit, could cause the Group to incur significant costs and harm its business reputation. Furthermore, if any such claims were successful, the Group could be subject to substantial liabilities, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group is exposed to credit risk.

The Group pays considerable attention to credit risk attributable to trade receivables from a number of its customers and advances issued to its suppliers. Credit is only offered to customers that are major Russian and foreign companies and that have been working with the Group for a significant period of time and have strong credit histories. To manage the risk of payment arrears, the Group monitors the status of receivables on a daily basis and has set up an Accounts Receivable and Accounts Payable Committee, which is responsible for this monitoring. In addition, the Group has developed procedures aimed at preventing payment arrears and ensuring effective collection. However, there can be no assurance that the implementation of these measures will be successful to substantially reduce the Group's credit risk in these transactions. Any significant increase in the credit risk associated with the Group's trade receivables could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

If the title to any company or asset acquired by the Group through privatisation or otherwise is successfully challenged, the Group may lose its ownership interest in such company or asset.

Almost all of the Group's production assets in Russia consist of companies that had been privatised before it acquired them and the Group may seek to acquire additional companies that have been privatised or that have undergone bankruptcy proceedings. Privatisation legislation in Russia is vague, inconsistent and in conflict with other elements of Russian legislation. As a result, most, if not all, of the privatisations that have occurred in Russia are arguably deficient and vulnerable to challenge, including through selective action by governmental authorities. Although the statute of limitations for challenging transactions and acquisitions of assets or companies that have gone through bankruptcy proceedings, may still be vulnerable to challenge, including through selective action by governmental authorities authorities motivated by political or other extra judicial considerations.

If any of the Group's acquisitions were challenged as having been improperly conducted, and the Group is unable to defend itself successfully, it may lose its ownership interests, which could materially adversely affect the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The interests of the Group's controlling beneficial owner may conflict with those of other shareholders and the Noteholders.

As at 1 October 2019, 65.0584 per cent. of TMK's issued and outstanding shares were owned directly and indirectly by TMK Steel Holding Limited ("**TMK Steel**"), a holding company incorporated in Cyprus, whose ultimate beneficial owner is Mr. Pumpyanskiy, the Chairman of TMK's Board of Directors. Mr. Pumpyanskiy has the ability to exert significant influence over certain actions requiring shareholder approval, including increasing or decreasing TMK's authorised share capital (in cases other than decisions on share capital increases that are adopted by the Board of Directors), the election of directors, declaration of dividends, the appointment of management and other policy decisions. The Group is also required to comply with the related party transactions regime under the U.K. Listing Rules and has in the past sought, and continue to seek, to conduct all related party transactions on an arm's length basis, and has adopted procedures for entering into transactions with related parties. However, the interests of Mr. Pumpyanskiy could at times conflict with the interests of other shareholders and the Noteholders, and any such conflict of interest could adversely affect the Group's business, financial condition, results of operations and prospects.

In addition, TMK's controlling shareholder possesses sufficient votes to pass most shareholder resolutions notwithstanding the votes of other shareholders. Potential conflicts may arise if TMK's controlling shareholder were to choose not to approve matters which are otherwise in the interests of the Group. In addition, transactions with TMK

Steel and entities controlled by it may in certain circumstances qualify as interested party transactions under Russian law and would therefore require approval of a majority of TMK's shareholders that do not have an interest in such transactions. As a result, the Group may be prevented from completing certain transactions. Any of the foregoing could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's insurance coverage may not be adequate to cover all of its losses and liabilities.

The Group has a limited and, potentially, insufficient level of insurance coverage for expenses and losses that may arise in connection with the quality of its products, property damage, work-related accidents and occupational illnesses, natural disasters and environmental contamination. The Group has no insurance coverage for loss of profits or other losses caused by the death or incapacitation of the Group's senior management. Consequently, any losses or liabilities arising from these or other such events could increase the Group's costs and have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's subsidiaries are in many cases the largest employers in their respective locations, and as a result, the Group may be limited in its ability to make rapid and significant reductions in numbers of employees.

The Group's Russian subsidiaries are in many regions the largest employers in the locations in which they operate, such as Volzhsky (where Volzhsky is located), Taganrog (where Tagmet is located), Kamensk Uralsky (where Sinarsky is located) and Polevskoy (where Seversky is located). While the Group does not have any specific legal obligations or responsibilities with respect to these regions, its ability to effect alterations in the number of the Group's employees may nevertheless be subject to political and social considerations. Any inability to make planned reductions or to be able to plan reductions in the number of employees or other changes to the Group's operations in such regions could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

TMK's ability to pay cash dividends depends to some extent on the results of operations and financial condition of TMK's subsidiaries and may be restricted by legal, contractual or other limitations.

TMK conducts all of its production, sales and marketing operations, and some of its trading operations, through subsidiaries. Apart from the trading operations, other source of funds to pay TMK's expenses, including interest expenses, are dividends and other intercompany transfers of funds from TMK's subsidiaries. The ability of TMK's subsidiaries to pay dividends and make other payments to it depends on their results of operations and financial condition and may be restricted by, among other things, applicable corporate and other laws and regulations (including those imposing currency controls or transfer restrictions) financing arrangements and other agreements and commitments of such subsidiaries. In addition, TMK's ability to pay dividends is subject to legal and other requirements and restrictions at the holding company level. For example, TMK may only pay dividends out of net profits calculated in accordance with Russian accounting standards ("**RAS**").

Shortages of skilled labour, labour cost inflation, and labour disruptions could have a material negative effect on the Group's business, financial conditions and results of operations.

Competition for skilled labour in the steel pipe industry is relatively intense, and labour costs continue to moderately increase, particularly in the CIS and Eastern Europe. The demand for skilled engineers, technicians, productions workers and operators of specialised equipment continues to increase, reflecting the significant demand from other industries and public infrastructure projects. Further increases in the demand for skilled labour are likely to lead to increases in labour costs of the Group, which could have a material adverse effect on its business, financial condition, results of operations and prospects. While wage costs in Russia have historically been significantly lower than wage costs for similarly skilled employees in more developed markets, such as North America and Europe, to the extent that wage costs continue to increase and the Group would not be able to adjust its prices to recover such increases, this could result in a reduction of the Group's profit margins.

As at 30 September 2019, the majority of the Group's workforce was unionised. Large union representation may subject the Group's businesses to the threat of interruptions through strikes, lock-outs or delays in renegotiations of labour contracts. In addition, the Group may be adversely affected by labour strikes or other disruptions due to labour disputes at companies acting as contractors for the Group. There can be no assurance that such industrial actions will not occur in the future. Furthermore, the Group may not be able to renew its existing collective bargaining agreements with the Group's employees on favourable terms, or at all. Failure to renew the Group's collective bargaining

agreements, significant work slowdowns, stoppages or other labour-related developments could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's competitive position and future prospects are dependent on the experience and expertise of Mr. Pumpyanskiy and other senior management.

Dmitry Pumpyanskiy, who acts as the chairman of TMK's board of directors, Igor Korytko, who acts as the General Girector and Chairman of the Management Board, and other senior managers of TMK did, and will continue to play an important role in the implementation of the Group's strategy and the handling of the Group's day-to-day activities. The experience, personal connections and relationships of Mr. Pumpyanskiy, Mr. Korytko and other members of senior management are important to the conduct of the Group's business. There can be no assurance that these senior managers will continue to hold their respective positions in the Group in the future. Moreover, competition in Russia for personnel with relevant expertise is intense due to the limited number of qualified individuals, and this situation could seriously affect the Group's ability to retain its existing senior managers and attract additional suitably qualified senior managers. Any failure to retain the Group's senior management team or an inability to attract and retain additional senior managers could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Some transactions between TMK's Russian subsidiaries and their interested parties, affiliates and other Group members require the approval of disinterested directors or disinterested shareholders.

TMK owns less than 100 per cent. of the shares in some of its Russian subsidiaries, including Seversky, Sinarsky and Tagmet. These subsidiaries have in the past carried out, and continue to carry out, numerous transactions with other companies within TMK's consolidated group and TMK's affiliates that may be considered "interested party transactions" under Russian law, requiring prior approval for each transaction to be obtained not later than the date of such transaction's completion by a majority vote of the "disinterested directors", "independent disinterested directors" or "disinterested shareholders", as the case may be (if such prior approval is requested in accordance with Russian law). In particular, TMK's production subsidiaries rely to a large extent on the supply of raw materials from related parties, including TMK Trade House, and sales to TMK.

The provisions of Russian law on "interested party" transactions have recently been amended and may be subject to different interpretations taking into account, inter alia, the lack of court practice in relation to the new amendments to the JSC Law. There can not be assurance that the Group's compliance with these provisions will not be subject to challenge. Any such challenge could result in the Group's inability to enter into such transactions or the invalidation of transactions that are important to its business. Although the Group generally uses its best efforts to obtain the required approvals for interested party transactions, in some cases, as a practical matter, the Group may not be able to obtain them. Further, the Group may not always be aware of who its "interested parties" are at any moment in time, as this sometimes depends on obtaining information from persons that the Group does not control. Therefore, there is a risk that the Group could enter into "interested party" transactions without its knowledge and without following the special approval procedures provided for by Russian law. Failure to obtain the necessary approvals for transactions involving TMK's Russian subsidiaries or any successful challenge to such transactions (if prior approval of the relevant interested party transaction has been requested) could result in the invalidation of such transactions, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's capital expenditure programme and its ability to raise financing is subject to various risks and uncertainties and the Group may require additional sources of financing to continue to fund the growth of the Group's business.

The Group's business is capital-intensive and requires significant investment and expenditures in order to, amongst other things, maintain and develop the production quality and cost and time effectiveness of its facilities, to build new production facilities, and to make strategic acquisitions. In particular, in the nine months ended 30 September 2019 and in the years ended 31 December 2018, 2017 and 2016, the Group made capital expenditures (defined as cash additions to property, plant and equipment) of U.S.\$152.4 million, U.S.\$273.1 million, U.S.\$232.6 million and U.S.\$175.2 million (which, for the year ended 31 December 2016, also included the purchase of intangible assets), respectively.

The Group's capital expenditure programme contemplates significant investments in the foreseeable future and may be affected by a number of potential problems and uncertainties, including incompletion, cost overruns and defects in

design or construction (which may require additional investments), as well as changes in economic and market conditions (which may affect the economic viability of such capital expenditures). In addition, the Group relies to a certain extent on third-party contractors for the implementation of its capital expenditure projects. If these third-party contractors cease their operations for any reason, the Group could incur higher costs and expenses and experience construction delays. There can be no assurance that the Group will successfully implement its capital expenditure programme, either on time or on budget.

The Group has in the past funded, and continues to fund its capital expenditure programme, primarily through cash flow from operations and borrowings, including loans, domestic bonds and credit lines. However, the Group might be unable to generate adequate cash flow from current operations and external funding may not be available at the level the Group requires, on a timely basis, on commercially acceptable terms or at all during the periods when the Group requires external funding for any of its projects. In addition, some of the Group's loan agreements contain restrictions or caps on the amount of capital expenditure financial covenants, which may impose limitations on the Group's ability to incur additional debt in the future that may limit the Group's ability to secure funding sufficient for the implementation of its capital expenditure programme. If the Group is unable to finance planned capital expenditures on reasonable terms or at all, projects that constitute the Group's capital expenditure programme may not be able to achieve the forecasted production volumes or be able to improve the efficiency of the existing production facilities or to construct new production facilities.

Any or all of these factors could result in a failure to achieve the Group's growth target and have a material adverse effect on the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group relies on a limited number of suppliers for delivery of its raw materials, and any failure by such suppliers to meet the Group's quantity demands or quality standards could have a material adverse effect on the Group's business operations.

The Group's production operations depend on the adequate supply of semi-finished steel products used to manufacture its products, including steel plate for producing welded steel pipe products and steel billet for producing seamless steel pipe products. In addition, the steel plate and steel billet that the Group uses in its manufacturing processes must meet certain quality standards. The Group relies on a limited number of suppliers for its primary raw materials, including steel plates. The principal suppliers of raw materials for the Group are TMK-Chermet (scrap metal) and MMK (coil and steel plates) with a share in the nine months ended 30 September 2019 of 35.5 per cent. and 33.5 per cent. of total amount of supplies of raw materials, as well as with a share in the year ended 31 December 2018 of 39.6 per cent. and 21.9 per cent. of total amount of supplies of raw materials, respectively.

In the event such supplier fails to meet the Group's quantity demands or quality standards, the Group may be unable to deliver its products in a timely manner to its customers in the required quantities or at all, which could result in order cancellations, decreased revenue and loss of market share, any of which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects as well as the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Sales of many of the Group's steel pipe products depend on certain quality certifications from standard setting organisations as well as quality approvals from major oil and gas customers.

The Group has obtained certifications from a number of standard setting organisations for its steel pipe products and manufacturing processes that are necessary to sell its steel pipe products to certain customers, including certification pursuant to Russian standards set by the Russian Federal Agency on Technical Regulating and Metrology and international standards set by the International Standardisation Organisation ("**ISO**"). In addition, the Group has obtained customer approvals from certain of its largest customers in the Russian oil and gas industry with respect to its LDP, OCTG, line pipes and pipeline bends and hubs, and the processes through which they are manufactured. These certifications and customer approvals are subject to periodic inspections and renewals by the applicable standard setting organisations and customers of the Group. The Group may also seek additional certifications and customer approvals, or if it fails to obtain any of the additional certifications and customer approvals, or if it fails to obtain any of the Group to sell its steel pipe products to certain customers, which would have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Notes.

The Group may consider expansion through acquisitions as part of its strategic development but there can be no assurance that the Group will be able to procure all required regulatory clearance and consents and integrate successfully such acquired businesses or identify suitable acquisition targets.

As of the date of these Listing Particulars, the Group has not entered into any binding arrangements to acquire new businesses or significant assets. As part of the implementation of its business strategy, the Group may consider further acquisitions, which will help it to meet its production targets and/or enhance future growth. However, such acquisitions may require prior clearances or approvals from antitrust or other authorities. For example, the consummation of the recent sale of IPSCO Tubulars to Tenaris was subject to clearance by the U.S. Department of Justice (see "-The Group is exposed to the risks connected with TMK IPSCO disposal"). In October 2019, the Group filed an application to the FAS for anti-monopoly clearance of its share increase in Uralchermet, a Russian pipe producer, from 26 per cent. to 75 per cent. Any failure to obtain or delay in obtaining the required clearances or consents may affect the Group's ability to consummate contemplated acquisitions or disposals in a timely manner or at all. Furthermore, the acquisition and integration of new companies and businesses pose significant risks to the Group's existing operations, such as the difficulty of integrating the operations and personnel of the acquired business, problems with minority shareholders in acquired companies and their material subsidiaries, the potential disruption of the Group's own business, the assumption of liabilities (including, with respect to tax and environmental matters faced by the acquired assets or businesses), the possibility that indemnification agreements with the sellers of those assets may be unenforceable or insufficient to cover potential tax or other liabilities, the difficulty of implementing effective management, financial and accounting systems and controls over the acquired business, the imposition and maintenance of common standards, controls, procedures and policies and the impairment of relationships with employees and counterparties. Furthermore, the value of any business that the Group acquires or invests in may be less than the amount that the Group pays for it if, for example, there is a decline in the position of that business in the relevant market in which it operates or there is a decline in the market generally, all of which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Failures of the Group's IT systems or third party attacks on such systems could adversely affect its business.

The Group's business and operations may be negatively affected by failures of the Group's key IT systems and equipment, unauthorised access to confidential information and a corruption of information during data transfers or disruption of activities during the roll-out of new IT systems, all of which becomes increasingly important in light of the Group's strategy towards digital transformation. See "*Business—Strategy—Focus on innovation and digitalisation*". IT systems are vulnerable to a number of risks, such as software or hardware malfunctions, malicious hacking, cyber terrorism, physical damage to vital IT centres and computer virus infection. These factors may result in a lack of information or potential information inaccuracies that could cause disruptions in the Group's decision making process, as well as deterioration in the quality of the Group's operational and financial reporting and the overall manageability of the Group. However, there can be no assurance that the Group's IT systems will continue to function in a manner that will not result in significant disruptions or temporary loss of functionality.

The Group's ability to operate its business depends, amongst other things, on its ability to protect its IT systems and databases from the attacks of third parties who have attempted in the past and may attempt in the future to gain access to the Group's IT systems, networks or databases through DDoS attacks or otherwise. Although the Group has measures in place to ensure the cybersecurity of its computer systems and believes that its computer systems, networks and databases are well protected from unauthorised access, given the potential technical and financial resources of intruders, full assurance cannot be given that its IT systems, networks and databases will not suffer from such attacks in the future. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Risks Relating to Russia

General

Emerging markets are subject to greater risks than more developed markets, including significant legal, economic and political risks.

Investors in emerging markets such as Russia should be aware that these markets are subject to greater risk than more developed markets, including in some cases significant legal, economic and political risks. Moreover, financial turmoil in any emerging market country tends to adversely affect prices in debt or equity markets of all emerging market countries as investors tend to re-invest into more stable, developed markets. Financial problems or an increase in the perceived risks associated with investing in emerging economies may adversely affect the level of foreign

investment, which may, in turn, adversely affect the economies in those countries. In addition, during such times, companies that operate in emerging markets can face severe liquidity constraints as foreign funding sources are withdrawn. Investors should also note that an emerging economy such as that of Russia is subject to rapid change and that the information set out in these Listing Particulars may become outdated relatively quickly. Accordingly, investors should exercise particular care in evaluating the risks involved and must decide for themselves whether, in light of those risks, their investment is appropriate. Generally, investment in emerging markets is only suitable for sophisticated investors who fully appreciate the significance of the risks involved. Potential investors are urged to consult with their own legal and financial advisers before making an investment in the Notes. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Political and Social Risks

The current political instability relating to Ukraine and related sanctions imposed by the U.S. and the EU may have a material adverse effect on the Group.

In late 2013 and the first half of 2014, deteriorating economic conditions and general social unrest provoked a widescale crisis in Ukraine with armed confrontations between various political groups. Amid concerns of a possible civil war and alleged discrimination of ethnic Russians in predominately Russian-speaking regions, such as the Crimean peninsula and south-eastern parts of continental Ukraine, on 1 March 2014, the Russian Parliament officially authorised the use of Russian military force in Ukraine. Following a public referendum on 18 March 2014, the Crimean peninsula and the city of Sevastopol, the historical base of the Russian Black Sea Fleet, became new separate constituents of the Russian Federation.

During the course of 2014, in response to the perceived role of the Russian Federation in events in Ukraine and Crimea, the U.S. and the EU (as well as other states, such as Canada, Switzerland, Australia and Japan) imposed sanctions on a number of Russian and Ukrainian persons and entities, including current and former officials and individuals, companies, banks and businessmen, with the consequence that entities and individuals in the U.S. and EU cannot do business with them or provide funds or economic resources to them, with assets in the relevant sanctioning jurisdictions subject to a freeze and the individuals to visa bans. In addition, the U.S. and EU have applied "sectoral" sanctions. These sanctions have imposed restrictions on the ability of several Russian leading state-owned banks to access the capital markets or otherwise obtain funding from persons in the U.S. and EU. Similar sanctions have been imposed on major companies in the oil and gas and defence sectors of the Russian economy. Moreover, the EU and U.S. prohibited the provision, exportation, or re-exportation, directly or indirectly, of goods, services (except for financial services), or technology in support of exploration or production for deepwater, Arctic offshore, or shale projects that have the potential to produce oil in the Russian Federation and that involve certain companies in the Russian energy sector.

On 18 December 2014, the U.S. President signed into law the Ukraine Freedom Support Act of 2014 passed by the U.S. Congress which provided a basis to extensively widen the scope of U.S. sanctions against Russian entities and persons. Among other things, the legislation authorises the U.S. President to impose significant additional sanctions on Russia's energy and defence sectors and restrictions on using the U.S. banking system by non-U.S. financial institutions that knowingly facilitate significant financial transactions on behalf of any Russian so-called "Specially Designated Nationals" ("SDNs"). Furthermore, in December 2014, the United States established a region-specific embargo prohibiting a wide range of activities in the Crimea region by U.S. persons. The sanctions also apply to non-U.S. persons in respect of their dealings with U.S. persons or through the U.S. financial system. The EU has maintained sanctions specifically targeting the Crimea region and the city of Sevastopol since June 2014. Furthermore, in December 2016, the U.S. introduced sanctions against Russia's intelligence services, the Main Intelligence Agency (GRU) and the Federal Security Service (FSB), as well as other entities and individuals associated with GRU in connection with certain allegations of tampering with the political process in the United States by those entities.

The implementation and enforcement of sanctions imposed by the United States is administered by OFAC and the U.S. Department of State.

The current sanctions regime is a result of multiple extensions by the U.S. and EU in the term and scope of sanctions, including SDN designations from April 2018 and March 2019 that targeted a number of Russian state officials and a number of prominent Russian businessmen and their businesses. It is currently unclear how long these sanctions will remain in place and whether new sanctions may be imposed.

The governments of the U.S. and certain EU member states, as well as certain EU officials have indicated that they may consider additional sanctions should tensions in Eastern Ukraine escalate. Tensions between Russia and the EU and between Russia and the U.S. have further increased recently as a result of the conflict in Syria, and there can be

no assurance that the governments of the EU and U.S. or other countries will not impose further sanctions on Russia related to the Syrian conflict.

In August 2014, on the basis of a directive issued by the President of the Russian Federation that cited the necessity to protect national interests, the Russian Government introduced a ban on the import of certain agricultural products from countries that have adopted economic sanctions against Russian legal entities and individuals. This ban on exports has been extended until 31 December 2020.

In addition, on 2 August 2017, the U.S. President signed into CAATSA that includes additional sanctions against Russian entities. The CAATSA, inter alia: (a) codifies the existing sanctions against Russia established by former President Obama's executive orders, reduces the permitted terms of financing under the existing sectoral sanctions and restricts supplies of equipment and services for new deepwater, Arctic offshore, or shale projects anywhere in the world in which a Russian sanctioned entity holds a 33 per cent. or more interest; (b) gives the U.S. Treasury Secretary the power to impose sanctions against state-owned companies in Russia in the railways, metals, and mining sectors of the Russian economy; (c) requires the U.S. President, subject to the ability to claim a national interest waiver, to impose certain secondary sanctions that were discretionary under the existing U.S. sanctions legislation (including, but not limited to, secondary sanctions for investing in or supporting special Russian crude oil projects and the facilitation of transactions on behalf of Russian SDNs); (d) allows the U.S. President to introduce secondary sanctions on foreign persons (including those that invest in the construction or servicing of Russian energy export pipelines); and (e) requires the U.S. President, subject to the ability to claim a national interest waiver, to impose asset-blocking and travel sanctions, including certain secondary sanctions, on any person who knowingly engages in significant activities that undermine the cybersecurity of any person or government, including a democratic institution, on behalf of the Russian Government. In addition, the CAATSA requires the U.S. administration to submit various reports to U.S. Congress. In late January 2018, several such reports were published, including a report under Section 241 of the CAATSA that identified certain Russian individuals and parastatal entities, as well as a report under Section 242 of the CAATSA on the effects of expanding sanctions to include sovereign debt and derivative products. The identification of any individuals or entities in such reports does not automatically lead to the imposition of new sanctions and it is not possible to predict whether any such identification could have a material adverse effect on the Russian economy or iron and steel industry, including the Group. More recently, the U.S. State Department imposed new sanctions on Russia under the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 ("CBW Act") on 27 August 2018. The initial set of sanctions under the CBW Act includes, among other things, termination of sales of any defence articles and services and prohibition on the export to Russia of certain national security-sensitive goods and technology. On 12 September 2018, the U.S. President has also signed an executive order that provides for the imposition of sanctions on countries, organisations and persons that the U.S. government determines have interfered in the U.S. elections. In addition, on 1 August 2019, the U.S. President issued a new executive order related to the CBW Act that imposes additional sanctions because the U.S. President has determined that certain conditions set out in the CBW Act were not met. Pursuant to the CBW Act and the new executive order, OFAC also issued a Russia-related Directive ("CBW Act Directive") having an effective date of 26 August 2019. According to the CBW Act Directive, after 26 August 2019, participation of any U.S. bank (as defined in the CBW Act Directive) in the primary market for non-Rouble denominated bonds issued by any ministry, agency or sovereign fund of the Russian Federation and lending non-Rouble denominated funds to any ministry, agency or sovereign fund of the Russian Federation are prohibited, except to the extent provided by law or unless licensed or otherwise authorised by OFAC.

Several pieces of legislation directed at amplifying U.S. sanctions against the Russian Federation have been introduced in the U.S. Congress and are currently under consideration. It is currently unclear at which point, if at all, any of these bills could be signed into law and what would be the scope of any new sanctions that may be imposed pursuant to such law.

As of the date of these Listing Particulars, no member of the Group is designated as a sanctioned entity in any of the U.S. or EU sanctions lists. OFAC and EU sanctions regimes do not apply to any member of the Group, save for entities incorporated in the U.S. or the EU, including:

- TMK Overseas LLC, an entity incorporated in the Unites States, to which U.S. sanctions regulations apply; and
- TMK-Resita S.A. ("**TMK-Resita**") and TMK-Artrom S.A. ("**TMK-Artrom**") which are entities incorporated in the Romania, TMK Italia s.r.l. which is an entity incorporated in Italy ("**TMK Italia**"), TMK Europe GmbH ("**TMK Europe**") which is an entity incorporated in Germany, to each of which EU sanctions regulations apply.

The proceeds of the issue of any Notes will not be used to fund activities or persons that are subject to sanctions introduced by the U.S. and the EU. Nevertheless, any material dealings with sanctioned persons by the Group may

have certain commercial and business consequences as set out below. In the ordinary course of its business, the Group enters into transactions with Russian entities that are subject to U.S. and EU sanctions, and from time to time transacts with companies engaged in politically sensitive projects. However, these transactions are entered into by the Russian companies of the Group and are compliant with the sanctions regime binding on them. Although the Group's transactions and commercial relations with these entities are not prohibited by U.S. or EU sanctions, should the sanctions regime in respect of these entities be extended or should new sanctions be introduced which would affect certain counterparties of the Group, the Group's business could be adversely affected. While the Group, as of the date of these Listing Particulars, does not have any material dealings with, or involving sanctioned persons (being persons with whom dealings are generally prohibited under the applicable U.S. or EU sanctions regulations), activities, products or technologies that are listed in any of the U.S. or EU sanctions lists, there can be no assurance that compliance issues under U.S. and applicable EU regulations, measures or similar laws and regulations will not arise with respect to the Group or its personnel in the future. The Group allows the possibility, that if the OFAC or EU sanctions regime expands to other sectors of the Russian economy, the Group could be targeted by such sanctions due to its operations in the Russian oil and gas industry and co-operation ties with major Russian oil and gas companies. Such expansion of the U.S. or EU sanctions regime could apply to the Group directly or to sectors of economy where the Group operates (including, but not limited to, oil and gas pipelines). Such sanctions could cause further limitations and difficulties for the company in the course of implementation of its investment and maintenance projects involving supplies of imported equipment, raising funds on the EU and U.S. markets, the failure to implement executed contracts and an inability to execute new contracts, and other adverse consequences related to sanctions.

Furthermore, should either OFAC, other U.S. governmental agencies or the Council of the EU expand their respective sanctions programmes, including the sectoral sanctions, to include any more of the Group's existing or future clients, suppliers or other counterparties, further sectors of the Russian economy or otherwise, such an expansion could result in financial difficulties for such persons, the Group's dealings with designated persons could become material or the suspension or potential curtailment of business operations between the Group and the designated persons could occur. Should such events arise, the Russian Government may continue to provide support to the Russian economy, and the Russian Government has put in place initiatives with the view of limiting some of the effects of OFAC and EU sanctions. Nonetheless, the introduction of large scale sanctions or the expansion of further restrictive economic measures by Russia, may negatively affect the Russian economy and investment climate and lead to further deterioration of financial markets. Any of the foregoing could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Notes.

Political and social instability in Russia may have a material adverse effect on the Group's business, financial condition, results of operations and prospects and on the value of the Notes.

While the political situation in the Russian Federation has been relatively stable since 2000, future policy and regulation may be less predictable than in less volatile markets. Additional uncertainty may also arise from a significant change in the governmental policy and regulation as well as any large-scale political reforms.

Political reforms or instability could result in investor uncertainty and worsening of the overall economic situation, including capital flight and a slowdown of investment and business activity, including activity in the international capital markets.

Actions by government bodies motivated by politics or other factors could call into question the security of property and contractual rights, progress of the market and political reforms, the independence of the judiciary and the certainty of legislation. This, in turn, could result in significant fluctuations in the market price of Russian securities and have a negative impact on foreign investments in the Russian economy, over and above the general market turmoil. Future shifts in governmental policy and regulation in Russia could also lead to political instability and disrupt or reverse political, economic and regulatory reforms. In addition, more generally, actions of the Russian legislative, executive and judicial authorities can affect the Russian securities market.

Furthermore, social instability in Russia, coupled with difficult economic conditions, the failure of the state and large private enterprises to make full and timely payment of salaries on a regular basis and the failure of salaries and benefits generally to keep pace with the rapidly increasing cost of living have led in the past, and could lead in the future, to labour and social unrest and increased support for a renewal of centralised authority, increased nationalism, restrictions on foreign involvement in the economy, and increased violence. For example, in 2018, there were mass public protests against the increase of the retirement age, in March 2019, there were public protests against increasingly restrictive internet policies of the Russian Government, and, in August 2019, there were clashes of protesters with the police as a result of the disqualification of certain opposition candidates in the Moscow city parliament. Any of these factors could have a material adverse effect on the Group's business, financial condition,

results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Domestic and regional political conflicts could create an uncertain operating environment that could have a material adverse effect on the Group's business, financial conditions, results of operations and prospects and on the value of the Notes and hinder its long-term planning ability.

The Russian Federation consists of 85 regions ("**subjects**") of the federation, some of which exercise considerable autonomy in their internal affairs. In certain areas, the division of authority between federal and regional governmental authorities remains uncertain. The lack of consensus between local and regional authorities and the federal governmental authorities may result in political instability and may have a material adverse effect on the Group's business, financial condition, prospects or ability to fulfil its financial obligations. The Russian federal and regional electoral legislation is subject to ongoing revision and amendment. The amendments made to such legislation in 2004, whereby heads of regions are nominated by the President of the Russian Federation and appointed by regional legislatures (instead of direct election by the population) were designed to minimise conflict between federal and regional authorities and secure stability across the Russian Federation. In April 2013, a new law came into force which allows the federal subjects to choose their own process of electing the regional governors. According to this law, each region can choose whether to proceed with direct elections of regional governors or to submit to the President a list of candidates for the position of governor from which the President shall choose three candidates. The deputies of the legislative assembly would then appoint one candidate for the post of regional governor from such list.

In addition, ethnic, religious, historical and other divisions have, on occasion, given rise to tensions and, in certain cases, military conflict, both internally and with other countries. For example, Russian military and paramilitary forces have been engaged in the Chechen Republic in the recent past and continue to maintain a presence there. In addition, a military conflict in August 2008 between Russia and Georgia involving South Ossetia and Abkhazia resulted in significant overall price declines on the Russian stock exchanges. The conflict ended with Russian recognition of the independence of South Ossetia and Abkhazia. Russian stock exchanges experienced heightened volatility, significant overall price declines and capital outflow following these events and the international capital markets temporarily closed to Russia. Furthermore, differing views on the Georgia conflict, as well as the recent armed conflict in Eastern Ukraine, have had an impact on the relationship between the Russian Federation, the EU, the United States and certain former Soviet Union countries and, if prolonged, could adversely affect business relationships among these countries and adversely affect the Russian economy. There are ongoing tensions between the Republic of Ingushetia and the Republic of Ingushetia. In June 2019, after mass riots in Tbilisi, the Russian President imposed a ban on Russian airlines transporting passengers to Georgia with effect from 8 July 2019. Such tensions or conflicts may lead to reduced liquidity, greater trading volatility and significant reductions in the price of listed Russian securities.

Furthermore, various acts of terrorism have been committed within Russia. In particular, on 29 March 2010, there were a series of suicide bombings in the Moscow underground system, which temporarily paralysed operations and business activity in Moscow. On 24 January 2011, a suicide bombing in the international arrivals hall of the Moscow international airport Domodedovo killed 36 and injured over 180 people. More recently, two suicide bombings in Volgograd carried out on 29 and 30 December 2013 at the central Volgograd railway station and on a trolleybus, respectively, resulted in 34 fatalities. The risks associated with these events or potential future events could materially adversely affect the investment environment and overall consumer confidence in Russia, which in turn could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Russian banking system remains underdeveloped.

Russia's banking and other financial systems are in a period of ongoing development. There are currently a limited number of creditworthy Russian banks, most of which are headquartered in Moscow, with the capacity to service companies of the size of those found in the Group. Although the CBR has the mandate and authority to suspend banking licences of insolvent banks, insolvent banks may still operate. Many Russian banks also do not meet international banking standards, and the transparency of the Russian banking sector still does not meet all internationally accepted norms. In the fall and winter of 2017, the CBR announced its decision to implement measures aimed at improving the financial stability of several Russian banks, including PJSC Bank Otkritie Financial Corporation, PJSC B&N Bank and PJSC Promsvyazbank. Moreover, there has been media coverage relating to a significant increase in withdrawals by state-owned corporations from Russian private banks. Liquidity difficulties in the market could arise among the privately and state owned banks in Russia, which could undermine investors' confidence and lead to instability of the Russian banking system. There can be no assurance that such banks would not be subject to rehabilitation measures by the CBR, which would further exacerbate difficulties in the banking sector and the local financial markets.

The serious deficiencies in the Russian banking sector, combined with the deterioration in the credit portfolios of Russian banks, as well as the bankruptcy of a number of large Russian banks, may result in the banking sector being more susceptible to the current worldwide credit market downturn and economic slowdown.

Further, the Group relies on debt financing from Russian banks. Accordingly, if a prolonged or serious banking crisis were to occur in Russia, the Group's ability to access this source of financing may be limited or may not be available on market terms. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Legislation prohibiting the expropriation and nationalisation of property may not be enforced in the event of expropriation or nationalisation of the Group's assets.

The Russian Government has enacted legislation to protect property against expropriation and nationalisation and in the event that property should be expropriated or nationalised, legislation provides for the payment of fair compensation. However, there can be no certainty that such protections will be enforced should the Group's property be expropriated or nationalised. This uncertainty is due to several factors, including the lack of state budgetary resources, the lack of an independent judicial system, insufficient mechanisms to enforce judgments and corruption among Russian state officials.

The concept of property rights is not well developed in Russia, as compared to other jurisdictions, and there is little experience in enforcing legislation enacted to protect private property against nationalisation and expropriation. As a result, the Group may be unable to obtain proper protection or recourse in courts, and may not receive adequate or timely compensation if in the future the Russian Government decides to nationalise or expropriate some or all of the Group's assets. The expropriation or nationalisation of the whole or any material part of the Group's assets without fair compensation would amount to an Event of Default under the Loan Agreement, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Economic Risks

The Russian economy is less stable than that of most Western countries.

The Russian economy has, at various times, experienced:

- significant declines in GDP;
- hyperinflation or high levels of inflation;
- an unstable currency;
- high levels of state debt relative to GDP;
- crises in the banking sector limiting the ability of banks to provide liquidity to Russian enterprises;
- a large number of loss-making enterprises that continue to operate due to the lack of effective bankruptcy proceedings;
- widespread tax evasion;
- growth of "black" and "grey" market economy;
- pervasive capital flight;
- high levels of government corruption and the penetration of organised crime into the economy;
- political and social instability;
- ethnic and religious tensions;
- lack of consensus between federal and local governments;

- over-dependence of the economy on export of commodities, in particular oil, gas and metals;
- significant declines and volatility in the stock market;
- significant increases in unemployment and under-employment;
- the impoverishment of a large portion of the Russian population;
- a declining population and short life-expectancy; and
- outdated and deteriorating physical infrastructure.

The Russian economy was adversely affected by the global financial and economic crisis that commenced in the second half of 2008, which manifested itself through extreme volatility in debt and equity markets, reductions in foreign investment, sharp decreases in GDP and rise of unemployment around the world. While the global economy has, to a certain extent, stabilised since then, the Russian economy began experiencing a new slowdown in 2013. The conditions and outlook for the Russian economy deteriorated significantly during 2014 and continued to worsen in 2015. According to Rosstat, the Russian economy experienced a significant decline in 2015, when Russia's GDP declined by 2.5 per cent., though in 2016 the decline trend changed to a moderate growth of 0.3 per cent. In 2017 and 2018, Russia's GDP slightly improved and showed a 1.6 per cent. and 2.3 per cent. growth, respectively, which is, however, lower than the growth of other global economies. Whereas, during the period 2015-2018, the consumer price index in the Russian Federation measured on the basis of the official statistics published by the Rosstat was 12.9 per cent. in 2015, 5.4 per cent. in 2016, 2.5 per cent. in 2017 and 4.3 per cent. in 2018. A return to heavy and sustained inflation could lead to market instability, new financial crises, reductions in consumer purchasing power and the erosion of consumer confidence. Any of these events could lead to decreased demand for the Group's products and services in the market, and accordingly, could have a material adverse effect on the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes, because a majority of the Group's operations are dependent on Russian market conditions.

Crime and corruption in Russia could harm the Group's ability to conduct its business.

The political and economic changes in Russia since the early 1990s have resulted in reduced policing of society and increased crime and corruption. The Russian and international press have reported high levels of organised criminal activity and corruption of officials in Russia and other countries of the former Soviet Union. Press reports have also described instances in which state officials have engaged in selective investigations and prosecutions to further commercial interests of select constituencies. Additionally, published reports indicate that a significant proportion of the Russian media regularly publishes biased articles in return for payment. Illegal activities, corruption or claims alleging involvement in illegal activities could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Notes.

Legal Risks

Weaknesses related to the Russian legal system and Russian legislation may result in a material adverse effect on the Group and on the rights of investors in the Notes.

The Russian legal framework applicable to a market economy is still under development. Since 1991, Soviet law has been largely, but not entirely, replaced by a new legal regime as established by the 1993 Federal Constitution, the Civil Code, by other federal laws and by decrees, orders and regulations issued by the President, the Russian Government and federal ministries, which are, in turn, complemented by regional and local rules and regulations. These legal norms, at times, overlap with or contradict one another. Several fundamental Russian laws have only recently become effective. The recent nature of much of Russian law and the rapid evolution of the Russian legal system place the enforceability and underlying constitutionality of laws in doubt and result in ambiguities, inconsistencies and anomalies. In addition, Russian law often leaves substantial gaps in the regulatory infrastructure.

Among the risks of the current Russian legal system are:

- inconsistencies among federal laws, decrees, orders and regulations issued by the President, the Russian Government, federal ministries and regulatory authorities, and regional and local laws, rules and regulations;
- limited judicial and administrative guidance on interpretations of Russian law;

- substantial gaps in the regulatory structure due to delay or absence of implementing legislation;
- the relative inexperience of certain judges in interpreting new principles of Russian law, particularly business and corporate law;
- the possibility that certain judges may be susceptible to economic, political or nationalistic influences;
- a high degree of discretion on the part of governmental authorities; and
- bankruptcy procedures that are not well developed.

As a result of the above factors, sudden unexpected changes in legal requirements in Russia may occur. Such unpredictability and lack of legal guidance may result in inadvertent violations by the Group of applicable rules and regulations.

Any of these factors make judicial decisions in the Russian Federation difficult to predict and effective redress uncertain. Additionally, court claims are often used to further political aims. The Group may be subject to these claims and may not be able to receive a fair hearing. Additionally, court judgments are not always enforced or followed by law enforcement agencies.

In addition, the Group has taken, and continues to take from time to time, a variety of actions relating to share issuances, share disposals and acquisitions, valuation of property, interested party transactions, major transactions including those which may have anti-monopoly implications. As legal procedures and requirements applicable to these actions are sometimes vague or contradictory, they may be susceptible to challenge by third parties (including on formal grounds). Should a transaction the Group has entered into be successfully challenged due to not complying with applicable legal requirements, this could result in the invalidation of such transaction and/or the imposition of certain liabilities on the Group. While the relevant statutes of limitations are likely to have expired, where that is not the case the Group may not be able to successfully defend against such claims, and any such transaction may be invalidated and/or liability in connection with the invalidation of such transaction could be imposed on the Group. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

The Group's business could be adversely affected due to fast-changing and vague Russian laws, as well as fails to obtain or renew necessary licences and permits or fails to comply with the terms of its licences and permits.

The application of Russian laws is not always clear or consistent, particularly where the legislative drafting has not kept pace with the demands of the marketplace. Russian commercial practices and legal and regulatory frameworks differ significantly from practices in other jurisdictions. As a result, it may be difficult to hire qualified management and accounting staff that can ensure compliance with changing regulatory requirements.

Russian authorities have the right to, and do, conduct periodic inspections of the Group's operations throughout the year. Any such inspections may conclude that the Group has violated laws, decrees or regulations, and the Group may be unable to adequately address such conclusions. Such findings could result in the imposition of fines or penalties or more severe sanctions, including the suspension or termination of the Group's licences.

The Group's business depends on the continuing validity of its licences and permits, the issuance to it of new licences and permits and its compliance with the terms of its licences and permits. Regulatory authorities exercise considerable discretion in the timing of licence and permit issuance and renewal and in monitoring of licensees and permitholders' compliance with their terms. Requirements imposed by these authorities may be costly and time-consuming and may result in delays in the commencement or continuation of production operations. Moreover, such licencing requirements may expand in the future as a result of more restrictive environmental standards, which could make it harder to obtain or renew the required licences or permits.

In certain circumstances, state authorities in Russia may seek to interfere with the issuance of licences and permits, for example, by initiating legal proceedings alleging that the issuance of a licence or permit violates the civil rights or legal interests of a person or legal entity. The process of granting licences and permits may also be influenced by outside commentary, political pressure and other non-legal factors. Accordingly, licences and permits that the Group requires may be invalidated or may not be issued or renewed. Licences and permits that are issued or renewed may not be issued or renewed in a timely fashion or may involve conditions that restrict the Group's ability to conduct its operations or to do so profitably. For example, in most cases, a licence may be suspended or terminated if the licensee does not comply with the "significant" or "material" terms of such licence or commits a material breach of terms of such licence. Court decisions on interpretation of these vague and ambiguous concepts have been inconsistent and,

under the Russian legal system, do not have significant value as precedents for future judicial proceedings. These deficiencies result in the regulatory authorities, prosecutors and courts having significant discretion over enforcement and interpretation of the law, which may be used arbitrarily to challenge the rights of licensees. As a result, while the Group seeks to comply with the terms of its licences and believes that it is currently in material compliance with the terms of such licences, there can be no assurance that its licences will not be suspended or terminated. In the event that the licensing authorities in Russia discover a material violation by the Group company, that Group company may be required to suspend its operations or to incur substantial costs in eliminating or remedying the violation. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Unlawful or arbitrary government action in Russia may have an adverse effect on the Group's business.

State authorities have a high degree of discretion in Russia and at times exercise their discretion arbitrarily, without conducting a hearing or giving prior notice, and sometimes on disputed legal grounds. Moreover, the state also has the power in certain circumstances, by regulation or act, to interfere with the performance of, nullify or terminate contracts. Unlawful or arbitrary state actions have included withdrawal of licences, sudden and unexpected tax audits, criminal prosecutions and civil actions. Federal and local government entities have also used common defects in matters surrounding documentation of financing activities as pretexts for court claims and other demands to invalidate such activities and/or to void transactions, often for political purposes. Unlawful or arbitrary state action, if directed at the Group, could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Shareholder liability under Russian legislation could cause TMK to become liable for the obligations of its subsidiaries.

Under Russian law, TMK may be primarily liable for the obligations of its Russian subsidiaries jointly and severally with such entities if: (i) TMK has the ability to make decisions for such Russian subsidiaries as a result of its ownership interest, the terms of a binding contract or in any other way; and (ii) the relevant Russian subsidiary concluded the transaction giving rise to the obligations pursuant to TMK's instructions or with the consent of TMK. TMK may also be held liable for damages incurred by its Russian subsidiaries, provided that (i) TMK is found to have the ability to direct the actions of such subsidiaries and (ii) TMK's Russian subsidiaries have incurred damages as a result of TMK's fault.

In addition, TMK may have secondary liability for the obligations of its Russian subsidiaries if the subsidiary becomes insolvent or bankrupt as a result of the action of TMK. Accordingly, TMK could be liable in some cases for the debts of its subsidiaries, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Lack of developed corporate and securities laws and regulations in Russia may limit the Group's ability to attract future investment.

The regulation and supervision of the securities market, financial intermediaries and issuers are relatively less developed in Russia than in the United States and certain members of the EU. While some important areas are subject to virtually no oversight, the regulatory requirements imposed on Russian issuers in other areas result in delays in conducting securities offerings and in accessing the capital markets. It is often unclear whether or how regulations, decisions and letters issued by the various regulatory authorities apply to the Group. As a result, the Group may be subject to fines or other enforcement measures despite its best efforts at compliance with the domestic securities laws and regulations, which could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Difficulty in enforcing the Group's rights in Russia may have an adverse effect on the Group's business, financial condition, results of operations and prospects.

The current status of the Russian legal system makes it uncertain whether the Group would be able to enforce its rights in disputes with any of its contractual counterparties. Furthermore, the dispersion of regulatory power among a number of state agencies in the Russian Federation has resulted in inconsistent or contradictory regulations and unpredictable enforcement. The Russian Government has rapidly introduced laws and regulations and has changed its legal structure in an effort to make the Russian economy more market-oriented, resulting in considerable legal confusion. No assurance can be given that local laws and regulations will become stable in the future. The Group's ability to operate

in the Russian Federation could be adversely affected by difficulties in protecting and enforcing its rights and by future changes to local laws and regulations. Further, its ability to protect and enforce such rights is dependent on the Russian courts, which are underdeveloped, inefficient, and, in places, corrupt. Judicial precedents generally have no binding effect on subsequent decisions. Enforcement of court orders can in practice be very difficult in the Russian Federation. Any of these factors could have a material adverse effect on the Group's business, financial condition, results of operations and prospects, the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Risks Relating to Taxation

Russian tax legislation is relatively undeveloped and subject to frequent changes.

Historically, the system of tax collection in Russia has been subject to frequent changes in tax legislation, which sometimes occur on short notice and apply retrospectively, and in the interpretation and application of existing laws and regulations by various authorities. Despite certain improvements of the Russian tax system undertaken by the Russian Government over the last couple of decades, such as the adoption of the unified legislative act ("**Russian Tax Code**") and successive reduction of major tax rates, Russian tax legislation is still subject to frequent changes. There can be no assurance that the Russian Tax Code will not be changed or interpreted in the future in a manner adverse to the stability and predictability of the Russian tax system. For example, in August 2017 the Russian Tax Code was amended to include provisions reflecting anti-avoidance approaches developed by the courts (see "*—Russian tax authorities' approach to tax law enforcement and interpretation of legislation may be unpredictable and selective*" below) that may be characterised as the introduction of a general anti-avoidance rule, or GAAR, into Russian domestic tax legislation.

The possibility exists that Russia may impose arbitrary or onerous taxes, levies, fines and penalties in the future, which could adversely affect the Group's business. For instance, starting from 2019 the VAT rate was increased from 18 per cent. to 20 per cent. In addition, quasi-fiscal charges are introduced regularly that do not fall under the tax legislation but impose additional burden on business, e.g. ecological and utilisation payments as well as road deterioration charges. These changes affect the overall tax climate in Russia and may result in additional tax liabilities for the Group, have a material adverse effect on the Group's overall tax position and undermine the Group's tax planning efforts, which, individually or in combination, could adversely impact the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Russian tax authorities' approach to tax law enforcement and interpretation of legislation may be unpredictable and selective.

Due to the absence or ambiguity of some of enforcement regulations, lack of legislative and/or judicial guidance and frequent changes in the regulator's (the Russian Ministry of Finance) interpretation of the relevant legislation, additional tax audits and groundless claims of the Russian tax authorities are not rare. The absence of effective outof-court dispute resolution procedure also results in additional costs and administrative efforts for taxpayers who are often forced to file claims in courts when a dispute with tax authorities arises.

In addition to the usual tax burden imposed on Russian taxpayers, these conditions complicate tax planning and related business decisions. These uncertainties could possibly expose the Group to significant fines and penalties and potentially severe enforcement measures despite its best efforts at compliance, and could result in a greater than expected tax burden, and could adversely impact the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Further, court precedents are generally not binding in Russia. As a result, even though in recent years the highest Russian courts gradually tried to regulate court practice in the sphere of taxation and develop unified approaches to deciding particular types of cases, there is no guarantee that in similar circumstances the tax authorities or lower courts will not adopt a conflicting approach.

At the same time, an attempt to introduce a clear borderline between tax evasion and regular business activity was made in 2017 when anti-avoidance rules were introduced by Article 54.1 of the Russian Tax Code. A similar concept of "unjustified tax benefit" was previously introduced into court practice by the Plenary of the Supreme Arbitrazh Court of the Russian Federation in its Resolution No. 53. The new anti-avoidance rules (a) establish the framework within which taxpayers enjoy tax benefits and (b) prohibit any wilful misconduct resulting in a non-payment or underpayment of taxes by misrepresenting information on commercial events and objects of taxation. The new rules apply retrospectively to all periods that may be subject to tax audits. However, due to the fact that the court practice related to the application of the new rules is still limited and underdeveloped, no assurance could currently be given as to the exact effect such rules may have on taxpayers, including the Group.

Finally, there is no assurance that any previous or future tax audit establishing the Group's tax liabilities for a particular period will not be revisited by the same or a superior tax body. This repetitive review is subject to the default three-year limitation period, but it nevertheless can result in additional tax liabilities if the reviewing body applies new interpretation of the tax law or finds new evidence of tax underpayment.

Any of these factors could have a material adverse effect on the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and, as a result, the Issuer's ability to service its payment obligations under the Notes.

Introduction of CFC rules, beneficial ownership and tax residency concepts into the Russian Tax Code as well as Russia's participation in OECD/G20 Base Erosion and Profit Shifting Project ("BEPS") may result in additional tax liabilities for the Group.

The Russian Tax Code contains the "controlled foreign companies" rules ("**Russian CFC Rules**"), the concept of tax residency for legal entities and the beneficial ownership concept. Under the Russian CFC Rules, in certain circumstances, undistributed profits of foreign companies and non-corporate structures (e.g., trusts, funds or partnerships) domiciled in foreign jurisdictions, which are ultimately owned and/or controlled by Russian tax residents (legal entities and individuals) are subject to taxation in Russia. The Russian CFC Rules are being further developed. Certain provisions of the Russian CFC Rules are still ambiguous and may be subject to arbitrary interpretation by the Russian tax authorities.

Under the concept of tax residency for legal entities, a foreign legal entity may be recognised as a Russian tax resident if such entity is de facto managed from Russia. When an entity is recognised as a Russian tax resident, it is required to register with the Russian tax authorities, calculate and pay Russian tax on its worldwide income and comply with other tax-related rules established for Russian entities. The new rules set principal and secondary criteria for determining the place of management (among other things, the place where the company's executive body operates). However, there is some uncertainty as to how these criteria will be applied by the Russian tax authorities in practice.

A beneficial ownership concept, which, to a certain extent, is in line with the concept developed by the Organisation for Economic Co-operation and Development ("**OECD**"), has also been added to the Russian Tax Code. In particular, based on this concept the treaty relief should be available to foreign legal entities provided they have the actual right to receive income (i.e., they qualify as a "beneficial owner of income"). When determining the beneficial owner, the functions of a foreign person that is claiming the application of reduced tax rates under an applicable double tax treaty and the risks that such person takes should be analysed. The benefits of a double tax treaty will not apply if a foreign person claiming such benefits has limited powers to dispose of the relevant income, fulfils intermediary functions without performing any other duties or taking any risks and paying such income (partially or in full) directly or indirectly from Russia. Starting 1 January 2017, a non-resident income recipient is required to provide a Russian tax agent with confirmation that it is the beneficial owner of the income.

In November 2017, the country-by-country reporting ("**CbCR**") requirements were introduced in Russia. The introduction of CbCR is in line with the OECD recommendations within the BEPS initiative. The introduction of these new rules and concepts, including the new GAAR rules (see "*—Russian tax legislation is relatively undeveloped and subject to frequent changes*" above), imposed an additional administrative burden on the Group, including the preparation of certain reports. Therefore, the Group may have to undertake additional actions to ensure compliance with CbCR requirements and to prevent possible risks that may be triggered by the failure to comply therewith, which could have an adverse effect on the Group's business, results of operations and financial condition.

On 1 July 2015, the Convention on Mutual Administrative Assistance in Tax Matters developed by the Council of Europe and the OECD came into effect for Russia. On 12 May 2016, the Russian Federation signed the Multilateral Competent Authority Agreement on Automatic Exchange of Financial Account Information (thereby joining the Standard for Automatic Exchange of Financial Account Information (Common Reporting Standard)) which enables the Russian tax authorities to obtain information for tax purposes from foreign countries, including certain offshore jurisdictions. On 7 June 2017, the Russian Federation joined the OECD Multilateral Agreement for amending double tax treaties, and automatic information exchange with foreign tax authorities ("**Multilateral Convention**"). The Multilateral Convention is expected to implement a series of tax treaty measures to update international tax rules and lessen the opportunity for tax avoidance by multinational enterprises. In particular, the Multilateral Convention sets forth certain provisions with respect to tax treaty abuse and other matters. This new initiative may result in significant changes to tax treaties' provisions and the applicable practice that potentially may result in a higher tax burden for the Group's business, which could have a material adverse effect on the Group's ability to service its payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to service its payment obligations under the Notes.

Russian transfer pricing legislation is unclear and subject to change.

While Russian transfer pricing ("**TP**") rules generally follow the OECD principles, Russia is not an OECD member. Accordingly, Russian taxpayers should primarily act on the basis of Russian TP rules rather than rely on the OECD's TP guidelines, including when analysing risks and developing policies and compliance documents.

Russian TP rules are fairly untested and remain open to a number of interpretations by taxpayers, professional bodies, tax authorities and courts. Although the Russian Ministry of Finance and tax authorities may, from time to time, issue clarifications on various matters, any such clarifications are non-binding in their nature and relying on them does not relieve taxpayers from risks of a different interpretation.

Disputes between taxpayers and the tax authorities on practical application of TP rules may end up in court. Currently, publicly available disputes on TP rules comprise disputes of four companies, which relate to transactions with commodities and the decisions issued in the context thereof were held in favour of the tax authorities. Apart from that, there are numerous instances when Russian tax authorities challenged pricing arrangements in transactions which are uncontrolled from a TP rules perspective using general requirements for calculation of taxable base and anti-avoidance concepts.

In the ordinary course of its business the Group engages in a number of transactions, some of which fall under Russian TP rules. Therefore, the Group may be inherently subject to TP risks that originate from conflicting interpretations of TP rules by taxpayers, tax authorities and courts. Potential tax claims resulting from the Russian TP rules being relatively underdeveloped and any inconsistent application of such rules by Russian courts or tax authorities may have an adverse effect on the Group's business, results of operations and financial condition as well as its ability to service payment obligations under the Loan Agreement and the Guarantees and the Issuer's ability to perform its payment obligations under the Notes.

Risks Relating to the Notes, the Issuer, the Guarantees and the Trading Market

The TMK's obligations to make payments under the Loan Agreement are effectively subordinated to all the liabilities of TMK's subsidiaries other than those of the Guarantors.

TMK is a holding company with no direct operations other than certain functions for the Group. TMK's ability to make payments to the Issuer under the Loan Agreement depends upon the receipt of dividends, distributions, intercompany loan repayments and other payments from TMK's subsidiaries, or TMK's issuance of debt or equity securities. TMK's subsidiaries are separate and distinct legal entities. With the exception of the Loan Guarantors, from time to time, pursuant to the terms of the Deed of Loan Guarantee, and any other subsidiaries have no obligation in respect of any amounts due under the Loan Agreement. In the event of a bankruptcy, liquidation or reorganisation of a subsidiary, holders of that subsidiary's indebtedness and trade and other creditors of that subsidiary will have a claim to the assets of that subsidiary that is senior to Noteholders' interest in those assets (except that the Loan Guarantee shall rank pari passu with the other senior unsecured obligations of the Loan Guarantors, from time to time, and to the extent that TMK is recognised as a creditor through intercompany claims or loans). Therefore, in most circumstances, obligations under the Loan Agreement will effectively rank junior to all liabilities of TMK's subsidiaries other than those of the Loan Guarantors, including, but not limited to, trade payables.

In addition, TMK's subsidiaries may be subject to legal, contractual or other restrictions that would prevent them from paying dividends or otherwise distributing cash to TMK. There can be no assurance that any of TMK's subsidiaries will be able to make distributions to TMK to enable it to make payments under the Loan Agreement. See "*Operating and Financial Review*" for a discussion of TMK's borrowings.

TMK's subsidiaries may not approve the issuance of guarantees securing the Borrower's obligations under the Loan Agreement.

TMK has agreed in the Loan Agreement to procure, not more than 90 days after the Issue Date of the Notes, that "Seversky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company and "Taganrog Metallurgical Plant", Public Joint stock company as the Additional Loan Guarantors, will issue the Additional Loan Guarantees in favour of the Issuer, pursuant to which they will jointly and severally guarantee the payment of all the amounts due by the Borrower under the Loan Agreement. In addition, under certain circumstances TMK may also be required to procure that further subsidiaries guarantee TMK's obligations under the Loan. There can be no assurance that such subsidiaries will be able to approve the issuances of any such guarantees. In relation to "Seversky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company issuances of any such guarantees constitute major transactions and interested party transactions under the JSC Law, the provision of such guarantees requires the approval of the requisite majority of

the shareholders of any such subsidiaries. There can be no assurance that the shareholders will approve the issuance of any such guarantees.

Accordingly, if the Borrower fails to provide any such Additional Loan Guarantor or Further Loan Guarantor in accordance with the Loan Agreement, the Noteholders will have an option to redeem their Notes in whole or in part, and the Borrower will be required to prepay the Loan to the extent such Notes are tendered for redemption. See "*Description of the Transaction and the Security*". There can be no assurance that, if required to prepay the Loan in whole or in part, the Borrower or the other Loan Guarantors will have, or be able to obtain, the funds required to make such payments and that accordingly, the Issuer will be able to redeem such Notes.

TMK's obligations to make payments under the Loan Agreement are subordinated to TMK's secured obligations and the obligations of any Loan Guarantor to make payments under the Deed of Loan Guarantee are subordinated to secured obligations of the Loan Guarantors.

Some of TMK's indebtedness, as well as some of the indebtedness of the Loan Guarantors, is secured by property, plant and equipment, inventory and/or trade receivables. Upon the occurrence of an event of default under any of any Loan Guarantor's secured loans, or if TMK default on the Loan and this default triggers an event of default under any of TMK's or any Loan Guarantor's secured loans or other debt, or in the event of TMK's or any Loan Guarantor's bankruptcy, liquidation or reorganisation, the relevant entity's secured creditors will have a claim that will have priority over Noteholders' interest in the assets that serve as the security for such creditor's indebtedness. Therefore, TMK's obligations under the Loan Agreement and the obligations of any Loan Guarantor under the Deed of Loan Guarantee, respectively, will rank junior to TMK's and each Loan Guarantor's respective secured obligations.

Covenants in TMK's debt agreements, including the Loan Agreement, restrict its ability to borrow and invest, which could impair its ability to expand or finance its future operations.

Certain of TMK's short-term and long-term debt agreements, including the Loan Agreement, contain covenants that impose operating and financial restrictions on TMK and its subsidiaries. These restrictions significantly limit, and in some cases prohibit, among other things, TMK's and certain of TMK's subsidiaries' (including the Loan Guarantors') ability to incur additional debt, provide guarantees in relation to the obligations of third parties, create liens on assets or enter into business combinations. Failure to comply with these restrictions may constitute a default under TMK's debt agreements, including the Loan Agreement, and the Loan and any of TMK's other senior debt containing cross default provisions could become immediately due and payable. In addition, some of TMK's debt agreements contain provisions that permit its lenders to require TMK to repay its debt to them in the event of a material deterioration in TMK's financial condition. See "*Operating and Financial Review — Liquidity and Capital Resources — Indebtedness*" for a discussion of these limitations. See also "*— Risks Relating to the Group's Business and the Pipe Industry — The Group is significantly leveraged and is required to meet certain financial and other restrictive covenants under the terms of its indebtedness, and failure to do so could negatively affect the Group's business, financial condition and results of operations.*"

The ability of investors to receive payment on the Notes is limited to payments received by the Issuer under the Loan Agreement and/or the Deed of Loan Guarantee.

The obligations of the Issuer are limited recourse in nature and it is only obliged to make payments under the Notes to Noteholders in an amount equivalent to sums of principal, interest, increased amounts of principal, interest and "any other payment due under the Loan Agreement" (as defined in the Loan Agreement) and any "Additional Amounts" (as defined in the Loan Agreement) actually received by or for the account of the Issuer under the Loan Agreement and/or the Deed of Loan Guarantee, less any amount in respect of Reserved Rights. Consequently, if TMK fails to meet fully its obligations under the Loan Agreement and/or any Loan Guarantor fails to meet fully its obligations under the Loan Agreement and/or the scheduled amount of principal, interest, increased amounts of principal, interest and any other payment due under the Loan Agreement (if any) and/or Additional Amounts (if any) on the relevant due date. The Issuer's assets solely consist of the Loan Agreement and its liabilities solely consist of its obligations to make payments under the Notes. As an orphan special purpose vehicle incorporated for the sole purpose of issuing notes, it has no other material assets or liabilities.

Noteholders have no direct recourse against the Issuer.

Except as otherwise disclosed in "*Terms and Conditions of the Notes*" and in the Trust Deed, no proprietary or other direct interest in the Issuer's rights under or in respect of the Loan Agreement and/or the Deed of Loan Guarantee exists for the benefit of the Noteholders. Subject to the terms of the Trust Deed, no Noteholder will have any entitlement to enforce any of the provisions of the Loan Agreement and/or the Deed of Loan Guarantee or have direct recourse against the Group, except through action by the Trustee under the Security Interests (as defined in "*Terms and Conditions of the Notes*"). Neither the Issuer nor the Trustee under the Assigned Rights (as defined in "*Terms and*").

Conditions of the Notes") shall be required to enter into proceedings to enforce payment under the Loan Agreement and/or the Deed of Loan Guarantee.

The lack of a public market for the Notes could reduce the value of an investment in the Notes.

There may not be an existing market for the Notes at the time they are issued. The Notes are expected to be listed and admitted to trading on the Global Exchange Market. However, there can be no assurance that a liquid market will develop for the Notes, that holders of the Notes will be able to sell their Notes, or that such holders will be able to sell their Notes for a price that reflects their value.

TMK's payments under the Loan, the Guarantors' payments under the Guarantees and the Issuer's payments under the Notes may be subject to withholding tax.

A Russian legal entity should be released from tax withholding obligation on interest payments made to foreign organisations on debt obligations arising in connection with issuance by foreign organisations of traded bonds under certain conditions established in the Russian Tax Code (see "*Taxation*"). The Group's management believes that it should be released from obligations to withhold Russian withholding tax from interest payments made to the Issuer under the Loan Agreement, provided that the Issuer duly confirms its tax residency, since the Group's management believes that Notes meet the conditions established in the Russian Tax Code. However, since the rules granting release from tax withholding obligation were only tested to a limited extent, it is at the moment not exactly clear how they can be interpreted by the tax authorities. Release from the tax agent duty means that, in practice, withholding tax on interest payments should not arise in Russia, because currently there is no mechanism or requirement for non-resident legal entities and organisations to self-assess and pay tax. However, there can be no assurance that such rules will not be introduced in the future which may result to the obligation of non-resident legal entities and organisations to self-assess and pay tax.

If the Notes are simultaneously (i) delisted from the Euronext Dublin and (ii) in the limited circumstances are exchanged for duly executed and authenticated registered Notes in definitive form, TMK may be required to withhold Russian income tax from interest payments made by TMK to the Issuer. This also applies to the income received under the Guarantees.

In a scenario of delisting or other circumstances that may lead to the inability to enjoy the benefit of the traded bonds exemption TMK does not exclude the possibility that the Russian tax authorities may attempt to apply thin capitalisation rules to interest payments on the Loan, given the history of broad interpretation of these rules that is loosely based on the wording of the law. While TMK considers this risk to be theoretical and extremely remote (technically, the Issuer will be legally independent from TMK, and the Loan will not meet the definition of a controlled debt in its literal sense), in case it materialises (subject to having a 3-to-1 debt-to-equity ratio), dividend withholding tax of up to 15 per cent. may apply to the whole amount or part of interest payments and interest deductibility will be limited for TMK.

If interest payments under the Loan are subject to Russian withholding tax (as a result of which the Issuer would reduce payments made under the corresponding Notes by the amount of the tax withheld), TMK will be required under the terms of the Loan Agreement to increase any payment due to such amount as may be necessary to ensure that the Issuer receives a net amount equal to the full amount which it would have received had withholding not been made. Historically, Russian tax law was based on a principle that everyone has to discharge his/her tax liabilities personally, and there were doubts as to whether gross-up provisions were consistent with this principle. There is a risk that gross up for withholding tax will not take place and that the interest payments made by TMK under the Loan Agreement will be reduced by the amount of the Russian income tax withheld by TMK at the rate of 20 per cent., or such other rate as may be in force at the time of payment. In addition, whilst some Noteholders may be eligible for an exemption from, or a reduction in, the Russian withholding tax under applicable double tax treaties, there is no assurance that in this case the respective treaty relief will be available to them in practice.

The Notes represent limited recourse obligations of the Issuer, with the effect that the Issuer will have an obligation to the Noteholders to account only for amounts equivalent to amounts of principal, interest, and other amounts, if any, actually received by it from the Borrower under the Loan. Thus, in theory it may be argued that the Notes do not constitute a self-contained obligation of the Issuer to redeem the Notes and, thus, to repay the principal. In this regard TMK cannot entirely exclude the possibility that the Russian tax authorities may query whether the Notes can be regarded as debt obligations for the purposes of the exemption from Russian withholding tax.

In addition, payments in respect of the Notes will, except in certain limited circumstances, be made without deduction or withholding for or on account of Luxembourg taxes except as required by law. In the event of such deduction or withholding, the Loan Agreement provides for TMK to pay such corresponding amounts to the Issuer. In these circumstances, there are some doubts as to whether a tax gross-up clause such as that contained in the Loan Agreement

is enforceable under Russian law. Due to the limited recourse nature of the Notes, if TMK fails to pay any such grossup amounts, the amount payable by the Issuer under the Notes will be correspondingly reduced.

If during the life of the Notes, the Issuer ceases to be resident for tax purposes in Luxembourg and becomes resident for tax purposes in another jurisdiction, in the event that such new jurisdiction requires the Issuer to effect deduction for or on account of any taxes (other than taxes of Luxembourg or the Russian Federation) in respect of payments which the Issuer is required to make under or in respect of the Notes, under the terms of the Loan Agreement, TMK will be under no obligation to increase payments to the Issuer under the Loan Agreement in respect of such withholding or deduction for or on account of any taxes (other than taxes of Luxembourg or the Russian Federation). In such circumstances, the Noteholders will receive payments under the Notes net of such withholding or deduction and will have no right to require that their Notes be repaid.

Tax might be withheld on proceeds received from a source within Russia upon disposal of the Notes reducing their value.

Generally, there should be no Russian withholding tax on gains from a sale or other disposition of the Notes imposed on entities not residents in Russia for tax purposes. There is some uncertainty regarding the tax treatment of the portion of the sales or disposal proceeds, if any, attributable to accrued interest (coupon) on the Notes (i.e., debt obligations) where proceeds from the sale or other disposition of the Notes are received from a source within Russia by a nonresident legal entity, which is caused by isolated precedents in which the Russian tax authorities challenged the nonapplication of the Russian tax to the amount of accrued interest (coupon) embedded into the sale price of the Notes. Although the Russian Ministry of Finance in its most recent clarification letters opined that the amount of sale or other disposal proceeds attributable to the accrued interest on the Notes paid to a non-Russian organisation should not be regarded as Russian source income and on this basis should not be subject to taxation in Russia, there remains a possibility that a Russian entity or a foreign entity having a registered tax presence in Russia which purchases the Notes or acts as an intermediary may seek to assess Russian withholding tax at the rate of 20 per cent. (or such other rate as could be effective at the time of such sale or other disposal) on the accrued interest portion of the disposal proceeds.

Where proceeds from the sale or other disposal of the Notes are deemed to be received from a source within Russia by an individual not recognised as a tax resident in Russia, a Russian personal income tax at a tax rate of 30 per cent. may apply to the gross amount of sales or other disposal proceeds realised upon such sale or other disposal of the Notes less any available duly documented cost deductions (including the acquisition cost of the Notes), provided that the documented expenses related to the acquisition, holding and the sale or other disposal of the Notes), provided that the documentation supporting cost deductions is available in a timely manner to the tax agent that is required to calculate and withhold Russian personal income tax. Although such tax may be reduced or eliminated based on provisions of an applicable double tax treaty subject to timely compliance by that Noteholder with the treaty clearance formalities, in practice a non-resident Noteholder, who is an individual may not be able to obtain the advance treaty relief in relation to sales or disposal proceeds received from a source within Russia, while obtaining a refund of taxes withheld can be extremely difficult, if not impossible.

Before 1 January 2020, the Russian Tax Code provided for a closed list of tax agents responsible for withholding personal income tax from payment to an individual associated with the disposition of the Notes, including a professional asset manager or a broker acting under an asset management agreement, a brokerage service agreement, an agency agreement, a commission agreement or a commercial mandate agreement. However, starting from 1 January 2020, the list of tax agents was extended to include any Russian entities or individual entrepreneurs that make payments to individuals under contracts for sale or exchange of securities.

Under such circumstances the imposition or possibility of imposition of Russian withholding tax, including but not limited to situations where an individual is unable to timely confirm cost deductions or obtain a treaty relief, could adversely affect the value of the Notes.

The Notes may or must be redeemed early in a number of circumstances.

On the occurrence of one of the early redemption events described in "*Terms and Conditions of the Notes* — *Redemption and Purchase*" and in "*The Loan Agreement*", the Borrower may, or in some cases must, prepay the Loan in whole or in part together with accrued interest at any time, and (to the extent that it has actually received the relevant funds from the Borrower or the Loan Guarantors) the Issuer shall redeem all outstanding Notes in accordance with the Terms and Conditions of the Notes. On such redemption, or at maturity, the Borrower and/or the Loan Guarantors may not have the funds to fulfil its obligations under the Loan Agreement and/or the Deed of Loan Guarantee, as the case may be, and the Borrower may not be able to arrange for additional financing. If the early repayment or maturity date of the Loan occurs at a time when other arrangements prohibit.

Modification, waivers and substitution.

The Terms and Conditions of the Notes contain provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the majority.

The Terms and Conditions of the Notes also provide that the Trustee may, without the consent of Noteholders, agree to (i) any modification of, or to the waiver or authorisation of any breach or proposed breach of, any of the provisions of Notes or (ii) determine without the consent of the Noteholders that any Event of Default or potential Event of Default shall not be treated as such or (iii) the substitution of another company as principal debtor under any Notes in place of the Issuer, in the circumstances described in Condition 12 of the Terms and Conditions of the Notes.

The market price of the Notes may be volatile.

The market price of the Notes could be subject to significant fluctuations in response to actual or anticipated variations in the Group's own or the Group's competitors' operating results, adverse business developments, changes to the regulatory environment in which the Group operates, changes in financial estimates by securities analysts, and the actual or expected sale of a large number of Notes, as well as other factors. Historically, the market for non-investment grade debt, such as the Notes, has been subject to disruptions that have caused substantial volatility in the prices of such securities. Any such disruptions may harm Noteholders. In addition, in recent years the global financial markets have experienced significant price and volume fluctuations that, if repeated in the future, could adversely affect the market price of the Notes without regard to the Group's results of operations, prospects or financial condition.

Credit ratings of the Notes may not reflect all risks.

As described in "—*Risks relating to the Notes, the Issuer, the Guarantees and the Trading Market*—*Changes to the Borrower's credit rating may adversely affect the trading price of the Notes*", two independent credit rating agencies are expected to assign credit ratings to the Notes. Credit ratings assigned to the Notes do not necessarily mean that they are a suitable investment. The ratings may not reflect the potential impact of all risks related to the structure, market, additional factors discussed above, and other factors that may affect the value of the Notes. Similar ratings on different types of notes do not necessarily mean the same thing. The ratings do not address the likelihood that the principal on the Notes will be prepaid, paid on an expected final payment date or paid on any particular date before the legal final maturity date of the Notes. The ratings do not address the marketability of the Notes or any market price. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation.

Changes to the Borrower's credit rating may adversely affect the trading price of the Notes.

It is expected that the Notes will be rated BB- by Standard & Poor's and B1 by Moody's. TMK is rated "BB-" longterm credit rating with a stable outlook by Standard & Poor's and "B1" corporate family rating with a positive outlook by Moody's. As payments to be made under the Notes depend on payments made by the Borrower under the Loan, any changes in the credit ratings of the Borrower could adversely affect the trading price of the Notes. A change in the credit rating of the Russian Federation, or one or more other Russian corporate borrowers or banks could also adversely affect the trading price of the Notes. Further, any rating given to the Notes is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time by the assigning rating organisation.

The Notes may not be a suitable investment for all investors.

Each potential investor in the Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained in these Listing Particulars;
- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Notes and the impact such investment will have on its overall investment portfolio;
- have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes;
- understand thoroughly the terms of the Notes and be familiar with the behaviour of the relevant financial markets; and

• be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

Noteholders' rights will be limited so long as the Notes are issued in book-entry interests.

Owners of book-entry interests will not be considered owners or holders of Notes unless and until definitive notes are issued in exchange for book-entry interests. Instead, Euroclear or Clearstream, Luxembourg or their nominees, will be the sole holders of the Notes.

Payments of principal, interest and other amounts owing on or in respect of the Notes in global form will be made as described in "*Summary of the Provisions Relating to the Notes in Global Form*" and none of the Issuer, the Loan Guarantors, the Trustee or any paying agent will have any responsibility or liability for any aspect of the records relating to or payments of interest, principal or other amounts to Euroclear or Clearstream, Luxembourg or to owners of book-entry interests.

Owners of book-entry interests will not have the direct right to act upon the Issuer's, TMK's or the Loan Guarantors' solicitations for consents or requests for waivers or other actions from holders of the Notes, including enforcement of security for the Notes and the Loan Guarantees. Instead, Noteholders who own a book- entry interest will be reliant on the nominees for the common depositary or custodian (as registered holder of the Notes) to act on their instructions and/or will be permitted to act directly only to the extent such holders have received appropriate proxies to do so from Euroclear or Clearstream, Luxembourg or, if applicable, from a participant. There can be no assurances that procedures implemented for the granting of such proxies will be sufficient to enable you to vote on any requested actions or to take any other action on a timely basis.

Tax Risks Relating to Anti-tax Avoidance Directive

On 12 July 2016, the EU adopted the EU Directive No. 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market ("**ATAD I**"), which sets out anti-tax avoidance measures that all EU Member States are to apply regarding controlled foreign companies, hybrid mismatches, exit taxation, anti-abuse and interest limitation. Article 4 of ATAD I provides that the deduction of exceeding borrowing costs is capped to an amount corresponding to 30 per cent. of EBITDA or to an amount of EUR 3 million, whichever is higher.

ATAD I entered into force on 1 January 2019 in Luxembourg (save exit taxation rules effective from 1 January 2020). In addition, on 29 May 2017, the Council of the EU adopted the EU Directive No. 2017/952 ("**ATAD II**") amending ATAD I. ATAD II extends the scope of ATAD I to hybrid arrangements with third countries and encompasses forms of hybrid mismatches not covered by ATAD I. ATAD II was implemented in Luxembourg effective as of 1 January 2020 (save the reverse hybrid rules that should be effective as of 1 January 2022).

The above-mentioned tax rules may limit the Issuer's ability to deduct interest accrued on the Notes from its taxable base and, as a consequence, may increase its tax burden, which could adversely affect its business, results of operations and reduce the cash flow available to service its indebtedness. Should the holding of Notes by a Noteholder (or a group of Noteholders) result in an increase of the Issuer's tax burden, the tax due on the additional tax burden shall be borne by that Noteholder (or group of Noteholders).

Insolvency laws in Luxembourg are subject to the number of uncertainties which may affect the Noteholders

Any insolvency proceedings with regard to the Issuer would most likely be based on and governed by the insolvency laws of Luxembourg, the jurisdiction under which the Issuer is organised. As a result, in the event of the Issuer's insolvency, a Noteholder's claim against the Issuer is likely to be subject to insolvency laws of Luxembourg. The insolvency laws of Luxembourg may not be as favourable to the interest of Noteholders as the laws in other jurisdictions. In the event that the Issuer experiences financial difficulty, it is not possible to predict with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings would be commenced or how these proceedings would be resolved. In addition, there can be no assurance as to how the insolvency laws of Luxembourg will be applied in insolvency proceedings relating to several jurisdictions.

OVERVIEW OF THE GROUP

This overview highlights certain information concerning the Group's business and this offering of Notes. It does not contain all information that may be important to you and to your investment decision. TMK urges you to carefully read the entire Listing Particulars, including the financial data and related notes and the matters set forth in "Risk Factors" before deciding to invest in the Notes.

The Group's management believes that the Group is a global leader in tubular products for the oil and gas industry and is among the world's largest steel pipe producers by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019 and approximately a 6 per cent. share of the global market for seamless pipes and a 15 per cent. share of the global market for seamless OCTG by sales volume for the nine months ended 30 September 2019, according to the Group's management's estimates. The Group's management considers that for the nine months ended 30 September 2019, the Group was the largest Russian producer and supplier of steel pipes. The Group's management estimates that the Group had approximately a 23 per cent. market share for tubes and pipes in Russia, a 33 per cent. market share for pipes used in the oil and gas industry in Russia, a 56 per cent. market share for seamless OCTG in Russia, in each case by sales volume for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months en

The Group's management further believes that the Group is a leading exporter of pipes produced in Russia, with sales volumes of pipe products produced at its Russian plants accounting for 34 per cent., 30 per cent., 23 per cent. and 33 per cent. of the volume by tonnes of all steel pipe exports from Russia for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively, according to the Group's management's estimates.

The Group produces both seamless and welded pipes, and primarily supplies pipes for the oil and gas industry which accounted for 78.8 per cent., 78.1 per cent., 76.7 per cent. and 78.4 per cent. of the Group's total sales volume by tonnes for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group focuses principally on higher margin and technologically advanced seamless products, which accounted for approximately 90 per cent. of the Group's gross profit for the nine months ended 30 September 2019. The Group's main focus is the production of predominantly higher margin and technologically advanced seamless OCTG pipes, including premium connections, manufactured at the Group's facilities in Russia. OCTG pipes are an integral element of oil and gas exploration and production and are used for drilling wells, casing and tubing. The Group is also a major producer of large diameter welded pipes, used in the construction of trunk pipelines for long-distance transportation of natural gas, crude oil and oil products, as well as line pipes for short distance transportation.

The Group also manufactures higher margin industrial seamless pipes, which are widely used in the automotive, power generation, machine building and chemical industries. In addition, the Group produces industrial welded pipe, which has a wide array of applications in various industries, including utilities and agriculture.

For the nine months ended 30 September 2019, the Group sold 2,932 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,372 thousand tonnes, while sales of LDP reached 373 thousand tonnes.

For the year ended 31 December 2018, the Group sold 3,989 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,930 thousand tonnes, while sales of LDP reached 303 thousand tonnes.

For the year ended 31 December 2017, the Group sold 3,784 thousand tonnes of steel pipes with seamless pipes comprising 71 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,758 thousand tonnes, while sales of LDP decreased to 267 thousand tonnes.

For the year ended 31 December 2016, the Group sold 3,458 thousand tonnes of steel pipes with seamless pipes comprising 70 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,426 thousand tonnes, while sales of LDP decreased to 516 thousand tonnes.

The Group currently has the following six principal product lines:

- seamless OCTG, which are used in oil and gas production;
- seamless and welded line pipes, which are used for in-field short-distance oil and gas transportation;

- large diameter welded pipes, which are used for the transportation of oil and gas, typically over long distances;
- industrial seamless pipes, which have various industrial applications in the machine building, chemicals and petrochemicals, power generation, automotive, nuclear and other industries; and
- industrial welded pipes, which are used in a wide variety of infrastructure and industrial applications.

As a result of the sale of TMK IPSCO, the Group disposed of its welded OCTG production capacities.

As at 30 September 2019, the Group's nominal annual steel pipe production capacity was approximately 6.1 million tonnes, including 3.2 million tonnes of seamless pipes. As a result of the sale of TMK IPSCO, the Group's nominal annual steel pipe production capacity decreased to 4.8 million tonnes. As a vertically integrated seamless pipe producer, the Group operates its own steel-making facilities and in 2013, it completed the construction of a new electric arc furnace ("**EAF**") at Tagmet. In 2014, the Group completed the construction of a new Fine Quality Mill ("**FQM**") at Seversky with a total annual seamless pipe capacity of approximately 550 thousand tonnes, which resulted in an incremental growth of nominal production capacity of seamless pipe by approximately 200 thousand tonnes.

For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group produced 2,334 thousand tonnes, 3,309 thousand tonnes, 3,235 thousand tonnes and 2,738 thousand tonnes of steel (which, in turn, is produced from scrap metal or HBI), respectively, which satisfied more than 95 per cent. of the Group's steel billet requirements for seamless pipe production for each of such periods, respectively. The Group primarily uses EAFs in connection with the Group's steel-making operations, the principal input for which is scrap metal. For its Russian operations, the Group sources almost all of scrap metal from a single domestic supplier, TMK-Chermet. The Group also sources scrap metal from various domestic suppliers in Romania and the United States for its operations in these regions. The Group purchases hot rolled coil ("**HRC**") and steel plates for use in its welded pipe production from major producers in the Group's key regions.

The Group has historically supplied its products to customers in more than 80 countries. The Group's principal customers include major Russian oil and gas and service companies, such as Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. The Group also works with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol. In addition, the Group ships significant amounts of its pipe products to large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC.

As at 30 September 2019, the Group's business was globally represented in three reporting segments consisting of:

- *Russia:* includes plants located in Russia, a finishing facility in Kazakhstan, and oilfield service companies and traders located in Russia, the UAE and Switzerland;
- *Americas:* includes plants and traders located in the United States and Canada; and
- *Europe:* includes plants in Romania and traders located in Italy and Germany that are engaged in the sale of pipe production and steel billets.

See "Business—Corporate Structure", "Business—Strategic Ventures—Recent Sale of TMK IPSCO" and "Operating and Financial Review—Segments".

The Group has an extensive sales network with trading subsidiaries and representative offices in Russia, the United States, the UAE, Germany, Italy, Switzerland, China and Turkmenistan.

The Group's management believes the Group's production facilities to be state-of-the-art with respect to technology and business processes. The Group has undertaken significant investments in its operations since 2004 and has now completed all of the key projects of its capital expenditure programme, which significantly upgraded and increased the efficiency of the Group's Russian seamless and welded pipe operations and enhanced its R&D operations. In Russia, the Group completed two major projects in 2013 and 2014, which were the construction of a new EAF at Tagmet and the construction of a new FQM at Seversky. In 2018, the Group opened a heat treatment facility in Romania. In 2015 and 2016, the Group implemented a large-scale cost cutting programme and limited its capital expenditures substantially to maintenance works with expansion capital expenditures being limited to investments in finishing operations to increase the production of higher margin products. See "*Business—Capital Expenditure Programme*". In 2019, the Group completed the construction of state-of-the-art R&D facilities at Skolkovo Centre, which further enhanced the Group's competitive position in the R&D area. Skolkovo Centre will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products),

transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

For the nine months ended 30 September 2019, the Group had a total consolidated revenue of U.S.\$ 3,666.5 million and a net profit of U.S.\$ 105.2 million, as compared to total consolidated revenue of U.S.\$ 3,834.9 million and net profit of U.S.\$ 19.7 million for the nine months ended 30 September 2018. The Group's Adjusted EBITDA for nine months ended 30 September 2019 was U.S.\$ 508.5 million, as compared to U.S.\$ 521.5 million for the same period in the year ended 30 September 2018 (for the definition of Adjusted EBITDA, see "Summary Consolidated Financial and Operating Information" and "Operating and Financial Review").

TMK is rated "BB-" long-term credit rating with a stable outlook by Standard & Poor's and "B1" corporate family rating with a positive outlook by Moody's.

Competitive Strengths

The Group's management believes the following competitive strengths distinguish its past operational and financial performance and the Group's future growth prospects from other global steel pipe producers:

Leading position in the market and well-established client base

The Group's management believes that the Group is a global market leader by tubular production capacity and is among the world's largest steel pipe producers by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019. According to the Group's management's estimates, the Group is the third largest seamless OCTG producer globally and the largest steel pipe producer in Russia. The Group's management estimates that for the nine months ended 30 September 2019, it had approximately 15 per cent. share of the global seamless OCTG pipe market and an approximately 64 per cent. share of the Russian seamless OCTG pipe market, in each case by sales volume.

The Group's significant investments in the construction and modernisation of its production facilities and significant experience make it well positioned to service the most sophisticated clients in the oil and gas industry and underpin the Group's profitability. The Group's management believes that there is a relatively small number of large international producers capable of successfully competing with the Group. Further, any new entrants into the market would have to contend with the capital-intensive nature of the pipe manufacturing business, high technological sophistication of the manufacturing process and product lines and stringent certification requirements imposed by industry bodies and major international oil and gas companies.

As an incumbent producer, the Group has been able to secure larger market shares in Russia and Europe. In Russia, the Group is significantly larger compared to its principal competitors in the seamless pipe market, and specifically the OCTG and premium connections markets, and benefits from strong relationships with many of the local major oil and gas production companies, including Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. According to the Group's management's estimates, for the nine months ended 30 September 2019, the Group had approximately a 74 per cent. share of the premium connections market in Russia by sales volume. The Group also benefits from the established relationships with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol, as well as with large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC. The Group's leading market position allows the Group to effectively compete with other industrial pipe manufacturers in its key markets.

Product diversification, strong international presence (including in one of the most attractive markets in the industry), developed distribution network and customer recognition

Historically, global oil and gas drilling and production activity has been focused on a number of geographic regions including Russia and the Middle East. The Group has a strong international presence, with more than 14 production sites in Russia, the CIS and Europe supported by an extensive wholly-owned sales and marketing network covering all key oil and gas markets.

The Russian market where the Group has a strong presence is one of the most attractive markets in the industry. Russia accounted for approximately 20 per cent. of global drilling activity in the oil and gas industry (excluding China and Central Asia) in the year ended 31 December 2018, while remaining one of the lowest cost producing regions globally. The Group's management believes that stable oil and gas drilling activity in Russia will continue to support demand for the Group's pipe products for the oil and gas industry in the coming years.

The Group's management estimates that for the nine months ended 30 September 2019 the Group was also the leading exporter of pipes from Russia with an estimated 34 per cent. share of all Russian-produced steel pipe exports and an

estimated 66 per cent. share of total Russian-produced seamless pipe exports, in each case based on the Group's total sales volume by tonnes.

The Group's production sites are located in close proximity to the main oil and gas production regions (especially oil and gas shale formations) and consumers of the Group's products. Two of the Group's plants, Volzhsky and Tagmet, are strategically located in the south-western part of Russia near the Black Sea and Volga river shipping routes to North America, the Middle East and Southern Europe and transit routes to the Caspian region, which gives them a strong export advantage. The Group's global platform and expertise allows the Group to manufacture products suitable for various climate zones and environmental conditions. The Group's management believes that the Group's wide geographical footprint, as well as the completion of key strategic investment projects, provide it with a strong platform enabling to enhance the Group's position as a global leader in OCTG and line pipe segments.

The Group's broad product offering for the oil and gas industry includes OCTG (including OCTG with premium threaded connections), seamless and welded line pipe and large diameter welded pipe. The Group's focus on the premium segment of the OCTG market and the availability of proprietary solutions developed through its R&D base enables the Group to position it as a premium producer in the industry. Furthermore, although the Group's product portfolio is largely focused on the oil and gas industry, the Group also manufactures products for other industries, such as pipe for infrastructure and industrial applications, machine building, chemicals and petrochemicals, power generation, automotive, nuclear and other industries, which enables the Group to utilise the benefits of a cross-industry producer, including the diversification of client and product base and mitigation of the risks inherent to a focus on a sole industry.

In addition, the Group's management believes that the Group's strong international presence, together with diversified product portfolio, allows the Group to remain less exposed to the risks inherent in a concentrated product or client sector portfolio.

Low-cost position, stable margins and superior earnings resilience through the cycle supported by vertical integration

The Group is a vertically integrated steel pipe producer. In particular, the Group meets almost all of its own needs for steel billets by in-house production. Three of the Group's four Russian pipe plants have internal steel manufacturing facilities and produce their own billets used for, amongst other things, seamless pipe-making. While Sinarsky in Russia does not have its own steel-making facilities, it is advantageously located near Seversky and obtains its steel billets from there. In addition, the Group's operational efficiency benefits from substantially all of TMK-Artrom's steel billets requirements being covered by TMK-Resita, both of which are located in Romania. As a result, the Group is able to achieve cost savings by reducing its need to purchase semi-finished steel products from third party manufacturers. Having internal steel-making capabilities also enables the Group to have a greater degree of quality control over the steel used in its pipe-making operations and certain production flexibility. Further, the construction of a new EAF steel-making facility at Tagmet, completed in 2013, has significantly enhanced the Group's steel-making capabilities as well as improved its environmental performance by enabling the Group to close its remaining open hearth furnaces.

In Russia, the Group is typically able to source the main raw material for its seamless pipe production, steel scrap, at lower costs than on the international markets due to the Group's relationship with a local scrap supplier, the favourable location of the Group's assets, as well as due to the sufficient supply of scrap in Russia and constraints on the export of steel scrap from Russia, including export duties. Furthermore, to the extent the Group is exposed to raw material costs, such as purchases of scrap and ferroalloys for use in steelmaking operations, steel billets for the production of seamless pipes and steel coils and plates for the production of welded pipes, the Group has been able to successfully pass a portion of raw material costs on its customers through the agreements providing for quarterly, four-monthly or semi-annual price adjustment (depending on the agreement) that is linked to the cost of raw materials with some of its key customers, which is evidenced by its relatively stable profit margins.

The Group benefits from its vertically integrated production structure accompanied by a low cost position, which underpins stronger earnings resilience in changing markets.

In addition, the significant depreciation in the value of the Rouble in recent years has provided the Group with a competitive advantage in terms of lower cost base. The Group's plants are also strategically located near important domestic customers and export routes. For example, Seversky and Sinarsky are located in the Urals region near transport routes linking the Russian industrial centres with the oil and gas regions in Western Siberia, which helps to reduce the Group's transportation costs. The Group's long operating history as well as acquisitions in Russia and elsewhere provide it with significant industrial know-how. The Group maintains high levels of integration of its facilities as a result of its in-house steel production and share benchmarking and best-practices from facility to facility.

The Group has already achieved significant cost benefits from capital expenditures at its plants, which feature technologically sophisticated steel-making, pipe-rolling and pipe-finishing equipment and the Group's management believes the Group has some of the most efficient pipe-making facilities in Russia. The Group has achieved further cost benefits after the Group completed the construction of a new EAF with annual production capacity of 950 thousand tonnes at Tagmet and an FQM seamless pipe rolling mill with an annual production capacity of 550 thousand tonnes at Seversky.

Strong organic growth potential and well positioned to benefit from market recovery

From 2004 to 2014, the Group implemented its strategic capital expenditure programme, which significantly enhanced the Group's Russian seamless pipe production capabilities and the efficiency of its production processes. See "*Business—Capital Expenditure Programme*". As a result, the Group's management believes that most of the necessary infrastructure is now in place to enable the Group to grow its business on the basis of its existing manufacturing capacity and equipment.

In response to the market demand, the Group currently operates at moderate capacity utilisation levels. In particular, in its Russian segment, for the nine months ended 30 September 2019, the Group operated at approximately 48 per cent. capacity utilisation in its welded business and approximately 86 per cent. in its seamless business. In Europe, for the nine months ended 30 September 2019, the Group had a capacity utilisation rate of approximately 95 per cent. in its seamless business. Accordingly, the Group can increase its production volumes in response to market demand growth with limited additional investment and is very well positioned to benefit from the market recovery.

Experienced management team and strong capital markets track record

The Group's management team has an extensive track record of successful execution of complex projects (including a wide range of debt and equity capital markets projects) and effective business management. It combines extensive industry and marketing experience with in-depth financial and management expertise. TMK's board of directors and management board consists of a team of professionals who have been involved in the Group's business for an extended period of time and have global experience in all necessary areas of competence.

The members of the Group's management team have an average of more than twenty years of industry experience. The Group believes that the experience of the Group's management and their in-depth knowledge of the industry ensures timely, efficient and objective decision making and project execution in the best interests of TMK and stakeholders.

In addition, the Group adheres to the highest environmental, social and corporate governance and business ethics standards, including the appointment of independent directors to TMK's board of directors. TMK considers five of its current eleven directors to be independent directors. See "*Management and Corporate Governance*". In 2018, TMK was recognised as a top-20 company in Russia in terms of disclosure of corporate governance information, according to the annual survey "National Corporate Governance Index".

TMK has also been present in international capital markets since 2006 and has successfully executed five Eurobond issues since then.

Strategy

The Group's strategy through 2027, which was adopted in September 2017, is aimed at reinforcing the Group's position as a leading supplier to the global OCTG market, the dominant supplier to the Russian oil and gas market and the second leading pipe producer in terms of financial performance in the world. Since the incorporation of TMK, the Group has developed its pipe business through acquisitions and organic growth and the Group's management believes that the Group's Russian and European assets, as well as the completion of its large scale capital investment programme, have provided the Group with a strong platform enabling the Group to reinforce its position as a global leader in OCTG and line pipe products. The Group contemplates revising its strategy in 2020 to reflect the effect of TMK IPSCO disposal.

As one of its key priorities, the Group's endeavours to enhance its position as one of the world's leading producers of steel pipes. In addition, the Group's acquisition of assets and subsidiaries in Russia, the CIS and Europe completed over the last several years has:

- provided the Group with a strong production presence in major oil and gas regions;
- represented a strategic fit with its existing position in OCTG pipes;

- enhanced its global profile;
- broadened its product mix and provided the Group with complimentary higher margin products to offer to the oil and gas industry; and
- provided the Group with product and geographical diversification.

At present, the Group pursues the following key strategies:

Strengthen leadership in key segments and enter new product niches

The key focus of the Group's strategy is to enhance its global leadership in the key product segments. The Group intends to continue focusing principally on higher margin and technologically advanced products (including OCTG and line pipe products) with an emphasis on seamless OCTG production at, and export from, the Group's Russian plants through leveraging the existing or newly commissioned capacities.

Further, the Group aims to strengthen its leading position in the OCTG and line pipe segments by expanding its relationship with existing customers and forming strategic partnerships with major Russian oil and gas companies, such as Rosneft and Gazprom, as well as its global customers to collaborate on the development of breakthrough technology and services.

The Group also intends to enhance its R&D capabilities with the aim of improving the technological sophistication of its products, improving its manufacturing efficiency and decreasing its production costs. The Group benefits from R&D capabilities of ROSNITI JSC, a Russian technological institute ("**RosNITI**") in Chelyabinsk, Russia. In addition, in the fourth quarter of 2019, the Group completed the construction of state-of-the-art R&D facilities at Skolkovo Centre, which further enhanced the Group's competitive position in the R&D area. Skolkovo Centre will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products), transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

The Group intends to bolster its revenues through the development of innovative products and solutions, as well as through the increase of the share of technologically advanced products in its overall production.

The Group plans to further develop its premium connections business by increasing the current product range and intensifying its marketing efforts and aims to remain the largest producer of premium connections in Russia. TMK-Premium Service LLC ("**TMK-Premium Service**") currently develops and promotes the Group's existing and new premium connection products produced in Russia in the international markets. The Group's management believes that TMK-Premium Service developments are enabling the Group to improve the quality of its higher margin products and helping to make the Group a leading supplier of a full range of premium-class threaded connections and complex OCTG products in conjunction with the provision of related services in Russia and elsewhere.

Optimise vertical integration to reduce costs and further develop product and service range with a view to increase profit margins

The Group intends to enhance its vertical integration, which the Group expects to further reduce costs and improve profit margins, whilst also allowing it to further develop and enhance its range of products and services. In particular, it aims to:

- increase the capacity utilisation of steelmaking facilities through higher production volumes of steel billets and other products and thus maximising the revenues derived therefrom. In 2018, the Group increased the sales of steel billets and launched production of railway wheel steel at Tagmet in strategic cooperation with a wheel producer from Kazakhstan;
- expand its capabilities in further processing of tubular products (such as drill pipe and coating products). In 2018, the Group launched a new heat treatment facility at TMK-Artrom, which allowed the Group to increase the share of high-margin products in the sales mix, which allowed the Group to expand its product range;
- develop a service offering of ready-to-use comprehensive engineering solutions for customers, including through the adoption of cutting-edge digital technologies and the promotion of the Group's technologically advanced products. In 2018, the Group continued to develop its services for the construction, repair and efficient operation of wells, logistical support, engineering and process consulting. In the year ended 31 December 2018, 15 per cent. of premium connection shipments at the Russian division also included the engineering analysis of projects;

• secure stable supplies of flat-rolled products to the Group's facilities for welded OCTG and line pipe production in Russia.

Focus on innovation and digitalisation

Innovation and digitalisation is one of the key focus areas of the Group's strategy through 2027 with the Group aiming to adopt and utilise advanced digital technologies to improve the quality of its products and further reduce costs.

The Group's management believes that in order to be able to satisfy the continuously evolving customer needs and requirements, the Group must remain at the forefront of innovation and technological breakthrough, particularly in the oil and gas industry. The Group's management considers that business transformation encompasses more than merely implementing individual projects based on digital technologies. Rather, the Group's business transformation should involve the creation of a continuous chain of improvements to existing processes across all aspects of the Group's business, from customer and supplier relations to adopting innovative production management approaches, as well as standardising and digitising company-wide processes based on a new level of employee engagement.

Furthermore, from 2017, in the implementation of its strategy, the Group took major steps towards its digital transformation and implemented a number of milestone digital projects. See "Business—Digital Solutions and Technologies".

Enhance international sales platform and the Group's scale

The Group plans to expand its commercial footprint by leveraging its wide geographical presence through improved coordination between divisions, more active development of existing brands, and strengthening of the TMK's global sales network. The Group has historically supplied its products to customers in more than 80 countries. The Group's principal customers include major Russian oil and gas and service companies, such as Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. The Group also works with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol. In addition, the Group ships significant amounts of its pipe products to large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC.

Furthermore, despite the recent sale of TMK IPSCO (see "*Business—Strategic Ventures—Recent Sale of TMK IPSCO*"), the Group's management endeavours to maintain relationships with end users based in the United States established prior to such sale (including, among others, ExxonMobil, XTO, Anadarko Petroleum, Occidental Petroleum, Chesapeake Energy, Antero Resources, Noble Energy, EQT, Range Resources and Hunt Oil) by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement.

The Group intends to focus on offering products that are in demand in Russia and other countries of the Group's presence and, in particular, on technologically advanced seamless pipes and premium connections, and increasing the share of the export sales of its Russian plants while maintaining the flexibility to refocus its sales depending on macroeconomic and geopolitical environment.

The Group further intends to utilise TMK eTrade, an on-line platform, which is the first on-line platform for the sale of tubular goods in Russia. See "*Business—Digital Solutions and Technologies*".

Enhance operational excellence

The Group intends to foster a culture of continuous operational improvements, lean production and operational cost cutting, and to ensure consistent product quality through increasing the sustainability of technologies and personnel qualification.

The Group aims to enhance its reputation as a reliable supplier, ensure that the consumer requirements as to quality and delivery times are complied with, enable prompt attention to customers' requests, including through the use of modern digital technologies.

Adhere to best practices in environment, social and governance matters

An important element of the Group's strategy is its contribution to maintaining an environmental balance across its operations and its commitment to improving working conditions and enhancing occupational safety. In the year ended 31 December 2018 and the nine months ended 30 September 2019, the Group continued to be focused on the environmental compliance of its production processes with the international standards, reducing the Group's consumption of water resources, and minimising landfill volumes. With more than 20 projects implemented, the Group's aggregate expenditure for environmental projects in the year ended 31 December 2018 amounted to approximately U.S.\$40 million, representing an increase of 8 per cent. from approximately U.S.\$37 million in the

year ended 31 December 2017, which, in turn, represented an increase of 48 per cent. from approximately U.S.\$25 million in the year ended 31 December 2016. In the context of occupational health and safety, the Group's comprehensive efforts in 2018 across its production facilities drove a major reduction in occupational injury rates and resulted in there being no fatalities or mass accidents.

The Group also focuses on regular improvement of its health and safety performance with a view to provide a healthy and safe working environment for its employees and minimise accidents in the workplace. In the year ended 31 December 2018, the Group's investments in safe working environment amounted to U.S.\$11 million, representing an increase of 14 per cent. year-on-year. In the context of occupational health and safety, the Group's comprehensive efforts across its production facilities in 2018 allowed to achieve a major reduction in occupational injury rates and resulted in there being no fatalities or mass accidents which remains the Group's key priority to maintain the relevant rates at this level. The Group's injury frequency rate for the year ended 31 December 2018 and a 14 per cent. decrease, as compared to the year ended 31 December 2018 and a 14 per cent. decrease, as compared to the year ended 31 December 2018 and a 14 per cent. 2018 decreased by 45 per cent., as compared to the year ended 31 December 2017.

In addition, the Group develops a number of projects aimed at implementation of best social and governance practices (such as "conscious safety" system and electronic system of pre-shift inspections aimed at increasing labour protection at the Group's production facilities).

The Group's sustainability performance is assessed by several international ratings and analytical agencies, including MSCI (in May 2019, the Group's MSCI ESG rating was upgraded from "BB" to "B"¹). As of 1 January 2020, the Group was assigned with governance score "2" (on a scale from 1 to 10, where 1 indicates the lowest governance risk and 10 indicates the highest governance risk), social score "6" and environmental score "4" (on a scale where 1 indicates the highest environmental and social disclosure and 10 indicates the lowest environmental and social disclosure by ISS.

Maintain prudent financial policy and target further credit rating updates

The Group adheres to a prudent financial policy and maintains a balanced debt portfolio by instruments, currencies and maturity profile and targets to achieve upgrades of the credit ratings assigned to TMK.

The Group plans to continue focusing on maximising operating cash flow and reducing the leverage, endeavouring to achieve a long-term target Net Debt to Adjusted EBITDA ratio of 2.5x or lower. In line with this strategy, the Group has consistently reduced its capital expenditure programme in the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016 and, subject to any unanticipated maintenance or repair works, further targets to decrease capital expenditures to around U.S.\$ 200 million per annum in the medium-term perspective. For further details of the Group's capital expenditure projects see "*Business—Capital Expenditure Programme*". The Group also plans to exercise strict control over maintenance costs.

In addition, the Group plans to explore opportunities for non-organic deleveraging, including through a potential disposal of international assets. In line with this strategy, in March 2019, TMK entered into an agreement with Tenaris, a manufacturer of seamless and welded pipe, for the sale of 100 per cent. of the shares in IPSCO Tubulars for an aggregate, cash free, debt free price of U.S.\$ 1,209 million, which includes U.S.\$ 270 million of working capital. As at 30 September 2019, interest bearing loans and borrowings of TMK IPSCO amounted to U.S.\$ 55.0 million. On 17 December 2019, the U.S. Department of Justice approved the transaction which was completed on 2 January 2020. The final amount of the consideration, after all applicable adjustments, received by the Group for the sale of TMK IPSCO was U.S.\$ 1,067 million. See "*—Strategic Ventures—Recent Sale of TMK IPSCO*". The majority of the proceeds (less any costs or taxes incurred in relation to such sale) received by the Group from the disposal of TMK IPSCO shall be applied to repay the Group's indebtedness within 60 days from the date when such proceeds were received.

The Group has historically maintained and plans to continue maintaining a comfortable liquidity position, including by keeping unutilised portions of credit facilities with major Russian banks.

¹ The use by the Group of any MSCI ESG RESEARCH LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of the Group by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.

OVERVIEW OF THE OFFERING

The following overview of the Offering should be read in conjunction with, and is qualified in its entirety by "Terms and Conditions of the Notes", "Clearing and Settlement" and the forms of the Loan Agreement and the Loan Guarantees.

The Notes

Issuer	TMK CAPITAL S.A. The Issuer is not a subsidiary of TMK, directly or indirectly.
Global Coordinators	J.P. Morgan Securities plc and Renaissance Securities (Cyprus) Limited
Lead Managers	AO "ALFA-BANK" (acting jointly with Alfa Capital Holdings (Cyprus) Limited), Alfa Capital Holdings (Cyprus) Limited (acting jointly with AO "ALFA-BANK"), GPB Financial Services Hong Kong Limited, Merrill Lynch International, Sova Capital Limited, Public Joint-Stock Company "Sovcombank", UBS AG London Branch and VTB Capital plc
Notes Offered	U.S.\$500,000,000 4.3 per cent. Loan Participation Notes due 2027.
Issue Price	100 per cent. of the principal amount of the Notes.
Issue Date	12 February 2020
Maturity Date	12 February 2027
Trustee	BNY Mellon Corporate Trustee Services Limited
Principal Paying Agent	The Bank of New York Mellon, London Branch
Transfer Agent and Registrar	The Bank of New York Mellon SA/NV, Luxembourg Branch
Interest	On each interest payment date (being 12 February and 12 August in each year and commencing on 12 August 2020), the Issuer shall account to the Noteholders for an amount equivalent to amounts of interest actually received by or for the account of the Issuer pursuant to the Loan Agreement and/or the Deeds of Loan Guarantee, which interest under the Loan accrues at a rate of 4.3 per cent. per annum from and including the Issue Date.
Form and Denomination	The Notes will be issued in registered form, in denominations of U.S.\$200,000 and higher integral multiples of U.S.\$1,000. The Notes will be represented by a Global Certificate. The Global Certificate will be exchangeable for a Definitive Certificate in the limited circumstances specified in the Global Certificate.
Initial Delivery of Notes	On or before the Issue Date, the Global Certificate shall be registered in the name of a nominee of, and deposited with a common depositary for, Euroclear and Clearstream, Luxembourg.
Status of the Notes	The Notes are limited recourse, secured obligations of the Issuer as more fully described in " <i>Terms and Conditions of the Notes</i> — <i>Status</i> ".
	The Notes will constitute the obligation of the Issuer to apply the proceeds from the issue of the Notes solely for financing the Loan and to account to the Noteholders for an amount equivalent to sums of principal, interest and other amounts (if any) actually received by or for the account of the Issuer pursuant to the Loan Agreement and/or the Deeds of Loan Guarantee less any amount in respect of Reserved Rights, all as more fully described in " <i>Terms and Conditions of the Notes</i> — <i>Status</i> ".

Security

The Notes will be secured by the Charge (as defined in "Description of the Transaction and the Security") on:

- all principal, interest and other amounts now or hereafter payable to the Issuer by the Borrower under the Loan Agreement and/or the Loan Guarantors under the Deed of Loan Guarantee:
- the right to receive all sums which may be or become payable by the Borrower or the Loan Guarantors under any claim, award or judgment relating to the Loan Agreement and/or the Deed of Loan Guarantee, as the case may be; and
- all the rights, title and interest in and to all sums of money now or in the future deposited in the Account and the debts represented thereby (including interest from time to time earned on the Account, if any), pursuant to the Trust Deed,

provided that Reserved Rights and any amounts relating to Reserved Rights are excluded from the Charge.

The Notes will also be secured by an absolute assignment with full title guarantee by the Issuer to the Trustee of its rights under the Loan Agreement and the Deed of Loan Guarantee (save for the Reserved Rights and those rights subject to the Charge) pursuant to the Trust Deed.

All payments by or on behalf of the Issuer in respect of the Notes Withholding Tax

> shall be made free and clear of, and without withholding or deduction for, any present or future tax, duty, levy, impost, assessment, or other governmental charge imposed or levied by Luxembourg or Russia or any political subdivision or any authority thereof or therein having power to tax, unless such withholding or deduction is required by law. In the event that any deduction or withholding is required by law, the Issuer will be required, except in certain limited circumstances, to pay increased amounts of principal, interest or any other payment due thereon to the extent that it receives corresponding amounts from the Borrower or a Loan Guarantor under the Loan Agreement or the Deed of Loan Guarantee, as the case may be.

Early Redemption at the Option of All as more fully described in "Terms and Conditions of the Notes the Noteholders Redemption and Purchase", the Notes may be redeemed early at the option of the Noteholders:

- upon the failure of the Borrower to procure the Additional Loan Guarantors to provide the Additional Loan Guarantees within 90 days of the Issue Date, at their principal amount thereof, together with accrued and unpaid interest thereon plus any additional amounts or other amounts that may be due thereon, if any, up to but excluding the date of such early redemption; or
- upon the failure of the Borrower to procure any Further Loan Guarantor to provide a Further Loan Guarantees in accordance with the Loan Agreement, at their principal amount thereof, together with accrued and unpaid interest thereon plus any additional amounts or other amounts that may be due thereon, if any, up to but excluding the date of such early redemption.

The Issuer will be required to redeem in whole, but not in part, the Notes at the principal amount thereof, together with accrued and unpaid interest and additional amounts, if any, to the date of redemption should (1) the Borrower elect to repay the Loan in the event that it is required to pay increased amounts of principal, interest or any other payment due

Optional Redemption for Taxation Reasons

	under the Loan Agreement on account of Russian or Luxembourg withholding taxes, or (2) the Borrower elect to repay the Loan in the event it is required to pay additional amounts on account of certain costs incurred by the Issuer pursuant to the Loan Agreement.
Optional Redemption by the Issuer for Illegality	In limited circumstances as more fully described in the Loan Agreement, the Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, upon giving notice to the Trustee, at the principal amount thereof, together with accrued and unpaid interest and additional amounts, if any, to the date of redemption, in the event that it becomes unlawful for the Issuer to fund the Loan or allow the Loan to remain outstanding under the Loan Agreement or allow the Notes to remain outstanding and in such case the Issuer shall require the Loan to be repaid in full.
Early Redemption at Option of Borrower at Make Whole	On one occasion only the Borrower may elect to prepay the Loan (in whole but not in part) at the principal amount thereof and the Make Whole Premium (as defined in the Loan Agreement) together with accrued and unpaid interest and additional amounts, if any, to the Call Settlement Date (as defined in the " <i>Terms and Conditions of the Notes</i> "). The Issuer shall only be obliged to Noteholders on the Call Settlement Date for an amount equivalent to that received by it under the Loan.
Optional Redemption by the Issuer under Par Call Option	At any time on or after the date three months prior to the repayment date, the Borrower may prepay in whole but not in part at its principal amount plus accrued and unpaid interest on the Loan so prepaid to but excluding the relevant prepayment date. Once the Borrower so prepays the Loan, the Notes will thereupon become due and repayable and the Issuer shall, subject to receipt of the relevant amounts from the Borrower under the Loan, redeem the Notes on the relevant prepayment date.
Optional Redemption by the Noteholders upon a Change of Control	Upon the occurrence of a Change of Control (as defined in " <i>Terms and Conditions of the Notes</i> —6. <i>Redemption</i> "), the Notes may be redeemed at the option of a Noteholder at 100 per cent. of their principal amount together with accrued interest, if any, all as more fully described in the " <i>Terms and Conditions of the Notes</i> ".
Relevant Events	Upon the occurrence of a Relevant Event (as defined in " <i>Terms and Conditions of the Notes</i> "), the Trustee may, subject as provided in the Trust Deed and subject to being indemnified and/or secured to its satisfaction, enforce the security created in its favour pursuant to the Trust Deed.
Ratings	It is expected that the Notes will be rated:
	• "BB-" by Standard & Poor's; and
	• "B1" by Moody's.
	A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation. Similar ratings on different types of notes do not necessarily mean the same thing. The ratings do not address the likelihood that the principal on the Notes will be prepaid or paid on a particular date before the legal final maturity date of the Notes. The ratings do not address the marketability of the Notes or any market price. Any change in the credit ratings of the Notes could adversely affect the price that a subsequent purchaser will be willing to pay for the Notes. The significance of each rating should be analysed independently from any other rating.
Listing	Application has been made to Euronext Dublin for the Notes to be admitted to the Official List of Euronext Dublin and to trading on the Global Exchange Market.

Selling Restrictions	The Notes and the Loan Guarantees are subject to selling restrictions in the United Kingdom, the United States, Luxembourg, Hong Kong, the
Governing Law and Arbitration	Russian Federation and Singapore. See " <i>Subscription and Sale</i> ". The Notes, the Trust Deed and the Agency Agreement (as defined below) and any non-contractual obligations arising out of or in connection with them shall be governed by and construed in accordance with English law and, in the case of the Agency Agreement, contains provisions for arbitration in London, England. The provisions of articles 470-1 to 470-19 of the Luxembourg law of 10 August 1915 on commercial companies, as amended, are excluded.
Use of Proceeds	The Issuer will use the gross proceeds of to the issue of the Notes for the sole purpose of financing the Loan to TMK.
Security Codes	Common Code: 211622245
	International Security Identification Numbers ("ISIN"): XS2116222451
Legal Entity Identifier of the Issuer	222100TBRQIOGYHYB529
Legal Entity Identifier of the Borrower	213800TF7S5EDO6V3K66
Legal Entity Identifier of the Initial Loan Guarantor	213800FYT591NMMOL156
Clearing Systems	Euroclear and Clearstream, Luxembourg.
Yield	The annual yield of the Notes when issued is 4.3 per cent.
Risk Factors	An investment in the Notes involves a high degree of risk. See "Risk Factors".
The Loan and the Initial Loan Guarantee	
Lender	TMK CAPITAL S.A., a company incorporated as a société anonyme under the laws of the Grand Duchy of Luxembourg, having its registered office at 14, rue Edward Steichen, L-2450 Luxembourg and registered with the Luxembourg Trade and Companies Register (<i>Registre de</i> <i>commerce et des sociétés, Luxembourg</i>) under number B119081.
Borrower	PAO "TMK", a public joint stock company existing under the laws of the Russian Federation in accordance with the Civil Code and the JSC Law.
Status of the Loan	The Loan is a direct, unconditional, unsubordinated and unsecured obligation of TMK and obligations under the Loan will rank at least <i>pari passu</i> with all other direct, unconditional, unsubordinated and unsecured indebtedness of TMK.
Initial Loan Guarantor	The Loan will be initially unconditionally and irrevocably guaranteed pursuant to the Initial Loan Guarantee by the Initial Loan Guarantor under the Deed of Loan Guarantee in favour of the Issuer as Lender under the Loan Agreement.
Additional Loan Guarantors	The Borrower has agreed in the Loan Agreement to procure that each of "Seversky Pipe Plant", Public Joint stock company (whose business address is 7 Vershinina str., 623388 Polevskoy, Sverdlovsk region, Russian Federation), "Sinarsky Pipe Plant", Public Joint stock company (whose business address is 1 Zavodskoy proezd str., 623401 Kamensk- Uralsky, Sverdlovsk region, Russian Federation) and "Taganrog Metallurgical Plant", Public Joint stock company (whose business

	address is 1 Zavodskaya street, 347928 Taganrog, Rostov region, Russian Federation) shall provide an unconditional and irrevocable guarantee of the Loan not later than 90 days after the Issue Date.
Further Loan Guarantees	The Borrower may be required to procure further of its subsidiaries to provide an unconditional and irrevocable guarantee of the Loan in the circumstances outlined in the Loan Agreement.
	Failure of the Borrower to procure the guarantee of its obligations under the Loan by the Additional Loan Guarantors or any Further Loan Guarantees (if required) shall be deemed a "Further Loan Guarantee Event" under the Notes and Noteholders will have an option to redeem their Notes as further set out in the " <i>Terms and Conditions of the Notes</i> — <i>Redemption and Purchase</i> ".
Loan Guarantees	The Loan will be initially unconditionally, irrevocably, jointly and severally guaranteed by the Initial Loan Guarantors, and is intended to be further unconditionally and irrevocably guaranteed by the Additional Loan Guarantors. In certain circumstances set out in the Loan Agreement, the Borrower may be obligated to procure certain Further Loan Guarantees. The Loan Guarantees will rank equally in right of payment with other outstanding and unsecured indebtedness of the Loan Guarantors.
Certain Covenants	As described in "The Loan Agreement".
Events of Default	As described in the "Loan Agreement".
Withholding Tax	All payments under the Loan Agreement and the Deed of Loan Guarantee will be made free and clear of, and without withholding or deduction for, or on account of any present or future tax, duty, levy, impost, assessment, or other governmental charge imposed or levied by or on behalf of any government or political subdivision or territory or possession of any government or authority or agency therein or thereof having the power to tax within Russia or Luxembourg except as required by law. In the event that any deduction or withholding is required by law with respect to payments under the Loan Agreement or the Deed of Loan Guarantee, the Borrower and the Loan Guarantors will be obliged, except in certain limited circumstances, to increase the amounts payable under the Loan Agreement and the Deed of Loan Guarantee, respectively, by an amount equivalent to the required tax payment.
Prepayment	See "—Optional Redemption for Taxation Reasons", "—Optional Redemption by the Issuer for Illegality", —Early Redemption at the Option of the Noteholders", and "—Early Redemption at option of Borrower at Make Whole".
Use of Proceeds	The Borrower intends to use the proceeds of the Loan to refinance some of its existing indebtedness. See " <i>Use of Proceeds</i> ".
Governing Law	The Loan Agreement and the Deeds of Loan Guarantee and any non- contractual obligations arising out of or in connection with them shall be governed by and construed in accordance with English law.

USE OF PROCEEDS

The Issuer will use the proceeds of the issue of the Notes for the sole purpose of financing the Loan. Total commissions and expenses payable by the Borrower in relation to the Loan and the listing to admission and trading of the Notes are expected to be approximately U.S.\$3,600,000. The Borrower intends to use all of the net proceeds of the Loan to refinance some of its existing indebtedness.

Neither TMK, nor Loan Guarantors, nor any of their respective subsidiaries, any of their respective directors or officers, nor, to the knowledge of the TMK, any employee, agent or affiliate of the TMK, any Loan Guarantor or any of their respective subsidiaries, including any joint venture will directly or indirectly use the proceeds of the Loan, or lend, contribute or otherwise make available such proceeds to any subsidiary, any joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is, or is owned or controlled by, the subject or the target of Sanctions and would result in violation of Sanctions if such activity or business were conducted by a U.S. or EU person, (ii) to fund or facilitate any activities of or business in any Sanctioned Country, (iii) to fund or facilitate any Activity subject to Sanctions or (iv) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as a Joint Lead Manager, advisor, investor or otherwise) of any Sanctions.

CAPITALISATION

The following table sets forth the Group's capitalisation, cash and cash equivalents and current interest-bearing loans and borrowings as at 30 September 2019.

The below table should be read in conjunction with the sections entitled "Summary Consolidated Financial and Operating Information", "Use of Proceeds" and "Operating and Financial Review", the Financial Statements and the related notes thereto included elsewhere in these Listing Particulars.

	As at 30 September 2019
	(millions of U.S. dollars) (unaudited)
Non-current interest-bearing loans and borrowings	1,748.6
Non-current interest-bearing loans and borrowings of disposal group held for sale	54.6
	1,803.2
Shareholder's equity	
Share capital	342.9
Treasury shares	(1.0)
Additional paid-in capital	235.0
Reserve capital	17.2
Retained earnings	1,252.3
Foreign currency translation reserve	(1,013.0)
Other reserves	8.6
Total shareholders' equity	842.0
Non-controlling interests	48.8
Total equity	890.8
Total capitalisation ⁽¹⁾	2,694.0
Cash and cash equivalents	271.5
Cash and cash equivalents of disposal group held for sale	3.4
	274.9
Current interest-bearing loans and borrowings	1,291.3
Current interest-bearing loans and borrowings of disposal group held for sale	0.5
	1,291.8

Notes:

⁽¹⁾ Total capitalisation is calculated as the sum of total equity and total non-current interest-bearing loans and borrowings.

Other than the deconsolidation of non-current interest-bearing loans and borrowings of disposal group held for sale as a result of the sale of TMK IPSCO (see "*Business*—*Strategic Ventures*—*Recent Sale of TMK IPSCO*"), there have been no material changes in the capitalisation of the Group since 30 September 2019.

SUMMARY CONSOLIDATED FINANCIAL AND OPERATING INFORMATION

The summary consolidated financial information set forth below shows the Group's consolidated financial information and other operating information as at and for the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016. This information has been extracted without material adjustment from, and should be read in conjunction with, the Financial Statements included elsewhere in these Listing Particulars. This information should also be read in conjunction with "*Operating and Financial Review*". See also "*Presentation of Financial and Other Information*" for important information about the financial information presented herein.

Consolidated Income Statement

			Nine mon	ths ended			
	3	0 September 2019		30 September 2018			
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total	
		(millions of U.S. dollars, except per share data) (unaudited)					
Revenue Cost of sales	2,904.6 (2,263.9)	762.0 (698.0)	3,666.5 (2,961.9)	2,851.7 (2,300.3)	983.3 (842.8)	3,834.9 (3,143.1)	
Gross profit	640.7	64.0	704.6	551.4	140.5	691.9	
Selling and distribution expenses	(165.3)	(10.2)	(175.5)	(166.7)	(9.5)	(176.2)	
Advertising and promotion expenses General and	(7.0)	(0.3)	(7.3)	(4.6)	(0.4)	(5.0)	
administrative expenses Research and	(168.4)	(39.6)	(207.9)	(146.5)	(44.6)	(191.1)	
development expenses Other operating	(1.6)	(3.2)	(4.8)	(1.5)	(4.2)	(5.7)	
income/(expenses)	(10.4)	(1.3)	(11.7)	(5.5)	(7.0)	(12.4)	
Operating profit	288.0	9.4	297.4	226.6	74.8	301.4	
Impairment of goodwill Foreign exchange	-	-	-	(2.2)	-	(2.2)	
gain/(loss) Finance costs Finance income	27.1 (168.9) 10.7	(0.1) (4.3)	27.0 (173.2) 10.7	(49.7) (182.4) 7.0	0.3 (2.8) 0.0	(49.4) (185.2) 7.0	
Share of profit/(loss) of associates	(3.8)	-	(3.8)	0.0	-	0.0	
Gain/(loss) on disposal of subsidiaries	0.4	-	0.4	(23.7)	-	(23.7)	
Other non-operating income/(expenses)	(5.4)	(6.9)	(12.3)	(0.3)	-	(0.3)	
Profit/(loss) before tax	148.1	(1.9)	146.2	(24.7)	72.3	47.6	
Income tax benefit/(expense)	(40.7)	(0.3)	(41.0)	(12.2)	(15.6)	(27.8)	
Profit/(loss) for the period	107.3	(2.2)	105.2	(36.9)	56.6	19.7	
Attributable to: Equity holders of the							
parent entity Non-controlling interests .	104.6 2.7	(2.2)	102.5 2.7	(34.2) (2.7)	56.6	22.4 (2.7)	
Earnings/(loss) per share attributable to equity holders of the parent entity, basic and diluted	107.3	(2.2)	105.2	(36.9)	56.6	19.7	
(in U.S. dollars)	0.10	-	0.10	(0.03)	0.05	0.02	

	Year ended 31 December			
-	2018	2017	2016	
-	(millions of U.S.	dollars, except per s	hare data)	
Revenue	5,098.8	4,393.7	3,338.0	
Cost of sales	(4,183.2)	(3,521.2)	(2,634.4)	
Gross profit	915.6	872.5	703.6	
Selling and distribution expenses	(230.8)	(260.6)	(220.4)	
Advertising and promotion expenses	(7.2)	(6.9)	(5.7)	
General and administrative expenses	(250.4)	(231.2)	(196.0)	
Research and development expenses	(7.3)	(11.5)	(10.7)	
Other operating income/(expenses)	(22.4)	(33.8)	(4.2)	
Operating profit	397.6	328.5	266.6	
Impairment of goodwill	(16.6)	(22.0)	(3.3)	
Impairment of property, plant and equipment	-	(1.6)	-	
Reversal of impairment of property, plant and equipment	-	16.3	-	
Foreign exchange gain/(loss)	(72.3)	27.5	129.9	
Finance costs	(241.5)	(281.0)	(273.5)	
Finance income	9.5	12.7	10.9	
Gain/(loss) on derivatives	-	(3.4)	9.2	
Share of profit/(loss) of associates	0.6	(0.0)	(0.1)	
Gain/(loss) on disposal of subsidiaries	(23.7)	-	-	
Other non-operating income/(expenses)	(8.7)	0.6	29.4	
Profit/(loss) before tax	44.8	77.5	169.2	
Income tax benefit/(expense)	(45.0)	(47.9)	(3.5)	
Profit/(loss) for the period	(0.2)	29.6	165.6	
Attributable to:				
Equity holders of the parent entity	2.4	35.5	166.6	
Non-controlling interests	(2.6)	(6.0)	(1.0)	
	(0.2)	29.6	165.6	
Earnings per share attributable to the equity holders of the	0.00	0.03	0.17	

parent entity, basic and diluted (in U.S. dollars)

Selected Consolidated Statement of Financial Position

	As at 30 September	As			
	2019	2018	2017	2016	
	(millions of U.S. dollars)				
	(unaudited)				
Cash and cash equivalents ⁽¹⁾	271.5	391.8	491.2	276.6	
Total assets	5,273.9	5,004.5	5,536.8	4,735.9	
Total interest bearing loans and borrowings ⁽²⁾	3,039.9	2,884.3	3,264.4	2,857.1	
Total equity	890.8	817.6	933.2	898.7	

⁽¹⁾ Does not include cash and cash equivalents of the disposal group held for sale as at 30 September 2019. For cash and cash equivalents of the disposal group held for sale, see "*Operating and Financial Review–Recent TMK IPSCO disposal*".

⁽²⁾ Does not include interest bearing loans and borrowings of the disposal group held for sale as at 30 September 2019. For interest bearing loans and borrowings of the disposal group held for sale, see "*Operating and Financial Review–Recent TMK IPSCO disposal*".

Selected Consolidated Statement of Cash Flows

	Nine months ended 30 September		Year ended 31 Decem		nber
	2019	2018	2018	2017	2016
_		(millio	ns of U.S. dolla	rs)	
	(unaudii	ted)			
Net cash flows from operating activities	231.8	229.9	510.3	311.7	475.6
Net cash flows used in investing activities	(247.8)	(216.1)	(254.6)	(234.8)	(80.8)
Net cash flows (used in)/from financing activities	(97.9)	(279.6)	(351.4)	120.6	(418.2)

Selected Non-IFRS Measures

	As at and for months e 30 Septer	ended		d for the year e 31 December	nded
	2019	2018	2018	2017	2016
		(millio	ns of U.S. dolla	nrs)	
	(unaudi	ited)			
Adjusted EBITDA ⁽¹⁾	508.5	521.5	700.2	604.9	530.2
Russia segment	438.1	361.9	484.9	462.8	577.9
Americas segment	49.8	120.5	163.8	113.8	(72.1)
Europe segment	20.5	39.2	51.5	28.4	24.3
Adjusted EBITDA margin ⁽²⁾	13.9%	13.6%	13.7%	13.8%	15.9%
Russia segment	16.1%	13.8%	14.1%	14.6%	20.7%
Americas segment	6.5%	12.3%	12.1%	11.5%	(19.6%)
Europe segment	11.1%	16.9%	16.7%	11.7%	14.0%
Adjusted EBITDA (last 12 months) ⁽³⁾	687.2	682.0	700.2	604.9	530.2
Net Debt ⁽⁴⁾	2,670.8	2,623.8	2,437.0	2,688.2	2,478.6
Net Debt/Adjusted EBITDA (last 12 months) ⁽³⁾⁽⁵⁾	3.89x	3.85x	3.48x	4.44x	4.68x

(1) Adjusted EBITDA represents profit/(loss) for the period excluding finance costs and finance income, income tax (benefit)/expense, depreciation and amortisation, foreign exchange (gain)/loss, impairment/ (reversal of impairment) of non-current assets, movements in allowances and provisions (except for provisions for bonuses), (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associates and other non-cash, non-recurring and unusual items (see the reconciliation in the table below).

Adjusted EBITDA is not a measure of the Group's operating performance under IFRS and should not be considered as an alternative to gross profit, net profit or any other performance measures or as an alternative to cash flow from operating activities or as a measure of the Group's liquidity. In particular, Adjusted EBITDA should not be considered as a measure of discretionary cash available to invest in the Group's growth. Adjusted EBITDA and Adjusted EBITDA for the last 12 months have limitations as analytical tools, and potential investors should not consider it in isolation, or as a substitute for analysis of the Group's operating results as reported under IFRS. Some of these limitations include:

- Adjusted EBITDA and Adjusted EBITDA for the last 12 months do not reflect the impact of financing or finance costs on the Group's operating performance, which can be significant and could further increase if the Groups was to incur more debt;
- Adjusted EBITDA and Adjusted EBITDA for the last 12 months do not reflect the impact of income taxes on the Group's operating performance;
- Adjusted EBITDA and Adjusted EBITDA for the last 12 months do not reflect the impact of depreciation and amortisation on the Group's operating performance. The assets that are being depreciated and/or amortised will have to be replaced in the future and such depreciation and amortisation expense may approximate the cost to replace these assets in the future. By excluding this expense from Adjusted EBITDA and Adjusted EBITDA for the last 12 months, it does not reflect the Group's future cash requirements for these replacements; and
- Adjusted EBITDA and Adjusted EBITDA for the last 12 months do not reflect the impact of other non-cash items on the Group's operating performance, such as foreign exchange (gain)/loss,

impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions (except for provisions for bonuses), (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associates and other non-cash, non-recurring and unusual items.

- Adjusted EBITDA and Adjusted EBITDA for the last 12 months exclude items which the Group considers to be one-off or unusual, but such items may in fact recur.
- ⁽²⁾ Adjusted EBITDA margin is calculated as a percentage of revenue. Adjusted EBITDA margin for the relevant segment is calculated as a percentage of revenue of the relevant segment.
- (3) Adjusted EBITDA for the 12 months ended 30 September 2019 is derived by adding the Adjusted EBITDA for the nine months ended 30 September 2019 to the Adjusted EBITDA for the year ended 31 December 2018 and subtracting the Adjusted EBITDA for the nine months ended 30 September 2018. Adjusted EBITDA for the 12 months ended 30 September 2018 is derived by adding the Adjusted EBITDA for the nine months ended 30 September 2018 to the Adjusted EBITDA for the year ended 31 December 2017 and subtracting the Adjusted EBITDA for the nine months ended 30 September 2018 to the Adjusted EBITDA for the year ended 31 December 2017 and subtracting the Adjusted EBITDA for the nine months ended 30 September 2017.
- ⁽⁴⁾ Net Debt represents interest bearing loans and borrowings, excluding interest payable, less cash and cash equivalents, short-term loans advanced to entities under common control and other short-term financial assets (see the reconciliation in the table below). Net Debt is not a measure under IFRS and it should not be considered as an alternative to other measures of financial position. Other companies in the pipe industry may calculate Net Debt differently and therefore comparability may be limited. Net Debt is a measure that is not required by, or presented in accordance with, IFRS, but it is widely used to assess liquidity and the adequacy of a company's financial structure. The Group believes that Net Debt provides an accurate indicator of the Group's ability to meet its financial obligations, represented by gross debt, from available cash. Net Debt demonstrates to investors the trend in the Group's net financial position over the periods presented.
- ⁽⁵⁾ Net Debt/Adjusted EBITDA means Net Debt as at the end of the relevant period divided by Adjusted EBITDA for the last twelve months ending the relevant period, as defined below.

The tables below set forth information regarding the Group's reportable segments' results.

	Nine months ended 30 September 2019				
-	Russia	Americas (millions of U	Europe .S. dollars)	Total	
		lited)			
Revenue	2,719.2	762.0	185.3	3,666.5	
Cost of sales	(2,121.6)	(698.0)	(142.3)	(2,961.9)	
Gross profit	597.7	64.0	43.0	704.6	
Selling, general and administrative expenses	(306.3)	(53.3)	(36.0)	(395.6)	
Other operating income/(expenses)	(9.5)	(1.3)	(0.9)	(11.7)	
Operating profit	281.9	9.4	6.1	297.4	
Add back:					
Depreciation and amortisation	130.2	21.7	14.5	166.4	
(Gain)/loss on disposal of property, plant and equipment.	3.6	3.6	(1.0)	6.2	
Movements in allowances and provisions	8.5	15.1	0.3	23.9	
Other expenses	13.9	0.1	0.6	14.6	
-	156.2	40.4	14.4	211.1	
Adjusted EBITDA	438.1	49.8	20.5	508.5	

Nine months ended 30 September 2018

-	RussiaAmericasEuropeT(millions of U.S. dollars) (unaudited)			
Revenue	2,619.6	983.3	232.1	3,834.9
Cost of sales	(2,129.0)	(842.8)	(171.3)	(3,143.1)
Gross profit	490.5	140.5	60.8	691.9
Selling, general and administrative expenses	(281.0)	(58.7)	(38.3)	(378.0)
Other operating income/(expenses)	(4.5)	(7.0)	(0.9)	(12.4)
Operating profit	205.0	74.8	21.6	301.4
Add back:	144.9	43.6	14.7	203.2
Depreciation and amortisation	2.6	6.2	0.1	8.9
(Gain)/loss on disposal of property, plant and equipment.	(3.2)	(4.2)	2.2	(5.2)
Movements in allowances and provisions	12.5	0.1	0.5	13.2
Other expenses	156.9	45.7	17.5	220.1
Adjusted EBITDA	361.9	45.7 120.5	39.2	521.5

-	Year ended 31 December 2018				
	Russia	Americas	Europe	Total	
	(millions of U.S. dollars)				
Revenue	3,442.0	1,349.2	307.5	5,098.8	
Cost of sales	(2,790.1)	(1,167.6)	(225.5)	(4,183.2)	
Gross profit	651.9	181.6	82.1	915.6	
Selling, general and administrative expenses	(366.1)	(76.6)	(52.9)	(495.6)	
Other operating income/(expenses)	(13.6)	(7.8)	(1.1)	(22.4)	
Operating profit	272.2	97.3	28.1	397.6	
Add back:					
Depreciation and amortisation	188.3	60.5	19.4	268.3	
(Gain)/loss on disposal of property, plant and equipment.	3.9	7.7	0.1	11.7	
Movements in allowances and provisions	3.4	(1.7)	3.2	4.8	
Other expenses	17.1	0.1	0.7	17.8	
	212.7	66.6	23.4	302.7	
Adjusted EBITDA	484.9	163.8	51.5	700.2	

-				
	Russia	Americas	Europe	Total
		(millions of U		
Revenue	3,162.6	989.3	241.8	4.393.7
Cost of sales	(2,507.6)	(819.7)	(193.9)	(3,521.2)
Gross profit	655.0	169.6	47.9	872.5
Selling, general and administrative expenses	(395.3)	(76.8)	(38.0)	(510.2)
Other operating income/(expenses)	(33.1)	(0.4)	(0.3)	(33.8)
Operating profit	226.5	92.4	9.6	328.5
Add back:				
Depreciation and amortisation	191.5	54.3	17.3	263.1
(Gain)/loss on disposal of property, plant and equipment.	14.3	6.4	0.3	21.1
Movements in allowances and provisions	13.2	(39.3)	0.7	(25.5)
Other expenses	17.2	_	0.5	17.7
-	236.2	21.4	18.8	276.4
Adjusted EBITDA	462.8	113.8	28.4	604.9

-	Year ended 31 December 2016				
	Russia	Americas	Europe	Total	
		(millions of U.S. dollars)			
Revenue	2,795.8	367.9	174.3	3,338.0	
Cost of sales	(2,049.4)	(448.5)	(136.4)	(2,634.4)	
Gross profit/(loss)	746.4	(80.7)	37.9	703.6	
Selling, general and administrative expenses	(315.7)	(87.7)	(29.5)	(432.9)	
Other operating income/(expenses)	(4.7)	1.0	(0.5)	(4.2)	
Operating profit/(loss)	426.1	(167.4)	7.9	266.6	
Add back:					
Depreciation and amortisation	154.4	71.3	15.9	241.6	
(Gain)/loss on disposal of property, plant and equipment.	(3.9)	1.0	0.3	(2.6)	
Movements in allowances and provisions	(11.6)	23.1	(0.2)	11.4	
Other expenses	12.9	-	0.4	13.2	
-	151.8	95.4	16.4	263.6	
Adjusted EBITDA	577.9	(72.1)	24.3	530.2	

Net Debt has been calculated at the dates indicated as follows:

	As at 30 September		As at 31 December		er
	2019	2018	2018	2017	2016
	(millions of U.S. dollars)				
	(unaud	ited)			
Current interest-bearing loans and borrowings	1,291.3	846.2	906.1	601.0	261.6
Current interest-bearing loans and borrowings of					
disposal group held for sale	0.5	-	-	-	-
Non-current interest-bearing loans and borrowings	1,748.6	2,127.6	1,978.2	2,663.5	2,595.5
Non-current interest-bearing loans and borrowings of					
disposal group held for sale	54.6	-	-	-	-
Net of:					
Interest payable	(31.1)	(32.9)	(17.2)	(25.2)	(21.3)
Interest payable of disposal group held for sale	(0.3)	(021))	(1/12)	(1012)	(2110)
Cash and cash equivalents	(271.5)	(228.1)	(391.8)	(491.2)	(276.6)
Cash and cash equivalents of disposal group held	()	()	(27212)	(.,)	(,
for sale	(3.4)	-	-	-	-
Current loans advanced to entities under common	(211)				
control	(117.4)	(88.6)	(37.8)	(59.5)	(38.2)
Other current financial assets	(0.5)	(0.5)	(0.4)	(0.4)	(42.4)
Net Debt	2,670.8	2,623.8	2,437.0	2,688.2	2,478.6

OPERATING AND FINANCIAL REVIEW

The following discussion of the Group's financial condition and results of operations as of and for the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016 should be read in conjunction with the Financial Statements, the notes thereto, "Summary Consolidated Financial and Operating Information" and the other information included elsewhere in these Listing Particulars.

This section contains forward-looking statements that involve risks and uncertainties. The Group's results may differ materially from those discussed in such forward-looking statements as a result of various factors, including those described under "Risk Factors".

Selected consolidated information in this section has been derived from the Financial Statements, in each case without material adjustments, unless otherwise stated, as well as the Group's management reports.

Overview

The Group's management believes that the Group is a global leader in tubular products for the oil and gas industry and is among the world's largest steel pipe producers by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019 and approximately a 6 per cent. share of the global market for seamless pipes and a 15 per cent. share of the global market for seamless OCTG by sales volume for the nine months ended 30 September 2019, according to the Group's management's estimates. The Group's management considers that for the nine months ended 30 September 2019, the Group was the largest Russian producer and supplier of steel pipes. The Group's management estimates that the Group had approximately a 23 per cent. market share for tubes and pipes in Russia, a 33 per cent. market share for pipes used in the oil and gas industry in Russia, a 56 per cent. market share for seamless OCTG in Russia, in each case by sales volume for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019, the Group had approximately a 74 per cent. share of the Russian premium connections market by sales volume.

The Group's management further believes that the Group is a leading exporter of pipes produced in Russia, with sales volumes of pipe products produced at its Russian plants accounting for 34 per cent., 30 per cent., 23 per cent. and 33 per cent. of the volume by tonnes of all steel pipe exports from Russia for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively, according to the Group's management's estimates.

The Group produces both seamless and welded pipes, and primarily supplies pipes for the oil and gas industry which accounted for 78.8 per cent., 78.1 per cent., 76.7 per cent. and 78.4 per cent. of the Group's total sales volume by tonnes for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group focuses principally on higher margin and technologically advanced seamless products, which accounted for approximately 90 per cent. of the Group's gross profit for the nine months ended 30 September 2019. The Group's main focus is the production of predominantly higher margin and technologically advanced seamless OCTG pipes, including premium connections, manufactured at the Group's facilities in Russia. OCTG pipes are an integral element of oil and gas exploration and production and are used for drilling wells, casing and tubing. The Group is also a major producer of large diameter welded pipes, used in the construction of trunk pipelines for long-distance transportation of natural gas, crude oil and oil products, as well as line pipes for short distance transportation.

The Group also manufactures higher margin industrial seamless pipes, which are widely used in the automotive, power generation, machine building and chemical industries. In addition, the Group produces industrial welded pipe, which has a wide array of applications in various industries, including utilities and agriculture.

For the nine months ended 30 September 2019, the Group sold 2,932 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,372 thousand tonnes, while sales of LDP reached 373 thousand tonnes.

For the year ended 31 December 2018, the Group sold 3,989 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,930 thousand tonnes, while sales of LDP reached 303 thousand tonnes.

For the year ended 31 December 2017, the Group sold 3,784 thousand tonnes of steel pipes with seamless pipes comprising 71 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,758 thousand tonnes, while sales of LDP decreased to 267 thousand tonnes.

For the year ended 31 December 2016, the Group sold 3,458 thousand tonnes of steel pipes with seamless pipes comprising 70 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,426 thousand tonnes, while sales of LDP decreased to 516 thousand tonnes.

For the nine months ended 30 September 2019, the Group's consolidated revenue was U.S.\$3,666.5 million as compared to U.S.\$3,834.9 million for the nine months ended 30 September 2018. Profit for the period was U.S.\$105.2 million as compared to U.S.\$19.7 million for the nine months ended 30 September 2018. The Group's Adjusted EBITDA for the nine months ended 30 September 2019 was U.S.\$508.5 million, as compared to U.S.\$521.5 million for the nine months ended 30 September 2018.

For the years ended 31 December 2018, 2017 and 2016, the Group had a total consolidated revenue of U.S.\$5,098.8 million, U.S.\$4,393.7 million and U.S.\$3,338.0 million, respectively, and loss for the period of U.S.\$0.2 million, profit for the period of U.S.\$165.6 million, respectively.

TMK is rated "BB-" long-term credit rating with a stable outlook by Standard & Poor's and "B1" corporate family rating with a positive outlook by Moody's.

Recent Developments

On 22 March 2019, the Group entered into a stock purchase agreement with Tenaris for the sale of 100 per cent. interest in TMK IPSCO which, as at 30 September 2019, represented the Americas segment, one of the three Group's reporting segments (see "*—Segments*"), and comprised IPSCO Tubulars and its subsidiaries. On 17 December 2019, the U.S. Department of Justice approved the sale which was completed on 2 January 2020 and resulted in the disposal of the America's segment. The final amount of the consideration, after all applicable adjustments, received by the Group, was U.S.\$ 1,067 million. Following the disposal of TMK IPSCO, the Group's management endeavours to maintain shipments to the North American market by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement. See "*Business—Strategic Ventures—Recent Sale of TMK IPSCO*".

Certain Factors Affecting the Group's Results of Operations

The Group's results of operations are affected by a number of factors, including dependence on the oil and gas industry, general economic conditions, foreign exchange, cost of raw materials and seasonality. See "*—Results of Operations*" for a description of the extent to which these factors have affected the Group's results of operations.

Developments in the Oil and Gas Industry, in particular in Russia

The oil and gas industry is the principal consumer of steel pipe products worldwide and accounts for most of the Group's sales, in particular sales of OCTG, line pipes and large diameter welded pipes. In the nine months ended 30 September 2019 and in the year ended 31 December 2018, 78.8 per cent. and 78.1 per cent., respectively, of the Group's pipes by volume were sold to the oil and gas industry, and 37.1 per cent. and 37.3 per cent., respectively, of the Group's pipes were sold to the five largest customers. As a result, the majority of the Group's revenues is generated from, or relates to, the oil and gas industry (primarily vertically-integrated oil and gas corporations and pipeline operators in Russia).

The oil and gas industry has historically been and continues to be volatile and downturns in the oil and gas markets can adversely affect demand for the Group's products, which depends, among other factors, on the number of oil and gas wells being drilled, completed and reworked, the depth and drilling conditions of wells and the construction of oil and gas pipelines. The level of such industry specific activities in turn depends on the level of capital spending by major oil and gas companies, primarily for the development of oil and gas fields, construction of pipelines to service these fields and modernising and repairing equipment on existing oil and gas fields and pipelines.

In some of the markets capital spending on OCTG and other kinds of pipes used in oil and gas exploration, drilling and production activities is driven to a large degree by the prevailing prices for oil and gas and the perceived stability and sustainability of those prices. The Group's OCTG and line pipe production volumes primarily depend on drilling and oil production activity, oil and gas transportation, and specific large-scale investment projects in the oil and gas industry and respective long-term contracts. A decline in oil and gas exploration, drilling and production activities in Russia and more globally (including as a result of the volatility of oil and gas prices), adversely affects the Group's results of operations.

In this regard, there has been a significant decline in crude oil prices and natural gas prices during the periods under review. In particular, at the beginning of 2016, the Brent crude oil prices decreased to U.S.\$25.99 per barrel on 20 January 2016 but subsequently increased to U.S.\$54.99 per barrel on 23 January 2017. In 2017, following the decrease to U.S.\$44.09 per barrel on 26 June 2017, the Brent crude oil prices significantly increased to U.S.\$66.80

per barrel on 28 December 2017. In 2018, the Brent crude oil prices remained volatile which resulted in an increase to U.S.\$86.07 per barrel on 4 October 2018 followed by a sharp decrease to U.S.\$50.57 per barrel on 28 December 2018. During 2019, the Brent oil prices fluctuated between the lowest of U.S.\$53.23 per barrel on 3 January 2019 and the highest of U.S.\$74.94 per barrel on 25 April 2019. Such volatility in oil prices has resulted in a significant decrease in, or, in certain instances, in suspension of, oil drilling and production activities in certain markets, particularly North America, and caused a significant decrease in revenues generated by oil companies, which has consequently resulted in a decrease in capital expenditure on oil drilling, exploration and production activities by oil companies. In addition, in 2016, natural gas prices continued the 2014-2015 decrease trend reaching U.S.\$1.57 per million Btu on 1 March 2016 but subsequently increased throughout during 2017 and reached U.S.\$3.69 per million Btu on 29 December 2017. In 2018 natural gas prices remained volatile ranging from U.S.\$2.49 per million Btu on 15 February 2018 to U.S.\$4.70 per million Btu on 21 November 2018. During 2019 natural gas prices have consistently decreased from the highest of U.S.\$3.58 per million Btu on 15 January 2019 to the lowest of U.S.\$2.02 per million Btu on 5 August 2019. The volatility in oil and gas prices has put pressure on the prices of the Group's products during the periods under review, which, in turn, has decreased the Group's revenue and profit margins, primarily those attributable to the Americas segment in the year ended 31 December 2018 and nine months ended 30 September 2019 (See "-Segments" below).

Conversely, any uplift in oil and gas exploration, drilling and production activities generally has a positive effect on the prices of the Group's products and, as a result, the Group's results of operations. The Group's management believes that capital expenditures of some of the oil and gas companies in Russia and some other countries could increase in the coming years due to a number of factors, including the implementation of the new pipeline projects, relative underinvestment in oil and gas infrastructure, deteriorating production conditions at some of the traditional mature oil and gas regions, the need of oil and gas companies to deliver on their long-term production targets and the Russian government's increasingly close attention to reserve replacement. Nevertheless, any such increase is generally subject to a number of conditions and macroeconomic factors.

Level of Industrial Activity in Russia and Russian Macroeconomic Conditions

The majority of the Group's revenue is attributable to Russia. For the nine months ended 30 September 2019 and 2018, sales to customers located in Russia accounted for 58.5 per cent. and 54.3 per cent. of the Group's total revenue for the respective periods. For the years ended 31 December 2018, 2017 and 2016, sales to customers located in Russia accounted for 53.9 per cent., 60.7 per cent. and 72.3 per cent., respectively, of the Group's total revenue. As a consequence, a substantial portion of the Group's sales and the Group's results of operations, generally, have historically been, and will continue to be, significantly impacted by the level of industrial activity in Russia, which is largely driven by macroeconomic trends relating to Russia, including the overall growth of the economy.

The table below summarises certain key macroeconomic indicators relating to the Russian economy and the pipemanufacturing industry dynamics for the periods indicated:

	Nine months ended	Year e	nded 31 Decem	ber
		2018	2017	2016
Real GDP growth	1.2%	2.3%	1.6%	0.3%
Industrial production index (annualised)	3.0%	2.9%	2.1%	2.2%
Inflation (consumer price index, annualised)	4.0%	4.3%	2.5%	5.4%
Unemployment rate (annualised)	4.7%	4.8%	5.2%	5.6%
Pipe-manufacturing industry	3.3%	1.5%	8.1%	(9.8)%
production (decline)/growth				
- Including large-diameter pipe production	13.0%	0.0%	7.3%	(28.3)%
(decline)/growth				

Sources: Rosstat, Ministry of Economic Development, CBR, Worldsteel Association, Metal Expert.

The Russian economy is, to a significant degree, dependent on exports of key commodities, such as oil, gas, iron ore and other raw materials. Dramatic decreases in the prices of these commodities in the world market lead to sharp decreases in the Russian Government's revenues, along with similarly sharp declines in the revenues of privately held Russian companies operating in the key commodity sectors, which, in turn, negatively impact the overall Russian economy. While the volatility was less pronounced in 2018 and 2017, in 2016, commodity prices remained highly volatile, which, in turn, contributed to a significant depreciation of the Rouble against both the U.S. dollar and the euro.

Foreign Exchange

The Group's exposure to currency risk relates to sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Group's subsidiaries, and the Group's net investments in foreign operations. The currencies in which these transactions and balances are primarily denominated are Russian roubles, U.S. dollars and euros. More than half of the Group's revenues are typically denominated in Russian roubles and the remaining part are typically denominated in U.S. dollars and euros. The Group's direct costs, including raw materials, labour and transportation costs, are largely incurred in Russian roubles, and, to a lesser degree, in U.S. dollars. Other costs, such as interest expense, are currently incurred largely in U.S. dollars and euros.

As a result, the Group is vulnerable to some degree to margin erosion if the currencies in which costs are denominated appreciate against the currencies in which revenues are denominated. The Rouble-U.S. dollar exchange rate has fluctuated significantly in recent years, ranging: from the lowest of 60.27 Roubles per 1.00 U.S. dollar to the highest of 83.59 per 1.00 U.S. dollar in 2016; from the lowest of 55.85 Roubles per 1.00 U.S. dollar to the highest of 60.75 Roubles per 1.00 U.S. dollar in 2017; from the lowest of 55.67 Roubles per 1.00 U.S. dollar to the highest of 69.97 Roubles per 1.00 U.S. dollar in 2018; and from the lowest of 62.52 Roubles per 1.00 U.S. dollar to the highest of 67.19 Roubles per 1.00 U.S. dollar in the nine months ended 30 September 2019.

For the nine months ended 30 September 2019, the Group recognised a foreign exchange gain in the amount of U.S.\$27.0 million compared to a U.S.\$49.4 million loss for the nine months ended 30 September 2018 in the income statement. In the year ended 31 December 2018, the Group recognised a foreign exchange loss of U.S.\$72.3 million compared to U.S.\$27.5 million foreign exchange gain in the year ended 31 December 2017 and U.S.\$129.9 million foreign exchange gain in the year ended 31 December 2016 in the income statement. As at 30 September 2019, 37.4 per cent. of the Group's interest-bearing loans and borrowings (excluding the balances of the disposal group held for sale (See "—Segments")) were denominated in U.S. dollars. This, along with the general volatility of the Rouble, means that the risk of losses resulting from the devaluation of the Rouble remains high.

In addition, the Group is exposed to currency translation effect on income/expense items which illustrates the effect of different exchange rates the Group uses to convert these items from functional currencies into the presentation currency, the U.S. dollar, in different reporting periods for financial reporting purposes.

Cost of Raw Materials

The Group requires substantial quantities of raw materials to produce steel pipes. The principal raw materials used in production processes include scrap and ferroalloys for use in the Group's in-house steel-making operations, steel billets used for the production of seamless pipe and steel coils and plates for the production of welded pipe. As such, the results of the Group's operations can be impacted by volatility in the costs of, and the availability of, these raw materials.

The table below shows the Group's average purchase prices per tonne for scrap and HRC, the Group's principal raw materials used in steel pipe production, for the nine months ended 30 September 2019 and 2018 and for the years ended 31 December 2018, 2017 and 2016:

	Nine mont 30 Septem		Year End	ded 31 Dece	ember
	2019	2018	2018	2017	2016
		(U.	S.\$ per tonne	e)	
Scrap	266	284	281	256	181
HRC	477	575	551	500	387

There are many factors which influence raw materials prices, including oil and gas prices, worldwide production capacity, capacity utilisation rates, inflation, exchange rates, trade barriers and developments in steel-making processes. In particular, the Group remains exposed to increases in the prices of scrap metal, which is the principal raw material used in its steel-making operations. In the nine months ended 30 September 2019 and the year ended 31 December 2018, the cost of scrap metal in Russia in Rouble terms decreased on average by 1 per cent. and increased on average by 18 per cent. year-on-year, respectively. The cost of coils remained unchanged year-on-year in the nine months ended 30 September 2019 and increased by 12 per cent. year-on-year in the year ended 31 December 2018. In addition, in Russia the Group mainly purchases scrap from a single local supplier, which may enhance the Group's exposure to increases in prices.

At the same time, the contracts the Group has in place with a number of its major clients contain price formulas (providing for the quarterly or semi-annual adjustment of sale prices) which allow to partially hedge the Group's risks relating to the growing raw materials prices by passing a portion of raw material costs to the Group's customers. The share of raw materials and consumables in the total production cost in the nine months ended 30 September 2019 and in the years ended 31 December 2018, 2017 and 2016 was 66.8 per cent., 66.7 per cent. and 64.4 per cent. and 59.6 per cent., respectively. The increase in prices for scrap, coils and other raw materials, if not passed to customers, can adversely affect the Group's profit margins and results of operations.

The Group's plants also consume significant quantities of energy, particularly electricity and natural gas. In the nine months ended 30 September 2019 and in the years ended 31 December 2018, 2017 and 2016, energy and utility costs comprised 7.4 per cent., 7.2 per cent., 7.9 per cent. and 8.8 per cent. of the Group's total production cost, respectively. Accordingly, any increase in the prices for raw materials, natural gas and electricity results in a consequential increase of the Group's costs of sales which negatively affects the Group's results of operations.

Transportation of Raw Materials and Finished Products

The majority of the Group's product deliveries to customers are transported by rail. Accordingly, the Group relies on the freight rail network operated by Russian Railways, a state-controlled company, for the distribution of its products to customers. The Russian Government sets rail tariffs, which have increased in recent years and may further increase, which could adversely affect the Group's transportation costs. In the past, the Group generally has been able to pass to its customers a significant proportion of the increases in railway transportation costs. However, there can be no assurance that the Group will be able to do so in the future. See "*Risk Factors—Risks relating to the Group's Business and the Pipe Industry—The Group depends on the Russian railroad, port and waterway infrastructure for the transportation of its raw materials and products in Russia and the CIS"*.

Capital Expenditure Programme

The Group's business is capital-intensive and requires significant investment and expenditures in order to maintain and develop the production quality and cost and time effectiveness of its facilities. As a consequence, the Group's results of operations are significantly impacted by the levels of capital expenditure and the Group's being able to implement the relevant projects as and when planned. In the nine months ended 30 September 2019 and in the years ended 31 December 2018, 2017 and 2016, the Group made capital expenditures defined as cash used for purchase of property, plant and equipment of U.S.\$152.4 million, U.S.\$273.1 million, U.S.\$232.6 million and U.S.\$175.2 million (which for the year ended 31 December 2016 also included purchase of intangible assets), respectively.

To finance its future capital expenditures, the Group's management plans to rely on cash generated from the Group's operations and external debt financing. However, there can be no assurance that the Group will be able to generate sufficient cash from operations to finance such expenditures or that external financing will be available on reasonable terms, or at all. See "*Risk Factors—Risks relating to the Group's Business and the Pipe Industry—The Group's capital expenditure programme and its ability to raise financing is subject to various risks and uncertainties and the Group may require additional sources of financing to continue to fund the growth of the Group's business*". In addition, the Group's capital expenditure plans are subject to change depending on, among other things, the need to conduct unanticipated maintenance or repair works, the evolution of market conditions and the cost and availability of funds.

Limitations on Export Sales Arising from Anti-Dumping Measures and Import Duties

The Group's principal production facilities are located in Russia and the EU, where certain domestic manufacturers and/or industries (for example, the steel pipe manufacturing industry) are protected by national anti-dumping regulations from harmful effects of foreign imports that the local governments believe are priced below fair market value. Similarly, certain import duties apply to export sales to foreign markets by domestic producers. Accordingly, the lifting of import duties or the introduction of more stringent import duties in the export markets where the Group intends or may be considering increasing the shares of its sales is likely to affect the Group's revenue and gross profit margin. See "*Risk Factors—Risks relating to the Group may adversely affect the Group's business*".

Seasonality

Seasonality has a relatively limited impact on the Group's business. Nonetheless, a decrease in demand and a consequent reduction in sales volumes, accompanied by an increase in inventories, is typically evident in the Russia segment and the Europe segment in the third quarter of the Group's financial year, reflecting the traditionally lower demand for pipe products during this period. As a result, the Group typically schedules capital repairs and maintenance programmes of its pipe production assets for the same period.

Segments

As at 30 September 2019, the Group had three reporting segments:

- <u>Russia segment</u>: represents the results of operations and financial position of plants located in the Russian Federation, a finishing facility in Kazakhstan, oilfield service companies in Russia, traders located in Russia, the UAE and Switzerland;
- <u>Americas segment</u>: represents the results of operations and financial position of plants and traders located in the United States and Canada; and
- <u>Europe segment</u>: represents the results of operations and financial position of plants located in Romania and traders located in Italy and Germany.

For a reconciliation of the Group's key (but not all) production, trading and services companies to the reporting segments, see "*Business – Corporate Structure*". In 2016, the Americas segment comprised TMK IPSCO, OFS International LLC and its subsidiaries and TMK Completions LTD. and its subsidiaries. From 2017 to 2019, the Americas segment was represented by TMK IPSCO only.

On 22 March 2019, the Group signed the stock purchase agreement with Tenaris for the sale of 100 per cent. interest in TMK IPSCO (the "**SPA**") which represented the Americas segment before completion of the transaction on 2 January 2020. See "*Business—Strategic Ventures—Recent Sale of TMK IPSCO*" for further details. Accordingly, from the date of the SPA, TMK IPSCO was classified as a disposal group held for sale and as discontinued operations. The results of discontinued operations are presented separately in the Group's income statement in the Interim Financial Statements. In addition, assets and liabilities relating to the discontinued operations were reclassified as held for sale. See "*– Recent TMK IPSCO disposal*" for additional information.

Results of Operations

Nine months ended 30 September 2019 and 2018

The following table sets forth the Group's consolidated income statement for the nine months ended 30 September 2019 and 2018.

		Nine	e months ende	d 30 September		
		2019		•	2018	
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
		(in millions o	f U.S. dollars, (unaud	unless otherwise ited)	stated)	
Sales volumes, thousand tonnes Revenue	2,497.2 2,904.6 (2,263.9)	434.7 762.0 (698.0)	2,931.9 3,666.5 (2,961.9)	2,387.7 2,851.7 (2,300.3)	598.9 983.3 (842.8)	2,986.6 3,834.9 (3,143.1)
Cost of sales	<u>(2,203.9)</u> 640.7	<u> </u>	<u>(2,901.9)</u> 704.6	551.4	140.5	<u>(3,143.1)</u> 691.9
Gross profit Net operating expenses ⁽¹⁾ Gain/(loss) on disposal of	(352.7)	(54.6)	(407.3)	(324.8)	(65.7)	(390.5)
subsidiaries	0.4	-	0.4	(23.7)	-	(23.7)
Impairment of goodwill Foreign exchange gain/(loss)	- 27.1	(0.1)	- 27.0	(2.2) (49.7)	0.3	(2.2) (49.4)
Finance costs	(168.9)	(4.3)	(173.2)	(182.4)	(2.8)	(185.2)
Finance income	10.7	-	10.7	7.0	0.0	7.0
Other non-operating income/(expenses) ⁽²⁾	(9.3)	(6.9)	(16.1)	(0.3)	-	(0.3)
Profit/(loss) before tax	148.1	(1.9)	146.2	(24.7)	72.3	47.6
Income tax benefit/(expense)	(40.7)	(0.3)	(41.0)	(12.2)	(15.6)	(27.8)
Profit/(loss) for the period	107.3	(2.2)	105.2	(36.9)	56.6	19.7

Notes:

⁽¹⁾ Net operating expenses comprise selling and distribution expenses, advertising and promotion expenses, general and administrative expenses, research and development expenses and other operating income/(expenses).

⁽²⁾ Other non-operating income/(expenses) comprise other non-operating income/(expenses) and share of profit/(loss) of associates.

Revenue

Revenue represents the Group's total sales to customers net of value added tax and product returns. The Group's primary product categories are seamless pipe and welded pipe. In addition to selling pipe, the Group's revenue derives from other operations which primarily include sale of steel billets and pipe-related services, such as threading, repair and field services.

The following table shows the Group's pipe sales volumes by group of products for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
	2019	2018	
	(thousands of tonnes)		
Seamless pipes	2,009.6	2,005.7	
Welded pipes	922.3	981.0	
Total	2,931.9	2,986.6	

The following table shows the Group's revenue by group of products and services for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
	2019	2018	
	(in millions of U.S. dollars)		
	(unaudited)		
Seamless pipes	2,606.2	2,600.0	
Welded pipes	926.5	1,004.2	
Total pipes	3,532.7	3,604.2	
Other operations	133.8	230.7	
Total revenue	3,666.5	3,834.9	

The following table shows the Group's pipe sales volumes by reporting segment for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
	2019	2018	
	(thousands of tonnes)		
Russia	2 353,9	2 239,4	
Americas	434,7	598,9	
Europe	143,3	148,3	
Total	2 931,9	2 986,6	

For the nine months ended 30 September 2019, total sales volumes decreased by 54.7 thousand tonnes or 1.8 per cent., as compared to the nine months ended 30 September 2018. Higher sales in the Russia segment were fully offset by a significant decrease in the Americas segment following the slowdown in the North American OCTG market reflecting reduced drilling activity and operators focused on capital discipline, which resulted in lower demand for pipe products and pressure on prices.

The following table shows the Group's revenue by reporting segment for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
	2019	2018	
	(in millions of U.S. dollars) (unaudited)		
Russia	2,719.2	2,619.6	
Americas	762.0	983.3	
Europe	185.3 232.		
Total revenue			

For the nine months ended 30 September 2019, the Group's total revenue decreased by U.S.\$168,4 million, or 4.4 per cent., as compared to the nine months ended 30 September 2018, primarily as a result of a decrease in revenue of the Americas segment and the Europe segment which was partially compensated by an increase in revenue of the Russia segment.

Russia segment

For the nine months ended 30 September 2019, revenue generated by the Russia segment increased by U.S.\$99.7 million, or 3.8 per cent., to U.S.\$2,719.2 million from U.S.\$2,619.6 million for the nine months ended 30 September 2018. Excluding the negative currency translation effect of U.S.\$168.7 million, revenue generated by the Russia segment for the nine months ended 30 September 2019 increased by U.S.\$268.4 million as compared to the nine months ended 30 September 2018. The growth in revenue was mostly attributable to higher sales of seamless OCTG and LDP, which also resulted in the improved product mix.

Americas segment

For the nine months ended 30 September 2019, revenue generated by the Americas segment decreased by U.S.\$221.3 million, or 22.5 per cent., to U.S.\$762.0 million from U.S.\$983.3 million for the nine months ended 30 September 2018, primarily as a result of decrease in OCTG sales, due to the slowdown in the North American OCTG market reflecting reduced drilling activity and operators focused on capital discipline, as well as the announcement of the contemplated TMK IPSCO disposal and the anticipated change in the sales strategy following the consummation of the disposal, all of which resulted in lower demand for pipe products and pressure on prices.

Europe segment

For the nine months ended 30 September 2019, revenue generated by the Europe segment decreased by U.S.\$46.8 million, or 20.2 per cent., to U.S.\$185.3 million from U.S.\$232.1 million for the nine months ended 30 September 2018, reflecting a more challenging market environment compared to the one in the nine months ended 30 September 2018, and a negative effect of currency translation.

Cost of Sales and Gross Profit

Cost of Sales

The table below sets out the Group's cost of sales for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
-	2019	2018	
-	(in millions of U.	S. dollars)	
	(unaudite	ed)	
Raw materials and consumables	1,970.2	2,088.7	
Staff costs including social security	382.7	399.8	
Energy and utilities	218.4	224.4	
Depreciation and amortisation	145.6	189.9	
Repairs and maintenance	62.7	56.3	
Contracted manufacture	54.8	57.9	
Freight	47.4	61.5	
Professional fees and services	25.3	26.6	
Import duties	18.1	13.8	
Taxes	11.5	22.8	
Rent	6.0	6.6	
Insurance	3.1	3.0	
Travel	1.4	1.3	
Communications	0.3	0.3	
Other	0.9	2.3	
Total production cost	2,948.3	3,155.3	
Change in own finished goods and work in progress	(33.1)	(42.4)	
Cost of sales of externally purchased goods	24.7	33.9	
Obsolete stock, write offs/(reversal of allowances)	21.9	(3.7)	
Cost of sales	2,961.9	3,143.1	

For the nine months ended 30 September 2019, the Group's cost of sales decreased by U.S.\$181.2 million, or 5.8 per cent., as compared to the nine months ended 30 September 2018. The decrease was primarily attributable to a significant drop in the Americas segment sales volumes and the decrease was also affected by the currency translation effect in the Russia segment.

For the nine months ended 30 September 2019 and 2018, the key components of the Group's cost of sales were raw materials and consumables, staff costs including social security, energy and utilities costs and depreciation and

amortisation which represented, in aggregate, 91.7 per cent. and 92.4 per cent. of the Group's cost of sales for the nine months ended 30 September 2019 and 2018, respectively.

Raw materials and consumables

Raw materials and consumables comprise scrap metal, coil, steel plates, ferroalloys, steel billets and other consumables. For the nine months ended 30 September 2019 and 2018, raw materials and consumables decreased by U.S.\$118.4 million, or 5.7 per cent., as compared to the nine months ended 30 September 2018. The decrease was primarily attributable to a significant drop in the Americas segment sales volumes and the decrease was also affected by the currency translation effect in the Russia segment.

Staff costs including social security

Staff costs include all forms of consideration that the Group pays for the services rendered by its employees. Shortterm employee benefits paid by the Group represent wages, salaries, social security contributions, paid annual and sick leave, bonuses and non-monetary benefits (such as medical insurance). The Group companies provide also postemployment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, financial support to pensioners, jubilee payments, etc.) and pay contributions to publicly or privately administered pension insurance plans. For the nine months ended 30 September 2019, staff costs including social security were U.S.\$382.7 million which constitutes a decrease of U.S.\$17.1 million, or 4.3 per cent., from U.S.\$399.8 million for the nine months ended 30 September 2018 due to a negative currency translation effect in the Russia segment and a decrease in headcount in the Americas segment.

Energy and utilities costs

Energy and utilities costs mainly comprise costs for electricity, natural gas and water. For the nine months ended 30 September 2019 and 2018, energy and utilities were fairly stable and amounted to U.S.\$218.4 million and U.S.\$224.4 million, respectively.

Depreciation and amortisation

For the nine months ended 30 September 2019, depreciation and amortisation costs were U.S.\$145.6 million which constitutes a decrease of U.S.\$44.2 million, or 23.3 per cent., from U.S.\$189.9 million for the nine months ended 30 September 2018 which was partially attributable to the currency translation effect in the Russia segment and was also the result of a cessation of depreciation and amortisation of non-current assets of the Americas segment following its classification as discontinued operations.

Gross Profit

The table below shows the Group's gross profit and gross profit margin percentages (calculated as the ratio of gross profit to revenue and expressed as percentage) by reporting segment for the nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September					
	201	19	2018			
	Gross Profit Gross Profit Margin		fit Gross Profit Margin Gross Profit			
	(in millions of U.S. dollars)	(in %)	(in millions of U.S. dollars)	(in %)		
		(unaudited)				
Russia	597.7	22.0	490.5	18.7		
Americas	64.0	8.4	140.5	14.3		
Europe	43.0	23.2	60.8	26.2		
Total	704.6	19.2	691.9	18.0		

Russia segment

For the nine months ended 30 September 2019, gross profit of the Russia segment was U.S.\$597.7 million which constitutes an increase of U.S.\$107.1 million, or 21.8 per cent., from U.S.\$490.5 million for the nine months ended 30 September 2018. Excluding the negative currency translation effect of U.S.\$46.6 million, for nine months ended 30 September 2019 gross profit of the Russia segment increased by U.S.\$153.8 million as compared to the nine months ended 30 September 2018. The increase in gross profit was mainly attributable to higher sales of seamless OCTG and LDP, which also resulted in better product mix.

Gross profit margin of the Russia segment increased from 18.7 per cent. for the nine months ended 30 September 2018 to 22.0 per cent. for the nine months ended 30 September 2019.

Americas segment

For the nine months ended 30 September 2019, gross profit of the Americas segment was U.S.\$64.0 million which constitutes a decrease of U.S.\$76.5 million, or 54.5 per cent., from U.S.\$140.5 million for the nine months ended 30 September 2018 as a result of a decrease in sales volumes, primarily of OCTG due to the slowdown in the North American market which is discussed above.

Gross profit margin of the Americas segment decreased from 14.3 per cent. for the nine months ended 30 September 2018 to 8.4 per cent. for the nine months ended 30 September 2019.

Europe segment

For the nine months ended 30 September 2019, gross profit of the Europe segment was U.S.\$43.0 million which constitutes a decrease of U.S.\$17.8 million, or 29.3 per cent., from U.S.\$60.8 million for the nine months ended 30 September 2018, primarily as a result of challenging market environment, which resulted in lower sales volumes of seamless pipes and put pressure on prices.

Gross profit margin of the Europe segment decreased from 26.2 per cent. for the nine months ended 30 September 2018 to 23.2 per cent. for the nine months ended 30 September 2019.

Net Operating Expenses

The following table shows a breakdown of the Group's net operating expenses for nine months ended 30 September 2019 and 2018.

	Nine months ended 30 September		
	2019 2018		
	(in millions of U.S. dollars)		
	(unaud	lited)	
Selling and distribution expenses	(175.5)	(176.2)	
Advertising and promotion expenses	(7.3)	(5.0)	
General and administrative expenses	(207.9)	(191.1)	
Research and development expenses	(4.8)	(5.7)	
Other operating (income)/expenses	(11.7)	(12.4)	
Total net operating expenses	(407.3) (390.5		

For the nine months ended 30 September 2019, the Group's net operating expenses were U.S.\$407.3 million which constituted an increase of U.S.\$16.8 million, or 4.3 per cent., from U.S.\$390.5 million for the nine months ended 30 September 2018. The increase was mainly attributable to an increase in general and administrative expenses which represented 51.1 per cent. and 48.9 per cent. of the Group's net operating expenses for the nine months ended 30 September 2019 and 2018, respectively.

Selling and Distribution Expenses

For the nine months ended 30 September 2019 and 2018, the Group's selling and distribution expenses remained largely stable and were U.S.\$175.5 million and U.S.\$176.2 million, respectively.

For the nine months ended 30 September 2019 and 2018, the key components of the Group's selling and distribution expenses were freight and staff costs including social security which represented, in aggregate, 75.8 per cent. and 74.9 per cent. of the Group's selling and distribution expenses for the nine months ended 30 September 2019 and 2018, respectively.

Freight costs

Railway transportation is the Group's principal means of transporting pipe products to Russian, CIS, and European customers, as well as to ports for onward transportation overseas. For the nine months ended 30 September 2019 and 2018, freight costs slightly increased by U.S.\$4.1 million, or 4.1 per cent., from U.S.\$101.3 million for the nine months ended 30 September 2018 to U.S.\$105.4 million for the nine months ended 30 September 2019.

Staff costs including social security

Staff costs including social security decreased by U.S.\$3.0 million, or 9.9 per cent., from U.S.\$30.6 million for the nine months ended 30 September 2018 to U.S.\$27.6 million for the nine months ended 30 September 2019.

General and Administrative Expenses

For the nine months ended 30 September 2019, the Group's general and administrative expenses were U.S.\$207.9 million which constitutes an increase of U.S.\$16.9 million, or 8.8 per cent., from U.S.\$191.1 million for the nine months ended 30 September 2018. The growth was mainly the result of an increase in staff costs.

For the nine months ended 30 September 2019 and 2018, the key components of the Group's general and administrative expenses were staff costs including social security and professional fees and services which represented, in aggregate, 80.3 per cent. and 75.7 per cent. of the Group's general and administrative expenses for the nine months ended 30 September 2019 and 2018, respectively.

Staff costs including social security

Staff costs including social security increased by U.S.\$21.9 million, or 20.1 per cent., from U.S.\$109.2 million for the nine months ended 30 September 2018 to U.S.\$131.1 million for the nine months ended 30 September 2019 due to payment of one-off bonuses related to long-term projects.

Professional fees and services

Professional fees and services as part of the general and administrative expenses comprise primarily consulting services. For the nine months ended 30 September 2019 and 2018, professional fees and services remained largely stable and were U.S.\$35.8 million and U.S.\$35.4 million, respectively.

Impairment of goodwill

In the nine months ended 30 September 2019, the Group did not record any impairment of goodwill. In the nine months ended 30 September 2018, the impairment of goodwill was U.S.\$2.2 million which was attributable to the Canadian well completions business' goodwill caused by the lack of demand on this market.

Foreign exchange gain/(loss)

The Group recorded a foreign exchange gain in the amount of U.S.\$27.0 million for the nine months ended 30 September 2019 as compared to a foreign exchange loss in the amount of U.S.\$49.4 million for the nine months ended 30 September 2018 in the income statement.

In addition, the Group recognised a foreign exchange gain from exchange rate fluctuations in the amount of U.S.\$48.5 million (net of income tax) for the nine months ended 30 September 2019 as compared to a U.S.\$79.4 million loss (net of income tax) for the nine months ended 30 September 2018 in the statement of other comprehensive income. These amounts represent the effective portion of foreign exchange gains or losses on the Group's hedging instruments.

Net Finance costs

For the nine months ended 30 September 2019, the Group's net finance costs (representing total finance costs and finance income) decreased by U.S.\$15.8 million, or 8.9 per cent., to U.S.\$162.4 million from U.S.\$178.2 million for the nine months ended 30 September 2018. As at 30 September 2019 and 2018, the Group's weighted average nominal interest rate was 7.21 per cent.

Other non-operating income/(expenses)

For the nine months ended 30 September 2019, the Group's other non-operating expenses increased by U.S.\$12.0 million to U.S.\$12.3 million from U.S.\$0.3 million for the nine months ended 30 September 2018. Higher expenses in the nine months ended 30 September 2019 reflected expenses for the initial public offering of IPSCO Tubulars and the secondary public offering of TMK-Artrom, cancelled due to market conditions and expenses for research of potential participation in upcoming pipeline projects and professional and consulting fees related to TMK IPSCO sale.

Income tax

For the nine months ended 30 September 2019 and 2018, the following corporate income tax rates were in force in the countries where the Group's production facilities were located: 20 per cent. in Russia, 21 per cent. (federal rate) in the United States and 16 per cent. in Romania.

For the nine months ended 30 September 2019 and 2018, the Group reported a profit before tax of U.S.\$146.2 million and U.S.\$47.6 million, respectively, and an income tax expense of U.S.\$41.0 million and U.S.\$27.8 million, respectively.

Profit for the period

For the reasons discussed above, the Group's profit for the nine months ended 30 September 2019 and 2018 was U.S.\$105.2 million and U.S.\$19.7 million, respectively.

Years Ended 31 December 2018, 2017 and 2016

The following table sets forth the Group's consolidated income statement for the years ended 31 December 2018, 2017 and 2016:

	Year ended 31 December			
	2018	2017	2016	
	(in millions of U.S.	dollars, unless othe	erwise stated)	
Sales volumes, thousand tonnes	3,988.8	3,784.4	3,458.1	
Revenue	5,098.8	4,393.7	3,338.0	
Cost of sales	(4,183.2)	(3,521.2)	(2,634.4)	
Gross profit	915.6	872.5	703.6	
Net operating expenses ⁽¹⁾	(518.0)	(544.0)	(437.1)	
Gain/(loss) on disposal of subsidiaries	(23.7)	-	-	
Impairment of goodwill	(16.6)	(22.0)	(3.3)	
Impairment of property, plant and equipment	-	(1.6)	-	
Reversal of impairment of property, plant and equipment	-	16.3	-	
Foreign exchange gain/(loss)	(72.3)	27.5	129.9	
Finance costs	(241.5)	(281.0)	(273.5)	
Finance income	9.5	12.7	10.9	
Gain/(loss) on derivatives	-	(3.4)	9.2	
Other non-operating income/(expenses) ⁽²⁾	(8.1)	0.6	29.3	
Profit/(loss) before tax	44.8	77.5	169.2	
Income tax benefit/(expense)	(45,0)	(47.9)	(3.5)	
Profit/(loss) for the period	(0.2)	29.6	165.6	

Notes:

⁽¹⁾ Net operating expenses comprise selling and distribution expenses, advertising and promotion expenses, general and administrative expenses, research and development expenses and other operating income/(expense).

(2) Other non-operating income/(expenses) comprise other non-operating income/(expenses) and share of profit/(loss) of associates.

Revenue

The following table shows the Group's pipe sales volumes by group of products for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
	2018 2017		2016	
	(thousands of tonnes)			
Seamless pipes	2,743.2	2,671.3	2,411.9	
Welded pipes	1,245.6	1,113.1	1,046.2	
Total	3,988.8	3,784.4	3,458.1	

The following table shows the Group's revenue by group of products and services for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
	2018	2017	2016	
	(in millions of U.S. dollars)			
Seamless pipes	3,550.1	3,074.2	2,339.7	
Welded pipes	1,271.5	1,086.4	833.2	
Total pipes	4,821.6	4,160.6	3,172.9	
Other operations	277.1	233.1	165.1	
Total revenue	5,098.8	4,393.7	3,338.0	

The following table shows the Group's revenue by reporting segment for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
	2018 2017		2016	
	(in millions of U.S. dollars)			
Russia	3,442.0	3,162.6	2,795.8	
Americas	1,349.2	989.3	367.9	
Europe	307.5	241.8	174.3	
Total revenue	5,098.8	4,393.7	3,338.0	

For the year ended 31 December 2018, the Group's total revenue increased by U.S.\$705.1 million, or 16.0 per cent., to U.S.\$5,098.8 million from U.S.\$4,393.7 million for the year ended 31 December 2017, which, in turn, constitutes a U.S.\$1,055.7 million, or 31.6 per cent., increase in the Group's total revenue from U.S.\$3,338.0 million for the year ended 31 December 2016. The increase in both years was attributable to the increase in revenue from all segments.

Russia segment

For the year ended 31 December 2018, revenue generated by the Russia segment increased by U.S.\$279.5 million, or 8.8 per cent., to U.S.\$3,442.0 million from U.S.\$3,162.6 million for the year ended 31 December 2017. Excluding the negative currency translation effect of U.S.\$257.9 million, revenue generated by the Russia segment for the year ended 31 December 2018 increased by U.S.\$537.4 million as compared to the year ended 31 December 2017. The increase was due to the better product mix, reflecting higher sales volumes of seamless OCTG and LDP, and better pricing environment for seamless pipes.

For the year ended 31 December 2017, revenue generated by the Russia segment increased by U.S.\$366.8 million, or 13.1 per cent., to U.S.\$3,162.6 million from U.S.\$2,795.8 million for the year ended 31 December 2016, as a result of a positive currency translation effect.

Americas segment

For the year ended 31 December 2018, revenue generated by the Americas segment increased by U.S.\$359.9 million, or 36.4 per cent., to U.S.\$1,349.2 million from U.S.\$989.3 million for the year ended 31 December 2017, as a result of the stabilisation of market conditions in the North America, which led to a considerable increase in sales volumes, primarily of OCTG.

For the year ended 31 December 2017, revenue generated by the Americas segment increased by U.S.\$621.4 million, or 168.9 per cent., to U.S.\$989.3 million from U.S.\$367.9 million for the year ended 31 December 2016, primarily due to a significant increase in drilling activity combined with increased exploration and production spending in the

North American market, which resulted in a considerable growth in sales volumes, primarily of OCTG, and better pricing.

Europe segment

For the year ended 31 December 2018, revenue generated by the Europe segment increased by U.S.\$65.8 million, or 27.2 per cent., to U.S.\$307.5 million from U.S.\$241.8 million for the year ended 31 December 2017, primarily due to better product mix with an increased share of higher-margin products, more favourable pricing environment and higher sales volumes.

For the year ended 31 December 2017, revenue generated by the Europe segment increased by U.S.\$67.5 million, or 38.7 per cent., to U.S.\$241.8 million from U.S.\$174.3 million for the year ended 31 December 2016, primarily due to better pricing environment and higher sales volumes.

Cost of Sales and Gross Profit

Cost of Sales

The table below sets out the Group's cost of sales for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
—	2018	2017	2016	
	(in mi	llions of U.S. dollars)		
Raw materials and consumables	2,805.4	2,380.3	1,523.0	
Staff costs including social security	530.7	498.1	386.0	
Energy and utilities	302.1	290.8	224.4	
Depreciation and amortisation	249.7	246.9	208.9	
Freight	82.3	61.3	32.3	
Contracted manufacture	78.7	77.2	61.7	
Repairs and maintenance	74.7	67.9	49.2	
Professional fees and services	37.1	31.4	22.4	
Taxes	26.8	26.9	27.8	
Rent	8.9	9.7	10.5	
Insurance	4.0	3.5	2,9	
Travel	1.9	1.5	1.5	
Communications	0.4	0.4	0.3	
Other	2.5	2.9	2.5	
Total production cost	4,205.2	3,698.9	2,553.4	
Change in own finished goods and work in progress	(67.8)	(165.3)	41.0	
Cost of sales of externally purchased goods	42.4	30.0	21.2	
Obsolete stock, write offs/(reversal of allowances)	3.5	(42.4)	18.8	
Cost of sales	4,183.2	3,521.2	2,634.4	

For the year ended 31 December 2018, the Group's cost of sales increased by U.S.\$662.0 million, or 18.8 per cent., to U.S.\$4,183.2 million from U.S.\$3,521.2 million for the year ended 31 December 2017. The increase was primarily attributable to an increase in:

- raw materials and consumables due to higher purchase prices of raw materials;
- staff costs including social security due to an increase in average salaries across all segments and an increase in headcount in the Americas segment as a result of hiring of additional productions staff; and
- freight due to higher sales volumes.

For the year ended 31 December 2017, the Group's cost of sales increased by U.S.\$886.8 million, or 33.7 per cent., to U.S.\$3,521.2 million from U.S.\$2,634.4 million for the year ended 31 December 2016. The increase was largely attributable to the currency translation effect in the Russia segment and a significant growth in sales volumes of the Americas segment, which resulted in growth of the key components of the Group's cost of sales. In addition, the increase in the cost of sales was also the result of higher selling prices of raw materials, an increase in average salaries

across all segments and an increase in headcount in the Americas segment as a result of hiring of additional productions staff.

For the years ended 31 December 2018, 2017 and 2016, the key components of the Group's cost of sales were raw materials and consumables, staff costs including social security, energy and utilities costs and depreciation and amortisation which represented, in aggregate, 92.9 per cent., 97.0 per cent. and 88.9 per cent. of the Group's cost of sales for the years ended 31 December 2018, 2017 and 2016, respectively.

Raw materials and consumables

For the year ended 31 December 2018, raw materials and consumables increased by U.S.\$425.0 million or 17.9 per cent., to U.S.\$2,805.4 million from U.S.\$2,380.3 million for the year ended 31 December 2017, which was due to the reasons set out above.

For the year ended 31 December 2017, raw materials and consumables increased by U.S.\$857.3 million or 56.3 per cent., to U.S.\$2,380.3 million from U.S.\$1,523.0 million for the year ended 31 December 2016, which was due to the reasons set out above.

Staff costs including social security

For the year ended 31 December 2018, staff costs including social security increased by U.S.\$32.6 million or 6.5 per cent., to U.S.\$530.7 million from U.S.\$498.1 million for the year ended 31 December 2017, which was due to the reasons set out above.

For the year ended 31 December 2017, staff costs including social security increased by U.S.\$112.0 million or 29.0 per cent., to U.S.\$498.1 million from U.S.\$386.0 million for the year ended 31 December 2016, which was due to the reasons set out above.

Energy and utilities

For the year ended 31 December 2018, energy and utilities costs increased by U.S.\$11.3 million or 3.9 per cent., to U.S.\$302.1 million from U.S.\$290.8 million for the year ended 31 December 2017.

For the year ended 31 December 2017, energy and utilities costs increased by U.S.\$66.4 million or 29.6 per cent., to U.S.\$290.8 million from U.S.\$224.4 million for the year ended 31 December 2016, which was due to the reasons set out above.

Depreciation and amortisation

For the year ended 31 December 2018, depreciation and amortisation costs increased by U.S.\$2.8 million or 1.1 per cent., to U.S.\$249.7 million from U.S.\$246.9 million for the year ended 31 December 2017.

For the year ended 31 December 2017, depreciation and amortisation costs increased by U.S.\$38.0 million or 18.2 per cent., to U.S.\$246.9 million from U.S.\$208.9 million for the year ended 31 December 2016, which reflected the currency translation effect in the Russia segment.

Gross profit

The table below illustrates the Group's gross profit and gross profit margin percentages (calculated as the ratio of gross profit to revenue and expressed as percentage) by reporting segment for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December					
	2018		2017		2016	
	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin
		(in millions of U.S. dollars, except for percentages)				
Russia	651.9	18.9%	655.0	20.7%	746.4	26.7%
Americas	181.6	13.5%	169.6	17.1%	(80.7)	(21.9)%
Europe	82.1	26.7%	47.9	19.8%	37.9	21.7%
Total	915.6	18.0%	872.5	19.9%	703.6	21.1%

Russia segment

For the years ended 31 December 2018 and 2017, gross profit of the Russia segment remained largely stable and amounted to U.S.\$651.9 million and U.S.\$655.0 million, respectively.

For the year ended 31 December 2017, gross profit of the Russia segment decreased by U.S.\$91.4 million, or 12.3 per cent., to U.S.\$655.0 million from U.S.\$746.4 million which was attributable primarily to a sharp increase in raw material prices.

Gross profit margin of the Russia segment decreased from 26.7 per cent. for the year ended 31 December 2016 to 20.7 per cent. for the year ended 31 December 2017 and to 18.9 per cent. for the year ended 31 December 2018.

Americas segment

For the year ended 31 December 2018, gross profit of the Americas segment increased by U.S.\$12.0 million, or 7.1 per cent., to U.S.\$181.6 million from U.S.\$169.6 million, which reflected improved market conditions and higher sales volumes of seamless pipes, but was offset by the growth in raw material prices.

For the year ended 31 December 2017, gross profit of the Americas segment increased by U.S.\$250.3 million to U.S.\$169.6 million from a loss of U.S.\$80.7 million which was attributable primarily due to a significant increase in drilling activity combined with increased exploration and production spending in the North American market, which resulted in a considerable growth in sales volumes, primarily of OCTG, and better pricing. The positive effect of higher sales volumes and favourable pricing environment was partially offset by an increase in raw material prices.

Gross profit margin of the Americas segment increased from negative 21.9 per cent. for the year ended 31 December 2016 to 17.1 per cent. for the year ended 31 December 2017 but decreased to 13.5 per cent. for the year ended 31 December 2018.

Europe segment

For the year ended 31 December 2018, gross profit of the Europe segment increased by U.S.\$34.2 million, or 71.4 per cent., to U.S.\$82.1 million from U.S.\$47.9 million primarily due to better product mix with an increased share of higher-margin products, more favourable pricing environment and higher sales volumes.

For the year ended 31 December 2017, gross profit of the Europe segment increased by U.S.\$10.0 million, or 26.4 per cent., to U.S.\$47.9 million from U.S.\$37.9 million mainly as a result of favourable pricing environment and higher sales of seamless pipes, which was partially offset by higher raw material prices.

Gross profit margin of the Europe segment decreased from 21.7 per cent. for the year ended 31 December 2016 to 19.8 per cent. for the year ended 31 December 2017, and increased to 26.7 per cent. for the year ended 31 December 2018.

Net Operating Expenses

The following table shows a breakdown of the Group's net operating expenses for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
	2018	2017	2016	
	(in mi	illions of U.S. dollars)		
Selling and distribution expenses	(230.8)	(260.6)	(220.4)	
Advertising and promotion expenses	(7.2)	(6.9)	(5.7)	
General and administrative expenses	(250.4)	(231.2)	(196.0)	
Research and development expenses	(7.3)	(11.5)	(10.7)	
Other operating (income)/expenses	(22.4)	(33.8)	(4.2)	
Total net operating expenses	518.0	544.0	437.1	

For the year ended 31 December 2018, the Group's net operating expenses decreased by U.S.\$25.9 million and amounted to U.S.\$518.0 million compared to U.S.\$544.0 million for the year ended 31 December 2017 primarily as a result of negative currency translation effect in the Russia segment. For the year ended 31 December 2017, the Group's net operating expenses increased by U.S.\$106.9 million, or 24.5 per cent., to U.S.\$544.0 million from U.S.\$437.1 million primarily as a result of currency translation effect in the Russia segment and an increase in other operating expenses. For the years ended 31 December 2018, 2017 and 2016, the selling and distribution expenses and general and administrative expenses represented, in aggregate, 92.9 per cent., 90.4 per cent. and 95.3 per cent., respectively, of the Group's net operating expenses.

Selling and Distribution Expenses

For the year ended 31 December 2018, the Group's selling and distribution expenses were U.S.\$230.8 million which constitutes a decrease of U.S.\$29.8 million, or 11.4 per cent., from U.S.\$260.6 million for the year ended 31 December 2017, primarily due to the currency translation effect in the Russia segment and a decrease in freight and a decrease in professional fees and services due to a lower expenses for quality inspections.

For the year ended 31 December 2017, the Group's selling and distribution expenses were U.S.\$260.6 million which constitutes an increase of U.S.\$40.2 million, or 18.2 per cent., from U.S.\$220.4 million for the year ended 31 December 2016. The increase was largely due to the currency translation effect in the Russia segment and was also attributable to an increase in freight due to higher tariffs for railway transportation and higher sales volumes and bad debt expense which was attributable to movements in provisions for accounts receivable.

For the years ended 31 December 2018, 2017 and 2016, the key components of the Group's selling and distribution expenses were freight and staff costs including social security which represented, in aggregate, 73.6 per cent., 70.7 per cent. and 69.9 per cent., respectively, of the Group's selling and distribution expenses.

Freight costs

For the year ended 31 December 2018, freight costs were U.S.\$130.6 million which constitutes a decrease of U.S.\$14.1 million, or 9.7 per cent., from U.S.\$144.7 million for the year ended 31 December 2017 which, in its turn, constitutes an increase of U.S.\$27.1 million, or 23.0 per cent., from U.S.\$117.6 million for the year ended 31 December 2016. The relevant movements in the Group's freight costs were attributable to the reasons set out above.

Staff costs including social security

For the years ended 31 December 2018 and 2017, staff costs including social security were largely stable and amounted to U.S.\$39.2 million and U.S.\$39.4 million, respectively. For the year ended 31 December 2017, staff costs including social security were U.S.\$39.4 million which constitutes an increase of U.S.\$30 million, or 8.3 per cent., from U.S.\$36.4 million for the year ended 31 December 2016 due to the currency translation effect in the Russia segment.

General and Administrative Expenses

For the year ended 31 December 2018, the Group's general and administrative expenses were U.S.\$250.4 million which constitutes an increase of U.S.\$19.2 million, or 8.3 per cent., from U.S.\$231.2 million for the year ended 31 December 2017.

The increase was mainly attributable to an increase in depreciation and amortisation, staff costs including social security mainly due to an increase in headcount in the Americas segment and average salaries across all segments and professional fees and services mainly as a result of an increase in consulting services.

For the year ended 31 December 2017, the Group's general and administrative expenses were U.S.\$231.2 million which constitutes an increase of U.S.\$35.2 million, or 18.0 per cent., from U.S.\$196.0 million for the year ended 31 December 2016.

The increase was mainly attributable to an increase in staff costs including social security mainly due to an increase in headcount in the Americas segment and average salaries across all segments and professional fees and services mainly as a result of an increase in consulting services.

For the years ended 31 December 2018, 2017 and 2016, the key components of the Group's general and administrative expenses were staff costs including social security and professional fees and services which represented, in aggregate, 75.3 per cent., 76.9 per cent. and 75.5 per cent., respectively, of the Group's general and administrative expenses.

Staff costs including social security

For the year ended 31 December 2018, staff costs including social security were U.S.\$141.5 million which constitutes an increase of U.S.\$5.6 million, or 4.1 per cent., from U.S.\$135.9 million for the year ended 31 December 2017 which, in turn, constitutes an increase of U.S.\$22.0 million, or 19.3 per cent., from U.S.\$113.9 million. The increases in both years were attributable to the reasons set out above.

Professional fees and services

For the year ended 31 December 2018, professional fees and services were U.S.\$47.1 million which constitutes an increase of U.S.\$5.0 million, or 12.0 per cent., from U.S.\$42.0 million for the year ended 31 December 2017 which, in turn, constitutes an increase of U.S.\$7.9 million, or 23.3 per cent., from U.S.\$34.1 million in the year ended 31 December 2016. The increases in both years were attributable to the reasons set out above.

Impairment of goodwill

In the year ended 31 December 2018, the impairment of goodwill was U.S.\$16.6 million which mostly reflected an impairment loss in respect of goodwill of the Tagmet cash-generating unit.

In the year ended 31 December 2017, the impairment of goodwill was U.S.\$22.0 million in respect of goodwill of the Middle East division.

In the year ended 31 December 2016, the impairment of goodwill was U.S.\$3.3 million in respect of goodwill of Middle East division and other cash-generating units.

Foreign exchange gain/(loss)

The Group recorded a foreign exchange loss in the amount of U.S.\$72.3 million for the year ended 31 December 2018 as compared to a foreign exchange gain in the amount of U.S.\$27.5 million for the year ended 31 December 2017 and U.S.\$129.9 million for the year ended 31 December 2016 in the income statement. For the year ended 31 December 2018, the Group recognised the reclassification of foreign currency reserves related to the hedged net investment in foreign operation from other comprehensive loss to the income statement in the amount of U.S.\$23.3 million (net of income tax), related to partially disposed ownership in TMK Gulf International Pipe Industry LLC ("TMK GIPI").

In addition, the Group recognised a foreign exchange loss from exchange rate fluctuations in the amount of U.S.\$116.0 million (net of income tax) for the for the year ended 31 December 2018 as compared to a U.S.\$14.2 million gain (net of income tax) for the for the year ended 31 December 2017 in the statement of other comprehensive income. These amounts represent the effective portion of foreign exchange gains or losses on the Group's hedging instruments.

Net Finance costs

For the year ended 31 December 2018, the Group's net finance costs (representing total finance costs and finance income) decreased by U.S.\$36.3 million, or 13.5 per cent., to U.S.\$232.1 million from U.S.\$268.3 million for the year ended 31 December 2017. The weighted average nominal interest rate was 7.29 per cent. as at 31 December 2018 as compared to 8.16 per cent. as at 31 December 2017.

For the year ended 31 December 2017, the Group's net finance costs increased by U.S.\$5.8 million, or 2.2 per cent., to U.S.\$268.3 million from U.S.\$262.6 million for the year ended 31 December 2016. The weighted average nominal interest rate was 8.16 per cent. as at 31 December 2017 as compared to 9.03 per cent. as at 31 December 2016.

Income tax

For the years ended 31 December 2018, 2017 and 2016, the Group reported a profit before tax of U.S.\$44.8 million, U.S.\$77.5 million and U.S.\$169.2 million, respectively, and an income tax expense of U.S.\$45.0 million, U.S.\$47.9 million and U.S.\$3.5 million, respectively.

Profit/(loss) for the year

For the reasons discussed above, the Group incurred a loss of U.S.\$0.2 million for the year ended 31 December 2018, whereas for the years ended 31 December 2017 and 2016 the Group recorded a profit of U.S.\$29.6 million and U.S.\$165.6 million, respectively.

Liquidity and Capital Resources

Capital Requirements

The Group's liquidity requirements arise principally from (i) the need to finance its working capital, (ii) the need to finance its capital expenditure programme, (iii) payment of dividends to TMK's shareholders and (iv) repayment of maturing debt. Historically, the Group has relied on cash from operating activities and external financing as its sources of liquidity, and the Group's management expects that these will continue to be important sources of liquidity in the future.

Cash flows

The table below sets forth the Group's summarised cash flows for the periods indicated.

	Nine month 30 Septen		Year e	nded 31 Decem	ıber
	2019	2018	2018	2017	2016
		(in milli	ons of U.S. dol	lars)	
	(unaud	ited)			
Profit/(loss) before tax	146.2	47.6	44.8	77.5	169.2
Non-cash and other adjustments	335.9	453.1	637.3	524.5	350.4
Working capital changes	(211.5)	(250.0)	(145.0)	(252.6)	(13.4)
Income taxes paid	(38.9)	(20.8)	(26.7)	(37.7)	(30.5)
Net cash flows from operating activities	231.8	229.9	510.3	311.7	475.6
Net cash flows used in investing activities	(247.8)	(216.1)	(254.6)	(234.8)	(80.8)
Net cash flows used in financing activities	(97.9)	(279.6)	(351.4)	120.6	(418.2)
Net increase/(decrease) in cash and cash equivalents	(113.9)	(265.9)	(95.7)	197.6	(23.4)

⁽¹⁾ Include cash flows of the disposal group held for sale. For cash flows of the disposal group held for sale see "*-Recent TMK IPSCO disposal*".

Net cash flows from operating activities

Net cash flows from operating activities primarily consist of net income/loss adjusted for certain non-cash items including depreciation, amortisation and other items, and the effect of working capital changes.

<u>Nine months ended 30 September 2019 compared to 30 September 2018</u>. Net cash flows from operating activities increased by U.S.\$1.9 million, or 0.8 per cent., from U.S.\$229.9 million in the nine months ended 30 September 2018 to U.S.\$231.8 million in the nine months ended 30 September 2019. In the nine months ended 30 September 2019, working capital increased by U.S.\$211.5 million compared to a U.S.\$250.0 million increase in the nine months ended 30 September 2018. The increase in working capital in both periods was primarily attributable to an increase in trade and other receivables and a decrease in advances from customers.

<u>Year ended 31 December 2018 compared to year ended 31 December 2017</u>. Net cash flows from operating activities increased by U.S.\$198.6 million, or 63.7 per cent., from U.S.\$311.7 million in the year ended 31 December 2017 to U.S.\$510.3 million in the year ended 31 December 2018. In the year ended 31 December 2018, working capital increased by U.S.\$145.0 million compared to a U.S.\$252.6 million increase in the year ended 31 December 2017. The increase was mainly the result of growth in inventories and trade receivables.

<u>Year ended 31 December 2017 compared to year ended 31 December 2016</u>. Net cash flows from operating activities decreased by U.S.\$163.9 million, or 34.5 per cent., from U.S.\$475.6 million in the year ended 31 December 2016 to U.S.\$311.7 million in the year ended 31 December 2017. In the year ended 31 December 2017, working capital increased by U.S.\$252.6 million compared to a U.S.\$13.4 million increase in the year ended 31 December 2016. The increase was mainly the result of an increase in inventories and trade receivables.

Net cash flows used in investing activities

Net cash flows used in investing activities in the nine months ended 30 September 2019 were U.S.\$247.8 million compared to U.S.\$216.1 million in the nine months ended 30 September 2018.

Net cash flows used in investing activities in the year ended 31 December 2018 were U.S.\$254.6 million compared to U.S.\$234.8 million in the year ended 31 December 2017 and U.S.\$80.8 million in the year ended 31 December 2016.

Net cash flows used in/from financing activities

Net cash flows used in financing activities in the nine months ended 30 September 2019 were U.S.\$97.9 million compared to U.S.\$279.6 million in the nine months ended 30 September 2018. In the nine months ended 30 September 2019, net proceeds from borrowings were U.S.\$80.6 million, as compared to net repayment of borrowings in the amount of U.S.\$ 56.7 million in the nine months ended 30 September 2018.

Net cash flows used in financing activities in the year ended 31 December 2018 were U.S.\$ 351.4 million compared to net cash flows from financing activities in the amount of U.S.\$120.6 million in the year ended 31 December 2017 and net cash flows used in financing activities in the amount of U.S.\$418.2 million in the year ended 31 December 2016. Net repayment of borrowings in the year ended 31 December 2018 was U.S.\$46.0 million compared to U.S.\$318.0 million of net proceeds from borrowings in the year ended 31 December 2017 and U.S.\$53.0 million of net repayment in the year ended 31 December 2016.

Cash and Cash Equivalents

The following table sets forth the Group's cash and cash equivalents as at 30 September 2019 and 31 December 2018, 2017 and 2016:

	As at 30 September	As at 31 December		,
	2019 ⁽¹⁾	2018	2017	2016
	(in r	(in millions of U.S. dollars)		
	(unaudited)			
Russian rouble	125.6	358.5	329.5	215.6
U.S. dollar	79.2	23.8	154.9	45.5
Euro	66.2	7.0	5.2	10.3
Romanian lei	0.3	1.0	0.6	0.3
Other currencies	0.3	1.6	0.9	4.9
Total cash and cash equivalents	271.5	391.8	491.2	276.6

⁽¹⁾ Do not include cash and cash equivalents of the disposal group held for sale. For cash and cash equivalents of the disposal group held for sale, see "*-Recent TMK IPSCO disposal*".

Indebtedness

The Group's current and non-current loans and borrowings principally consist of bank loans, borrowings and interestbearing debt securities denominated in Russian roubles, U.S. dollars and Euros.

The following table sets forth the Group's current and non-current loans and borrowings as at 30 September 2019 and 31 December 2018, 2017 and 2016.

	As at September	As a	at 31 December	
	2019 ⁽¹⁾	2018	2017	2016
	(in 1	millions of U.S.	dollars)	
	(unaudited)			
Current				
Bank loans	522.3	380.1	254.9	202.0
Interest payable	31.1	17.2	25.2	21.3
Current portion of non-current borrowings	161.8	437.1	89.8	38.5
Current portion of bearer coupon debt securities	577.6	72.0	231.4	-
Unamortised debt issue costs	(1.5)	(0.2)	(0.3)	(0.2)
Total current loans and borrowings	1,291.3	906.1	601.0	261.6
Non-current				
Bank loans	1,544.6	1,270.5	1,828.1	1,790.0
Bearer coupon debt securities	206.3	715.9	847.2	813.8
Unamortised debt issue costs	(2.2)	(8.2)	(11.8)	(8.2)
Total non-current loans and borrowings	1,748.6	1,978.2	2,663.5	2,595.5
Total loans and borrowings	3,039.9	2,884.3	3,264.4	2,857.1

⁽¹⁾ Do not include loans and borrowings of the disposal group held for sale. For loans and borrowings of the disposal group held for sale, see "*-Recent TMK IPSCO disposal*".

The following table sets forth the breakdown of the Group's interest-bearing loans and borrowings by currencies as at 30 September 2019 and 31 December 2018, 2017 and 2016.

Currency	As at 30 September	As at 31 December		r	
	2019 ⁽¹⁾	2018	2017	2016	
	(in millions of U.S. dollars)				
	(unaudited)				
Russian rouble	1,759.6	1,531.7	1,674.7	1,224.3	
U.S. dollar	1,135.5	1,253.1	1,514.0	1,568.4	
Euro	144.8	99.5	75.8	64.3	
Total loans and borrowings	3,039.9	2,884.3	3,264.4	2,857.1	

⁽¹⁾ Do not include interest-bearing loans and borrowings of the disposal group held for sale. For interest-bearing loans and borrowings of the disposal group held for sale, see "*-Recent TMK IPSCO disposal*".

As at 30 September 2019 and 31 December 2018, 2017 and 2016: (i) RUB-denominated loans and borrowings represented 57.9 per cent., 53.1 per cent., 51.3 per cent. and 42.9 per cent., respectively, of the Group's total borrowings; (ii) USD-denominated loans and borrowings represented 37.4 per cent., 43.4 per cent., 46.4 per cent. and 54.9 per cent., respectively, of the Group's total loans and borrowings; and (iii) EUR-denominated loans and borrowings represented 4.8 per cent., 3.4 per cent., 2.3 per cent. and 2.3 per cent., respectively, of the Group's total loans and borrowings.

During the periods under review substantially all of the Group's loans and borrowings bore interest at fixed rates or at the CBR base rate increased by a fixed margin.

The Group's most significant credit facilities, including those incurred by the disposal group held for sale, as at 30 September 2019 were as follows:

Type of borrowing	Bank	Original currency	Maturity period	Outstanding principal amount
				(in millions of U.S. dollars)
6.75% bonds		USD	April 2020	500.0
Loan	Gazprombank	USD	June 2021	400.0
Loan	Sberbank	RUB	August 2022	328.2
Loan	Gazprombank	RUB	March 2022	173.9
Loan	VTB	RUB	August 2020	155.2
Bonds		RUB	May 2021	155.2
Loan	VTB	RUB	December 2021	155.2
Loan	Alfa Bank	RUB	July 2021	93.1
Loan	Sberbank	RUB	December 2021	93.1
Loan	Gazprombank	RUB	September 2020	85.4
Sub total				2,139.5
Other facilities				928.8
Total				3,068.3

In addition, as at 30 September 2019, the Group had unutilised borrowing facilities in the amount of U.S.\$441.6 million of which U.S.\$63.6 million related to TMK IPSCO.

The Group's management considers the ratio of Net Debt to Adjusted EBITDA as the principal statistic for evaluating the impact of the total size of the Group's borrowings on its operations. For the definition of Net Debt to Adjusted EBITDA, see "*Summary Consolidated Financial and Operating Information*". As at 30 September 2019 and 31 December 2018, 2017 and 2016, the Group's Net debt to Adjusted EBITDA ratio was 3.89x, 3.48x, 4.44x and 4.68x, respectively. Net debt to Adjusted EBITDA represents a non-IFRS measure and may not be comparable to similarly titled measures disclosed by other companies, and investors should not use this non-IFRS measure as a substitute for figures provided in the Group's Financial Statements.

Some of the Group's loan agreements contain financial covenants, including Adjusted EBITDA to net finance cost, Net Debt to Adjusted EBITDA and some others (as calculated in accordance with the terms of the relevant loan agreements). The majority of the existing financial covenants are required to be calculated based on consolidated IFRS financial information. Calculating methods specified in those loan agreements for these measures may differ from those used by the Group for its internal purposes, including for reporting certain components of these measures in its financial statements. As of the date of these Listing Particulars, the Group believes that it had been in compliance, in all material respects, with these covenants.

Debt maturity schedule

The table below sets out the contractual maturity schedule of the principal amounts payable under the Group's borrowings outstanding as at 30 September 2019:

	Amount (millions of U.S. dollars)				
	2019 ⁽²⁾	2020	2021	2022	2023
Principal amount repayable ⁽¹⁾	104	1,294	913	751	6

⁽¹⁾ The schedule does not include interest and coupon payable.

⁽¹⁾ Represents amounts paid in the fourth quarter of 2019.

Contractual Commitments

As at 30 September 2019 and 31 December 2018, 2017 and 2016, the Group's contractual commitments for the acquisition of property, plant and equipment from third parties (net of VAT) were U.S.\$71.3 million, U.S.\$68.9 million, U.S.\$109.3 million and U.S.\$123.0 million, respectively.

As at 30 September 2019 and 31 December 2018, 2017 and 2016, the Group's advances with respect to commitments for the acquisition of property, plant and equipment were U.S.\$15.4 million, U.S.\$10.6 million, U.S.\$12.1 million and U.S.\$16.5 million, respectively. These advances were included in other non-current assets.

As at 30 September 2019 and 31 December 2018, 2017 and 2016, the Group had unsecured letters of credit relating to its contractual commitments in the amount of U.S.\$19.0 million, U.S.\$19.3 million, U.S.\$29.4 million and U.S.\$48.0 million, respectively.

Recent TMK IPSCO disposal

Due to the contemplated sale of TMK IPSCO, the following assets and liabilities relating to TMK IPSCO were classified as current assets and liabilities of disposal group held for sale:

	As at 30 September 2019
	(in millions of U.S. dollars)
	(unaudited)
ASSETS	
Current assets	
Cash and cash equivalents	3.4
Trade and other receivables	74.8
Inventories	283.6
Prepayments and input VAT	7.7
Prepaid income taxes	10.8
Other financial assets	0.1
Total current assets	380.6
Non-current assets	
Property, plant and equipment	385.1
Intangible assets	224.8
Other non-current assets	3.9
Total non-current assets	613.8
TOTAL ASSETS	994.3
LIABILITIES	
Current liabilities	
Trade and other payables	105.6
Advances from customers	0.4
Provisions and accruals	10.0
Interest-bearing loans and borrowings	0.5
Lease liability	6.7
Other liabilities	-
Total current liabilities	123.1
Non-current liabilities	
Interest-bearing loans and borrowings	54.6
Lease liability	19.3
Deferred tax liability	13.2
Provisions and accruals	10.2
Employee benefits liability	2.5
Other liabilities	0.1
Total non-current liabilities	100.0
TOTAL LIABILITIES	223.1

In addition, net cash flows incurred by the disposal group held for sale were as follows:

	Nine months ended 30 September	
	2019	2018
	(in millions of U.S. dollars) (<i>unaudited</i>)	
Net cash flows from operating activities	42.2	39.4
Net cash flows used in investing activities	(30.9)	(35.9)
Net cash flows used in financing activities	(8.8)	(9.9)

In addition, the consummation of TMK IPSCO disposal resulted, as of the date thereof, in the Group incurring a significant one-off loss due to the reclassification of foreign currency reserves related to the hedged net investment in TMK IPSCO from other comprehensive loss to the income statement.

Disclosures about Market Risk

The Group is exposed in the ordinary course of business to market risk (including risks related to changes in the interest rates and foreign currency exchange rates), liquidity risk and credit risk. See Note 30 to the 2018 Financial Statements and the 2017 Financial Statements.

Market Risk

The Group is exposed to risks from movements in interest rates and foreign currency exchange rates which affect its assets, liabilities and anticipated future transactions. The objective of market risk management is to manage and control market risk exposures, while optimising the return on the risk.

Interest Rate Risk

The Group is exposed to the risk of variations in cash flow related to its variable interest rate indebtedness and also to fair value risk related to its fixed-rate debt. The Group's exposure to the interest rate risk relates primarily to the borrowings bearing LIBOR-linked interest rates. For more information on this risk, see Note 30 to the Audited Financial Statements.

Foreign Currency Exchange Rate Risk

The Group's exposure to currency risk relates to sales, purchases and borrowings that are denominated in a currency other than functional currencies of the Group's subsidiaries, the Group's investments in foreign operations. The currencies in which these transactions and balances are primarily denominated are U.S. dollar and euro. The Group's products are typically priced in Russian roubles for Russian sales, and in U.S. dollars for U.S., the CIS and other international sales, and the Group's direct costs, including raw materials and consumables, labour and transportation costs, are largely incurred in Russian roubles and U.S. dollars. The Group's capital expenditures, as well as other costs, such as interest expense, are incurred principally in Russian roubles, U.S. dollars and euros. The Group seeks to manage its currency risk through a prudent approach to the choice of currency when arranging financing, thereby engaging in a policy of "economic hedging" whereby the Group matches foreign currency liabilities with foreign currency assets. See "*Risk Factors — Risks Relating to the Group's Business and the Pipe Industry — The Group may be adversely affected by volatility in currency exchange rates, particularly that of the Rouble against the U.S. dollar"* and Note 30 to the 2018 Financial Statements and the 2017 Financial Statements.

Liquidity Risk

Liquidity risk is the risk that the Group will not have sufficient cash to settle its liabilities when they fall due. The Group manages the liquidity risk by maintaining an adequate structure of borrowing facilities and cash reserves and matching the maturity profiles of financial assets and liabilities. For the information on the maturity profile of the Group's financial liabilities, see Note 30 to the 2018 Financial Statements and the 2017 Financial Statements.

In addition, the Group manages liquidity risk by targeting an optimal ratio between equity and total debt consistent with management plans and business objectives. This enables the Group to maintain an appropriate level of liquidity and financial capacity, to minimise borrowing expenses and to achieve an optimal profile of composition and duration of indebtedness. At present, The Group's management believes that the Group has access to sufficient funding and also have both committed and uncommitted borrowing facilities to meet currently foreseeable borrowing requirements. See "*Liquidity and Capital Resources*".

Credit Risk

The Group is subject to credit risk, which arises principally from its trade and other receivables. The Group has policies in place to ensure that sales of products and services are made to customers with appropriate credit profile. For the information on the Group's exposure to credit risk, see Note 30 to the Audited Financial Statements.

Significant Accounting Estimates and Assumptions

In the preparation of the consolidated financial statements the Group's management exercises judgements and makes estimates and assumptions that may affect the reported amounts of assets, liabilities and disclosures. Estimates and judgments are evaluated on an ongoing basis and are based on management's experience and other factors, including expectations of future events, which are believed to be reasonable under the given circumstances. However, actual results may differ from estimates and estimates can be revised in the future. The estimates and assumptions, which can cause a significant adjustment to the carrying amount of assets and liabilities, are set out below.

Impairment of Property, Plant and Equipment

At each reporting date, the Group assesses whether there is any indication that an asset may be impaired. If any such indication exists, the Group estimates the recoverable amount of the relevant asset. This requires an estimation of the value in use of the cash-generating unit to which the item is allocated. The value in use calculation is based on discounted cash flow-based methods, which require the Group to estimate the expected future cash flows and to determine the suitable discount rate. These estimates may have a material impact on the recoverable value and the amount of the property, plant and equipment impairment.

Assets that suffered an impairment loss are tested for possible reversal of the impairment at each reporting date if indications exist that impairment losses recognised in prior periods no longer exist or have decreased.

Useful Lives of Items of Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and impairment losses, if any. Depreciation is calculated on a straight-line basis. The estimation of useful lives of property, plant or equipment is a matter of judgment. The Group's management considers the following factors in determining the useful life of an asset: the expected usage of the asset, the expected physical wear and tear, technical obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset, legal or similar limits on the use of the asset, etc.

The Group assesses the remaining useful lives of property, plant and equipment at least at the end of each financial year and, if expectations differ from previous estimates, any changes are accounted for as changes in accounting estimates in accordance with IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors".

Fair Value of Assets and Liabilities Acquired in Business Combinations

The Group recognises separately, at the acquisition date, the identifiable assets, liabilities and contingent liabilities acquired or assumed in the business combination at their fair values, which involves estimates. Such estimates are based on valuation techniques, which require considerable judgment in forecasting future cash flows and developing other assumptions.

Impairment of Goodwill and Intangible Assets with Indefinite Useful Lives

Goodwill arising in a business combination is recognised as an asset at the date when control is acquired. Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the identifiable assets acquired and the liabilities assumed. Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination.

The Group tests at least annually whether goodwill and intangible assets with indefinite useful lives have suffered any impairment. The recoverable amount of cash-generating unit to which goodwill and intangible assets with indefinite useful lives allocated is determined based on the value in use calculations. These calculations require the use of estimates. Revisions to the estimates may significantly affect the recoverable amount of the cash-generating unit.

Employee Benefits Liability

The Group companies provide a number of post-employment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, jubilee payments, etc.). Such benefits are recognised as defined benefit obligations. The Group uses the actuarial valuation method for measurement of the present value of defined benefit obligations and related current service cost. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, rates of employee turnover and others. In the event that further changes in the key assumptions are required, the future amounts of the employment benefit costs may be affected materially.

Allowance for Expected credit losses

The calculation of financial assets' impairment on the basis of Expected credit losses (ECL) model is a significant estimate. The ECL model is based on assumptions about future economic conditions, expected defaults and credit loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions and forward looking estimates at the end of each

reporting period. Changes in the economy, industry or specific customer conditions may require adjustments to the allowance for ECL.

Net Realisable Value Allowance

Inventories are stated at the lower of cost and net realisable value. Estimates of the net realisable value are based on the most reliable information available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the end of reporting period to the extent that such events confirm conditions existing at the end of the period.

Taxes

The Group is subject to taxes in different jurisdictions. Taxes and fiscal risks recognised in the Group's consolidated financial statements reflect the management's best estimate of the outcome based on the facts known at each reporting date in each individual country. These facts may include, but are not limited to, changes in tax laws and interpretations thereof in the various jurisdictions where the Group's subsidiaries operate.

Tax legislation is subject to varying interpretations and frequently changes. Furthermore, the interpretation of tax legislation by the tax authorities as applied to the transactions and activity of the Group may not coincide with that of TMK's management. As a result, tax authorities may challenge the Group's transactions, and it may be assessed additional taxes, penalties and interest, which can be significant. The final taxes paid depend on many factors, including negotiations with tax authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from tax audits.

BUSINESS

Overview

The Group's management believes that the Group is a global leader in tubular products for the oil and gas industry and is among the world's largest steel pipe producers by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019 and approximately a 6 per cent. share of the global market for seamless pipes and a 15 per cent. share of the global market for seamless OCTG by sales volume for the nine months ended 30 September 2019, according to the Group's management's estimates. The Group's management considers that for the nine months ended 30 September 2019, the Group was the largest Russian producer and supplier of steel pipes. The Group's management estimates that the Group had approximately a 23 per cent. market share for tubes and pipes in Russia, a 33 per cent. market share for pipes used in the oil and gas industry in Russia, a 56 per cent. market share for seamless OCTG in Russia, in each case by sales volume for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months ended 30 September 2019. The Group's management also estimates that for the nine months en

The Group's management further believes that the Group is a leading exporter of pipes produced in Russia, with sales volumes of pipe products produced at its Russian plants accounting for 34 per cent., 30 per cent., 23 per cent. and 33 per cent. of the volume by tonnes of all steel pipe exports from Russia for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively, according to the Group's management's estimates.

The Group produces both seamless and welded pipes, and primarily supplies pipes for the oil and gas industry which accounted for 78.8 per cent., 78.1 per cent., 76.7 per cent. and 78.4 per cent. of the Group's total sales volume by tonnes for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group focuses principally on higher margin and technologically advanced seamless products, which accounted for approximately 90 per cent. of the Group's gross profit for the nine months ended 30 September 2019. The Group's main focus is the production of predominantly higher margin and technologically advanced seamless OCTG pipes, including premium connections, manufactured at the Group's facilities in Russia. OCTG pipes are an integral element of oil and gas exploration and production and are used for drilling wells, casing and tubing. The Group is also a major producer of large diameter welded pipes, used in the construction of trunk pipelines for long-distance transportation of natural gas, crude oil and oil products, as well as line pipes for short distance transportation.

The Group also manufactures higher margin industrial seamless pipes, which are widely used in the automotive, power generation, machine building and chemical industries. In addition, the Group produces industrial welded pipe, which has a wide array of applications in various industries, including utilities and agriculture.

For the nine months ended 30 September 2019, the Group sold 2,932 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,372 thousand tonnes, while sales of LDP reached 373 thousand tonnes.

For the year ended 31 December 2018, the Group sold 3,989 thousand tonnes of steel pipes with seamless pipes comprising 69 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,930 thousand tonnes, while sales of LDP reached 303 thousand tonnes.

For the year ended 31 December 2017, the Group sold 3,784 thousand tonnes of steel pipes with seamless pipes comprising 71 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,758 thousand tonnes, while sales of LDP decreased to 267 thousand tonnes.

For the year ended 31 December 2016, the Group sold 3,458 thousand tonnes of steel pipes with seamless pipes comprising 70 per cent. of the Group's sales volumes. Sales of seamless and welded OCTG reached 1,426 thousand tonnes, while sales of LDP decreased to 516 thousand tonnes.

The Group currently has the following six principal product lines:

- seamless OCTG, which are used in oil and gas production;
- seamless and welded line pipes, which are used for in-field short-distance oil and gas transportation;
- large diameter welded pipes, which are used for the transportation of oil and gas, typically over long distances;

- industrial seamless pipes, which have various industrial applications in the machine building, chemicals and petrochemicals, power generation, automotive, nuclear and other industries; and
- industrial welded pipes, which are used in a wide variety of infrastructure and industrial applications.

As a result of the sale of TMK IPSCO, the Group disposed of its welded OCTG production capacities.

As at 30 September 2019, the Group's nominal annual steel pipe production capacity was approximately 6.1 million tonnes, including 3.2 million tonnes of seamless pipes. As a result of the sale of TMK IPSCO, the Group's nominal annual steel pipe production capacity decreased to 4.8 million tonnes. As a vertically integrated seamless pipe producer, the Group operates its own steel-making facilities and in 2013, it completed the construction of a new EAF at Tagmet. In 2014, the Group completed the construction of a new FQM at Seversky with a total annual seamless pipe capacity of approximately 550 thousand tonnes, which resulted in an incremental growth of nominal production capacity of seamless pipe by approximately 200 thousand tonnes.

For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group produced 2,334 thousand tonnes, 3,309 thousand tonnes, 3,235 thousand tonnes and 2,738 thousand tonnes of steel (which, in turn, is produced from scrap metal or HBI), respectively, which satisfied more than 95 per cent. of the Group's steel billet requirements for seamless pipe production for each of such periods, respectively. The Group primarily uses EAFs in connection with the Group's steel-making operations, the principal input for which is scrap metal. For its Russian operations, the Group sources almost all of scrap metal from a single domestic supplier, TMK-Chermet. The Group also sources scrap metal from various domestic suppliers in Romania and the United States for its operations in these regions. The Group purchases HRC and steel plates for use in its welded pipe production from major producers in the Group's key regions.

The Group has historically supplied its products to customers in more than 80 countries. The Group's principal customers include major Russian oil and gas and service companies, such as Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. The Group also works with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol. In addition, the Group ships significant amounts of its pipe products to large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC.

As at 30 September 2019, the Group's business was globally represented in three reporting segments consisting of:

- *Russia:* includes plants located in Russia, a finishing facility in Kazakhstan, and oilfield service companies and traders located in Russia, the UAE and Switzerland;
- *Americas:* includes plants and traders located in the United States and Canada; and
- *Europe:* includes plants in Romania and traders located in Italy and Germany that are engaged in the sale of pipe production and steel billets.

See "—Corporate Structure", "—Strategic Ventures—Recent Sale of TMK IPSCO" and "Operating and Financial Review—Segments".

The Group has an extensive sales network with trading subsidiaries and representative offices in Russia, the United States, the UAE, Germany, Italy, Switzerland, China and Turkmenistan.

The Group's management believes the Group's production facilities to be state-of-the-art with respect to technology and business processes. The Group has undertaken significant investments in its operations since 2004 and has now completed all of the key projects of its capital expenditure programme, which significantly upgraded and increased the efficiency of the Group's Russian seamless and welded pipe operations and enhanced its R&D operations. In Russia, the Group completed two major projects in 2013 and 2014, which were the construction of a new EAF at Tagmet and the construction of a new FQM at Seversky. In 2018, the Group opened a heat treatment facility in Romania. In 2015 and 2016, the Group implemented a large-scale cost cutting programme and limited its capital expenditures substantially to maintenance works with expansion capital expenditures being limited to investments in finishing operations to increase the production of state-of-the-art R&D facilities at Skolkovo Centre, which further enhanced the Group's competitive position in the R&D area. Skolkovo Centre will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products), transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

For the nine months ended 30 September 2019, the Group had a total consolidated revenue of U.S.\$ 3,666.5 million and a net profit of U.S.\$ 105.2 million, as compared to total consolidated revenue of U.S.\$ 3,834.9 million and net

profit of U.S.\$ 19.7 million for the nine months ended 30 September 2018. The Group's Adjusted EBITDA for nine months ended 30 September 2019 was U.S.\$ 508.5 million, as compared to U.S.\$ 521.5 million for the same period in the year ended 30 September 2018 (for the definition of Adjusted EBITDA, see "*Summary Consolidated Financial and Operating Information*" and "*Operating and Financial Review*").

TMK is rated "BB-" long-term credit rating with a stable outlook by Standard & Poor's and "B1" corporate family rating with a positive outlook by Moody's.

Competitive Strengths

The Group's management believes the following competitive strengths distinguish its past operational and financial performance and the Group's future growth prospects from other global steel pipe producers:

Leading position in the market and well-established client base

The Group's management believes that the Group is a global market leader by tubular production capacity and is among the world's largest steel pipe producers by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019. According to the Group's management's estimates, the Group is the third largest seamless OCTG producer globally and the largest steel pipe producer in Russia. The Group's management estimates that for the nine months ended 30 September 2019, it had approximately 15 per cent. share of the global seamless OCTG pipe market and an approximately 64 per cent. share of the Russian seamless OCTG pipe market, in each case by sales volume.

The Group's significant investments in the construction and modernisation of its production facilities and significant experience make it well positioned to service the most sophisticated clients in the oil and gas industry and underpin the Group's profitability. The Group's management believes that there is a relatively small number of large international producers capable of successfully competing with the Group. Further, any new entrants into the market would have to contend with the capital-intensive nature of the pipe manufacturing business, high technological sophistication of the manufacturing process and product lines and stringent certification requirements imposed by industry bodies and major international oil and gas companies.

As an incumbent producer, the Group has been able to secure larger market shares in Russia and Europe. In Russia, the Group is significantly larger compared to its principal competitors in the seamless pipe market, and specifically the OCTG and premium connections markets, and benefits from strong relationships with many of the local major oil and gas production companies, including Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. According to the Group's management's estimates, for the nine months ended 30 September 2019, the Group had approximately a 74 per cent. share of the premium connections market in Russia by sales volume. The Group also benefits from the established relationships with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol, as well as with large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC. The Group's leading market position allows the Group to effectively compete with other industrial pipe manufacturers in its key markets.

Product diversification, strong international presence (including in one of the most attractive markets in the industry), developed distribution network and customer recognition

Historically, global oil and gas drilling and production activity has been focused on a number of geographic regions including Russia and the Middle East. The Group has a strong international presence, with more than 14 production sites in Russia, the CIS and Europe supported by an extensive wholly-owned sales and marketing network covering all key oil and gas markets.

The Russian market where the Group has a strong presence is one of the most attractive markets in the industry. Russia accounted for approximately 20 per cent. of global drilling activity in the oil and gas industry (excluding China and Central Asia) in the year ended 31 December 2018, while remaining one of the lowest cost producing regions globally. The Group's management believes that stable oil and gas drilling activity in Russia will continue to support demand for the Group's pipe products for the oil and gas industry in the coming years.

The Group's management estimates that for the nine months ended 30 September 2019 the Group was also the leading exporter of pipes from Russia with an estimated 34 per cent. share of all Russian-produced steel pipe exports and an estimated 66 per cent. share of total Russian-produced seamless pipe exports, in each case based on the Group's total sales volume by tonnes.

The Group's production sites are located in close proximity to the main oil and gas production regions (especially oil and gas shale formations) and consumers of the Group's products. Two of the Group's plants, Volzhsky and Tagmet,

are strategically located in the south-western part of Russia near the Black Sea and Volga river shipping routes to North America, the Middle East and Southern Europe and transit routes to the Caspian region, which gives them a strong export advantage. The Group's two European plants, TMK-Artrom and TMK-Resita, provide a strong base to access European markets. The Group's global platform and expertise allows the Group to manufacture products suitable for various climate zones and environmental conditions. The Group's management believes that the Group's wide geographical footprint, as well as the completion of key strategic investment projects, provide it with a strong platform enabling to enhance the Group's position as a global leader in OCTG and line pipe segments.

The Group's broad product offering for the oil and gas industry includes OCTG (including OCTG with premium threaded connections), seamless and welded line pipe and large diameter welded pipe. The Group's focus on the premium segment of the OCTG market and the availability of proprietary solutions developed through its R&D base enables the Group to position it as a premium producer in the industry. Furthermore, although the Group's product portfolio is largely focused on the oil and gas industry, the Group also manufactures products for other industries, such as pipe for infrastructure and industrial applications, machine building, chemicals and petrochemicals, power generation, automotive, nuclear and other industries, which enables the Group to utilise the benefits of a cross-industry producer, including the diversification of client and product base and mitigation of the risks inherent to a focus on a sole industry.

In addition, the Group's management believes that the Group's strong international presence, together with diversified product portfolio, allows the Group to remain less exposed to the risks inherent in a concentrated product or client sector portfolio.

Low-cost position, stable margins and superior earnings resilience through the cycle supported by vertical integration

The Group is a vertically integrated steel pipe producer. In particular, the Group meets almost all of its own needs for steel billets by in-house production. Three of the Group's four Russian pipe plants have internal steel manufacturing facilities and produce their own billets used for, amongst other things, seamless pipe-making. While Sinarsky in Russia does not have its own steel-making facilities, it is advantageously located near Seversky and obtains its steel billets from there. In addition, the Group's operational efficiency benefits from substantially all of TMK-Artrom's steel billets requirements being covered by TMK-Resita, both of which are located in Romania. As a result, the Group is able to achieve cost savings by reducing its need to purchase semi-finished steel products from third party manufacturers. Having internal steel-making capabilities also enables the Group to have a greater degree of quality control over the steel used in its pipe-making operations and certain production flexibility. Further, the construction of a new EAF steel-making facility at Tagmet, completed in 2013, has significantly enhanced the Group's steel-making capabilities as well as improved its environmental performance by enabling the Group to close its remaining open hearth furnaces.

In Russia, the Group is typically able to source the main raw material for its seamless pipe production, steel scrap, at lower costs than on the international markets due to the Group's relationship with a local scrap supplier, the favourable location of the Group's assets, as well as due to the sufficient supply of scrap in Russia and constraints on the export of steel scrap from Russia, including export duties. Furthermore, to the extent the Group is exposed to raw material costs, such as purchases of scrap and ferroalloys for use in steelmaking operations, steel billets for the production of seamless pipes and steel coils and plates for the production of welded pipes, the Group has been able to successfully pass a portion of raw material costs on its customers through the agreements providing for quarterly, four-monthly or semi-annual price adjustment (depending on the agreement) that is linked to the cost of raw materials with some of its key customers, which is evidenced by its relatively stable profit margins.

The Group benefits from its vertically integrated production structure accompanied by a low cost position, which underpins stronger earnings resilience in changing markets.

In addition, the significant depreciation in the value of the Rouble in recent years has provided the Group with a competitive advantage in terms of lower cost base. The Group's plants are also strategically located near important domestic customers and export routes. For example, Seversky and Sinarsky are located in the Urals region near transport routes linking the Russian industrial centres with the oil and gas regions in Western Siberia, which helps to reduce the Group's transportation costs. The Group's long operating history as well as acquisitions in Russia and elsewhere provide it with significant industrial know-how. The Group maintains high levels of integration of its facilities as a result of its in-house steel production and share benchmarking and best-practices from facility to facility. The Group has already achieved significant cost benefits from capital expenditures at its plants, which feature technologically sophisticated steel-making, pipe-rolling and pipe-finishing equipment and the Group's management believes the Group has some of the most efficient pipe-making facilities in Russia. The Group has achieved further cost benefits after the Group completed the construction of a new EAF with annual production capacity of

950 thousand tonnes at Tagmet and an FQM seamless pipe rolling mill with an annual production capacity of 550 thousand tonnes at Seversky.

Strong organic growth potential and well positioned to benefit from market recovery

From 2004 to 2014, the Group implemented its strategic capital expenditure programme, which significantly enhanced the Group's Russian seamless pipe production capabilities and the efficiency of its production processes. See "— *Capital Expenditure Programme*". As a result, the Group's management believes that most of the necessary infrastructure is now in place to enable the Group to grow its business on the basis of its existing manufacturing capacity and equipment.

In response to the market demand, the Group currently operates at moderate capacity utilisation levels. In particular, in its Russian segment, for the nine months ended 30 September 2019, the Group operated at approximately 48 per cent. capacity utilisation in its welded business and approximately 86 per cent. in its seamless business. In Europe, for the nine months ended 30 September 2019, the Group had a capacity utilisation rate of approximately 95 per cent. in its seamless business. Accordingly, the Group can increase its production volumes in response to market demand growth with limited additional investment and is very well positioned to benefit from the market recovery.

Experienced management team and strong capital markets track record

The Group's management team has an extensive track record of successful execution of complex projects (including a wide range of debt and equity capital markets projects) and effective business management. It combines extensive industry and marketing experience with in-depth financial and management expertise. TMK's board of directors and management board consists of a team of professionals who have been involved in the Group's business for an extended period of time and have global experience in all necessary areas of competence.

The members of the Group's management team have an average of more than twenty years of industry experience. The Group believes that the experience of the Group's management and their in-depth knowledge of the industry ensures timely, efficient and objective decision making and project execution in the best interests of TMK and stakeholders.

In addition, the Group adheres to the highest environmental, social and corporate governance and business ethics standards, including the appointment of independent directors to TMK's board of directors. TMK considers five of its current eleven directors to be independent directors. See "*Management and Corporate Governance*". In 2018, TMK was recognised as a top-20 company in Russia in terms of disclosure of corporate governance information, according to the annual survey "National Corporate Governance Index".

TMK has also been present in international capital markets since 2006 and has successfully executed five Eurobond issues since then.

Strategy

The Group's strategy through 2027, which was adopted in September 2017, is aimed at reinforcing the Group's position as a leading supplier to the global OCTG market, the dominant supplier to the Russian oil and gas market and the second leading pipe producer in terms of financial performance in the world. Since the incorporation of TMK, the Group has developed its pipe business through acquisitions and organic growth and the Group's management believes that the Group's Russian and European assets, as well as the completion of its large scale capital investment programme, have provided the Group with a strong platform enabling the Group to reinforce its position as a global leader in OCTG and line pipe products. The Group contemplates revising its strategy in 2020 to reflect the effect of TMK IPSCO disposal.

As one of its key priorities, the Group's endeavours to enhance its position as one of the world's leading producers of steel pipes. In addition, the Group's acquisition of assets and subsidiaries in Russia, the CIS and Europe completed over the last several years has:

- provided the Group with a strong production presence in major oil and gas regions;
- represented a strategic fit with its existing position in OCTG pipes;
- enhanced its global profile;
- broadened its product mix and provided the Group with complimentary higher margin products to offer to the oil and gas industry; and

• provided the Group with product and geographical diversification.

At present, the Group pursues the following key strategies:

Strengthen leadership in key segments and enter new product niches

The key focus of the Group's strategy is to enhance its global leadership in the key product segments. The Group intends to continue focusing principally on higher margin and technologically advanced products (including OCTG and line pipe products) with an emphasis on seamless OCTG production at, and export from, the Group's Russian plants through leveraging the existing or newly commissioned capacities.

Further, the Group aims to strengthen its leading position in the OCTG and line pipe segments by expanding its relationship with existing customers and forming strategic partnerships with major Russian oil and gas companies, such as Rosneft and Gazprom, as well as its global customers to collaborate on the development of breakthrough technology and services.

The Group also intends to enhance its R&D capabilities with the aim of improving the technological sophistication of its products, improving its manufacturing efficiency and decreasing its production costs. The Group benefits from R&D capabilities of ROSNITI JSC, a Russian technological institute ("**RosNITI**") in Chelyabinsk, Russia. In addition, in the fourth quarter of 2019, the Group completed the construction of state-of-the-art R&D facilities at Skolkovo Centre, which further enhanced the Group's competitive position in the R&D area. Skolkovo Centre will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products), transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

The Group intends to bolster its revenues through the development of innovative products and solutions, as well as through the increase of the share of technologically advanced products in its overall production.

The Group plans to further develop its premium connections business by increasing the current product range and intensifying its marketing efforts and aims to remain the largest producer of premium connections in Russia. TMK-Premium Service currently develops and promotes the Group's existing and new premium connection products produced in Russia in the international markets. The Group's management believes that TMK-Premium Service developments are enabling the Group to improve the quality of its higher margin products and helping to make the Group a leading supplier of a full range of premium-class threaded connections and complex OCTG products in conjunction with the provision of related services in Russia and elsewhere.

Optimise vertical integration to reduce costs and further develop product and service range with a view to increase profit margins

The Group intends to enhance its vertical integration, which the Group expects to further reduce costs and improve profit margins, whilst also allowing it to further develop and enhance its range of products and services. In particular, it aims to:

- increase the capacity utilisation of steelmaking facilities through higher production volumes of steel billets and other products and thus maximising the revenues derived therefrom. In 2018, the Group increased the sales of steel billets and launched production of railway wheel steel at Tagmet in strategic cooperation with a wheel producer from Kazakhstan;
- expand its capabilities in further processing of tubular products (such as drill pipe and coating products). In 2018, the Group launched a new heat treatment facility at TMK-Artrom, which allowed the Group to increase the share of high-margin products in the sales mix, which allowed the Group to expand its product range;
- develop a service offering of ready-to-use comprehensive engineering solutions for customers, including through the adoption of cutting-edge digital technologies and the promotion of the Group's technologically advanced products. In 2018, the Group continued to develop its services for the construction, repair and efficient operation of wells, logistical support, engineering and process consulting. In the year ended 31 December 2018, 15 per cent. of premium connection shipments at the Russian division also included the engineering analysis of projects;
- secure stable supplies of flat-rolled products to the Group's facilities for welded OCTG and line pipe production in Russia.

Focus on innovation and digitalisation

Innovation and digitalisation is one of the key focus areas of the Group's strategy through 2027 with the Group aiming to adopt and utilise advanced digital technologies to improve the quality of its products and further reduce costs.

The Group's management believes that in order to be able to satisfy the continuously evolving customer needs and requirements, the Group must remain at the forefront of innovation and technological breakthrough, particularly in the oil and gas industry. The Group's management considers that business transformation encompasses more than merely implementing individual projects based on digital technologies. Rather, the Group's business transformation should involve the creation of a continuous chain of improvements to existing processes across all aspects of the Group's business, from customer and supplier relations to adopting innovative production management approaches, as well as standardising and digitising company-wide processes based on a new level of employee engagement.

Furthermore, from 2017, in the implementation of its strategy, the Group took major steps towards its digital transformation and implemented a number of milestone digital projects. See "*Digital Solutions and Technologies*".

Enhance international sales platform and the Group's scale

The Group plans to expand its commercial footprint by leveraging its wide geographical presence through improved coordination between divisions, more active development of existing brands, and strengthening of the TMK's global sales network. The Group has historically supplied its products to customers in more than 80 countries. The Group's principal customers include major Russian oil and gas and service companies, such as Rosneft, Gazprom, Surgutneftegas, Gazprom Neft, LUKOIL, Tatneft, Novatek and Transneft. The Group also works with major multinational oil and gas companies, such as Royal Dutch Shell, BP and Repsol. In addition, the Group ships significant amounts of its pipe products to large state-owned oil companies, such as Saudi Aramco, ADCO and ONGC.

Furthermore, despite the recent sale of TMK IPSCO (see "*—Strategic Ventures—Recent Sale of TMK IPSCO*"), the Group's management endeavours to maintain relationships with end users based in the United States established prior to such sale (including, among others, ExxonMobil, XTO, Anadarko Petroleum, Occidental Petroleum, Chesapeake Energy, Antero Resources, Noble Energy, EQT, Range Resources and Hunt Oil) by selling its OCTG and line pipe products produced in Russia under the Master Distribution Agreement.

The Group intends to focus on offering products that are in demand in Russia and other countries of the Group's presence and, in particular, on technologically advanced seamless pipes and premium connections, and increasing the share of the export sales of its Russian plants while maintaining the flexibility to refocus its sales depending on macroeconomic and geopolitical environment.

The Group further intends to utilise TMK eTrade, an on-line platform, which is the first on-line platform for the sale of tubular goods in Russia. See "*Digital Solutions and Technologies*".

Enhance operational excellence

The Group intends to foster a culture of continuous operational improvements, lean production and operational cost cutting, and to ensure consistent product quality through increasing the sustainability of technologies and personnel qualification.

The Group aims to enhance its reputation as a reliable supplier, ensure that the consumer requirements as to quality and delivery times are complied with, enable prompt attention to customers' requests, including through the use of modern digital technologies.

Adhere to best practices in environment, social and governance matters

An important element of the Group's strategy is its contribution to maintaining an environmental balance across its operations and its commitment to improving working conditions and enhancing occupational safety. In the year ended 31 December 2018 and the nine months ended 30 September 2019, the Group continued to be focused on the environmental compliance of its production processes with the international standards, reducing the Group's consumption of water resources, and minimising landfill volumes. With more than 20 projects implemented, the Group's aggregate expenditure for environmental projects in the year ended 31 December 2018 amounted to approximately U.S.\$40 million, representing an increase of 8 per cent. from approximately U.S.\$37 million in the year ended 31 December 2017, which, in turn, represented an increase of 48 per cent. from approximately U.S.\$25 million in the year ended 31 December 2018 across its production facilities drove a major reduction in occupational injury rates and resulted in there being no fatalities or mass accidents.

The Group also focuses on regular improvement of its health and safety performance with a view to provide a healthy and safe working environment for its employees and minimise accidents in the workplace. In the year ended 31 December 2018, the Group's investments in safe working environment amounted to U.S.\$11 million, representing an increase of 14 per cent. year-on-year. In the context of occupational health and safety, the Group's comprehensive efforts across its production facilities in 2018 allowed to achieve a major reduction in occupational injury rates and resulted in there being no fatalities or mass accidents which remains the Group's key priority to maintain the relevant rates at this level. The Group's injury frequency rate for the year ended 31 December 2019 amounted to 0.92x, which represents a 33 per cent. decrease, as compared to the year ended 31 December 2018 and a 14 per cent. decrease, as compared to the year ended 31 December 2018 and a 14 per cent. 2018 decreased by 45 per cent., as compared to the year ended 31 December 2017.

In addition, the Group develops a number of projects aimed at implementation of best social and governance practices (such as "conscious safety" system and electronic system of pre-shift inspections aimed at increasing labour protection at the Group's production facilities).

The Group's sustainability performance is assessed by several international ratings and analytical agencies, including MSCI (in May 2019, the Group's MSCI ESG rating was upgraded from "BB" to "B"²). As of 1 January 2020, the Group was assigned with governance score "2" (on a scale from 1 to 10, where 1 indicates the lowest governance risk and 10 indicates the highest governance risk), social score "6" and environmental score "4" (on a scale where 1 indicates the highest environmental and social disclosure and 10 indicates the lowest environmental and social disclosure by ISS.

Maintain prudent financial policy and target further credit rating updates

The Group adheres to a prudent financial policy and maintains a balanced debt portfolio by instruments, currencies and maturity profile and targets to achieve upgrades of the credit ratings assigned to TMK.

The Group plans to continue focusing on maximising operating cash flow and reducing the leverage, endeavouring to achieve a long-term target Net Debt to Adjusted EBITDA ratio of 2.5x or lower. In line with this strategy, the Group has consistently reduced its capital expenditure programme in the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016 and, subject to any unanticipated maintenance or repair works, further targets to decrease capital expenditures to around U.S.\$ 200 million per annum in the medium-term perspective. For further details of the Group's capital expenditure projects see "*Capital Expenditure Programme*". The Group also plans to exercise strict control over maintenance costs.

In addition, the Group plans to explore opportunities for non-organic deleveraging, including through a disposal of international assets. In line with this strategy, in March 2019, TMK entered into an agreement with Tenaris, a manufacturer of seamless and welded pipe, for the sale of 100 per cent. of the shares in IPSCO Tubulars for an aggregate, cash free, debt free price of U.S.\$ 1,209 million, which includes U.S.\$ 270 million of working capital. As at 30 September 2019, interest bearing loans and borrowings of TMK IPSCO amounted to U.S.\$ 55.0 million. On 17 December 2019, the U.S. Department of Justice approved the transaction which was completed on 2 January 2020. The final amount of the consideration, after all applicable adjustments, received by the Group for the sale of TMK IPSCO was U.S.\$ 1,067 million. See "*Business-Strategic Ventures-Recent Sale of TMK IPSCO*". The majority of the proceeds (less any costs or taxes incurred in relation to such sale) received by the Group from the disposal of TMK IPSCO shall be applied to repay the Group's indebtedness within 60 days from the date when such proceeds were received.

The Group has historically maintained and plans to continue maintaining a comfortable liquidity position, including by keeping unutilised portions of credit facilities with major Russian banks.

Competition

Global Market

Global pipe market is highly competitive. The primary competitive factors are quality, price and value added features, such as premium threading, special steel grades and related services. The production of seamless steel pipe products for complex drilling environments that adhere to the stringent requirements of major oil and gas companies requires the development of specialised skills and significant investments in manufacturing facilities. In comparison, seamless

² The use by the Group of any MSCI ESG RESEARCH LLC or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of the Group by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.

pipe products for standard applications can be produced in most seamless pipe mills worldwide and sometimes compete with welded pipe products for such applications. Welded pipe, however, is not generally considered a satisfactory substitute for seamless steel pipe in high-pressure or high-stress applications, which constitute a significant segment of the Group's target market.

The Group's management estimates that, for the nine months ended 30 September 2019, the Group was among the world's largest producers of steel pipes by output, with sales volumes of 2,932 thousand tonnes for the nine months ended 30 September 2019.

The Group believes that its principal competitors in the international seamless steel pipe markets are:

- Tenaris, a supplier of tubes and related services for the world's oil and gas industry and certain other industrial applications. Tenaris has manufacturing facilities in Argentina, Mexico, Columbia, the United States, Canada, Romania and Japan;
- Vallourec, which operates hot rolled pipes facilities in Brazil, France, Germany, China and the United States. Vallourec has a strong presence in the European market for seamless pipes for industrial use and a significant market share in the international market with customers primarily in Europe, the United States, Brazil and the Middle East. The Group competes with Vallourec primarily in the international OCTG market, particularly for high-value premium connection products;
- U.S. Steel, the largest fully-integrated energy tubular producer in America. It operates several mills, both welded and seamless, located in the United States with a total annual capacity of 1.7 million net tonnes;
- Nippon Steel Corporation, based in Japan, has established a strong position in the markets in the Far East, North America and the Middle East. It is internationally recognised for the high quality of its products and for its supply of high-alloy grade pipe products;
- Chinese producers, including Baosteel and TPCO, are rapidly becoming significant competitors globally. While Chinese producers have historically competed primarily in the basic pipe products sector of the market, which is a sector predominantly driven by prices, these producers have been increasing their product quality and capacity and have become stronger competitors in the international market. Each of Baosteel and TPCO is state-owned and enjoys direct and indirect forms of state financial support;
- Voestalpine, an Austrian fully integrated seamless steel pipe and tube producer, produces premium threaded connections. Its international sales network covers offices in Kindberg (Austria), Houston and Moscow. Similarly with other producers, the Group competes with Voestalpine in the areas of innovative technologies in production, flexibility in production and strict quality control; and
- Interpipe, a Ukrainian producer, has also historically competed in the basic pipe products sector of the market, and, like the Chinese producers, is gradually improving the quality of its products and increasing its production capacity.

Russia

For the nine months ended 30 September 2019 and the year ended 31 December 2018, the Group's management estimates that the Group was the largest producer of steel pipes in the Russian market by sales volume, with an estimated share of the Russian market of 23 per cent. and 24 per cent., respectively. In the year ended 31 December 2018, the Group's market share in Russia was partially maintained as a result of restrictions imposed on imports of steel pipe products originating largely from China and Ukraine to Russia, including anti-dumping duties between 12 per cent. and 31 per cent. on imports of OCTG pipe, 19 per cent. anti-dumping duties on imports of cold-drawn stainless pipes from China, 18.9-37.8 per cent. anti-dumping duties on imports of certain types of industrial steel pipe products from Ukraine and 4.32-18.96 per cent. anti-dumping duties on imports of seamless pipes and tubes of stainless steel from Ukraine. See "*Risk Factors — Risks Relating to the Group's Business and the Pipe Industry — Removal or reduction of anti-dumping measures currently benefiting the Group may adversely affect the Group's business*".

For the nine months ended 30 September 2019, the Group's management estimates that imports represented approximately 4 per cent. of the total sales of steel pipes in Russia by volume, most of which were supplied by Kazakhstan pipe producers.

As at the date of these Listing Particulars, the Group's production facilities located in Russia produce all types of pipe products offered by the Group.

Seamless OCTG

According to the Group's management's estimates, for the nine months ended 30 September 2019, its share in the Russian market for seamless OCTG based on sales volumes was approximately 64 per cent. The only other significant producer of OCTG in Russia is ChTPZ, which owns Chelyabinsk Pipe Plant and Pervouralsk Pipe Plant. Other producers include Uraltrubprom and OMK, which owns, among others, OAO Vyksa Steel Works ("**Vyksa Steel Works**") and OAO Almetyevsky Pipe Plant ("**Almetyevsky**"), which also produce certain grades of welded line and welded OCTG pipes that compete with the Group's seamless line and OCTG products for certain applications.

Seamless Line Pipe

For the nine months ended 30 September 2019, the Group's management estimates that the Group had approximately a 58 per cent. share in the Russian market for seamless line pipe based on sales volumes. ChTPZ is the Group's principal competitor in the Russian market.

Welded Line Pipe

For the nine months ended 30 September 2019, the Group's management estimates that the Group had approximately a 28 per cent. share in the Russian market for welded line pipe based on sales volumes. Vyksa Steel Works is the Group's principal competitor in this segment.

Industrial Seamless Pipe

For the nine months ended 30 September 2019, the Group's management estimates that the Group had approximately a 36 per cent. share in the Russian market for industrial seamless pipe based on sales volumes. ChTPZ is the largest competitor of the Group in Russia in this segment.

Large Diameter Welded Pipe

For the nine months ended 30 September 2019, the Group's management estimates that the Group had approximately a 14 per cent. share in the Russian market for large diameter welded pipe based on sales volumes. OMK, Severstal (Izhora plant), ChTPZ and ZTZ are the Group's principal competitors in this segment.

Industrial Welded Pipe

For the nine months ended 30 September 2019, the Group's management estimates that it had approximately a 7 per cent. share in the Russian market for industrial welded pipe based on sales volumes. There is a large number of Russian producers in this market, of which the Group is among the largest, together with OMK and Severstal. The Group is also subject to some competition in this market segment from importers, primarily from Ukraine.

The Group's principal competitors in the Russian market are:

ChTPZ Group

ChTPZ Group, which includes Chelyabinsk Pipe Plant and Pervouralsk Pipe Plant, is located in the Urals region. ChTPZ has been actively modernising its large diameter welded pipe production. In July 2010, ChTPZ commissioned a new longitudinal welded pipe mill, which allows ChTPZ to produce longitudinal large diameter pipes ("LDP") with diameters of up to 1,420 mm. ChTPZ is also reportedly contemplating an investment to enhance its own steel-making facilities which would enable it to have greater control over production quality and speed of delivery, adding to its competitive strength in the industrial seamless pipe segment.

ОМК

OMK, which includes Vyksa Steel Works and Almetyevsky, is headquartered in the Nizhny Novgorod region of Russia and produces welded pipes. OMK's welded pipes meeting specifications of American Petroleum Institute ("**API**") compete with the Group's seamless pipes for the oil and gas industry. OMK has also completed the construction of a new facility for wide heavy steel plate production at the Vyksa Steel Works plant and is now believed to be self-sufficient in the production of LDP.

Severstal

Severstal is a major Russian steel producer and one of the major producers in the Russian LDP market. Severstal commenced manufacture of large diameter welded pipe for long distance pipelines at its lzhora pipe mill in July 2006. Severstal also launched an expansion project for hollow structural sections ("**HSS**") production at its Sheksna facility.

The Group views Severstal as an emerging competitor in the LDP market, particularly in light of its self-sufficiency in wide steel plate and in the market of welded pipes for the oil and gas sector due to the establishment of a joint venture with Tenaris.

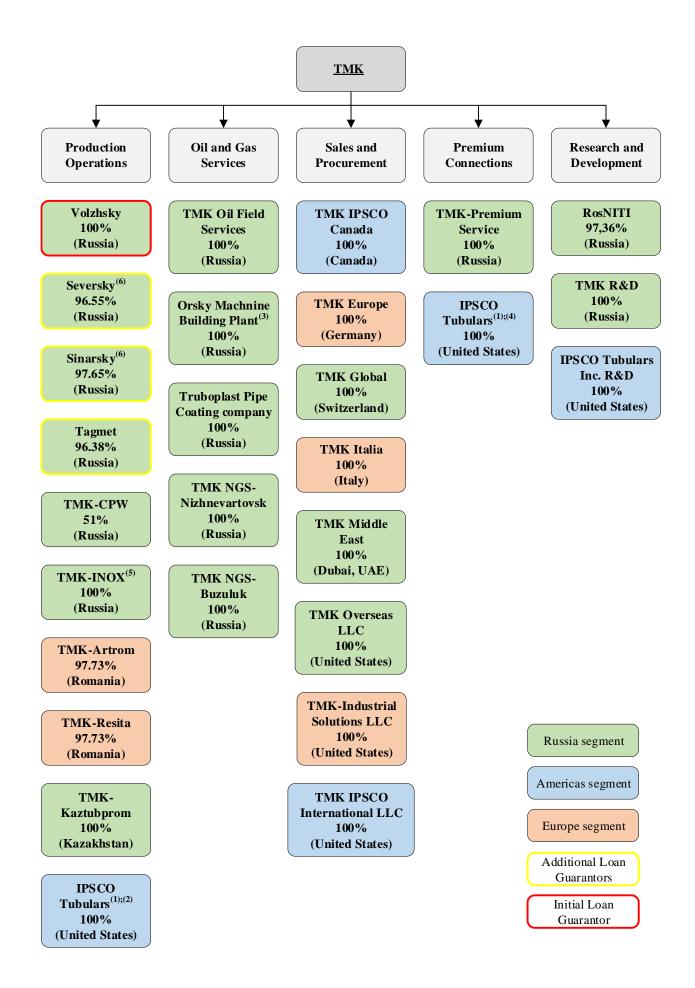
United States

In addition, despite the recent disposal of TMK IPSCO, the Group's management would endeavour to maintain shipments to the North American market by selling the Group's OCTG and line pipe products produced in Russia under the Master Distribution Agreement. See "*—Strategic Ventures—Recent Sale of TMK IPSCO*".

The principal producers of pipes in the United States are Tenaris, TMK IPSCO (which has recently been sold to Tenaris, as noted above), U.S. Steel and Vallourec, as well as companies importing OCTG and line pipe products. Several key U.S. producers have announced capacity additions in recent years. In the United States, the Group competes with U.S. producers as well as certain foreign steel pipe producers, especially from South Korea. In 2017, Tenaris completed the construction a new seamless pipe rolling mill in Bay City, Texas, with a capacity to produce 600,000 tons of OCTG and line pipe when fully operational. TPCO is working on a seamless mill in Corpus Christi, Texas; and Seah (Korean welded pipe manufacturer) acquired the OMK Tube Inc. mill in Texas, as well as the neighbouring Laguna Tubular Products Corp. finishing facility in 2016. Benteler's seamless mill in Shreveport, Louisiana, has reached its nominal capacity of 320,000 tonnes.

Corporate Structure

The Group conducts all of its production, sales, marketing and other operations through its subsidiaries. The following chart presents the key (but not all) production, trading and services companies of the Group and the effective ownership interest in these companies as of 30 September 2019:



Notes:

- (1) As at 30 September 2019, IPSCO Tubulars and its subsidiaries comprised TMK IPSCO, the Americas segment of the Group. On 2 January 2020, TMK IPSCO was sold to Tenaris. See "*—Strategic Ventures*—*Recent Sale of TMK IPSCO*".
- (2) Blytheville, Camanche, Geneva, Baytown, Koppel, Catoosa, Ambridge and Wilder facilities.
- (3) TMK owns 100 per cent. of the ordinary voting shares which comprise 75 per cent. of share capital. The Russian Government owns a 25 per cent. interest consisting of preference shares, which are non-voting.
- (4) Midland, Edmonton and Brookfield facilities.
- (5) TMK holds a 0.1 per cent. interest in TMK-INOX (as defined below) and Sinarsky holds the remaining 99.9 per cent.
- (6) TMK's subsidiary, Rockarrow Investments Limited, holds a 0.224 per cent. interest in Seversky and a 0.0008 per cent. interest in Tagmet.

Production Operations

As of the date these Listing Particulars, the Group conducts its production operations in Russia, Romania and Kazakhstan at nine production subsidiaries and one strategic venture.

Russia

- *Volzhsky*, which produces steel and seamless and welded pipes, is located in the town of Volzhsky in the Volgograd region;
- *Seversky*, which produces steel and seamless and welded pipes, is located in the town of Polevskoy in the Sverdlovsk region;
- *Sinarsky*, which produces seamless pipes, is located in the town of Kamensk-Uralsky in the Sverdlovsk region;
- *Tagmet*, which produces steel and seamless and welded pipes, is located in the town of Taganrog in the Rostov region near the Azov Sea;
- *TMK-CPW*, which produces welded oil and gas pipes and is located in Polevskoy, in the Sverdlovsk region ("**TMK-CPW**"); and
- *TMK-INOX*, which was established in December 2009 to further develop the production and sales of stainless steel pipes by TMK-INOX and Volzhsky ("**TMK-INOX**").

Europe

In Europe, the Group operates through the following subsidiaries located in Romania:

- TMK-Artrom, which produces seamless steel pipes and is located in Slatina, Southern Romania; and
- *TMK-Resita*, which produces steel billets and blooms and is located in Resita, South-Western Romania.

Kazakhstan

In Kazakhstan, the Group operates *TMK-Kaztrubprom*, which produces premium threading and finishing of tubing and casing pipes used in the oil and gas industry and is located in the town of Uralsk ("**TMK-Kaztrubprom**").

Oil and Gas Services

The Group's oil and gas services division is comprised of:

- *TMK Oilfield Services,* which is its management company for the oil and gas services division, located in Ekaterinburg, Sverdlovsk region, Russia ("**TMK Oilfield Services**");
- Orsky Machine Building Plant, which produces joints for drill pipes and couplings for tubing and casing pipes, carries out premium threading, as well as producing pump barrels and other equipment for the oil and gas and other industries, located in Orsk, the Urals region ("**Orsky Machine Building Plant**");
- *Truboplast Pipe Coating Company*, which produces protective coatings for steel pipes used in the oil and gas industry, located in Yekaterinburg, the Urals region ("**Truboplast**");
- *TMK NGS-Nizhnevartovsk*, which provides anti-corrosion coating and pipe repair and field services and produces threading and finishing tubing pipes, located in the Khanty-Mansi autonomous area in the Tyumen region ("**TMK NGS-Nizhnevartovsk**"); and
- *TMK NGS-Buzuluk*, which provides pipe repair services and produces threading and finishing tubing pipes, located in Buzuluk in the Orenburg region ("**TMK NGS-Buzuluk**").

Premium Connections

The Group's premium connections activity is carried out through *TMK-Premium Service*, which develops premium threaded connections and technologically advanced oil and gas threaded pipes, and provides product support services in Russia, the CIS and internationally, is located in Moscow. In particular, Volzhsky, Seversky, Sinarsky, Tagmet, TMK-Kaztrubprom and Orsky Machine Building Plant form part of the Group's premium connections business in Russia and Kazakhstan.

Sales and Marketing

The Group's sales and marketing activities are carried out through the following subsidiaries.

Russia

• TMK is primarily responsible for sales and marketing in Russia.

United States

• *TMK Overseas LLC* was set up for customs clearance support of the Group's products and their sales in the United States.

See "—Strategic Ventures—Recent Sale of TMK IPSCO".

Europe, the CIS, the Middle East and Central Asia

- *TMK Europe*, incorporated in Germany, currently acting as agent in the context of the sales of the Group's products in Northern and Central Europe;
- *TMK Italia*, incorporated in Italy, acting as agent in the context of the sales of the Group's products in Southern and Western Europe;
- *TMK Middle East*, incorporated in the UAE, is primarily responsible for the distribution of the Group's pipe products in the Middle East ("**TMK Middle East**");
- *TMK Global*, incorporated in Switzerland, is primarily responsible for the distribution of the Group's pipe products to certain customers outside Europe, Russia and the CIS ("**TMK Global**").

The Group's trading houses serve purely to facilitate its sales functions and are not involved in the production cycle.

Research and Development

In Russia, the Group's R&D activities are carried out through RosNITI, a subsidiary of the Group, which the Group's management believes is Russia's largest research institute devoted to the scientific and technological development of the Russian pipe industry and is located in Chelyabinsk. The Group authorises RosNITI to evaluate the quality of inputs used in pipe production, analyse product performance and audit the quality systems of its suppliers. In 2019, the Group completed the construction of a R&D facility at Skolkovo Centre that will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products), transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

The Group continues to enhance its R&D capabilities with a view to improve the technological sophistication of its products, including further development and implementation of the import substitution programme in Russia, improvement of its manufacturing efficiency and reduction of the production costs.

Digital Solutions and Technologies

From 2017, in the implementation of its strategy, the Group took major steps towards its digital transformation and implemented a number of milestone digital projects. In 2018, the Group developed and approved its comprehensive transformation programme the primary focus of which is digital solutions. The Group also established a transformation committee, chaired by TMK's general director, who is responsible for coordination and supervision of the implementation of the transformation programme. The key focus of the committee is to manage and implement projects based on digital solutions in the following key areas: supply chain management; sales; marketing and external contractors; efficiency management; digital culture and innovative development.

The Group focuses on optimisation of the production processes and implementation of new solutions and techniques into the Group's existing business processes. In particular, in pursuit of this strategy, the Group is developing a manufacturing execution system (MES) intended to ensure efficient supervision of the production process at the Group's production facilities.

In 2017, the Group launched an electronic procurement platform and a separate on-line platform for e-commerce operating under a brand name TMK eTrade, which is the first on-line platform for the sale of tubular goods in Russia. TMK eTrade was recognised as the best e-commerce project in Russia in 2018 and the Group is actively developing its e-commerce capabilities in the Russia segment via TMK eTrade.

Corporate History

TMK was originally incorporated in 2001 as a closed joint stock company under the name ZAO TMK. ZAO TMK was acquired from MDM Industrial Group in September 2002 together with controlling interests in Seversky, Volzhsky and TMK Trade House by entities controlled by Mr. Pumpyanskiy, the General Director of ZAO TMK at that time. In addition, entities controlled by Mr. Pumpyanskiy acquired a controlling interest in Sinarsky during 2001 and 2002. In February 2004, Mr. Pumpyanskiy entered into an agreement with Dalecone Limited, a Cypriot company affiliated with the MDM Industrial Group, pursuant to which Dalecone Limited contributed a 94.59 per cent. interest in Tagmet to ZAO TMK. In 2005, all the plants were consolidated by TMK Steel Limited, which was 100 per cent. beneficially owned by Mr. Pumpyanskiy. In October 2006, TMK conducted an initial public offering of 180 million of its ordinary shares in the form of ordinary shares and global depositary receipts. The proceeds from the offering were used to fund TMK's strategic capital expenditure programme, to repay certain indebtedness and for general corporate purposes.

The Group acquired an initial 50 per cent. interest in TMK Italia in 2000 and the remaining 50 per cent. interest in 2006. In 2005 and 2006, the Group acquired a 100 per cent. interest in TMK Global and in 2006 also acquired a 100 per cent. interest in TMK Europe.

In 2007, the Group acquired its oil and gas services plants, which later formed its oil and gas service division, including a 75 per cent. interest in Orsky Machine Building Plant for U.S.\$ 45.5 million from Sinara Group S.A. ("Sinara Group"), an entity under common control with the Group. The remaining 25 per cent. represented by preferred shares is owned by the Russian Government. Orsky Machine Building Plant specialises in the production of tool joints, which are critical components for drill pipes, as well as pump barrels, and other equipment for the oil and gas and other industries. The Group also acquired a 100 per cent. equity interest in Truboplast. Truboplast is one of Russia's largest producers of protective coatings for steel pipes used in the oil and gas industry. The Group also acquired certain service assets of TNK-BP including TMK NGS-Buzuluk (formerly, LLC Central Pipe Yard) and TMK NGS-Nizhnevartovsk (formerly, ZAO Pipe Maintenance Department). Control over the legal entities holding the service assets passed to the Group at the end of December 2007.

In 2008, the Group acquired controlling interest in IPSCO Tubulars and NS Group (currently TMK NSG). Prior to the disposal of TMK IPSCO, TMK held a 100 per cent. direct interest in IPSCO Tubulars and a 100 per cent. indirect interest in TMK NSG.

In 2012, the Group acquired a 55 per cent. equity interest in TMK GIPI (formerly, GIPI) in Oman, with a plant that produces welded OCTG and line pipe for the oil and gas industry. In 2018, the Group's stake in GIPI decreased to 27.735 per cent.

In 2013, a U.S.-based service company, OFS International LLC, controlled by TMK and 100 per cent. owned by a Luxembourg company OFS Development S.à r.l, incorporated subsidiaries engaged in the pipe services and precision manufacturing business in the United States with annual production capacity of more than 700 thousand joints of threaded pipe and approximately 250 thousand of couplings and a capability to provide pipe inspection services and manufacture down-hole tools and accessories for a wide range of oil and gas applications. In September 2016, the Group sold all of its ownership interest in OFS Development S.à r.l, a controlling shareholder of OFS International LLC.

In 2014, TMK and state owned Joint Stock Company "RUSNANO" ("**RUSNANO**") initiated a joint project at Seversky to expand the production of technologically advanced pipes with improved performance for the oil and gas industry. RUSNANO has invested RUB 5.5 billion in the project, and TMK's investment amounted to more than RUB 12.5 billion. As part of this project, RUSNANO acquired shares in TMK's additional share issuance and now owns 5.2579 per cent. of its ordinary shares.

In November 2015, RUSNANO sold its shares in TMK-INOX to Sinarsky. As of the date of these Listing Particulars, the Group held 100 per cent. of TMK-INOX (99.9 per cent. is held by Sinarsky and 0.1 per cent. is held by TMK).

On 29 December 2015, the Group completed a transaction with VTB to raise approximately RUB 10 billion by selling ordinary shares in TMK representing 13.4434 per cent. in its share capital to VTB for the purpose of repaying certain outstanding bank loans. As part of this transaction, in 2015, the Group delivered 80,000,000 ordinary shares in TMK to VTB, and in 2016, the Group delivered an additional 58,888,888 ordinary shares in TMK to VTB. In March 2017, the Group repurchased TMK's shares from VTB.

In 2016, in the context of the programme aimed at the disposal of the Group's non-core assets the Group sold TMK-Chermet, the company involved in the scrap metal procurement, to Sinara Group for RUB 6.2 billion, with the sale proceeds applied towards the reduction of the Group's net debt.

From January 2017, TMK started procurement of the Russian plants with the raw materials for the production of tubular products.

In 2017, TMK completed a secondary public offering of up to 138,888,888 ordinary shares of TMK that were offered by Rockarrow Investments Limited, TMK's wholly-owned subsidiary, to qualified institutional buyers in Russia, the United States and certain other jurisdictions resulting in the increase of the free float in TMK to approximately 35 per cent.

In 2018, the Group launched a buyback programme to purchase its ordinary shares and global depositary receipts (GDRs) representing such shares for an aggregate amount of up to U.S.\$ 30 million which was carried out in 2018 and 2019. See "*Principal Shareholders*".

In October 2019, the Group filed an application to the FAS to clear the increase of its stake in Uralchermet, a Russian pipe producer, from 26 per cent. to 75 per cent.

On 22 March 2019, the Group entered into a stock purchase agreement with Tenaris for the sale of 100 per cent. interest in TMK IPSCO. On 17 December 2019, the U.S. Department of Justice approved the disposal of TMK IPSCO which was completed on 2 January 2020. See "*—Strategic Ventures—Recent Sale of TMK IPSCO*".

As at the date of these Listing Particulars, TMK's shareholders are TMK Steel (holding 65.0584 per cent.), TMK's subsidiaries (holding 0.0561 per cent.), and a 34.8855 per cent. free float. See "*Principal Shareholders*".

TMK's registered office, which is also its principal office, is located at 40 Pokrovka Street, building 2A, 105062, Moscow, Russian Federation. TMK's main telephone at its principal office is +7 495 775 7600.

Products and Services

The Group produces both seamless and welded pipes. Its main focus is on the production of typically higher margin seamless OCTG pipes, including OCTG pipes with premium threaded connections developed in Russia. The Group also produces line pipes, large diameter welded pipes for the oil and gas companies and higher margin industrial seamless pipes which are widely used in the nuclear energy and chemical industries. The Group also has a capacity to produce industrial welded pipes, which have a wide array of applications in various industries, including utilities and agriculture. For the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016, the Group's gross profit margins with respect to seamless pipes were 24.2 per cent., 23.1 per cent., 23.2 per cent., 23.8 per cent. and 25.9 per cent., respectively, whereas in the same periods the Group's gross profit margins with respect to welded pipes were 7.8 per cent., 5.3 per cent., 10.2 per cent. and 8.2 per cent., respectively.

One of the key differentiating factors in the modern pipe products market is the satisfaction of a customer's requirements with respect to product specifications and quality. This is particularly true in respect of products for the oil and gas industry, which are often used in severe climate conditions, such as the northern regions of Russia and on ocean shelves. These pipes must meet both international quality standards as well as the specific requirements of each individual customer. Pipes for the oil and gas industry are subject to strict requirements with respect to functional reliability and structural strength and need to be adjustable to particular petroleum chemical composition and temperature conditions. The Group's management believes that the extensive range of products the Group currently offers and its efforts to continually improve its existing products and develop new products enable to satisfy the high demands of its customers in an efficient manner.

Seamless pipes

Based on the internal estimates, the Group's management believes that the Group is the leading producer, by volume, of seamless pipes in Russia and one of the three largest seamless pipe producers in the world, accounting for approximately 6 per cent. of the global market of seamless pipe based on sales volume for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group produces seamless pipes with diameters from 1.5 mm to 426 mm and wall thickness from 0.12 mm to 55 mm. The Group sells its seamless pipe products principally to the oil and gas, machine-building, chemicals and petrochemicals, power generation, automotive and aviation and aerospace industries.

The Group's principal seamless pipe products are:

Seamless OCTG which encompasses drill pipes, casing pipes and tubing pipes. Drill pipe is used to drill wells. Casing pipe is used for drilling and well construction and is connected by standard or premium connections. Casing pipe is also used for the protection of water bearing formations during the drilling of a well and for the production as casing forms the structural liner in oil and gas wells to provide support and prevent collapse during drilling operations. It is also the pipe cemented in the well to seal off formation fluids and to keep the hole from caving in. Production tubing is placed within the casing and is used to convey oil and gas to the surface, and may be replaced many times during the life of a producing well.

Seamless line pipes are used to construct in-field oil and gas pipelines and to transport crude oil, oil products and natural gas from wellheads to primary refineries, storage tanks and loading and distribution centres.

Industrial seamless pipes are used for various industrial applications, including in machinery, chemicals and petrochemicals applications and in the power generation and automotive industries, and are used for the construction of pipelines that require high performance pipes for transportation of steam, water, natural gas and oxygen under high pressure.

Welded pipes

The Group produces welded pipes with diameters from 8 mm to 1,420 mm and wall thicknesses from 0.5 mm to 42 mm. The Group's principal welded pipe products are:

Large diameter welded pipes, which are used to construct main oil and gas pipelines for long distance transmission and to transport crude oil and gas from primary collectors to refineries, storage tanks and loading and distribution centres. The Group makes both longitudinal and spiral welded pipes. Longitudinal welded pipes are made from steel plate with only one weld seam joining the two edges of the rolled plate. Spiral welded pipes are manufactured through the helical moulding of HRC. In contrast to longitudinal welded pipe production, in which each pipe diameter requires an exact plate width, various diameters of spiral welded pipe can be manufactured from a single HRC width. Spiral weld construction is more flexible as it allows LDP to be produced from HRC and thinner flat steel products.

Welded line pipes, which are used to construct main oil and gas pipelines and to transport crude oil, oil products and natural gas to refineries, storage tanks and loading and distribution centres.

Industrial welded pipes, which are used by the general industry for various applications, including utilities and construction. Industrial welded pipes are largely basic products.

Premium Connections

Standard or premium connections are used to join two OCTG pipes. Premium connections are used in wells with challenging environments.

Premium connections consist of premium-class threaded pipe connections designed to withstand difficult operating conditions by ensuring high seal ability in vertical, deviated and horizontal wells. Unlike standard pipe connections, premium connections feature high technology and innovation components and the performance of such connections is certified by national and international testing laboratories. The Group's products include threaded and coupled premium connections designed for special applications; integral joint connections for thin-wall pipes and integral joint connections for thick-wall pipes. The Group's premium connections consist of Russian-developed premium connections threaded at its Russian plants which are currently sold by the Group under a TMK Ultra Premium brand.

TMK-Premium Service was established by the Group in 2007 to enhance its presence in the Russian and global premium connections markets, develops a range of patented connections through its R&D efforts. TMK-Premium Service also offers comprehensive services for the construction, repair and efficient operation of wells, including delivery of premium threaded tubing, casing and drill piping, provision of equipment and accessories with premium connections for the construction of wells, logistical support, engineering and process consulting. Premium connections have been used in gas shale exploration and development activity since 2004 and, as of today, are one of the most widely used premium connections in U.S. gas shale exploration and development activity.

The Group produces premium threaded pipes at Tagmet, Volzhsky, Seversky, Sinarsky, Orsky Machine Building Plant and TMK-Kaztrubprom. The Group also licenses its premium connections technology to both Russian and foreign partners.

Steel Billets

Steel billets are square or round semi-finished steel products used in the production of seamless pipes as well as other finished steel products. Billets are delivered in bars of various diameters and sizes and cut into pieces of various lengths, corresponding to the length of the desired finished pipe.

The Group produced 96.4 per cent., 96.3 per cent., 96.8 per cent. and 95.8 per cent. of the steel that the Group uses for its seamless pipe production in the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group produced in aggregate 2.3 million, 3.3. million, 3.2 million and 2.7 million tonnes of steel in the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively.

Oilfield Services

The Group's oilfield services include the provision of comprehensive solutions for the construction, repair and efficient operation of wells, including, among other things, the manufacture and delivery of premium threaded pipes and connections for the oil and gas industry, logistics, repair and process-consulting services and are principally offered through its TMK Oilfield Services division, which the Group established in March 2008. TMK Oilfield Services is comprised of Orsky Machine Building Plant (which produces tool joints for drill pipes, couplings for tubing and casing pipes, carries out premium threading, drilling accessories, gas cylinders and hydro cylinders), Truboplast (which produces protective coatings for steel pipes used in the oil and gas industry) and TMK NGS-Nizhnevartovsk and TMK NGS-Buzuluk (which specialise in the repair of tubing pipes, piston rods and pipe coatings, and provide transportation services).

Production Processes

The Group makes steel from raw materials for its seamless pipe production using EAFs.

Steel-Making

EAFs produce steel by applying heat generated by electricity arcing between graphite electrodes and a metal bath. The steps in the EAF production process consist of charging, melting, oxidising or purifying and deoxidising or

refining. The charge includes scrap, iron ore, fluxes (lime and fluorspar), a reducing agent (carbon) and ferroalloys. Temperatures in the EAF may reach as high as 3,500°C (arc) in order to melt alloying components that are otherwise difficult to melt. Lime, fluorspar and other materials are used to form slag, which absorbs impurities during the steel-making process. The Group uses EAFs to produce steel at Volzhsky, Seversky, Tagmet and TMK-Resita. Among other advantages, EAFs melt steel significantly faster than open-hearth furnaces, provide a greater degree of quality of and production cost control over the steel used in pipe-making operations and release fewer emissions than open-hearth furnaces.

Steel Casting

The steel produced from EAFs is then cast in order to give it a basic shape that can be used for further processing.

The Group uses a continuous casting process, in which molten steel is cast directly into semi-finished products, such as the billets that the Group uses for its pipe-rolling operations. Continuous casting equipment produces a strand of moulded metal that is continuously withdrawn from the moulds at a set casting speed. The metal strand cools and solidifies and is then cut into billets and discharged for intermediate storage.

Seamless Pipes

Seamless pipe production involves the piercing, elongation and reduction of steel billets to obtain the required diameter, wall thickness and length for the finished pipe. The billet is cut to the required length and heated to temperatures of up to 1,280°C. The heated billet is then rolled in the cross roll piercing mill to produce a thin-walled hollow shell. In this mill, heated billet is rolled over a bullet shaped piercer point that creates a uniform hole in the centre of the billet. The size of the piercing point and the position of the rolls determine the hollow billet's outside diameter and the wall thickness.

The hollow billet then undergoes additional rolling processes that reduce the diameter and wall thickness of the billet and increase its length. The Group uses five principal types of seamless pipe manufacturing processes in its plants: continuous mandrel rolling with free floating and retained mandrel (for instance, Premium Quality Finishing (PQF) continuous rolling mill, FQM), Assel rolling, tandem rolling (type of plug rolling process), pipe extrusion and crossroll piercing elongation (a modern derivative of the push bench process). In a continuous rolling mill, the hollow shell produced in the cross roll piercer is rolled out over a mandrel bar without reheating through a series of five to eight closely arranged in-line two or three-roll rolling stands to produce a continuous tube. In an Assel mill, the hollow shell is rolled using three tapered rolls arranged symmetrically at an offset of 120° around the rolling centreline. In a tandem mill, the hollow shell passes through two two-roll rolling stands over short plugs to reduce the outside diameter and wall thickness. In an extrusion mill, the heated billet is pierced through the centre by a mandrel driven by a hydraulic ram, which extrudes the material under the pressure exerted by the ram and then the thin-walled hollow shell is elongated to a final pipe on a horizontal hydraulic drawing press using mandrel Cross-roll piercing elongation (CPE) process in which the piercing press and elongator are replaced by rotary piercing mill includes several consecutive processes including piercing in two-rolled cross roll piercer with guide discs, crimping of one end, elongation on the push bench, reeling and rolling in stretch reducing mill.

The Group uses continuous rolling mills and tandem mills primarily to manufacture OCTG and line pipe products; Assel mills and CPE primarily to produce industrial seamless pipes for the machine building industry; and extrusion mills primarily to produce industrial seamless pipes using high-grade steel for the chemical and petrochemical, power generation and aerospace industries. Continuous rolling mills are significantly faster and less wasteful than pilger mills and produce higher quality pipes. The Group's last pilger mill at Seversky was replaced with a continuous rolling mill FQM in 2014. While the extrusion process is highly effective for making pipes from grades of special steel, it requires expensive machinery, consumes more raw materials and has lower productivity than continuous rolling mills.

Welded Pipes

The process of manufacturing welded pipes involves the bending of HRC or plate and then welding the seam at the edges. The Group uses different principal types of welded pipe manufacturing: production of small diameter stainless steel welded pipes with the size ranging from 8.0 to 114.3 mm by using tungsten inert gas (TIG) and laser welding; production of small and medium diameter carbon and alloyed steel welded pipes with diameter of up to 530 mm from HRC by using welding currents; production of big diameter longitudinal and spiral carbon and alloyed welded pipes with the size ranging from 508 to 1,422 mm from plates and HRC by using submerged-arc welding.

In the processing line of small and medium diameter welded pipes, the steel is unwound from the coil in which it is delivered and is then passed through a series of rollers which cause the edges of the HRC to curl together to form a cylinder. These edges are then heated and sealed using different types of welding dependent on steel grades, following which the pipe is cut to the desired length and sorted for further processing.

Small diameter stainless steel welded pipes with size ranging from 8.0 to 114.3 mm are produced at Sinarsky by using TIG and laser welding. In Russia, Tagmet, Seversky and TMK-CPW produce small and medium diameter carbon and alloyed steel welded pipes from HRC using the Electric Resistant Welding ("**ERW**") process. In the ERW process, the edges of the steel strip are heated up by the welding current and the two sides of the strip are then forged together and welded before the heat has time to dissipate. The excess melted material is then removed from the outside and inside of the pipe.

Pipe Finishing

Pipe finishing processes are important elements in ensuring that the finished pipe product meets customers' specifications. The pipe finishing stages for seamless and welded pipes are largely similar and may include heat treatment, upsetting, threading, hydrostatic and ultrasonic testing, inspection, coating and packing. Heat treatment involves the application of a combination of heating and cooling operations to the pipe to achieve desired physical and mechanical properties such as increased strength, hardness and ductility, to relieve internal stresses and reduce brittleness. Upsetting is done primarily to increase the strength of connections by way of increasing the diameter and thickness of the ends of pipes. Larger sizes are threaded and connected with no upset needed. Hydrostatic testing involves filling the pipe with water and pressurising it to a high level to check for leaks. Pipes may also undergo anticorrosion coating treatment, which includes lacquer, epoxy and polypropylene coating. The final stage of the pipe finishing process generally involves marking, packing and storage.

Some of the Group's industrial seamless pipes, including pipes produced at its Sinarsky, TMK-INOX and TMK-Artrom facilities, also undergo subsequent cold finishing. Cold rolling and cold drawing involve rolling a pipe at room temperature or drawing a pipe through a die at room temperature. These cold working processes reduce the outside diameter and wall thickness of the pipe and improve the surface finish and mechanical properties of the pipe. These processes are often used in the production of pipes for use in machine building and power generation applications, automobile production and other industrial applications. The Group's pipe finishing processes were enhanced with the acquisition of TMK NGS-Buzuluk, TMK NGS-Nizhnevartovsk and Truboplast in 2007.

Production Facilities

The Group manufactures its pipes at four Russian operating plants, Volzhsky, Seversky, Sinarsky and Tagmet, TMK-Artrom in Romania, and TMK-Kaztrubprom in Kazakhstan. The Group also manufactures welded line pipe at its TMK-CPW strategic venture and stainless and highly-alloyed corrosion-proof seamless and welded pipes at TMK-INOX. The Group carries out threading operations at Volzhsky, Seversky, Sinarsky, Tagmet, Truboplast, TMK NGS-Nizhnevartovsk, TMK NGS-Buzuluk, Orsky Machine Building Plant and TMK-Kaztrubprom. The Group produces steel at four of its plants: Volzhsky, Seversky, Tagmet and TMK-Resita. In addition, the Group produces tool joints at Orsky Machine Building Plant in Orsk and protective pipe coatings for steel pipes used in the oil and gas industry at Truboplast and TMK NGS-Nizhnevartovsk.

In 2004-2014, the Group modernised its production facilities and increased the efficiency of its production processes through the implementation of its large-scale capital expenditure programme, which enabled the Group to improve the quality of its products, adapt its product range to the requirements of the international market and, consequently, improve the Group's competitive position. As a result, the Group managed to take significant steps toward import substitution of products in Russia and entered a number of new global market segments. See "— *Capital Expenditure Programme*".

The following table shows the annual production capacity of the Group's principal manufacturing facilities as at 30 September 2019.

	Seamless pipe production				Welded pipe production				
	OCTG	Line and Industrial	Total Seamless	OCTG	Large Diameter	Line and Industrial	Total Welded	Total Pipe Production	Steel Production
					(thousands of	tonnes)			
Volzhsky	320	580	900	_	805	—	805	1,705	950
Seversky	300	250	550	_		520	520	1,070	950
Sinarsky	385	239	624	_		—	_	624	—
Tagmet	300	170	470	_		600	600	1,070	950
TMK- INOX	_	7	7	_		5	5	12	—
TMK CPW	_	_				110	110	110	—
TMK-Artrom	_	220	220	_		—	_	220	—
TMK-Resita				_	_	_	_	_	450
TMK IPSCO	410		410	820		90	910	1,320	545
Total	1,715	1,466	3,181	820	805	1,325	2,950	6,131	3,845

The Group's production capacity has been significantly increased as a result of the completion of key projects under its capital expenditure programme.

The table above is based on nominal production capacity, while actual product mix and order books have a significant impact on actual output. For the nine months ended 30 September 2019, the Group's capacity utilisation rates decreased, mostly due to weaker performance of the Americas segment resulting from deteriorating market conditions in the United States. Utilisation rates in the Group's Russia and Americas segments were approximately 70 per cent. and 60 per cent. in the nine months ended 30 September 2019, while the utilisation rate in its Europe segment was close to 95 per cent. At the same time, seamless pipe utilisation rates at the Group's Russia segment were close to 86 per cent. and at the Group's Americas segment close to 93 per cent. Welded pipe utilisation rates at the Group's Russia segment were close to 48 per cent. and at the Group's Americas segment were close to 28 per cent. in the nine months ended 30 September 2019. In accordance with the Group's strategy to become one of the world's leading suppliers of premium pipes and related services, the Group continues to enhance its product mix with higher margin production, expand its global operations, and pursue advancements in R&D.

Volzhsky

Volzhsky started its operations in 1970 and underwent significant upgrades in the late 1980s and 1990s, and the Group has further expanded its capacity in the last few years in line with its capital expenditure programme. The Group owns the facility and the land, comprising approximately 4.7 million square metres, on which the facility is located.

Volzhsky is one of the most modern Russian pipe plants, featuring modern steel making, pipe-rolling and pipe welding equipment for the production of steel billets, hot rolled and welded LDP, most of which are supplied to European customers. The plant is located in proximity to rail, road and river transport routes and is linked by the Volga River to ports on the Caspian, Black, Baltic and Azov seas.

Volzhsky manufactures pipes of more than 900 sizes for various applications, including seamless casing and line pipe, spiral welded and longitudinal welded LDP for oil and gas pipelines, seamless pipes for steam boilers, seamless pipes for mechanical engineering and round and square steel billets. Volzhsky is currently the largest pipe manufacturer in Russia and one of few Russian plants that produces 1,420 mm pipes for high-pressure transmission natural gas pipelines in commercial volumes. Volzhsky supplies the majority of its output of welded 1,420 mm diameter pipes to Gazprom.

Volzhsky's principal production facilities consist of:

- a steel shop, including an EAF, a ladle furnace, a vacuum degasser and three 4-strand continuous casting machines;
- a 650,000 tonne mill that produces longitudinal welded pipes of up to X100 grade with diameters ranging from 508 mm to 1,422 mm and wall thickness of up to 42mm. The pipes primarily produced by the facility are designed to be used in long distance oil and gas pipelines including offshore pipelines and oilfield pipelines;
- pipe-welding mills for automatic submerged arc-welding, together with a heat treatment facility and pipefinishing lines, primarily used for the production of large diameter spiral welded pipes for oil and gas pipelines and petroleum and industrial process pipelines;
- three external anti-corrosion coating lines with an annual capacity of 1,100,000 tonnes;
- an internal anti-corrosion coating line with an annual capacity of 600,000 tonnes;
- a continuous pipe-rolling mill MPM with an annual capacity of 630,000 tonnes, NDT facilities, two heat treatment areas, three finishing lines with threading and cutting equipment, hydrotesters etc., primarily used for the production of threaded OCTG and line pipe, including bevelled pipe;
- an Assel pipe-rolling mill with an annual capacity of 250,000 tonnes and a conservation coating line; and
- two extrusion lines, principally used for the production of seamless stainless steel pipes for the power engineering and chemical industries.

Seversky

Seversky was founded in 1739 and commenced pipe-making operations in 1964. Seversky is located in the Sverdlovsk region in close proximity to major Russian oil and gas fields. The Group owns the facility and the land, comprising approximately 4.4 million square metres, on which the facility is located.

Seversky produces a variety of seamless and welded pipes principally for domestic oil and gas customers, including seamless casing and line pipes, as well as industrial seamless pipes for general application and industrial welded pipes for the automotive and power industries and in construction sector.

Seversky's principal production facilities consist of:

- a steel shop, including an EAF, a ladle furnace, a vacuum degasser and a 5-strand continuous casting machine;
- an FQM pipe rolling mill, NDT facilities, two heat treatment areas, six finishing lines with threading and cutting equipment, hydrotesters, etc., principally used for the production of seamless casing and line pipes; and
- five electric-welding pipe mills, including finishing lines, which are used to produce a variety of welded pipes for pipelines and welded pipes for industry and construction.

Tagmet

Tagmet was founded in 1896 and underwent a significant modernisation in the 1990s. It is located in the Rostov region, near the Azov Sea, and benefits from its close proximity to raw materials and sea export routes. The Group owns the facility and the land, comprising approximately 1.8 million square metres. The Group also leases approximately 1 million square metres of land near the plant. From 2008 to 2016, after Tagmet became a part of the Group, its rolling and steelmaking production facilities underwent a significant modernisation.

Tagmet produces principally seamless drill, casing and line pipes for oil and gas pipelines, industrial seamless pipes and electric welded pipes.

Tagmet's principal production facilities consist of:

- a steel shop, including EAF, a ladle furnace, a vacuum degasser and a 5-strand continuous casting machine;
- a 600,000 tonne capacity PQF seamless rolling mill;
- six finishing areas, including NDT facilities, upsetting, threading and cutting equipment, hydrotesters, five heat treatment lines, primarily used for the production of seamless drill, casing and line pipes as well as industrial seamless pipes; and
- four electric-welding pipe mills, a continuous butt-welding mill, including a hot galvanisation line, which are used to produce a variety of welded pipes for pipelines and welded pipes for industry and construction.

Sinarsky

Sinarsky was founded in 1934 and underwent a significant modernisation in the 1990s. Sinarsky is located in the Sverdlovsk region in close proximity to major Russian oil and gas fields. The Group owns the facility and the land, comprising approximately 3.2 million square metres, on which the facility is located. The Group also leases approximately 0.6 million square metres of land near the plant from the administration of Kamensk-Uralsky.

Sinarsky specialises in producing drill, casing, tubing and line pipes as well as various industrial pipes including coldfinished carbon and special grade seamless steel pipes principally for the power generation, chemical and machine building industries. Sinarsky also produces insulated lift pipes. Sinarsky does not have any in-house steel-making capacity, but obtains steel billets from Volzhsky, Seversky and Tagmet and third party suppliers.

Sinarsky's principal production facilities consist of:

• a tandem mill, including a heat treatment line, a pipe upsetting area and two threading lines, principally used for the production of seamless casing pipes and a drill pipe manufacturing line;

- a continuous pipe-rolling mill, which is used for seamless tubing and high quality corrosion resistant pipes;
- cold drawing and cold rolling mills, which are used for industrial seamless pipes;
- a heat treatment line; and
- a pipe finishing and coupling production line.

TMK IPSCO

Prior to its disposal (see "*—Strategic Ventures—Recent Sale of TMK IPSCO*"), TMK IPSCO, a vertically-integrated manufacturer and supplier of seamless and welded steel pipes in the United States and Canada, formed part of the Group and comprised IPSCO Tubulars and its subsidiaries. The production operations of TMK IPSCO are conducted in twelve facilities located throughout United States and Canada. TMK IPSCO is a producer of high performance OCTG pipe and premium connections required in unconventional drilling environments such as shale fields. TMK IPSCO produces a diverse range of carbon and alloyed seamless and welded pipe products for the oil and gas sector. The product offering includes seamless and welded tubing and casing, coated or bare line pipe, standard pipe, HSS, coupling stock, premium connections and oilfield accessories. Through its facility in Koppel, Pennsylvania, TMK IPSCO also produces steel billets for the manufacturing of seamless pipes and for sale to third parties. The description of TMK IPSCO's facilities and their operations prior to the sale of TMK IPSCO is set out below. Accordingly, such description does not reflect any changes which may have occurred following the sale of TMK IPSCO.

Seamless Pipe

Koppel Facility. The Koppel Facility in Pennsylvania produces steel billets from scrap using an EAF. The majority of billets produced at this facility are transferred to Ambridge to be used in seamless pipe production. Billets not used at the Ambridge Facility are sold to third parties. Koppel also has a heat treating facility.

Ambridge Facility. TMK IPSCO manufactures its seamless products at its Ambridge Facility in Pennsylvania, which began pipe-making operations in 1973. TMK IPSCO owns the land and facility, which is 724,000 square feet under roof. At this facility, TMK IPSCO manufactures seamless OCTG tubing and casing, line pipe, coupling stock, drill pipe hollows, and mechanical tubing. The Ambridge Facility has a piercer, an eight-stand mandrel mill, a 23-stand stretch-reducing mill, a heat treatment line, an NDT facility, and IMS wall control gauges.

Welded Pipe

TMK IPSCO manufactures welded pipe products at its facilities in Blytheville, Arkansas, Camanche, Iowa, Geneva, Nebraska and Wilder, Kentucky.

Blytheville Facility. The Blytheville Facility began operations in 1999 as a greenfield site and manufactures OCTG casing and tubing, line pipe and standard pipe products. The facility occupies 251,000 square feet. This facility has full finishing, upsetting, heat treating and high speed threading capabilities. Blytheville has been in limited operation throughout 2016 performing upsetting, heat treatment, inspection and threading operations. Pipe welding manufacturing at the facility was suspended in 2016 and restarted in 2017.

Camanche Facility. TMK IPSCO also manufactures OCTG casing, line pipe and standard pipe products at this facility, which was purchased by TMK IPSCO in 1990. The company owns the land and the facility, which is approximately 337,000 square feet, including 12,000 square feet of office space. This facility has full finishing and high speed threading capabilities.

Geneva Facility. The Geneva Facility (approximately 89,000 square feet) was acquired in 1988 and manufactures HSS and hollow structural rounds.

Wilder Facility. The Wilder, Kentucky facility began operation in 1981, was purchased by IPSCO Tubulars in 2006. IPSCO Tubulars owns the land and the facility (529,000 square feet), which includes office space. The facility manufactures line pipe, casing and standard pipe products and has high speed threading capability for OCTG. Wilder welded pipe manufacturing and threading operated intermittently on a limited basis throughout 2016 depending upon market and order book conditions.

Finishing

Baytown Facility. The Baytown pipe and tube finishing facility occupies 208,000 square feet of land and buildings space and is owned by IPSCO Tubulars. This facility has a heat treat quench and temper line, full finishing and CNC threading capabilities for OCTG casing, upsetters and external upset end tubing.

Catoosa Facility. The Catoosa Facility in Oklahoma occupies approximately 138,000 square feet of industrial space, has heat treating, testing and CNC threading capabilities, including TMK UP ULTRA Connections. The land on which the facility is located is leased from the Port of Catoosa. Catoosa pipe processing, heat treatment, inspection and threading were suspended in 2016 due to market conditions.

Wilder Ultra Line Pipe Coating Facility. The Ultra Line Pipe Coating facility, located adjacent to Wilder, Kentucky ERW Plant, began its operations in late 2018. Owned and operated by Ultra Premium LLC, a division of IPSCO Tubulars, the facility coats welded and seamless line pipe produced by TMK IPSCO facilities with either Fusion Bonded Epoxy (FBE) or Abrasion Resistant Overcoating (ARO) coatings. The initial capacity of the facility is 120,000 tons per year. The facility also coats pipe owned by other entities on a tolling basis.

Steel-Making

TMK IPSCO's Koppel, Pennsylvania facility, which occupies approximately 265,000 square feet, produces steel billets from scrap using an EAF. It is capable of producing 5 1/2 and 6 1/2 inch steel billets. The majority of the billets are transferred to the Ambridge Facility for seamless pipe production and heat treating. The remainder are sold externally.

TMK UP ULTRA Premium Connections

TMK IPSCO manufactures premium connections and oilfield accessories and provides field services for complex oil and gas exploration and production from the Group's Midland Facility and Brookfield Facility in the United States and Edmonton, Alberta, Canada facilities. These services include fishing tool repair, proprietary threading and general oilfield machine work and manufacturing.

Midland Facility. The Midland Facility (82,500 square feet) is capable of manufacturing both tubing and casing connections, as well as accessories. The land and facilities are owned by ULTRA Premium Oilfield Services.

Brookfield Facility. The Brookfield Facility (128,000 square feet) is located in close proximity to the Marcellus Shale region, one of America's largest shale gas deposits. Two threading lines produce TMK UP ULTRA Premium Connections, as well as accessories.

Edmonton Facility. The Edmonton Facility (40,000 square feet) commenced operations in 2012 and is capable of threading the full range of TMK UP ULTRA premium connections for both full length casing joints and accessories to support oil field drilling operations. The facility has direct rail access and is located in close proximity to the Canadian oil sands.

TMK-Artrom

TMK-Artrom, a leading Romanian pipe manufacturer, was founded in 1982 and was modernised in the 1990s. TMK-Artrom is located in Slatina in Southern Romania.

The plant produces seamless pipes for various applications, including for the mechanical engineering and automotive industries, as well as several types of seamless pipes for the oil and gas industry. TMK-Artrom's pipe products are exported to over 30 countries. TMK-Artrom does not have any in-house steel-making capacity but operates jointly with TMK-Resita.

TMK-Artrom's principal production facilities consist of:

- a hot rolling line using Assel process consisting in one billet reducing mill, two Assel pipe-rolling mills, one rotary size mill and one reducing mill and a finishing line which consists of cutting, bevelling and NDT facilities used for the production of seamless carbon and low alloy steel pipes;
- a new state-of-the-art heat treatment complex commissioned in 2018 that is able to perform various heat treatments, including quenching and tempering, annealing, normalising and tempering, with precise control of temperatures and low NOx emission. This facility allows to apply heat treatments to seamless steel pipes

including quenching and tempering for pipes with big wall thickness (of up to 60 mm) which is one of TMK-Artrom's competitive advantages;

- a section for cold drawn/rolled tubes which is comprised of one pickling workshop with two lines, four cold rolling mills, five draw benches and three continuous heat treatment furnaces (in which the material being heated moves steadily on a conveyor through the furnace) and other finishing facilities. NDT is used in the production of cold rolled pipes. This production facility produces precision pipes used primarily in automotive, hydraulic cylinders and energy sector;
- a hot rolling line utilising cross piercing elongation process which is comprised of a piercing mill, an elongating push bench, a reheating furnace, two reducing mills and two finishing lines, which consist of straightening, cutting, bevelling and NDT facilities. This facility produces carbon and low alloy steel tubes for energy, construction and other industrial application;
- a new production line commissioned in 2015 which produces skived and rolled burnished pipes and tubes for piston rods both used in hydraulic cylinders production, tubular parts for the automotive industry. Total capacity of this new complex is up to 25 thousand tonnes.

In April 2019, the majority shareholder of TMK-Artrom announced its intention to proceed with the secondary public offering of shares in TMK-Artrom which was postponed in May 2019 due to weak market conditions. While, as of the date of these Listing Particulars, the Group does not have any binding arrangements to dispose of its stake in TMK-Artrom, it continues to assess the market and consider all strategic options in respect of TMK-Artrom.

TMK-Resita

TMK-Resita, a Romanian steel mill has recently undergone a number of significant modernisations. TMK-Resita is located in Resita, South-Western Romania, approximately 400 kilometres from TMK-Artrom.

TMK-Resita produces billets for TMK-Artrom and other consumers, as well as blooms. The majority of TMK-Resita's steel production is delivered to TMK-Artrom.

TMK-Resita's principal production facilities consist of a steel shop, including an EAF, a ladle furnace, vacuum degassing and a continuous casting machine.

TMK-Artrom and TMK-Resita are certified as part of the same Integrated ISO Management System under the 9001:2015; ISO 14001:2015 and ISO 45001:2018 standards. Both are part of the same Integrated ISO Management System. TMK-Artrom is also certified with ISO/TS 16949:2016 as a producer for the automotive industry.

TMK-Kaztrubprom

Located in Western Kazakhstan, TMK-Kaztrubprom specialises in the threading and finishing of casing pipes used in the oil and gas industry, mainly with premium connections. The plant's production capacity is approximately 40,000 tonnes of pipes per year.

Orsky Machine Building Plant

Located in the Urals region, in the town of Orsk, Orsky Machine Building Plant produces a wide range of tool joints, couplings for casing and tubing pipes with premium threaded connections, drilling accessories, gas cylinders and hydraulic components.

Orsky Machine Building Plant's pipe production facilities consist of a finishing line for casing pipes with premium connections with an annual capacity of 24,000 tonnes, four tool joint forging lines, tool joint machining lines, gas cylinder production lines and heat treatment lines.

Orsky Machine Building Plant is authorised by the API to manufacture drill pipe connections in compliance with the API Spec 7 international standards. Its quality management system is certified according to EN ISO 9001/API Q1 international standards and its products are delivered to both Russian and international customers.

Truboplast

Truboplast was founded in 1993 and located in Yekaterinburg in close proximity to Seversky and Sinarsky.

Truboplast is one of the largest Russian producers of protective coatings to steel pipes and pipe fittings for the oil and gas industry. Truboplast applies coatings to 50,000 tonnes of oil and gas line pipes with diameters ranging from 57 to 720 mm a year. Truboplast produces one-, two-, and three-layered exterior coatings, thermo-hydro insulated coatings, and interior protection for the inner part of the pipe. Truboplast's products are used by major Russian and international oil and gas companies operating in challenging environments where anti-corrosive resistant coatings are required.

TMK NGS-Buzuluk and TMK NGS-Nizhnevartovsk

TMK NGS-Buzuluk and TMK NGS-Nizhnevartovsk specialise in the repair of tubing and drilling pipes, piston rods, external and internal anti-corrosive pipe coatings (for pipes with diameters ranging from 73 to 720 mm), the manufacturing of pipe column sections and other downhole equipment as well as providing transportation services for tubular goods to oil field sites located in the Urals-Volga and Western-Siberian oil and gas regions.

TMK plans to develop these manufacturing facilities by expanding their service offerings. At present, these service companies have the capacity to repair 485,000 pipes and 36,000 tonnes of tubing a year.

Capital Expenditure Programme

From 2004 to 2014, the Group has undertaken a significant capital expenditure programme, which was primarily aimed at increasing its Russian seamless OCTG and line pipe production capacity and enhancing the efficiency of its production processes. The aggregate investments in the capital expenditure programme amounted to approximately U.S.\$ 4.0 billion. As a result of this programme and, as well as the acquisitions made by the Group, the Group achieved a significant increase in its production capacities. The table below sets out the Group's production capacities as at 30 September 2019 and 31 December 2004.

	As at 30 September 2019	As at 31 December 2004
	(millions of	of tonnes)
Seamless Pipe	3.2	2.0
Welded Pipe	3.0	1.7
Steelmaking	3.9	2.4
Threading	2.5	0.8
Heat Treatment	2.2	0.7

Further, the Group's management believes that the Group has had since 2009, and continues to have, the largest pipe production capacity (in tonnes) globally.

The Group's capital expenditure programme has historically focused on:

- increasing its seamless pipe production, including production and development of premium connections;
- increasing the efficiency of its production processes, through both the modernisation and expansion of its steel-making operations and its pipe-rolling and finishing facilities;
- improving the quality and range of its products;
- increasing the production of higher margin products; and
- reducing the environmental impact of its operations.

This has included the completion of several large projects, including:

- installation of a longitudinal LDP mill at Volzhsky with an annual capacity of 600,000 tonnes of LDP, including pipes with a diameter of up to 1,420mm;
- commissioning of an EAF at Tagmet with an annual capacity of 950,000 tonnes of steel;
- installation of a FQM mill at Seversky with an annual capacity of 550,000 tonnes of seamless pipe; and
- overall modernisation of seamless capacities at Volzhsky.

As part of its extensive capital expenditure programme, in 2013 and 2014, the Group completed two major projects: the addition of a new EAF with the annual steel production capacity of 950,000 tonnes at Tagmet, and the addition of a FQM mill with annual seamless pipe production capacity of 550,000 tonnes at Seversky. The completion of these projects enabled the Group to further increase its seamless pipe production (by approximately 600,000 tonnes of steel and 200,000 tonnes of pipes per year) and enhance production efficiency in Russia. In addition to these projects, the Group intends to further develop its finishing and testing capacities, premium connections and production of high-alloyed and technology-intensive pipes. Starting from 2015, the Group primarily focused on smaller investments into finishing operations, such as threading, coating and heat treatment in order to increase the share of high-margin products in the sales mix. Subject to any unanticipated maintenance or repair works, the Group further targets to decrease capital expenditures (with a view to limit them to approximately U.S.\$ 200 million per annum in the medium-term perspective) and to focus on maintenance of existing facilities and selective de-bottlenecking. The Group also plans to exercise strict control over maintenance costs.

In the year ended 31 December 2016, cash used to acquire property, plant, and equipment was U.S.\$ 175 million. In the year ended 31 December 2017, cash used to acquire property, plant, and equipment (including expenditure on the implementation of its strategic capital expenditure programme) was in excess of U.S.\$ 233 million. In the year ended 31 December 2018, the Group's capital expenditure programme amounted to U.S.\$ 273 million (representing a 17 per. cent increase as compared to the year ended 31 December 2017, which was primarily attributable to an unplanned and opportunistic real estate acquisition). The Group's capital expenditure for the nine months ended 30 September 2019 amounted to U.S.\$ 152.4 million. According to the Group's management's estimates, the aggregate capital expenditure for the year ended 31 December 2019 amounted to approximately U.S.\$ 200 million.

Further, the Group's main capital expenditure projects completed in the years ended 31 December 2018 and 2017 in the Russia and Europe segments include the following:

- the installation of an automated pipe gauging system for LDP and a final washing system at Volzhsky;
- the commissioning of a mandrel machine and conservation coating equipment at Volzhsky;
- the installation of the phosphating and GreenWell pipe end coating lines and pipe threading machines at Tagmet;
- the reinforcement of the heat treatment facility's metal structures and foundations, the installation of wall envelopes and preparation of foundations for the installation of the equipment in the heat treatment and water treatment facilities as part of a comprehensive upgrade of the pipe-rolling unit at Seversky;
- the commissioning of a coupling threading machine, coupling blank cutting equipment, and thermal diffusion galvanising equipment for couplings at Sinarsky;
- the commissioning of a non-destructive pipe testing line and grinding equipment at Sinarsky; and
- the completion and commissioning of a new heat treatment at TMK-Artrom.

The Group's principal capital expenditure projects in the nine months ended 30 September 2019 included:

- the construction of Skolkovo Centre; and
- the commissioning of a heat treatment facility at Seversky.

Strategic Ventures

Strategic Venture with Humbel Limited

In January 2007, Seversky entered into a strategic venture with Humbel Limited, a leading producer of welded pipes in Greece, for the production of ERW longitudinal welded pipes with diameters ranging from 168 mm to 530 mm principally for use in oil and gas, construction and machine building applications. The Group contributed land and facilities to the strategic venture and Humbel Limited contributed welding equipment. As of the date of these Listing Particulars, the Group holds 51 per cent. and Humbel Limited holds 49 per cent. in TMK-CPW. The Group's strategic venture has a total production capacity of 95 thousand tonnes of medium-diameter welded pipe per annum.

Recent Sale of TMK IPSCO

On 22 March 2019, the Group entered into a stock purchase agreement with Tenaris for the sale of 100 per cent. interest in TMK IPSCO which, as at 30 September 2019, represented the Americas segment, one of the three Group's reporting segments (see "*Operating and Financial Review*—*Segments*") and comprised IPSCO Tubulars and its subsidiaries for an aggregate, cash free, debt-free price of U.S.\$ 1,209 million, which includes U.S.\$ 270 million of working capital. As at 30 September 2019, interest bearing loans and borrowings of TMK IPSCO amounted to U.S.\$ 55.0 million. The sale was completed on 2 January 2020. The final amount of the consideration, after all applicable adjustments, received by the Group for the sale of TMK IPSCO was U.S.\$ 1,067 million. The majority of the proceeds (less any costs or taxes incurred in relation to such sale) received by the Group from the disposal of TMK IPSCO shall be applied to repay the Group's indebtedness within 60 days from the date when such proceeds were received.

Following the sale of TMK IPSCO, the Group's management plans to continue the sales of the Group's products produced in Russia to the North American market under the Master Distribution Agreement.

The Group anticipates that a successful closing of TMK IPSCO disposal would contribute to achieving the target of deleveraging and higher stability of cash flows and margins (due to the decreased exposure to the volatility in the U.S. market). See "*Risk Factors—Risks relating to the Group's Business and the Pipe Industry—The Group is exposed to the risks connected with TMK IPSCO disposal"* and "*Operating and Financial Review—Recent TMK IPSCO disposal"*.

Raw Materials

The Group's raw material requirements consist principally of the following:

- *Integrated Seamless Pipe Operations*: The Group's principal raw materials are scrap metal, ferroalloys and refractories purchased from third party suppliers.
- *Other Seamless Pipe Operations*: The Group's principal raw materials are steel billets purchased from third party suppliers as well as produced by its integrated steel operations.
- *Welded Pipe Operations*: The Group's principal raw materials for the production of welded pipes are steel plates and HRC purchased from third party suppliers.

For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group's raw material costs amounted to U.S.\$ 1,970.2 million, U.S.\$ 2,805.4 million, U.S.\$ 2,380.3 million and U.S.\$ 1,523.0 million, which represented 66.8 per cent., 66.7 per cent. 64.4 per cent. and 59.6 per cent. of its total cost of production, respectively.

Seamless Pipe Operations

The Group produces steel for its seamless pipe-making operations at Volzhsky, Tagmet and Seversky. The Group's seamless pipe production facilities at Volzhsky, Tagmet and Seversky are now integrated, such that the Group supplies substantially all of the steel billets required for its own seamless pipe production at such facilities, with the exception of certain special high-grade steel billets, which the Group purchases in small amounts from third parties. In addition, TMK-Resita satisfies all of TMK-Artrom's steel billet requirements. Sinarsky, which does not have internal steel-making facilities, purchases steel billets mainly from the Group's Russian plants as well as from a number of Russian integrated steel companies including Evraz and Metalloinvest. Volzhsky, Tagmet and Seversky satisfied 82.7 per cent., 81.5 per cent., 85.5 per cent. and 82.3 per cent. of Sinarsky's steel billet requirements for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively.

EAFs, which the Group operates at Volzhsky, Tagmet, TMK-Resita and Seversky, consume almost exclusively scrap. In accordance with its strategic capital expenditure programme, the Group commissioned a new EAF to replace an open-hearth furnace at Tagmet in 2013. These improvements have reduced and are expected to continue to further reduce the Group's production costs and improve the ecological footprint of the Group.

The Group also procures scrap metal from waste created by its steel-making and pipe-making operations. The Group purchases ferroalloys, which are used in various stages of the steel-making process, such as deoxidation, and provide properties needed to manufacture certain steel products, principally from a number of Kazakh, Russian, Georgian and Azerbaijani suppliers, including ChEMK. The Group purchases refractories, which are heat resistant materials in its EAFs, from a number of Russian and foreign suppliers, including Chinese and European companies. In 2016 and 2019, the Group signed agreements with Metalloinvest for the supply of HBI, which provide for price revisions based

on pricing formulas. The agreements enable the Group to diversify its raw materials sources, and thus reduce risks triggered by the market volatility of the scrap market and improve the quality of the Group's products. TMK-Resita sources most of its scrap from suppliers in Romania, Serbia, Hungary and Bulgaria and satisfied some of its scrap requirements from the dismantling of its obsolete assets as well as from the production waste of TMK-Artrom pipe-making operations. TMK-Resita purchases most of its refractories from European producers. Although the Group's internal steel-making capacity significantly reduces the consumption of steel billets purchased from third parties and thus its exposure to fluctuations in the price of steel products, the Group remains subject to increases in the prices of scrap, which is the principal raw material used in its steel-making operations. As the Group has supply agreements with many of its large customers that have pricing terms that are fixed for certain periods of time, it may not be able to pass on an increase in the costs of raw materials to its customers in a timely manner or at all or may be able to do so only after a delay. See "*Risk Factors — Risks Relating to the Group's Business and the Pipe Industry — Increases in the cost of raw materials may have a material adverse effect on the Group's business, financial condition and results of operations"*. The Group does not, at present, use derivative instruments to hedge any commodity price risks.

The benefits from operating in-house steel production include lower prices (as scrap is cheaper and less expensive to transport than semi-finished products) better quality control and faster production times, as well as greater operational flexibility.

Welded Pipe Operations

For the production of welded pipes in Russia, the Group purchases steel plate and HRC from Russian and international producers for processing into welded steel pipes. The Group's principal suppliers of steel plate include MMK, Severstal, Salzgitter, Metalloinvest and Nippon Steel. The Group's principal suppliers of HRC include Mechel, MMK, Severstal, Novolipetsk Steel and ArcelorMittal-Temirtau.

Supply Agreements

Most of the Group's raw material supply agreements represent framework agreements for a period of one to three calendar years, which may be extended for the following calendar year, and contain pricing formulas, which can be revised on a monthly or quarterly basis. Terms of delivery of products under the Group's supply agreements are generally determined based on individual orders.

In September 2018, the Group entered into an agreement with MMK for the supply of HRC. In September 2018, the Group concluded an agreement with Evraz for the supply of steel billets providing for a price adjustment that is linked, among other factors, to the cost of raw materials. In January 2018, the Group entered into an agreement with EPM Group for the supply of graphite electrodes, which is valid until 2021 and satisfies most of the Group's requirements for graphite electrodes.

Energy and Utilities

The Group's steel-making and pipe-rolling operations require a significant amount of electrical power, natural gas, heat energy and other energy resources. For the nine months ended 30 September 2019, energy and utilities costs related to the Group's costs of production amounted to approximately 7.4 per cent. of its total costs of production, as compared to 7.1 per cent. for the nine months ended 30 September 2018. For the nine months ended 30 September 2019, the Group's main Russian production subsidiaries (Volzhsky, Seversky, Sinarsky, Tagmet and Orsky Machine Building Plant) consumed approximately 2.3 billion kWh of electricity, as compared to 2.3 billion kWh of electricity for the nine months ended 30 September 2018.

The Groups' principal Russian production subsidiaries purchase electricity on the wholesale electricity and capacity market as wholesale electricity market customer (Volzhsky) or via a power supply company (Seversky, Sinarsky, Tagmet, and Orsky Machine Building Plant). In the nine months ended 30 September 2019, the average price of electricity purchased in Russia by the Group's principal production subsidiaries in their regions of presence was RUB 3,271/kWh (excluding VAT). Electricity prices on the Russian market continue to grow, primarily because of rising prices of natural gas for electricity generators supplying the wholesale electricity and capacity market and because of the payment for capacity. Furthermore, the Group anticipates a further 3 per. cent. increase in July 2020 in the price tariffs of the network organisations (the Federal Network Company and Multiregional Network Company) that provide power transmission/capacity services. See "Risk Factors — Risks Relating to the Group's Business and the Pipe Industry — Increased energy costs or an interruption in the Group's electricity or natural gas supply could have a material adverse effect on its business, financial condition and results of operations".

Sales and Marketing

The Group sells its products to customers principally through two channels:

- directly to both Russian and non-Russian customers pursuant to ongoing supply contracts and tenders; and
- through wholesale traders for onward sale to end customers, principally in certain of the Group's export markets.

In addition, to satisfy the immediate demand of some of its customers, the Group maintains inventories of its products at its own warehouse facilities.

The table below sets forth the breakdown of the Group's sales by product for the nine months ended 30 September 2019.

	Nine months ended 30 September 2019
	(in %)
Oil and gas	
OCTG	47
LDP	13
Line Pipe	19
Industrial pipe	21
Total	100

The table below sets forth the Group's sales volumes of seamless and welded pipes, excluding TMK IPSCO, for the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016 and the aggregate sales volumes of TMK IPSCO for the same periods.

	Nine mont	hs ended			
	30 Septem	ber 2019	Year Ended 31 Decem		mber
	2019	2018	2018	2017	2016
		(thous	sands of tonr	nes)	
Seamless pipes (excluding the Americas segment)	1,768	1,716	2,333	2,307	2,203
Welded pipes (excluding the Americas segment)	729	672	852	804	973
Sales volumes of the Americas segment	435	599	804	673	282

The Group sells its products in Russia, America, Europe, Middle East, North Africa, CIS, Eastern Asia, South-Eastern Asia and the Far East. For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, sales to customers located in Russia accounted for 58.5 per cent., 53.9 per cent., 60.7 per cent. and 72.3 per cent. of the Group's consolidated sales revenue, respectively.

The Group's principal customers include major Russian oil and gas companies, such as Rosneft, Gazprom, Surgutneftegas, Gazprom Neft and LUKOIL. The Group's five major customers in Russia accounted for 34.3 per cent., 33.7 per cent., 35.2 per cent. and 39.3 per cent. of its sales volumes by tonnes for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group also works with major multinational oil and gas companies, including Royal Dutch Shell, BP, Repsol, and national oil companies, including ONGC, Saudi Aramco, ADCO and KOC.

The Group's long-term contracts with largest customers are based on price formulas (allowing for adjustment of sale prices every three, four or six months) rather than fixed prices, which allows the Group to pass costs of sales onto its customers and to secure its sales margins.

Marketing

The Group seeks to tailor its sales and marketing strategies to its customers and the markets that the Group serves. The Group coordinates all of its Russian and CIS sales through TMK, headquartered in Moscow, which is primarily responsible for establishing, expanding and maintaining contacts with customers, conducting market development studies, marketing and promotion. The functions of TMK Trade House, TMK's subsidiary headquartered in Ekaterinburg, are generally limited to the procurement of raw materials. It has one branch office in Russia as well as representative offices in Azerbaijan, Turkmenistan and China. In Kazakhstan, the Group's sales operations are carried out by its wholly owned subsidiary, TMK-Kaztrubprom. The Group also has a network of over 100 official distributors throughout Russia and the CIS, which principally market and sell the Group's industrial welded pipes.

The Group's sales operations outside of Russia and the CIS and Asia are generally coordinated by its subsidiaries: TMK Global, headquartered in Switzerland (and its subsidiary TMK Middle East), TMK Europe, headquartered in Germany, TMK Italia, headquartered in Italy. To most of its customers, TMK-Artrom and TMK-Resita ship their products directly and, for shipments to some of the regions, use TMK Italia (for sales to South and West Europe and North Africa) and TMK Industrial Solutions (for sales to Americas), which act as agents. Following the sale of TMK IPSCO, the Group's management plans to continue the sales of the Group's products produced in Russia to the North America under the Master Distribution Agreement.

The Group seeks to develop close, long-term relationships with its customers, including end customers who purchase its products through international wholesale traders, by seeking to provide them with a consistent quality of products, competitive pricing and timely delivery of orders. The Group also seeks to respond to its end-customers' individual requirements, ranging from specific packing or delivery requirements to the development of new products, including products manufactured using its own premium threaded connections. The Group periodically conducts customer satisfaction surveys and also arranges meetings with customers to discuss the Group's products and services as well as the customers' specific requirements. The Group attends major steel and pipe industry conventions to maintain and enhance its profile, and its PR service issues regular press releases in various publications to publicise significant developments in the Group's business operations.

The Group also aims to enhance its international profile through its ongoing qualification programmes with target customers.

Sales and Market Position

The Group's global presence is reflected in its extensive network of trading subsidiaries and representative offices, which are located in close proximity to its key customers. The Group also has a global network of about 80 authorised distributors. The Group sells its products primarily under direct sales contracts with its customers, including its international wholesale trading partners, typically based on standard industry terms and conditions. The quarterly or semi-annual price adjustments for the Group's customers are linked primarily to the cost of raw materials. In Russia, the Group's customers include more than 50 oil and gas and servicing companies, including almost all oil and gas companies, and the sales are made pursuant to framework supply agreements, which may be extended annually.

The Group acts as a supplier of pipe products in a number of major upstream projects in Russia. The Group has a balanced contract portfolio of supplies for the largest Russian onshore and offshore oil and gas projects including major brownfields and new greenfields.

From 2014, the Group has supplied LDP pipes to a number of pipeline projects including:

- second lines of the Bovanenkovo-Ukhta and Ukhta-Torzhok natural gas pipelines, which are part of the Yamal-Europe natural gas pipeline;
- the Sakhalin-Khabarovsk-Vladivostok natural gas pipeline;
- the Power of Siberia natural gas pipeline; and
- the Yamal LNG project.

In line with the Group's overall strategy to focus on OCTG and premium connections products, the Group also supplies OCTG and premium connections to the following major onshore and offshore oil and gas projects:

- Arcticgas, developed by Novatek and Gazprom Neft (the Group supplies OCTG with premium connections under the contract until 2022);
- Yamal LNG, major Russian LNG project developed by Novatek, Total, CNPC and Silk Road Fund (the Group supplies OCTG, including pipes with premium connections and line pipes under the contract until 2023);
- Chayandinskoye and Kovyktinskoye natural gas fields operated by Gazprom (the Group supplies OCTG, including pipes with premium connections under the contract until 2025);
- Prirazlomnoye offshore oil field, operated by Gazprom Neft Shelf (the Group supplies OCTG with premium connections and GreenWell technology under the contract until 2023);

- Messoyakhskoye field, operated by Gazprom Neft Shelf (the Group supplies OCTG, including pipes with premium connections, line pipes and LDP under the contract until 2020);
- Yuzhno-Kirinskoye field, operated by Gazprom (the Group supplies OCTG with premium connections under the contract until 2023);
- Caspian offshore projects: Filanovsky, Korchagin, Rakushechnoye fields, operated by Lukoil (the Group supplies OCTG with premium connections and LDP under the contract until 2020);
- Russkoe field, operated by Rosneft (the Group supplies OCTG with premium connections including vacuum insulated tubing under the contract until 2020);
- Vankorskoye cluster fields, operated by Rosneft (the Group supplies OCTG including pipes with premium connections, GreenWell technology, line pipes and LDP under the contract until 2023); and
- Sakhalin Energy fields, including Sakhalin-1 operated by Exxon Neftegas and Sakhalin-2 operated by Gazprom (the Group supplies OCTG with premium connections under the contract until 2022).

Arcticgas, Yamal LNG, Chayandinskoye and Kovyktinskoye natural gas fields, Messoyakhskoye field, Russkoe field, Vankorskoye cluster fields are onshore projects, whereas Prirazlomnoye offshore oil field, Yuzhno-Kirinskoye field, Caspian offshore projects and Sakhalin Energy fields are offshore projects.

In addition to supplying the oil and gas companies, the Group sells significant volumes of its pipe products to the automotive sector and the machine building industry. The Group also supplies pipes for the Russian and European energy sector, as well as petrochemical, chemical, public utilities and construction industries.

Russian Sales

As noted above, the Group's customers in Russia include the major oil and gas companies and machinery and power generation enterprises. The Group's sales revenue to customers located in Russia accounted for 58.5 per cent., 53.9 per cent., 60.7 per cent. and 72.3 per cent. of its total revenue for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. The Group's five major customers in Russia accounted for 34.3 per cent., 35.2 per cent. and 39.3 per cent. of its sales volumes by tonnes for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively.

In addition to direct shipments from its plants to key oil and gas fields, the Group also operates warehouses in Moscow and at its Russian plants, where it sells all types of pipe products to wholesalers. The Group realises higher margins on these sales compared to its other sales of comparable products. Through these sales, the Group also identifies potential new end customers for its products and markets its production capabilities and products directly to them. The Group continues to expand the offering of services provided at its warehouses and at OCTG repair and threading operations. Although, following the announcement of the contemplated TMK IPSCO disposal, the Group has begun to sell larger volumes of its OCTG pipes outside of Russia, the Group continues to sell the majority of its OCTG products made at its Russian plants domestically, primarily to large Russian oil and gas producers. See "*—Strategic Ventures—Recent Sale of TMK IPSCO*".

For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group's five largest domestic customers by sales volumes were Rosneft, Gazprom (excluding Gazprom Neft), Surgutneftegas, LUKOIL and Gazprom Neft, which, in aggregate, accounted for 34.3 per cent., 33.7 per cent., 35.2 per cent. and 39.3 per cent. of the Group's total pipe sales by tonnes respectively.

During these periods, Gazprom was the Group's largest customer of LDP. The Group's sales of LDP to Gazprom amounted to 53.3 per cent, 68.5 per cent, 57.0 per cent. and 47.4 per cent. of the Group's consolidated LDP sales for the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, respectively. For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group sold 62.6 per cent., 95.9 per cent., 94.6 per cent. and 93.8 per cent., respectively, of its LDP by tonnes domestically.

In addition, Russia is the Group's largest LDP market by sales volumes. The table below sets forth the breakdown of the Group's domestic and export sales of LDP for the years ended 31 December 2018, 2017 and 2016.

	Year ended 31 December			
	2018	2017	2016	
		(in %)		
Domestic sales	96	95	94	
Export sales	4	5	6	

As part of its efforts to develop an e-commerce platform, in 2017, the Group launched its TMK eTrade, a tubular goods on-line store, which was recognised as the best e-commerce project in Russia in 2018.

Sales Outside Russia

The Group sells its products and services outside of Russia principally through TMK and its subsidiaries, including TMK Europe and TMK Global in the European markets and TMK Middle East in the Middle Eastern region. In addition, the Group exports pipes outside of its primary markets to, among others, Africa and Asia. To enhance its global presence, the Group also continues to target the Sub-Saharan market.

The EU has imposed non-tariff measures, namely anti-dumping duties, on the sales of the Group's seamless and welded pipes from Russia to customers in the EU, which adversely affects the Group's sales prices in these markets. While a significant percentage of the Group's pipes are purchased through European agents and representatives for other markets, some of the end customers for its OCTG and line pipe take delivery of and use its pipes in the EU. As of the date of these Listing Particulars, the production of the Group's Russian plants is subject to anti-dumping duties of up to 28.7 per cent. for seamless pipes and 16.8 per cent. for welded pipes (whereas other Russian producers competing with the Group are subject to anti-dumping duties from 24.1 per cent. to 35.8 per cent. for seamless pipes and from 10.1 per cent. to 20.5 per cent. for welded pipes). The expiry review of anti-dumping duties on welded pipes is expected to be in the first half of 2020. In 2018, trade tensions increased seriously being intensified by additional duties for import of steel and aluminium into the Unites Stated under Section 232 of the Trade Expansion Act of 1962 and European reciprocal measures. See "*Risk Factors* — *Risks Relating to the Group's Business and the Pipe Industry* — *Anti-dumping proceedings and other import restrictions may limit sales of the Group's products in important geographical markets, particularly in Europe*".

For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group's exports to North America amounted to approximately 38.6 thousand tonnes, 143.8 thousand tonnes, 139.8 thousand tonnes and 90.8 thousand tonnes of the pipe products, respectively. See "*Strategic Ventures*—*Recent Sale of TMK IPSCO*".

The largest export customers of the Group's Russian plants are:

- in North America: B&L Pipeco Services Inc, Vass Pipe, American Piping Production, Lincoln Manufacturing, Inc., Texas Pipe & Supply Co, Sooner Pipe, CTAP and Champions-Cinco Pipe; and
- in the Middle East and North Africa: ONGC, ADCO, Saudi Aramco, KCO, GPC, Petrobel and Occidental Petroleum.

In addition, the Group's distribution model in North America is focused on providing broader technical solutions and closer interaction with end users of the Group's products and distribution partners to synchronise production, logistics and inventories with demand in the fields (the new "go-to-market" model). Customers who have accepted this distribution model have the ability to reserve production capacity and place orders with minimum supply lead times for the volumes and type of product required based on the latest drilling programmes. In the years ended 31 December 2018 and 2017, the Group has rolled out the new distribution model to more than 200 end users, with the Group's largest end user accounting for approximately 7 per cent. of the Group's revenue during these periods.

In connection with the disposal of TMK IPSCO to Tenaris, the Group entered into the Master Distribution Agreement whereby, starting from 2 January 2020, Tenaris became the exclusive distributor of the Group's OCTG and line pipe products in the United States and Canada. The Group intends to coordinate such sales through TMK Overseas LLC.

Transportation

The Group ships its products principally by railway, water and motor transport. Substantially all of the Group's finished products produced at its Russian operations are transported by railway and road directly to customers as well as to sea ports (namely, Novorossiysk, Taganrog, Saint Petersburg, Astrakhan and Volzhsky in Russia). The Group has primarily concentrated on efficiency of transportation and logistics operations by establishing a centralised

logistics infrastructure, which allows each of the Group's operating facilities to benefit from the timely planning, optimised logistics and shipment control systems.

The Group's main provider of rail transportation services in Russia is Joint Stock Company "Russian Railways". Tariffs for rail transportation services are set annually by the FAS. The Group is a party to strategic partnership agreements with key owners of railcars that the Group uses for raw materials and pipe products transportation. The Group's main export point for sea transportation is Novorossiysk Sea Port. During the navigable season, the Group uses shipment via the Volga River to European destinations, including the Netherlands and Romania. For export sales, the Group generally delivers its products on the following terms: CPT (carriage paid to) for pipes delivered by rail and CIF (cost, insurance and freight)/CFR (cost and freight) or FOB (free on board) for pipes delivered by sea, to different ports of destination.

In addition, the close proximity of Sinarsky and Seversky, which are located to the east of the Ural mountains, to the main oil and gas fields of Western Siberia and the proximity of Volzhsky and Tagmet (whose production is partially export-oriented) to the of Black Sea and Azov Sea ports helps to reduce the Group's transportation costs.

Research and Development

The Group engages in R&D of new products to meet the increasingly stringent requirements of its customers. In Russia, the Group's R&D activities are carried out through RosNITI, which the Group's management believes is Russia's largest research institute concentrating on the research and technological development of the Russian pipe industry, located in Chelyabinsk. The Group's R&D activities are often undertaken in cooperation with Russian federal authorities (including the Ministry of Industry and Trade of Russia ("MIT") and Federal Agency on Technical Regulation and Metrology ("Rosstandart")), customers (including Gazprom and Transneft) and suppliers (including Severstal and MMK). The Group authorises RosNITI to evaluate the quality of inputs used in pipe production, assess product performance and audit the quality systems of its suppliers. The Group also cooperates with leading Russian R&D institutions in the natural gas industry (Scientific & Research Institute of Natural Gas and Gas Technologies (Gazprom VNIIGAZ)), ferrous metals industry (Bardin Central Research Institute for Ferrous Metallurgy (CNIIChermet-I.P.)), oil transportation industry (Transneft Research and Development Institute for Oil and Oil Products Transportation) and energy equipment industry (Central Research Institute of Machine Building Technology (CNIITMASH)). The Group also conducts R&D through TMK-Premium Service. As noted above, in 2019 the Group completed the construction of Skolkovo Centre that will focus primarily on developing technologies for the oil and gas exploration and production (particularly higher value added products), transportation of hydrocarbons and identifying new solutions aimed at the improvement of energy efficiency in the industry.

The Group intends to enhance its R&D capabilities with the aim of improving the technological sophistication of its products, improving its manufacturing efficiency and decreasing its production costs. For the nine months ended 30 September 2019 and the years ended 31 December 2018, 2017 and 2016, the Group recorded expense of U.S.\$ 4.8 million, U.S.\$ 7.3 million, U.S.\$ 11.5 million and U.S.\$ 10.7 million, respectively, on R&D.

The Group's product development and research projects include:

- the development of production technologies of spiral welded and longitudinal welded pipes using high steel grades, such as API steel grades X70 X100, which can withstand high levels of pressure;
- improvement of steel design and thermomechanical rolling practice aimed at improved behaviour at low temperatures and better deformability of LDP for construction of new lines in Arctic climate and seismic areas;
- the development of pipe products technology for offshore applications in oil and gas industries;
- the development of new types of external and internal polymer coating for oil and gas transmission pipes;
- the development of steel making, billet casting, rolling and heat treatment of high strength steels for casing and tubing resistant to sulphide stress cracking;
- the development of high chromium steels and corrosion resistant alloys for casing and tubing;
- the development of casing and tubing with different types of threaded connections and coating, including premium-class threaded pipes and vacuum insulated tubing for oil and gas wells;
- the development of solid antifriction coating for threaded connections; and

• the development of effective technology for cold-worked pipe production applying nanotechnology and new generation of steels and alloys.

In addition to R&D focused on new or improved products, the Group continuously explores opportunities to improve the efficiency of its manufacturing processes and, in particular, its steel production processes. See "*—Capital Expenditure Programme*" for a description of the Group's strategic investment initiatives.

The Group is also working with the Russian Foundations for the Development of the Pipe Industry and other Russian pipe producers and consumers to develop new technical rules and national standards for pipes.

The Group protects its know-how and its R&D efforts by registering patents for various inventions. In the year ended 31 December 2018, the Group obtained 16 patents for inventions and five utility models. As of October 2019, the Russian Patent Office has granted six patents for inventions and three utility models for TMK and one patent for an invention for Volzhsky. Furthermore, in 2019, TMK also received two patents for inventions through the Eurasian Patent Office.

Intellectual Property

The Group has registered 205 patents (including 174 for inventions and 31 for utility models) in Russia, one in Belarus, one in Ukraine, two in Kazakhstan, two in the United States, two in Canada, one in Brazil, two in Vietnam, one in Indonesia, two in Nigeria and Algeria. The Group also has 8 applications in Russia and 6 applications in other countries for the registration of patents pending. The Group's patents relate primarily to premium connections, seamless and welded pipes, steels, coatings and lubricants. The Group has also registered 37 trademarks, including TMK, TMK UP and Green Well brands and other names and graphic trademarks and has eleven pending applications to register additional trademarks.

Product Quality Standards

The Group's products are manufactured in accordance with international, national and industry standards approved by the following organisations for standardisation:

- API (API standards);
- ASTM International (ASTM standards);
- American Society of Non-destructive Testing (ASNT standards);
- German Institute for Standardisation (Deutsches Institut für Normung, DIN standards);
- Det Norske Veritas (DNV) (standard for offshore pipelines);
- European Committee for Standardisation (EN standards);
- International Organization for Standardisation (ISO);
- Rosstandart, etc.

To ensure compliance with international standards, industry standards and technical requirements, and to maintain the competitiveness of its products, in 2008 the Group developed and implemented a corporate quality management system in accordance with ISO 9001-2008 requirements. In 2016, Lloyd's Register Quality Assurance Ltd., an independent audit company, again recognised the Group's quality management system to be in compliance with the new requirements of ISO 9001-2015.

The ISO 9001 quality management system is designed to ensure that the end product complies with applicable regulations and customers' quality requirements from the acquisition raw materials to the delivery of end product. The purpose of ISO 9001 is to ensure reliability of both the product itself and the process associated with its production.

Nine of the Group's plants are in compliance with ISO 14001:2015. In addition, the Group's production facilities have their product conformance verified by independent certification bodies. In particular, the Group maintains various API licenses for Seversky, TMK-CPW, Sinarsky, Orsky Machine Building Plant, Volzhsky, Tagmet, TMK-Kaztrubprom, TMK-Artrom and TMK NGS-Buzuluk.

The Group's existing API licenses (API Spec 5L, API Spec 5CT, API Spec 5DP and API-2B) entitle it to apply the API mark to the Group's products identifying the Group as a manufacturer of safe, high quality equipment for the oil and gas industry.

The Group's products must also satisfy its customers' requirements. Many international oil and gas companies purchase pipes only from suppliers satisfying the rigorous qualification requirements of such oil and gas companies with respect to specific kinds of pipes. These companies often keep official lists of qualified suppliers. Since 2005, the Group's Russian plants have been qualified as suppliers of various types of pipes by a number of large international and regional oil and gas companies, including ExxonMobil, Shell, ENI, Gazprom, LUKOIL, Rosneft, Saudi Aramco, Agip, CNPC, Arabian Drilling Company, Kuwait Oil Company, Kuwait National Petroleum Company, ONGC, PDVSA, Petronas, Qatar Petroleum, OXY and Petroleum Development Oman. The Group's Russian plants also have an experience of working with major global engineering, construction, and servicing companies, such as Baker Hughes, Technip, Saipem and WorleyParsons. The Group continues to seek to obtain qualifications from the world's leading oil and gas companies as a means of enhancing its product recognition on the global market.

Environmental Matters

The Group strives to ensure that the activity of its subsidiaries conforms to global standards and environmental legislation. The Group's primary goal in this respect is to make environmental protection an integral part of its business. The Group is subject to a wide range of international agreements and conventions, as well as local, regional and national laws, regulations, permits and decrees in Russia, Romania, the United States, Canada, Kazakhstan concerning, among other matters, environmental safety, discharges into the air and water and the handling of solid waste.

According to the Group's environmental policy, each of its plants approves an environmental protection plan on an annual basis. These plans include measures to aid in adhering to the limits imposed on air and water pollution and storage of industrial waste, introduction of environmentally-friendly industrial technologies, the construction of purification and filtering facilities, the repair and reconstruction of industrial water supply systems, the installation of metering systems, land remediation and the recycling of water and industrial waste. In 2017 and 2018, the Group reduced total pollutant emissions into atmosphere by 11 per cent. The Group's plants perform an ongoing environmental monitoring via accredited chemical-analytical laboratories.

The Group has works with non-governmental organisations, including the Russian Union of Industrialists and Entrepreneurs and the Chamber of Commerce and Industry of the Russian Federation and the Russian Steel Association, to respond in a timely fashion to changes in state and market driven environmental regulatory standards.

The Group has introduced environmental management systems at each of its plants as a means of improving its environmental processes. Nine TMK's plants (namely, Volzhsky, Seversky, Sinarsky, Tagmet, Orsky Machine Building Plant, TMK-INOX, TMK-Kaztrubprom, TMK-Artrom and TMK-Resita) have received 1SO 14001:2015 certifications with respect to their environmental management systems and are regularly audited by independent companies to ensure compliance with standards. The sites are also audited by external consultants on a regular basis to verify compliance with environmental laws and regulations.

The Group has not been subject to any material fines for any material environmental violation in the last five years, and the Group is not aware of any current material legal or administrative proceedings pending against the Group with respect to environmental matters which could have an adverse material impact on its financial position or results of operations. See "*Risk Factors* — *Risks Relating to the Group's Business and the Pipe Industry* — *The Group's products are used in applications that are inherently hazardous, which could lead to potential environmental, product liability and other claims which, in turn, may have a material adverse effect on the Group's business, financial condition and results of operations*".

Employees

The table below sets forth the number of the Group's employees as at the dates indicated.

	Nine months ended 30 September	Year en 31 Decen	
	2019	2018	2017
Subsidiaries comprising Russia segment:			
Seversky	6,109	5,994	5,857
Tagmet	5,945	5,981	6,024
Sinarsky	6,327	6,293	6,311
Volzhsky	10,143	10,271	10,271
Other subsidiaries comprising Russia segment	7,596	7,526	7,524
Total subsidiaries comprising Russia segment	36,120	36,065	35,987
Subsidiaries comprising Europe and Americas segments:			
TMK-Artrom	1,493	1,486	1,347
TMK-Resita	769	783	784
Other subsidiaries comprising Europe segment	70	74	228
TMK IPSCO	1,609	1,961	1,865
Total subsidiaries comprising Europe and Americas segments	3,941	4,304	4,224
Total Group	40,061	40,369	40,211

Over the past few years, the Group has been optimising its business processes, thus gradually downsizing its personnel. While the Group's productivity (measured in tonnes of product per employee) at its Russian facilities is below Western European standards, its production facilities are the principal employers in the towns and regions of their presence, and workforce reductions are generally constrained by Russian labour legislation as well as other political and social considerations. For these reasons, the Group reduces the number of employees at its production facilities gradually and continuously monitors this process. As at 30 September 2019, TMK IPSCO had 1,609 employees, which constitutes a decrease from 31 December 2018, due to deterioration in the Americas segment production volumes caused by the slowdown in the North American market. See "*—Strategic Ventures—Recent Sale of TMK IPSCO*".

The Group's management believes the Group's overall relations with its employees and trade unions are good due to its commitment to improve the social infrastructure in the cities of presence, its good history of paying wages on time, and its firm commitment to provide the Group's employees with social security. As at 30 September 2019, approximately 80 per cent. of employees of the Group's Russian pipe plants were members of the Russian Mining and Metallurgy Trade Union. Each of the Group's production facilities enters into collective bargaining agreements with trade unions which prescribe certain benefits and privileges for employees, including better working conditions than those provided for under Russian labour law.

The existing agreements define all the procedures required to keep jobs, develop and modernise production, create new jobs, and help downsized employees find jobs, and they require the Group to notify the trade union prior to downsizing of personnel.

Since the Group's acquisition of each of its plants, there has been no strikes or lockouts at its production facilities. The Group's management believes the average wage at all the Group's production facilities to be equal to or above the average for the respective region.

The Group's Russian subsidiaries make contributions on behalf of their employees to the Russian Federation state pension, social insurance, and medical insurance funds at the applicable rates based on gross salary payments. These contributions are expensed as incurred, and the Group has no legal or constructive obligation to make any additional payments on top of these compulsory social and pension contributions. Furthermore, the Group's subsidiaries provide their employees on retirement with certain pension and other benefits under the collective bargaining agreements. In addition, TMK and each of the Group's Russian plants are parties to agreements with each regional authority in the regions of presence that cover certain aspects of activity in the respective regions. In particular, the respective Group companies have assumed the obligation to contribute to the social infrastructure of the communities where they operate, such as providing assistance for schools and medical institutions.

Insurance

At present, the Group has insurance for, among other things:

- its real property and production facilities against fires and certain other natural disasters;
- its equipment against damage, including business interruption insurance;

- its production operations against damages to third parties, including environmental liabilities;
- transported goods against theft or damage;
- product liability for its exported products; and
- life insurance, insurance for accidents and diseases.

The Group maintains obligatory insurance policies required by Russian law and provides employees with medical insurance as part of its compensation arrangements with the Group's employees.

Legal Proceedings

From time to time, the Group has been and continue to be involved in legal and arbitration proceedings both as plaintiff and defendant. In particular, the Group is not and have not been involved in any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened, of which it is aware) during the 12 months preceding the date of these Listing Particulars, which may have, or have had, in the recent past, a significant effect on the Group's financial position or profitability.

Operational Results for the Year Ended 31 December 2019 and for the Fourth Quarter of 2019

The table below sets forth the Group's shipments in the year ended 31 December 2019 and the fourth quarter of 2019.

	Year ended 31 December		Change	Fourth quarter of	Third quarter of	Change
	2019	2018		2019	2019	
	(thousands of	of tonnes)	(%)	(thousands	of tonnes)	(%)
Seamless pipe	2,625	2,767	(5)	621	651	(5)
Welded pipe	1,176	1,244	(5)	249	290	(14)
Total	3,800	4,010	(5)	870	941	(8)
Including OCTG	1,738	1,958	(11)	375	416	(10)

Year ended 31 December 2019 compared to year ended 31 December 2018

The Group's total pipe shipments in the year ended 31 December 2019 decreased by 5 per cent. as compared to the year ended 31 December 2018, due to a decrease in the aggregate shipments of seamless and welded pipe (both of which decreased by 5 per cent. year-on-year) reflecting a weaker performance of the Americas segment.

The impact of lower total shipments in the Americas segment was mostly offset by the strong performance of the Russia segment, where total pipe shipments increased by 5 per cent. year-on-year, driven by a 4 per cent. increase in shipments of seamless OCTG pipe and a 56 per cent. increase in LDP shipments.

The Group's total OCTG shipments in the year ended 31 December 2019 decreased by 11 per cent. as compared to the year ended 31 December 2018. However, OCTG shipments in the Russia segment increased by 3 per cent. year-on-year (by 4 per cent. year-on-year net of welded OCTG shipments from TMK GIPI, which was deconsolidated in the fourth quarter of 2018), reflecting an increasing complexity of hydrocarbon production projects in Russia and a higher share of horizontal drilling.

Total shipments of premium-threaded connections declined by 10 per cent. year-on-year, to 370 thousand tonnes, while the Russia segment increased shipments of premium-threaded connections by 10 per cent. year-on-year.

Fourth quarter of 2019 compared to the third quarter of 2019

In the fourth quarter of 2019 the Group's total pipe shipments decreased by 8 per cent. as compared to the third quarter of 2019, mainly due to a decrease in shipments in the Americas segment and lower welded pipe shipments in the Russia segment.

Seamless pipe shipments decreased by 5 per cent. quarter-on-quarter, largely due to lower OCTG and line pipe shipments in the Americas segment due to continued slowdown of activity in the North American market.

Welded pipe shipments decreased by 14 per cent. quarter-on-quarter, mainly reflecting a decline in LDP shipments in the Russia segment, largely due to a change in the production mix, as well as lower OCTG and line pipe shipments in the Americas segment.

The Group's OCTG shipments decreased by 10 per cent. quarter-on-quarter, mainly due to lower shipments volumes in the Americas segment.

Recent Developments

On 22 March 2019, the Group entered into a stock purchase agreement with Tenaris for the sale of 100 per cent. interest in TMK IPSCO which, as at 30 September 2019, represented the Americas segment, one of the three Group's reporting segments (see "*Operating and Financial Review*—*Segments*") and comprised IPSCO Tubulars and its subsidiaries. On 17 December 2019, the U.S. Department of Justice approved the sale which was completed on 2 January 2020 and resulted in the disposal of the America's segment.

MANAGEMENT AND CORPORATE GOVERNANCE

TMK's management bodies comprise the Board of Directors, the Management Board (collective executive body) and the General Director (sole executive body).

General Meetings of Shareholders

The General Shareholders' Meeting is TMK's supreme governing body. The General Shareholders' Meeting must be convened at least once a year. The scope of authority of a general shareholders' meeting is limited to the issues specified by the JSC Law and TMK's charter. Among the issues that the shareholders have the power to decide at a general shareholders' meeting are:

- amendments to TMK's charter;
- TMK's reorganisation or liquidation, the appointment of a liquidation commission and the approval of interim and final liquidation balance sheets;
- determination of the number of members of the board of directors and the election and dismissal of members of the board of directors;
- determination of the number, nominal value and class/type of authorised shares and the rights granted by such shares;
- changes in TMK's share capital (other than those specifically delegated to the competence of the board of directors);
- appointment and dismissal of members of the Internal Audit Commission;
- approval of TMK's external auditor;
- distribution of profits;
- determination of the procedure for holding the general meetings of shareholders;
- split and consolidation of TMK's shares;
- approval of certain interested party transactions and major transactions;
- repurchase by TMK of issued shares in circumstances stipulated by the JSC Law and TMK's charter;
- approval of TMK's participation in financial and industrial groups, associations and other unions of commercial organisations;
- approval of certain internal documents and corporate records; and
- other issues, as provided for by the JSC Law and TMK's charter.

Voting at a shareholders' meeting is generally based on the principle of one vote per ordinary share, except for the election of the board of directors, which is effected through cumulative voting. Decisions are generally passed by a simple majority vote of the voting shareholders present at a shareholders' meeting. However, Russian law and TMK's charter require a three-quarters majority vote of the voting shareholders present at a general shareholders' meeting to approve the following:

- amendments to TMK's charter;
- TMK's reorganisation (except for transformation into a non-for-profit partnership which should be approved unanimously) or liquidation, the appointment of a liquidation commission and the approval of interim and final liquidation balance sheets;
- determination of the number, nominal value and class/type of authorised shares and the rights granted by such shares;

- any issuance of shares or securities convertible into shares by closed subscription;
- issuance by open subscription of ordinary shares or securities convertible into ordinary shares, in each case, constituting more than 25 per cent. of the number of issued and outstanding ordinary shares;
- reduction of the nominal value of TMK's shares;
- repurchase by TMK's of its outstanding shares pursuant to a shareholders' decision, as provided for by TMK's charter;
- major transactions involving assets in excess of 50 per cent. of the book value of TMK's assets; and
- an application for the delisting of shares and/or securities convertible into shares.

The shareholders' meeting also approves compensation for the members of the board of directors. A shareholder or a group of shareholders owning in aggregate at least 2 per cent. of the issued voting shares may introduce proposals for the agenda of the annual shareholders' meeting and may nominate candidates for the corporate bodies of TMK. Any agenda proposals or nominations must be provided to the company no later than 60 calendar days after the end of the preceding financial year. Extraordinary shareholders' meetings may be convened by the board of directors at its own initiative, or at the request of the Internal Audit Commission, an external auditor or a shareholder or a group of shareholders' meeting may be held in a form of a meeting or by absentee ballot. The form of a meeting contemplates the adoption of resolutions by the general shareholders' meeting through attendance of the shareholders or their authorised representatives for the purpose of discussing and voting on issues on the agenda, provided that if a ballot is mailed to shareholders for participation at a meeting convened as a physical meeting. A general shareholders' meeting by absentee ballot envisages collecting shareholders' opinions on issues on the agenda provided that if a ballot is mailed to shareholders for participation at a meeting convened as a physical meeting. A general shareholders' meeting by absentee ballot envisages collecting shareholders' opinions on issues on the agenda provided that if a poll (including by filling in voting ballots on the website in the Internet). The following issues cannot be decided by a shareholders' meeting by absentee ballot:

- election of members of the Board of Directors;
- appointment of members of the Internal Audit Commission;
- approval of an external auditor; and

Board of Directors

The Board of Directors is responsible for TMK's overall governance and presently consists of eleven members.

TMK's directors, and their respective years of birth, current positions and duties outside TMK as at the date hereof, are as follows:

Name	Year of birth	Position	Independent	Current duties outside TMK
Dmitry A. Pumpyanskiy	1964	Chairman of the Board of Directors	No	Member of the boards of directors of several companies, including PAO SKB-BANK and AO Sinara Transport Machines; President and member of the Board of Directors of AO Sinara Group; President of Sverdlovsk Regional Union of Industrialists and Entrepreneurs; member of the Council of the Skolkovo Innovation Centre; member of the Board of Trustees of Endowment Fund "ISTOKI"; President and member of the Supervisory Board of non-for-profit partnership "Russian Steel"; Chairman of the Supervisory Board of Ural Federal University, member of the Board, member of the Management Board and Chairman of the Committee for Technical Regulation, standardisation and compliance of the Russian Union of Industrialists and Entrepreneurs; Chairman of the Supervisory Board of the Federation of Ski-Jumping and Nordic Combined of Russia, member of the Supervisory Board of "The Football Union of Russia", member of the Supervisory Board of the State Academic Bolshoi Theatre Of Russia; Deputy Chairman of

				the Supervisory Board and Member of the Supervisory Board of the Russian-American Council of Business Partnership, member of the Board of the Charity fund of Saint Ekaterina, member of the Supervisory Board of the Ekaterinburg Nongovernmental Scientific Demidov Fund; member of the Board of Council of World Steel Association; member of the Supervisory Board of National Industrial Russian Steel Association; member of the non-for-profit partnership "National Council on Corporate governance"; member of the non-for-profit charity organisation "The Russian Olympians Foundation".
Alexander N. Shokhin	1951	Director	Yes	President of the Russian Union of Industrialists and Entrepreneurs; President of the State University — Higher School of Economics; member of the boards of directors of several companies, including, Eurasia Drilling Company Limited; member of the Board of Directors of AO Russian Small and Medium Business Corporation and member of the Management Board of the Chamber of Commerce and Industry of the Russian Federation.
Andrey Yu. Kaplunov	1960	Director	No	Member of the Board of Directors of Interregional Non State Big Pension Fund; member of the Board of Directors of AO Sinara Group; member of the Board of Directors of SKB- BANK and Chairman of the Board of Trustees of Sverdlovsk Regional Sports Public Fund "Mini-football Club "Sinara".
Natalia A. Chervonenko	1966	Director	Yes	No current duties outside TMK
Mikhail Ya. Khodorovskiy	1952	Director	No	Member of the Board of Directors and Chairman of the Counsel for Strategic Development of SKB-BANK, member of the Board of Directors of JSC "Sinara- TransportMachines"(STM) and JSC "FC "Ural", member of the Board of Directors and General Director of SINARA GROUP; Head of the Department of Banking and Investment Management at the Ural Federal University.
Yaroslav I. Kuzminov	1957	Director	Yes	Rector of National Research University "Higher School of Economics"; member of the Council of "Centre for Strategic Research" Foundation; member of All-Russian Non- governmental Organisation "Russian Rectors' Union"; member of the Executive Board of All-Russian industrial Association of employers "Russian Engineering Union"; member of the Expert Council for Strategic Documents of the Russian Union of Industrialists and Entrepreneurs; Deputy Head of Association of Global Universities; member of the Board of Association of Global Universities; member of Association of Leading Universities; member of non-profit partnership "Russian International Affairs Council"; Chairman of the Council of Association of Leading Universities in the Sphere of Economics and Management and member of governing bodies of other non- for-profit organisations.
Alexander D. Pumpyanskiy	1987	Director	No	Chairman of the Board of Directors of SKB-BANK; Chairman of the Board of Directors of Sinara Group; member of the Board of Directors of Segilo AG, TMK Steel and Domus Flavia Investments AG; member of the Council of Association of Banks of Russia; Managing Director of Sinara Capital Management SA and Lera Capital SA.
Frank-Detlef Wende	1952	Director	Yes	Head of Chair of Logistics at MADI, Head of Faculty of Logistics of the Financial University.
Alexander G. Shiryaev	1952	Director	No	Member of the board of directors of AO Sinara Group and General Director of VIZAVI, LLC.

Sergey V. Kravchenko	1960	Director	Yes	President of Boeing Russia and the CIS and Vice President of Boeing International.
Anatoly B. Chubais	1955	Director	No	Holds various positions at RUSNANO GROUP: Chairman of the Management Board of management company "RUSNANO", LLC; member of the Board of Directors of RUSNANO; Chairman and member of the Board of Directors of RusNanoMedInvest LLC; Chairman of the Board of Trustees "RUSNANO School league", Fund for Infrastructure and Educational Programs; member of the Boards of Directors of several companies, including Tri Alpha Energy, Inc., NovaMedica LLC; member of the Boards of Trustees of various public and charity funds, including Hospice Charity fund VERA, Yegor Gaidar Foundation, Fund "Presidential centre of B. N. Yeltsin"; founder of "Steps" Charity Fund; member of the supervisory boards of several universities including Far Eastern Federal University, Southern Federal University, Management School of Saint Petersburg University; member of the Supervisory Board of the Advanced Research Foundation; member of the Supervisory Board of the Moscow theatre "Modern School Play"; manager of interfaculty basic chair of technological business at Moscow Institute of Physics and Technology (State University); member of the Supervisory Board of the Autonomous non-for-profit organisation "Electronic Education for Nanoindustry (eNano)"; Deputy Chairman of the Board of directors of the Boards of directors of non-for-profit organisation "the Skolkovo Innovation Centre" and non-for-profit partnership "Innovation and R&D Directors Club"; Chairman of the board of directors of the trust company of non-for-profit partnership "Russian Nanoindustry Association"; member of the Russian President's Council for Modernisation of Economy and Innovative Development of Russia; Chairman of the Coordination Council on the Market of Innovations and Investments at MOEX; member of the Board of directors and Chairman of the Committee for Innovation Policy in the Russian Union of Industrialists and Entrepreneurs (RSPP) and Co-Chairman of Round Table of Industrialists of Russia and the EU.

The term of TMK's Board of Directors expires on the date of TMK's next annual meeting of shareholders, which is expected to occur in June 2020.

Biographies of TMK's directors are set out below.

Dmitry A. Pumpyanskiy joined TMK in 2002 and has served as a member of TMK's Board of Directors since 2002 and as Chairman of the Board of Directors since 2005. Mr. Pumpyanskiy graduated from the Ural S.M. Kirov Polytechnic Institute in 1986. Mr. Pumpyanskiy received a PhD degree in technical sciences in 2001 and a Doctor's degree in Economics in 2007. From 1994 to 1998, he held various administrative positions in metallurgical enterprises, including OAO Verkh Ysetski Metallurgical Works, AOOT Inter Industry Concern Uralmetprom and OAO Mechel. Between 1998 and 1999, he was a General Director of ZAO Trade House of Sinarsky, From 1999 to 2002, Mr. Pumpyanskiy held positions of First Deputy General Director and Chairman of the Board of Directors of Sinarsky. From 2001 to 2002, he acted as a General Director of AO Sinara Group. Between 2002 and 2005, Mr. Pumpyanskiy acted as a General Director of TMK. Between 2012 and 2013, Mr. Pumpyanskiy was a member of the Board of Directors of AO Russian Agricultural Bank and AO Rosagroleasing. Since 2001, Mr. Pumpyanskiy has been a member of the Board of Directors of SKB-BANK. Since 2005, Mr. Pumpyanskiy has held the position of President of AO Sinara Group and since 2007, he has been a member of the Board of Directors of AO Sinara Group. For the last few years, he has been a member of the boards of directors of various organisations, including Chamber of Commerce and Industry of the Russian Federation, Sverdlovsk Regional Union of Industrialists and Entrepreneurs, the Skolkovo Innovation Centre, Endowment fund "ISTOKI" and non-for-profit commercial partnership "Russian Steel" and other non-for-profit organisations such as the Federation of Ski-Jumping and Nordic Combined of Russia, the non-for-profit charity organisation "The Russian Olympians Foundation" and others.

Alexander N. Shokhin has served as a member of TMK's Board of Directors since 27 June 2008. Mr. Shokhin graduated with a degree in Economics from Moscow State University named after M.V. Lomonosov in 1974. Between 1991 and 1994, and again in 1998, he held the post of Deputy Prime Minister of the Russian Federation. From 1991 to 1994, he held the positions of Minister of Labour, Minister of Economics, Chairman of the Russian Agency for International Cooperation and Development and Russian governor at the International Monetary Fund and the World Bank. From 2002 to 2005, Mr. Shokhin was Chairman of the Supervisory Board of Renaissance Capital. From 2005 to 2009, he was a member of the Public Chamber of the Russian Federation and Chairman of its Commission for Competitiveness, Economic Development and Entrepreneurship Issues and President of the Russian Union of Industrialists and Entrepreneurs. Currently, Mr. Shokhin is a member of several think tanks established by the Russian President and the Russian Government. Mr. Shokhin also holds the positions of President of the Russian Union of Industrialists and Entrepreneurs, President of the State University — Higher School of Economics, is a member of the boards of directors of several companies, including Eurasia Drilling Company Limited, AO United Transport and Logistics Company; member of the board of directors of AO Russian Small and Medium Business Corporation.

Natalia A. Chervonenko joined TMK in 2019 as a member of Board of Directors. Ms. Chervonenko graduated with a degree in Economics from The Far Eastern Institute of Consumer Services. She is candidate of Sciences (Economics). Ms. Chervonenko worked for more than 20 years in the banking industry, occupied positions of the Deputy Chairman of the Management Board and First Vice-President of Bank GPB (JSC), member of the Board of Directors of GPB-Factoring LLC, Deputy Chairman of the Board of Directors of "Credit Ural Bank" Joint Stock Company, member of the Board of Directors of "Siemens EP" LLC, as well as held other positions in the governing bodies of other commercial entities.

Mikhail Ya. Khodorovskiy joined TMK in 2019 as a member of Board of Directors. Mr. Khodorovskiy graduated in 1975 from Chelyabinsk Polytechnic Institute and received PhD degree in Economics. His previous experience includes acting as a member of the boards of directors of JSC "Sinara-Development", PJSC "Kamenskoe", JSC "Arkhyz-Sinara" and held other positions in the governing bodies of various commercial entities.

Yaroslav I. Kuzminov joined TMK in 2018 as a member of Board of Directors. In 1979, Mr. Kuzminov graduated from Lomonosov Moscow State University and received PhD degree in Economics. From 1979 until 1989, Yaroslav Kuzminov lectured at the Department of Economic Theory and History of Economic Thought at Moscow State University. Further, from 1989 until 1993, he worked as a researcher at the Institute of Economics, Russian Academy of Sciences. In 1992, Mr. Kuzminov, in cooperation with Evgeny Yasin, proposed the establishment of a new type of institution of higher education — the Higher School of Economics — to the Russian Government. He is a rector of National Research University - Higher School of Economics, a professor and a Head of the Department of Institutional Economics and Academic Supervisor of the HSE Centre for Institutional Studies (CInSt). In addition, Yaroslav Kuzminov holds positions in governing bodies of various associations and other non-for-profit organisations, such as "Association of Moscow Universities", "Centre for Strategic Research" Fund and other organisations.

Alexander D. Pumpyanskiy joined TMK in 2018 as a member of Board of Directors. Mr. Pumpyanskiy graduated from the University of Geneva in 2008, in 2015 gained a master's degree in Economics. Since 2012, he has been a CFA Charterholder. Mr. Pumpyanskiy worked as an investment analyst at Sinara Capital Management.

Frank-Detlef Wende joined TMK in 2019 as a member of Board of Directors. Mr. Wende graduated in 1975 from Moscow Automobile and Road Construction State Technical Institute (MADI) and received PhD degree in Engineering. Prior to that, Mr. Wende held positions of Advisor to the President of JSC "AVTOVAZ", Chairman of the Board of Directors of "Shanghai QiFan SKET & PEINER Machinery LTD.", and was a member of various governing bodies of other companies. Currently he holds the position of Head of the Department of Logistics at MADI and Head of Faculty of Logistics at the Financial University.

Andrey Yu. Kaplunov joined TMK in 2000 and has served as a member of TMK's Board of Directors since 2009. Mr. Kaplunov received a degree in Economics from the Moscow Finance Institute in 1982 (now known as the Financial University under the Russian Government). Mr. Kaplunov received a PhD degree in Economics in 1985. Between 1998 and 1999, he served as Deputy Head of the currency and financial department of the Russian foreign economic union, Zarubezhneft. From 1999 to 2000, Mr. Kaplunov was a senior Vice President and Director of the Human Resources and Corporate Development Department at ZAO KB Guta Bank. In addition, Mr. Kaplunov served as a Director of Human Resources and Organisational Development Department of AKB Rosbank in 2000-2001. He was then appointed as a Deputy General Director of TMK responsible for organisational development in 2001 and remained in this role until 2005. Mr. Kaplunov has been a member of the Board of Directors of PAO SKB-BANK since 2003, he has served as Chairman of the Board of Directors of AO Sinara Group and SKB-BANK since 2006. He has also served as a member of the board of directors of the Interregional Non State Grand Pension Fund since 2012 and Chairman of the Board of Trustees of Sverdlovsk Regional Sports Public Fund "Minifootball Club "Sinara" since 2012. Mr. Kaplunov has also held positions of First Deputy General Director of TMK

and Chairman of the Board of Directors of TMK Trade House since 2009 to 2019. Starting from 2019, he has been appointed as Vice-President of TMK.

Alexander G. Shiryaev joined TMK in 2003 and has served as a member of TMK's Board of Directors since 2007 and as General Director of TMK from 2008 up to 2019. Mr. Shiryaev received a degree in Economics from Sverdlov Institute of National Economics (now known as the Ural State University of Economics) in 1991. From 1998 to 2000, Mr. Shiryaev served as General Director and Deputy General Director of OAO Uralshina. In 2001, Mr. Shiryaev served as a Deputy General Director responsible for Strategic Development at ZAO Trade House of Sinarsky. Between 2001 and 2003, he was a Deputy General Director responsible for economics and finance at TMK Trade House from 2004 to 2005 and served as General Director of AO Sinara Group from 2006 to 2008. Mr. Shiryaev has been a member of the Board of Directors of Tagmet since 2006 and a member of the boards of directors of Sinarsky and Volzhsky since 2007. He has served as General Director and Chairman of TMK's Management Board since 2008 until 2019. Mr. Shiryaev has also been a member of the boards of directors of Seversky and TMK Trade House since 2009 and served as Chairman of the Board of Directors of Orsky Machine Building Plant from 2011 to 2015. Since 2011, Mr. Shiryaev has also been a member of the Board of Directors of TAG Directors of Orsky Machine Building Plant from 2011 to 2015. Since 2011, Mr. Shiryaev has also been a member of the Board of Directors of TAG Directors of TAG Directors of AO Sinara Group. In 2016, Mr. Shiryaev was appointed as a General Director of VIZAVI, LLC. Starting from 2019, he has been appointed as Vice-President of TMK.

Sergey V. Kravchenko joined TMK in 2016 as a member of TMK's Board of Directors. Mr. Kravchenko graduated from Moscow Machinebuilding University in 1982. In 1991, he was awarded the title of Professor. Since 2002, Mr. Kravchenko has served as President of Boeing Russia and the CIS and also holds the position of Vice President of Boeing International. Prior to joining Boeing, Mr. Kravchenko was a lead member of the Russian Academy of Sciences.

Anatoly B. Chubais joined TMK in 2015 as a member of TMK's Board of Directors. Mr. Chubais graduated from Leningrad Institute of Engineering and Economics named after P. Togliatti (now known as Saint Petersburg State University of Economics) in 1977. In 1983, Mr. Chubais received a PhD degree in Economics. He was appointed as the Chairman of the Management Board of management company RUSNANO, LLC in December 2013. From 2008, Mr. Chubais headed the state entity Russian Corporation of Nanotechnologies, later serving as Chairman of the Management Board of RUSNANO after it was founded in 2011 through the reorganisation of the state corporation. Before joining RUSNANO, Anatoly Chubais served as Chairman for RAO Unified Energy System of Russia from 1998 to 2008. Prior to taking that position, he had held a number of public posts, including First Deputy Prime Minister and Minister of Finance (from 1997 to 1998), Head of the Presidential Administration (from 1996 to 1997), First Deputy Prime Minister for Economic and Financial Policy (from 1992 to 1996), and Chairman of the State Property Management Committee (from 1991 to 1994), in which capacity he designed and supervised the Russian privatisation programme. From 1995 to 1996, he also served as Russia's Governor for the World Bank and IMF. Currently Mr. Chubais holds prominent positions in various charity and public funds, non-for-profit organisations and governmental councils and commissions. At present, Mr. Chubais serves as a member of the boards of directors of several companies comprising the RUSNANO GROUP.

None of the above directors has any family relationship with any other director or with any member of senior management, except for Dmitry A. Pumpyanskiy and Alexander D. Pumpyanskiy. Furthermore, there are no potential conflicts of interest between any duties that each member of the Board of Directors owes to TMK and any private interests and/or other duties of such directors.

The business address for each of the members of TMK's Board of Directors is 40 Pokrovka Street, Building 2A, 105062, Moscow, Russia.

General Director

The general director is the TMK's sole executive body and the Chairman of the Management Board. The General Director reports to the Board of Directors and the General Meeting of Shareholders.

The current General Director, Mr. Igor V. Korytko, has served in this position since 22 June 2019.

Management Board

TMK's Management Board is generally responsible for certain day-to-day operational matters. Members of the Management Board, and their respective years of birth and positions as at the date hereof, are as follows:

Name	Year of birth	Position
Igor V. Korytko	1974	Chairman of the Management Board
Sergey G. Chikalov	1963	Member of the Management Board
Vladimir B. Oborsky	1961	Member of the Management Board
Tigran I. Petrosyan	1968	Member of the Management Board
Vyacheslav V. Popkov	1965	Member of the Management Board
Andrey A. Zimin	1980	Member of the Management Board
Denis N. Nesterov	1975	Member of the Management Board

In December 2019, Denis N. Nesterov, former Deputy CEO for Organisational Development, Director of the HR and Social Policy Directorate of TMK, left TMK. On 11 February 2020, a meeting of the Board of Directors is scheduled to take place on which the Management Board is expected to be re-elected.

Biographies of the members of the Management Board who are not directors of TMK are set out below.

Igor V. Korytko joined TMK in 2018. Mr. Korytko graduated in 1997 from Chelyabinsk State Technical University, specialising in machinery and technology of pressure metal treatment, and again in 1998, specialising in Economics and Business administration. Previously Mr. Korytko occupied positions of General Director of Kurgankhimmash LLC, Director of Petrostal Metallurgical Plant and Kirov-Energomash Plant Joint Stock Company. From 2018 to 2019, he held a position of Deputy General Director for Performance Management of TMK.

Sergey G. Chikalov joined TMK in 2013. Mr. Chikalov graduated in 1985 from the Moscow State Institute of Steel And Alloys. Before joining TMK, Mr. Chikalov was Director for Technical Policy and Investments of PJSC "Chelpipe". After joining TMK, Mr. Chikalov acted as a Deputy CEO for Scientific & Technical Development and Technical Sales of TMK and a member of the Board of Directors of RosNITI. Prior to that, he acted as a Deputy CEO for Technical Sales and Innovation of TMK from 2014 to 2018. Now Mr. Chikalov holds the position of Deputy CEO for Scientific & Technical Development and Technical Sales of TMK.

Vladimir B. Oborsky joined TMK in 2003. Mr. Oborsky graduated from Kiev High Military School in 1982 and the Military Academy named after M.V. Frunze in 1994. From 2000 to 2001, Mr. Oborsky was a Head of the VIP Clients and Tenders Division and a Head of the Division for Interaction with the Gas Industry at AO Trade House of Volzhsky. In 2001, he joined TMK Trade House. From 2001 to 2003, he headed the department for interaction with Transneft and enterprises of the oil and gas industry and between 2003 and 2005, he headed the department for interaction with Gazprom, independent oil and gas producers and Transneft. He was TMK's Deputy General Director responsible for procurement from 2008 to March 2015. Since 2005, he has been a member of TMK's Management Board. He also currently acts as TMK's First Deputy General Director – Executive Director and General Director of TMK Trade House. Since 2011, Mr. Oborsky has also been a member of the board of directors of TMK-CPW.

Tigran I. Petrosyan joined TMK in 2001. Mr. Petrosyan graduated from Yerevan State University in 1993. From 1993 to 1994, he held a position in the Ministry of the Economy of the Republic of Armenia. From 1994 to 1995, he served as an economist at AKB Noy and Volzhsky. Between 1995 and 1997, he acted as a Deputy General Director of LLC Volzhsky Audit. From 2000 to 2001, Mr. Petrosyan headed the Planning and Economics Department at OAO PO Volzhsky. From 2001 to 2002, Mr. Petrosyan was Head of the planning Directorate of TMK. Since April 2006, Mr. Petrosyan has been TMK's Deputy General Director, Chief Financial Officer and a member of TMK's Management Board. Since 2007 Mr. Petrosyan has also been a member of the boards of directors of Sinarsky, Seversky, Volzhsky and TAGMET. In 2013, he became a member of the Board of Directors of Orsky Machine Building Plant.

Vyacheslav V. Popkov joined TMK in 2017. Mr. Popkov graduated from Ural State Technical University in 1992. He currently acts as First Deputy General Director of TMK - Chief Engineer (Production and Scientific & Technical Development Block). Previously he worked at Sinarsky for almost 30 years. From 2003, he held leadership positions at Sinarsky, including as Sales Director and Director on Economic Affairs. From 2013, he acted as the Managing Director of Sinarsky till assignment to position of Deputy General Director on Production of TMK in March of 2017.

Andrey A. Zimin joined TMK in 2004. Mr. Zimin graduated from the Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs Russian Federation in 2003. During the last six years, Mr. Zimin acted as Head of the Corporate Projects Department, Head of the Corporate Ownership Department of TMK and held various positions in other entities in the Group. In 2016, he was appointed as a member of the Management Board of TMK. Currently, Mr. Zimin is a member of the boards of directors of several plants of the Group, namely Sinarsky, Seversky, Volzhsky, Tagmet, Orsky Machine Building Plant, TMK-Artrom and TMK-Resita. Mr. Zimin also holds senior positions in several Group companies, including TMK Trade House, Course Management Corp.,

Powerstream Holdings Litd., TMK Holdings S.a.r.l., Capitoline Holdings Ltd, TMK Middle East and Rockarrow Investments Limited.

Denis N. Nesterov joined TMK in 2019. Mr. Nesterov graduated in 2000 from the Ural Academy of Public administration. In 2014, he acted as a Deputy Director for Commercial Affairs of "Trade House "TMK" and as a Director for HR Management of Sinarsky. Mr. Nesterov was the Deputy CEO for Organisational Development, Director, HR and Social Policy Directorate of TMK until December 2019.

None of the above members of the Management Board has any family relationship with any director or with any other member of the Management Board. Furthermore, there are no potential conflicts of interest between any duties that each member of the Management Board owes to TMK and any private interests and/or other duties of such members of the Management Board.

The business address for each of the members of TMK's Management Board is 40 Pokrovka Street, building 2A, 105062, Moscow, Russia.

Remuneration of Directors and Management

Key management personnel include members of the Board of Directors, the Management Board and certain executives of the Group. Compensation to key management personnel consists of wages, salaries, social security contributions, provision for performance based bonuses depending on operating results for a given year and other short-term employee benefits. Total compensation to key management personnel included as part of the general and administrative expenses in the income statement of the Group (See "*Related Party Transactions*"). For the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016, the compensation to key management personnel in the form of wages, salaries, social security contributions and other short-term benefits amounted to U.S.\$32.6 million, U.S.\$11.3 million, U.S.\$14.9 million, U.S.\$13.9 million and U.S.\$11.8 million, respectively. There were no loans extended to key management personnel as at 30 September 2019. The balance of the loans issued to key management as at 31 December 2018, 2017 and 2016 was insignificant.

Members of the Board of Directors (including the Chairman of the Board of Directors), who are executive directors of TMK, serve in their capacities pursuant to written labour agreements and contracts (*soglasheniya*) with TMK. Such agreements are valid until termination of the powers of such member of the Board of Directors. According to TMK's internal regulations, executive directors of TMK are not entitled to receive compensation for their services as members of the Board of Directors. Decisions on the remuneration of members of the Board of Directors are made by TMK's shareholders based on the recommendations of the Board of Directors. The compensation which is to be paid to each member of the Board of Directors, who is not an executive director of TMK, is paid on the annual basis. In addition, members of the Board of Directors are entitled to be reimbursed for expenses related to performance of their duties as members of the Board of Directors.

Members of TMK's Management Board serve in their capacities pursuant to written labour agreements and contracts (*soglasheniya*) specifying their particular duties and responsibilities. Such contracts, containing identical terms, provide for the payment of fixed monthly remuneration and variable remuneration (including an annual bonus and other bonuses in certain cases) to each member of TMK's Management Board. Variable remuneration is paid only if a member of the Management Board achieves certain objectives as provided under the contract with him/her and specified in the Group's business plan and budget. The variable remuneration is paid upon consideration by the Board of Directors of the Group's operational and financial results.

Board Practices

Board of Directors

Members of TMK's Board of Directors are elected at TMK's annual general shareholders' meeting by cumulative voting. Each director is elected for a term that expires at the next annual general shareholders, meeting and may be reselected for an unlimited number of periods. TMK's Board of Directors currently consists of eleven members, including five independent directors. According to TMK's charter the Board of Directors has the authority to make the principal management decisions for TMK, except in respect of those matters reserved for the general meeting of shareholders.

The standing committees of TMK's Board of Directors are:

- the Audit Committee;
- the Nomination and Remuneration Committee; and

• the Strategy Committee.

Audit Committee

Pursuant to TMK's internal regulations, it's Audit Committee consists of at least three members of TMK's Board of Directors, each of whom is to be an independent director (or, if this is not reasonably possible, either an independent or non-executive director, an "**independent**" director generally being a director who satisfies the criteria for independent directors provided for in the listing rules of the Moscow Exchange, and a "**non-executive director**" being a member of the Board of Directors who does not hold an organisational, management or administrative position with TMK and is not an employee of TMK). As at the date of these Listing Particulars, the Audit Committee consists of Natalyia A. Chervonenko, Frank-Detlef Wende, Alexander D. Pumpyanskiy and is headed by Natalia A. Chervonenko, each of whom will serve until TMK's next annual meeting of shareholders.

The Audit Committee is principally responsible for:

- review of TMK's financial statements;
- review of reports of the Internal Audit Commission and the internal control department;
- review of and making recommendations to the Board of Directors in relation to the standards and procedures for internal and risk control of TMK;
- evaluating the efficiency of internal control procedures and preparing proposals for their improvement;
- assessment of the proposed major and interested party transactions to be entered into by TMK; and
- analysis, in conjunction with the external auditors, of major issues with respect to the audit of financial and accounting reporting.

Nomination and Remuneration Committee

Pursuant to TMK's internal regulations, it's Nomination and Remuneration Committee consists of at least three members from TMK's Board of Directors, each of whom is to be an independent director (or, if this is not reasonably possible, either an independent or non-executive director). As at the date of these Listing Particulars, the Nomination and Remuneration Committee consists Sergey V. Kravchenko, Mikhail Ya. Khodorovskiy, Yaroslav I. Kuzminov and is headed by Sergey V. Kravchenko, each of whom serves until TMK's next annual meeting of shareholders.

The Nomination and Remuneration Committee encourages the recruitment of qualified specialists to TMK's management and determines appropriate salary levels for TMK's management.

The Nomination and Remuneration Committee is principally responsible for:

- establishing criteria for evaluation of candidates for the Board of Directors and the Management Board, as well as for the position of the General Director;
- defining principles and criteria for the amount of remuneration and compensation for the General Director and the members of the Board of Directors and the Management Board; and
- evaluating the performance of the General Director and the Management Board.

Strategy Committee

Pursuant to TMK's internal regulations, the Strategy Committee consists of at least three members who are members of TMK's Board of Directors and, if deemed necessary, other officers and employees of TMK. As at the date of these Listing Particulars, the Strategy Committee consists of Alexander N. Shokhin, Anatoly B. Chubais, Alexander D. Pumpyanskiy, Alexander G. Shiryaev and Sergey V. Kravchenko and is headed by Alexander Shokhin, each of whom serves until TMK's next annual general shareholders' meeting.

The Strategy Committee is principally responsible for:

• proposing TMK's business priorities, including budgets, long-term plans, strategies and development programmes;

- proposing upgrades of TMK's budgeting system, investment planning, monitoring and analysis processes;
- reviewing and making recommendations in relation to TMK's investment policy;
- making proposals on dividend policy; and
- making proposals on the mergers and acquisitions policy and the sale of fixed assets.

Management of Subsidiaries

To achieve integrated control over the activities of TMK's operating facilities, in December 2003 TMK assumed the duty of a centralised management company. TMK was appointed by the shareholders of each of Seversky, Tagmet, Sinarsky and Volzhsky as the management company for indefinite duration.

These management contracts transfer all executive powers that are not under the direct control of the Board of Directors of these plants to TMK. TMK exercise the managing powers of a sole executive body of the companies that it manages, including entering into transactions on behalf of each company (within the limits provided for by applicable law and restrictive charters), operating their bank accounts and representing them in their relations with various governmental and judicial agencies. Management is exercised by TMK's officer acting under a power of attorney.

TMK's appointment as a management company serves to centralise all management functions in a single body and facilitates the adoption of standard operating and financial management practices across all of the Group's operations. The delegation of management functions to TMK also serves to improve the efficiency of management activities.

Corporate Governance

TMK's corporate governance procedures have been prepared in accordance with the general requirements of the JSC Law, the listing rules of the Russian stock exchanges, other regulatory acts governing operations of joint stock companies in the Russian Federation, TMK's charter and internal regulations. TMK has adopted standards for relations with TMK's shareholders, the composition and proceedings of TMK's Board of Directors, the role of TMK's executive officers, disclosure of information and the auditing of TMK's financial performance that comply with the Recommended Corporate Governance Code adopted by the CBR on 10 April 2014. For the purposes of the implementation of the provisions of the Recommended Corporate Governance Code, TMK have adopted the following documents relating to the corporate governance matters:

- Regulations on the General Meeting of Shareholders;
- Regulations on the Board of Directors;
- Regulations on the Management Board;
- Regulations on the Internal Audit Commission;
- Regulations on the Audit Committee of the Board of Directors;
- Regulations on the Strategy Committee of the Board of Directors;
- Regulations on the Nomination and Remuneration Committee of the Board of Directors;
- Regulations on the Information Policy;
- Regulations on Insider Information;
- Dividend Policy Regulations:
- Corporate Governance Code;
- Internal Audit Policy;
- Regulations on the Corporate Secretary; and

• Regulations on Internal Control.

TMK has approved an Ethics Code that establishes standards of professional activity and ethics for all TMK's employees, including members of the Board of Directors, Management Board and Internal Audit Commission.

In 2018, TMK was recognised as a top-20 company in Russia in terms of disclosure of corporate governance information, according to the annual survey "National Corporate Governance Index".

Certain Proceedings against TMK's Management

At the date of these Listing Particulars, no member of TMK's Board of Directors or Management Board for at least the previous five years:

- has any convictions in relation to fraudulent offences;
- has held an executive position in the form of a senior manager or a member of the administrative, management or supervisory bodies, of any company at the time of or preceding any bankruptcy, receivership or liquidation; or
- has been subject to any official public incrimination and/or sanction by any statutory or regulatory authority (including any designated professional body) nor has ever been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of a company or from acting in the management or conduct of the affairs of any company.

Other Interests

No actual or potential conflicts of interest exist between the duties that any member of the Board of Directors or the Management Board owes to the Group and such member's private interests or other duties.

PRINCIPAL SHAREHOLDERS

As at the date of these Listing Particulars, TMK's charter capital consists of 1,033,135,366 ordinary shares, all of which are fully paid, issued and outstanding and have a nominal value of RUB 10 each. TMK's ordinary shares are admitted to trading and are included in the A1 quotation list on Moscow Exchange (under the symbol "TRMK"). In addition, as at 30 September 2019, 34.8855 per cent. of TMK's shares were free float (including shares owned by RUSNANO), with approximately 13 per cent. of them traded as depositary receipts on the London Stock Exchange.

The following table sets forth the shareholders of record of TMK as of 30 September 2019:

Shareholder	Number of shares	Percentage of TMK's share capital
TMK Steel	672,141,399	65.0584%
TMK's subsidiaries	579,813	0.0561%
Free float	360,414,154	34.8855%
Total	1,033,135,366	100.00%

⁽¹⁾ The ultimate beneficial owner of TMK Steel is Dmitry Pumpyanskiy holding 100 per cent. of the shares of TMK Steel.

TMK is not aware of any arrangements in existence as of the date of these Listing Particulars, which could reasonably be expected to result in a change of control of TMK.

Dividend policy

As at the date of these Listing Particulars, the TMK's dividend policy is linked to net income and provides that at least 25 per cent. of the annual net income is distributed to the shareholders. However, due to the volatility of net income, TMK is considering amending the dividend policy by linking it to the market value of TMK and/or cash flows rather than net income in accordance with international best practices.

Share buyback programme

In 2018, TMK launched a buyback programme to purchase its ordinary shares and global depositary receipts (GDRs) representing such shares for an aggregate amount of up to U.S.\$ 30 million which was carried out throughout 2018 and 2019. The aggregate number of securities repurchased under the buyback programme represents less than 0.5 per cent. of the total number of shares in TMK.

REGULATORY MATTERS

General

Russia has enacted a limited number of specific regulations governing the operation of pipe manufacturing companies. The production, sale and distribution of pipes in the Russian Federation is regulated by general civil legislation and administrative and special legislation relating to quality standards, industrial safety, environmental, employment and other rules.

Federal, regional and local regulatory authorities governing the pipe industry

At the federal level, the MIT is the principal state body supervising the operation of the pipes sector. It is responsible for the development of governmental policy in the industry, including, among other, attraction of investments, foreign trade, taxation, support of research and employment, however, it lacks direct regulatory authority.

The federal ministries in Russia are not responsible for compliance control or management of state property and provision of services, which are directed by the federal services and the federal agencies, respectively. The federal services and agencies that are relevant to the Group's activities include:

- the Federal Service for Environmental, Industrial and Nuclear Supervision ("**Rostekhnadzor**"), which sets procedures for, and oversees compliance with, industrial safety and environmental protection;
- the Federal Service for Supervision of Natural Resources ("**Rosprirodnadzor**"), which exercises supervision over the observance of environmental legislation (including legislation relating to handling of hazardous wastes), geological exploration and exercises the land control;
- the Federal Agency for Technical Regulation and Metrology, which determines and oversees levels of compliance with applicable technical regulations; and
- FAS, which oversees, *inter alia*, economic concentration, including acquisitions of controlling stakes in companies and the activities of companies enjoying dominant market positions.

Aside from the above federal executive bodies, which are directly involved in the regulation of and supervision over the Russian pipe industry, a number of other governmental bodies and agencies have authority over general issues connected with the pipe industry such as defence, rail transport and tax enforcement.

Certification

Federal Law No. 184-FZ "On Technical Regulation" dated 27 December 2002, as amended (the "**Technical Regulation Law**"), governs the development, enactment, application, and enforcement of mandatory requirements, and development of voluntary standards relating to products, manufacturing, storage, transportation, sales and utilisation, as well as assessment of compliance with such requirements. Under the Technical Regulation Law, technical rules and regulations can be enacted only by treaties to which the Russian Federation is a party, decrees of the Russian President, resolutions of the Russian Government, and regulations adopted by Russian state authorities responsible for state regulation. Mandatory rules applicable to products and product-related operations and processes are also established by the current technical regulations of the Customs Union, which replace prior national regulations.

In the absence of technical regulations adopted under the Technical Regulation Law, the existing federal laws and regulations, including the previously adopted state standards (the so-called "GOSTs"), that prescribe specific requirements applicable to various products and technological processes, remain in force and are mandatory to the extent that they protect health, property, the environment or consumers.

In those cases where the Technical Regulation Law provides for mandatory confirmation of product conformity to the established technical regulations (standards), certain Group companies are obliged to obtain certificates of compliance evidencing that their products meet the requirements of such technical regulations. Certain Group companies are obliged to obtain the permits, which prove that their technical equipment used at hazardous production facilities meets the relevant industrial safety requirements.

Where certification is not mandatory, a company may elect for voluntary certification by applying for a compliance certificate from the relevant authorities. Following the issuance of that certificate, the applicant has the right to use the relevant compliance mark on its products.

Violation of the rules of mandatory certification, i.e. sale of the goods subject to mandatory certification without required certificates, may lead to an administrative fine and/or suspension of business operations for up to 90 days and confiscation of non-compliant products.

Licensing

The companies of the Group are required to obtain certain licences, authorisations and permits from the Russian governmental authorities in the conduct of their operations. Federal Law No. 99-FZ "On Licensing of Certain Types of Activities" dated 4 May 2011 (the "**Licensing Law**"), established a list of activities, which can only be performed on the basis of licences issued by the relevant Russian authorities. The list of activities relating to the pipe industry includes, among other things:

- the exploitation of explosive and chemically hazardous industrial facilities of hazard classes I, II and III;
- surveying works;
- the gathering, transportation, processing, utilisation, deactivation and disposal of waste of hazard classes I to IV;
- the collection, storage, processing and sale of ferrous metal and non-ferrous metal scrap; and
- utilisation of ionising radiation sources.

Under the Licensing Law, licences are generally issued for an unlimited term. Licences issued prior to, and valid as at the date of, the Licensing Law entering into force, also have unlimited duration. Nevertheless, licences can be suspended by the licensing authority and/or revoked by court order for non-compliance with the licensing requirements or conditions. Licensing regulations and the terms of licences and permits require compliance with numerous industrial standards. In particular, the Group must employ qualified personnel, provide training, maintain certain equipment and a system of quality controls, monitor operations, maintain and make appropriate filings and, upon request, submit specified information to the licensing authorities that control and inspect their activities.

Land Use Rights

Russian legislation prohibits the carrying out of any commercial activity on a land plot without appropriate land use rights (including rights in relation to the licence area being used).

Under the Land Code of the Russian Federation No. 136-FZ of 25 October 2001, as amended (the "Land Code"), legal entities may generally have ownership or lease rights with regard to land in the Russian Federation.

Russian law currently categorises all land as having a particular designated purpose, for example: agricultural land, industry land, settlement lands, lands under specially protected territories and objects. Land should be used in accordance with the purpose designated by the relevant category.

Most land in the Russian Federation is owned by the federal, regional or municipal authorities, which can sell, lease or grant other rights of use to third parties, including through auctions. As a general rule, a lessee has no pre-emptive right as to entering into a new land lease agreement with a lessor upon the expiration of the lease of the land owned by the federal, regional or municipal authorities without holding an auction. However, a new lease agreement can be concluded without holding an auction when the following criteria have been met: (i) a lessee applies for conclusion of a new agreement before the expiration of lease, (ii) no other party has an exclusive right to purchase the relevant land plot, (iii) previous lease agreement was not terminated on any of the grounds provided by the Civil Code or the Land Code (improper use of the land plot etc.) and (iv) as of the date of entering into a new lease agreement, the legal grounds for provision of the relevant land plot to the lessee without conducting a public auction remain effective. In order to renew a land lease agreement, the lessee must apply to the lessor for a renewal prior to the expiration of the agreement. Any lease agreement of a land plot for a period of one year or more must be registered with the Russian Federal Service for State Registration, Cadastre and Cartography ("**Rosreestr**").

Rosreestr records details of land plots, including their measurements and boundaries, in a unified register. A landowner must obtain a state cadastre number for a land plot as a condition to selling, leasing or otherwise transferring interests in that plot. Rosreestr maintains the Unified State Register of Immovable Property (the "**Register of Immovable Property**") containing data on the specifications of immovable property (cadastral record data) and the rights to immovable property. Generally, under the Civil Code, the right of ownership and the other rights to real estate property (such as buildings, land plots and other real estate items), the restriction of these rights, their arising, transfer and cessation shall be registered with the Register of Immovable Property. Federal Law No. 218-FZ "On State

Registration of Immovable Property," dated 13 July 2015, as amended, regulates the procedure for the state registration of rights and transactions. A person acquires the right to the real estate property only upon the state registration of such right in the Register of Immovable Property. A person, whose right has been registered earlier in the Register of Immovable Property, has a right to register an objection note with respect to the subsequently registered right of another person. However, if the person who registered the objection has not pursued such challenge in the court within three months, the objection note must be cancelled and further objection by the same person will not be allowed.

Environmental Matters

The Group is subject to laws, regulations and other legal requirements relating to the protection of the environment, including those governing the discharge of substances into the air and water, the management and disposal of hazardous substances and waste, the cleanup of contaminated areas on the production sites, flora and fauna protection and wildlife protection. Issues of environmental protection in Russia are regulated primarily by Federal Law No. 7-FZ "On Environmental Protection," dated 10 January 2002 (the "Environmental Protection Law"), as well as by a number of other federal and local legal acts.

Payments for negative impact on the environment ("pay-to-pollute" regime)

The Environmental Protection Law establishes a "pay-to-pollute" regime administered by the federal and local authorities. The Ministry of Natural Resources and Environment of the Russian Federation adopts regulatory documents governing the permissible impact on the environment and the extraction of resources, while Rosprirodnadzor establishes limits on emissions and disposals of substances and waste. A company may obtain approval for exceeding these statutory limits from the federal or regional authorities depending on the type and scale of the environmental impact. As a condition for such approval, a plan for the reduction of emissions or disposals must be developed by the company and cleared with an appropriate governmental authority. Fees, as set forth in Decree of the Russian Government No. 255 "On Calculation and Collection of Payments for Negative Impact on the Environment," dated 3 March 2017, are assessed on a sliding scale for both the statutory and individually approved limits on emissions and effluents and for pollution in excess of these limits. Under this sliding scale, the lowest fees are imposed for pollution within the statutory limits, higher fees are imposed for pollution within the individually approved limits and the highest fees are imposed for pollution exceeding such limits. Payments for negative impact on the environment do not relieve a company from its responsibility to take environmental protection measures and undertake restoration of the territory after the activities are completed.

The Russian Government has established fees for the statutory approved limits on emissions and effluents and for pollution in excess of these limits. The fees may be increased by statutory approved multiplier. Starting from 1 January 2020, the highest multiplier reaches 100 times the base rate and applies to companies exceeding such pollution limits and having a significant negative environmental impact. Payments of such fees do not relieve a company from its responsibility to take environmental protection measures and undertake restoration and clean-up activities.

Additionally, in July 2019, Russian authorities adopted the Federal Law No. 195-FZ "On Implementation of Experiment on Pollution Emission Quotation and Introduction of Amendments to Separate Legal Acts of the Russian Federation in Part of Reduction of Hazardous Air Pollution" dated 26 July 2019 introducing a quotation system in relation to pollution emissions for a period from 2020 to 2024 in twelve Russian cities, in particular, Bratsk, Krasnoyarsk, Lipetsk, Magnitogorsk, Mednogorsk, Nizhny Tagil, Novokuznetsk, Chelyabinsk, Cherepovets and Chita. In 2020, upon recommendation of local authorities the Russian Government should approve programmes aimed at reducing air pollutant emissions in each respective city. Companies with facilities that will be affected by the experimental quotation system shall develop their own programmes for reducing air pollutant emissions. In case the company is not able to comply with the quotation programme, compensatory measures will be triggered.

Industrial environmental monitoring

Under the Environmental Protection Law, objects having a negative environmental impact are divided into four categories based on the level of impact: objects having a significant negative environmental impact (I category), objects having a moderate negative environmental impact (II category), objects having a low negative environmental impact (III category) and objects having a minimal negative environmental impact (IV category). The criteria for determining the appropriate category of impact are determined by the Russian Government and take into account such factors as the level of negative environmental impact on business and/or production activity, toxic levels and the carcinogenic property of polluting substances and the classification of industrial facilities. All objects having a negative environmental impact should be registered with state authorities.

The Environmental Protection Law requires companies operating businesses and activities at a specified impact level to carry out industrial environmental monitoring, which includes implementation of a programme of industrial environmental monitoring and reporting on the results of the industrial environmental monitoring to Rosprirodnadzor.

Ecological approval

Any activities that may affect the environment are subject to state ecological approval by federal authorities in accordance with Federal Law No. 174-FZ "On Ecological Expert Examination," dated 23 November 1995, as amended. Conducting operations that may cause damage to the environment without state ecological approval may result in the negative consequences described under "*—Environmental liability*."

Environmental protection authorities

Rosprirodnadzor, Rostekhnadzor, the Russian Federal Service for Hydrometeorology and Environmental Monitoring, the Russian Federal Agency on Forestry and the Russian Federal Agency on Water Resources (along with their regional branches) are primarily responsible for environmental control, and the monitoring, implementation and enforcement of the relevant laws and regulations. The Russian Government and the Ministry of Natural Resources and Environmental protection are responsible for the development of regulatory documents in the sphere of environmental protection and for the co-ordination of activities of the regulatory authorities in this area. Such regulatory authorities, along with other state authorities, individuals and public and non-governmental authorities also have the right to initiate lawsuits for the compensation of damage caused to the environment. The statute of limitations for such lawsuits is 20 years.

Environmental liability

If the operations of a company violate environmental requirements or cause harm to the environment or any individual or legal entity, environmental authorities may suspend these operations for up to 90 days or a court action may be brought to limit or ban these operations and require the company to remedy the effects of the violation. Any company or employees that fail to comply with environmental regulations may be subject to administrative and/or civil liability, and individuals may be held administratively or criminally liable. Courts may also impose clean-up obligations on violators in lieu of or in addition to imposing fines.

Since 1 January 2012, owners of specified types of hazardous facilities are required to obtain insurance for liability for harm caused to third parties as a result of accidents at the facilities, except for harm caused to the environment. In addition, the Ministry of Natural Resources and Environment has recommended that a voluntary environmental insurance policy be obtained to cover events of accidental environmental pollution of air or land or accidental discharge of waste waters or other clean-up liabilities.

Environmental protection programmes

As a result of the recent amendments to the Environmental Protection Law, the scope of state support for business activities carried out by companies and individual entrepreneurs in order to protect the environment has been significantly extended. State support is provided by way of tax benefits, benefits with respect to payments for negative impact on the environment and funding from federal and regional budgets. It is also provided that other measures of state support can be established in federal and regional legislation.

Health and Safety

Due to the nature of the Group's business, much of its activity is conducted at industrial sites by large numbers of workers, and workplace safety issues are of significant importance to the operation of these sites.

The principal law regulating industrial safety is the Federal Law No. 116-FZ "On Industrial Safety of Dangerous Industrial Facilities" dated 21 July 1997, as amended (the "**Safety Law**"). The Safety Law applies, in particular, to industrial facilities and sites where companies undertake certain hazardous activities, including activities related to the usage, production, processing, storage, transportation or utilisation of fuels and explosive, toxic and environmentally dangerous substances, as well as usage of lifting machines, production of alloys of ferrous and non-ferrous metals.

Under the Safety Law, hazardous industrial facilities are divided into four categories based on the level of hazard that varies from class I (extremely hazardous industrial sites) to class IV (least hazardous industrial sites). Rostekhnadzor classifies hazardous industrial facilities at the time of their state registration. For the purposes of state registration companies are to file the information regarding the facilities with the relevant authority within 10 days after they start operating the facility.

Any construction, reconstruction, liquidation or other activity in relation to regulated industrial facilities is subject to an industrial safety review. Any deviation from project documentation in the process of construction, reconstruction and liquidation of industrial sites is prohibited, unless the revised documentation is examined by an expert and approved by Rostekhnadzor.

Maintenance of Industrial Safety

Companies that operate regulated industrial sites have a wide range of obligations under the Safety Law and the Labour Code of the Russian Federation No. 197-FZ dated 30 December 2001, as amended (the "Labour Code"). In particular, they must limit access to such sites to qualified specialists, maintain industrial safety controls and carry mandatory civil liability insurance for damage resulting from accidents occurred as a result of emergency at a hazardous industrial facility.

The Safety Law also requires these companies to enter into contracts with professional accident-rescue service companies or create their own accident-rescue services in certain cases, conduct personnel training programmes, create systems to prevent and inform Rostekhnadzor of accidents and maintain these systems in good working order.

In certain cases, companies operating regulated industrial sites must also prepare declarations of industrial safety that summarise the risks associated with operating such sites and the measures that the company has taken and will take to mitigate such risks. Such declarations must be adopted by the chief executive officer of the company, who is personally responsible for the completeness and accuracy of the data contained therein. Declarations of industrial safety are filed with Rostekhnadzor or its territorial body for further submission to the register of declarations of industrial safety. An industrial safety declaration and various other documents, including an industrial safety expert review, are required for the issuance of a licence permitting the operation of a dangerous industrial facility (in cases when such licence is required).

State Oversight of Industrial Safety

Rostekhnadzor has broad authority in the area of industrial safety. In case of an accident, a special commission led by a representative of Rostekhnadzor conducts a technical investigation of the causes of the accidents in cases envisaged by the Labour Code. The company operating the industrial facility where the accident took place bears all costs of such investigation. Rostekhnadzor has the right to access industrial sites and may inspect documents to ensure a company's compliance with safety rules. Rostekhnadzor may also impose administrative liability on a company or its officials, as well as suspend a company's operations for failure to comply with health and safety legislation.

Any company or individual violating industrial safety rules may incur administrative and/or civil liability and individuals may also incur criminal liability. A company that violates safety rules in a way that negatively impacts the health of an individual may also be liable to compensate the individual for lost earnings and health-related damages and, in certain cases, its activity may be suspended.

Antimonopoly Regulation

The anti-monopoly legislation of the Russian Federation is based on the Federal Law No. 135-FZ dated 26 July 2006 "On the Protection of Competition" (the "**Competition Law**") and other federal laws and regulations governing antimonopoly issues. Compliance with anti-monopoly legislation in Russia is monitored by the FAS. Russian legislation grants the FAS the powers necessary for the performance of its functions and dealing with violations of anti-monopoly legislation.

In accordance with the Competition Law, companies having a dominant position in a particular goods market are prohibited from, among other things, entering into agreements, which have the effect of limiting competition, including artificially limiting the supply of goods, maintaining high or low monopolistic prices and refusing without justification to sell goods to third parties. A company will be deemed to have a dominant position if its share in a particular goods market exceeds 50 per cent. (in some circumstances its market share may be below 35 per cent.).

Prior anti-monopoly clearance from the FAS is required in respect of any acquisition of: (i) more than 25 per cent. of the voting shares in a Russian joint stock company (or a one-third interest in a Russian limited liability company) and any subsequent increase of that stake to more than 50 per cent. or more than 75 per cent. of the voting shares (or a one-half and two-third interest in a Russian limited liability company); (ii) subject to certain exceptions, fixed production assets or goodwill of a company located in Russia in an amount exceeding 20 per cent. of the aggregate balance sheet value of all fixed production assets and goodwill of such company; (iii) the right to control the business activities of another Russian company or perform the functions of its executive body; or (iv) more than 50 per cent. of the voting shares (or a 50 per cent. interest) in, or other right to control the business activities or perform the functions of the executive body of a company registered outside Russia, which, during the previous year, delivered or

provided goods or services into Russia for an aggregate total amount exceeding RUB1 billion (approximately U.S.\$16 million). Certain other transactions are also subject to a prior anti-monopoly clearance from the FAS.

Any of the above acquisition transactions would require prior approval by the FAS if according to the latest balance sheet: (i) the aggregate asset value of a purchaser (and its group) together with the target (and its group) exceeds RUB7 billion (approximately U.S.\$ 111 million), or the total revenues of such persons for the preceding calendar year exceed RUB10 billion (approximately U.S.\$ 159 million); and (ii) the total asset value of the target (and its group) exceeds RUB400 million (approximately U.S.\$ 6.3 million). Transactions within the same group are exempt from prior clearance by the FAS, subject to compliance with certain reporting requirements.

The Competition Law expressly provides for extraterritorial application to the transactions, which are made outside of the Russian Federation but lead, or may lead, to the restriction of competition in the Russian Federation and which relate to assets located in the Russian Federation or to the shares (or participation interests) in Russian companies or rights in relation to such companies.

Under the Competition Law, if a purchase violates the merger control rules by way of, for example, acquisition of the shares of a Russian company without obtaining the prior approval of the FAS, such acquisition transaction may be invalidated by a court upon petition filed by the FAS, provided that such transaction has led or may lead to the restriction of competition, for example, by means of strengthening of a dominant position in the relevant market.

More generally, Russian legislation provides for civil, administrative and criminal liability for the violation of the Russian anti-monopoly legislation.

Negative Net Assets

Under Russian corporate law, if the net assets of a Russian limited liability company calculated on the basis of RAS as at the end of its second or any subsequent financial year are lower than its charter capital, the company must make a decision on the decrease of its charter capital to the amount of its net assets. If the net assets of a Russian joint stock company calculated on the basis of RAS as at the end of its second financial year are lower than its charter capital, the joint-stock company's board of directors shall disclose it in the annual report. Furthermore, if the net assets of a Russian joint stock company calculated on the basis of RAS as at the end of the financial year that follows its second or any subsequent financial year, at the end of which the net assets of such company were lower than its charter capital, remain lower than its charter capital, the company must make a decision on the decrease of its charter capital. In addition, if a Russian company's (both a limited liability company and a joint-stock company) net assets calculated on the basis of RAS as at the end of its second or any subsequent financial year are lower than the minimum amount of the charter capital required by law, the company must make a decision on its liquidation.

Moreover, if a Russian company (both a limited liability company and a joint-stock company) fails to comply with any of the requirements stated above within the required period of time (within a reasonable period of time for a limited liability company and within six months upon the end of the relevant financial year for a joint-stock company), governmental or local authorities will be able to seek the involuntary liquidation of such company in court. In addition, if a Russian company (both a limited liability company and a joint-stock company) fails to comply with any of the requirements stated above within the required period of time (within a reasonable period of time for a limited liability company and within six months upon the end of the relevant financial year for a joint-stock company) or decreases its charter capital, the company's creditors will have the right to accelerate their claims or demand early performance of the company's obligations owed to them and demand compensation of damages.

In addition, if a Russian joint stock company's net assets calculated on the basis of RAS are lower than its charter capital by more than 25 per cent. as at the end of three, six, nine or twelve months of the financial year that follows its second or any subsequent financial year, at the end of which the net assets of such company were lower than its charter capital, a joint-stock company is obliged to make a public disclosure of this fact and certain of the company's creditors will have the right to accelerate their claims or demand early performance of the company's obligations owed to them and demand compensation of damages.

However, if a Russian joint stock company is able to demonstrate that the creditors' rights were not violated as a result of a decrease of its charter capital or a decrease of the amount of its net assets, as the case may be, and that the security provided for due performance of the company's obligations is sufficient, a court may dismiss the creditors' claims that are brought in the following cases: (i) in the event of a decrease of the amount of its net assets in compliance with the requirements of Russian law; and (ii) in the event the company's net assets calculated on the basis of RAS are lower than its charter capital by more than 25 per cent. at the end of three, six, nine or twelve months of the financial year that followed its second or any subsequent financial year, at the end of which the net assets of such company became

lower than its charter capital. Moreover, the existence of negative assets, generally, may not accurately reflect the actual ability to pay debts as they come due. Some Russian courts, in deciding whether or not to order the liquidation of a company for having negative net assets, have looked beyond the fact that the company failed to comply fully with all applicable legal requirements and have taken into account other factors, such as the financial standing of the company and its ability to meet its tax obligations, as well as the economic and social consequences of its liquidation. Nonetheless, creditors have the right to accelerate claims, including damages claims, and governmental or local authorities may seek the liquidation of a company with negative net assets. Courts have, on rare occasions, ordered the involuntary liquidation of a company for having net assets less than the minimum charter capital required by law, even if the company had continued to fulfil its obligations and had net assets in excess of the minimum charter capital required by law at the time of liquidation.

Employment and Labour

Labour matters in Russia are primarily governed by the Labour Code. In addition to this core legislation, relationships between employers and employees are regulated by various federal laws.

Employment contracts

As a general rule, employment contracts for an indefinite term are concluded with all employees. Russian labour legislation expressly limits the possibility of entering into fixed term employment contracts. Generally, an employment contract can be entered into for a fixed term of up to five years in cases where labour relations may not be established for an indefinite term due to the nature of the duties or the conditions of the performance of such duties, as provided by the Labour Code and federal laws. The Labour Code specifies where the employer is obliged to enter into fixed term employment contracts, and where the employer may, but is not obliged to, conclude such agreement subject to the parties' mutual agreement. Employment contract with the chief executive officer, his deputy, and the chief accountant may be concluded either for a fixed or an indefinite term.

In certain cases specifically provided for by the Labour Code, the employer is obliged to enter into a fixed term employment contract. A fixed term employment contract must be entered into, *inter alia*, with an employee employed to:

- perform the job duties of another employee for the period of his/her temporary leave of absence;
- work abroad (i.e., if the employee is sent by its Russian employer to work outside Russia);
- perform seasonal work (which, due to the condition of climate or nature can only be performed in course of a particular season not exceeding six months); and
- perform work outside the scope of the employer's ordinary activity (reconstruction, installation, commissioning and other work which is without doubt temporary and shall not take more than one year) and work specifically related to a temporary (up to one year) extension of production or scope of services provided.

In certain other cases provided for by the Labour Code, the employer may, but is not obliged to, enter into a fixed term employment contract subject to the parties' mutual agreement. In particular, a fixed term employment contract may be entered into, *inter alia*, with:

- the company's chief executive officer, its deputies, and the chief accountant;
- retirees by age and persons who are only allowed temporary work in accordance with a medical certificate; and
- part-time employees.

An employer may terminate an employment contract only on the basis of the specific grounds listed in the Labour Code, including:

- the liquidation of the company or downsizing of its staff;
- the failure of the employee to comply with the position's requirements due to incompetence as confirmed by the results of an evaluation;

- the systematic failure of the employee to fulfil his or her job duties, if he or she was subject to disciplinary measures;
- a single gross violation by the employee of his or her job duties in the events expressly specified in the Labour Code; and
- the provision by the employee of false documents upon entering into the employment contract.

Regardless of the grounds for termination of employment, on the employee's last day of work (which is the date of termination of employment), the employer must pay the employee his/her salary, compensation for unused vacation and other outstanding payments (such as bonuses).

Depending on the grounds for termination of employment and the terms of the employment contract, an employee may also be entitled to a severance payment. As a general rule, an employee dismissed due to downsizing of staff or the company's liquidation is entitled to the sum of following severance payments: (i) an average monthly salary; (ii) an average monthly salary maintained for a period of employment but not more than two months following the employment termination date; and (iii) an additional average monthly salary, if an employee applies for jobs with the local employment service within two weeks of the employment termination date and is not offered a new job within three months of the redundancy.

The Labour Code also provides protection for specified categories of employees. For example, except in cases of liquidation of an organisation, an employer cannot dismiss an expectant mother. In addition, an employer may not dismiss a mother with a child under the age of three, a single mother with a child under the age of 14 (or a disabled child under the age of 18) or other persons caring for a child under the age of 14 (or a disabled child under the age of 18) without a mother, other than due to liquidation of an organisation, specified breach of the employment duties by an employee, and for certain delinquent actions. Employment contracts with minors can be terminated only with the consent of the state labour inspection and the commission for protection of minors' rights (except in the case of liquidation of an organisation).

Any termination of employment that is inconsistent with the Labour Code requirements may be invalidated by a court, which may require the employer to reinstate such employee. Lawsuits resulting in the reinstatement of illegally dismissed employees and the payment of damages for wrongful dismissal are increasingly frequent and Russian courts tend to support employees' rights in most cases. Where a court reinstates an employee, the employer must compensate the employee for unpaid salary for the period between the wrongful termination and reinstatement, for any mental distress and the employee's legal and other expenses incurred as a result of the litigation.

Work time

The Labour Code generally sets the regular working week at 40 hours. Any time worked beyond 40 hours per week, as well as work on public holidays and weekends, must be compensated at a higher rate or with additional days of paid vacation.

Annual paid vacation under the Labour Code is generally 28 calendar days. The Labour Code contemplates additional paid vacation in a number of cases, including work on an unlimited hours basis, work under harmful conditions and work in the Northern regions of Russia. Companies may establish additional paid vacations beyond the statutory minimums. Employees who perform work in harmful conditions may be entitled to additional paid vacation of at least seven calendar days.

Prior to 1 January 2019, the retirement age in Russia comprised 60 years for men and 55 years for women. Starting from 1 January 2019, the retirement age in Russia will be gradually raised to 65 for men and 60 for women by 2028.

Salary

The minimum monthly salary in Russia is established by federal law from time to time. Starting from 1 January 2019, the minimum monthly salary is set at the amount of RUB11,280 (approximately U.S.\$176 as at the date of the Listing Particulars). The salaries of the Group's employees are higher than the statutory minimum and none are below such minimum.

Employees working in localities with abnormal climatic conditions are entitled to increased compensation due to unfavourable climatic or other conditions in particular regions.

Strikes

The Labour Code defines a strike as a temporary and voluntary refusal of employees to fulfil their work duties with the intention of settling a collective labour dispute. Russian legislation contains several requirements, which must be met for strikes to be legal. An employer may not use an employee's participation in a legal strike as a ground for terminating an employment contract, although Russian law generally does not require employers to pay salaries to striking employees for the duration of the strike. Furthermore, an employee's participation in an illegal strike may entail imposition of a disciplinary penalty for labour misconduct.

Trade Unions

The activities of trade unions are generally governed by the Federal Law No. 10-FZ "On Trade Unions, Their Rights and Guaranties of Their Activity," dated 12 January 1996, as amended (the "**Trade Union Law**"). The Trade Union Law defines a trade union as a voluntary union of individuals with common professional and other interests incorporated for the purposes of representing and protecting the rights and interests of its members.

As part of their activities, trade unions have the right to:

- negotiate collective contracts and agreements between trade unions and employers, federal, regional and local governmental authorities and other entities;
- monitor compliance with labour laws, collective bargaining and other agreements;
- access work sites and offices and request information relating to labour issues from the management of companies and state and municipal authorities;
- represent their members and other employees in individual and collective labour disputes with employers;
- organise strikes and participate in them; and
- monitor redundancies and seek action by municipal authorities to delay or suspend mass layoffs.

Russian laws require that companies cooperate with trade unions and do not interfere with their activities. Trade unions and their officers enjoy certain guarantees.

If a trade union discovers any violation of work condition requirements, notification is sent to the employer with a request to cure the violation and to suspend work if there is an immediate threat to the lives or health of employees. The trade union may apply to state authorities and labour inspectors and prosecutors to ensure that an employer does not violate Russian labour laws. Trade unions may also initiate collective labour disputes, which may lead to strikes.

To initiate a collective labour dispute, trade unions must present their demands to the employer. The employer is then obliged to consider the demands and notify the trade union of its decision. If the dispute remains unresolved, a reconciliation commission is gathered to resolve the dispute. Collective labour disputes may be further referred to mediation or labour arbitration.

The Trade Union Law provides that those who violate the rights and guarantees of trade unions and their officers may be subject to disciplinary, administrative and criminal liability. Although the Trade Union Law provides that those who violate the rights and guarantees provided to trade unions and their officers may be subject to disciplinary, administrative and criminal liability, no specific sanctions for these violations are set forth in Russian legislation.

Consequences of formal non-compliance with certain requirement of Russian law

Russian law allows a court to order liquidation of a Russian entity if such entity among other things (i) has been established in violation of Russian law provided that these violations are not capable of remedy, (ii) undertakes an activity without a proper permit or licence, (iii) undertakes an activity prohibited by law or in defiance of the Constitution of the Russian Federation, or (iv) repeatedly acts in violation of Russian law. The companies of the Group are subject to the jurisdiction of Russian courts and may have failed in the past and may in the future fail to fully comply with all applicable legal requirements. In the past, formal non-compliance with provisions of Russian law was used by Russian courts as a basis for the liquidation of a Russian entity. However, Russian court practice has changed recently and currently Russian courts require liquidation of a company only if non-compliance with Russian law is of a gross or irremediable nature. If, for example, violations may be eliminated or they are not material, Russian courts

normally do not order liquidation. However, weaknesses in the Russian legal system creates uncertain legal environment, which makes the decisions of Russian courts difficult, if not impossible, to predict.

Ferrous Metal Industry Strategy

From 1 January 2020, automatic licensing (observation) of import of certain types of steel pipes within Eurasian Economic Union came into force which will apply till 31 December 2020, unless extended.

In May 2014, the MIT approved the Strategy for the Development of the Ferrous Metal Industry of Russia for the period of 2014 till 2020 and further up to 2030 (the "**Ferrous Metal Industry Strategy**"). This document primarily discusses the production capacity, development trends in the Russian metal industry and the tools of its state support in Russia planned for the period of up until 2030.

The Ferrous Metal Industry Strategy anticipates growth of Russian steel pipe market for the period till 2030 primarily due to demand of the fuel and energy and construction industry, which require upgrade of the existing pipeline systems. In accordance with the Ferrous Metal Industry Strategy, the Russian steel pipe manufacturers face the strongest competition in the global market from the Chinese steel pipe manufacturers.

The Ferrous Metal Industry Strategy, among other, provides for the following tools of state support of the Russian steel pipe manufacturers during the period of up to 2030:

- introduction of legal limitations of lifespan of steel pipes and their repeated use;
- limiting the projected long-term growth of tariffs of natural monopolies by the rate not exceeding the annual inflation rate in Russia for the preceding year;
- protectionism of the Russian steel manufacturers with regard to the public procurement procedures; and
- economic support, such as provision of state guarantees and subsidies for the purpose of increasing of production capacity of steel pipe manufacturers and renovation of their existing production facilities.

RELATED PARTY TRANSACTIONS

The following is a summary of the Group's most significant transactions with related parties as at and for the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016. For further details of these transactions, see Note 20 to the Interim Financial Statements and Note 27 to the 2018 Financial Statements and the 2017 Financial Statements.

In the ordinary course of business, the Group has engaged, and continues to engage, in transactions with parties that are under common control with TMK or that are otherwise related parties to TMK.

The Group seeks to conduct all transactions with entities that are under the Group's common control or that otherwise constitute related parties on market terms and in accordance with applicable law. Transactions with related parties are conducted on an arm's length basis.

Dividend distributions to TMK Steel

In June 2019, the Group approved dividends in respect of the first quarter 2019, of which U.S.\$ 27.2 million were attributable to TMK Steel.

In June 2018, the Group approved dividends in respect of the year 2017, of which U.S.\$ 24.1 million were attributable to TMK Steel.

In June 2017, the Group approved dividends in respect of the year 2016, of which U.S.\$ 23.3 million were attributable to TMK Steel.

In September 2016, the Group approved dividends in respect of the six months ended 30 June 2016, of which U.S.\$ 20.4 million were attributable to TMK Steel.

Compensation to Key Management Personnel of the Group

Key management personnel include members of the Board of Directors, the Management Board and certain executives of the Group.

For the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016, the compensation to key management personnel in the form of wages, salaries, social security contributions and other short–term benefits amounted to U.S.\$ 32.6 million, U.S.\$ 11.3 million, U.S.\$ 14.9 million, U.S.\$ 13.9 million and U.S.\$ 11.8 million, respectively; while the provision for performance bonuses amounted to U.S.\$ 2.0 million, U.S.\$ 3.1 million, U.S.\$ 4.1 million, U.S.\$ 5.3 million and U.S.\$ 3.8 million, respectively. These amounts are recognised as general and administrative expenses in the income statement for the relevant period.

Transactions with other related parties

Other related parties include entities under common control with the Group, associates, joint ventures and other related parties. The following table provides balances with other related parties as at 30 September 2019 and 31 December 2018, 2017 and 2016.

	As at 30 September			
	2019 ⁽¹⁾	2018	2017	2016
		(millions of U.S	5. dollars)	
	(unaudited)			
Cash and cash equivalents	7.8	40.0	87.5	48.6
Loans issued	142.8	53.8	59.5	39.3
Trade and other receivables	171.7	157.4	54.9	52.7
Prepayments for acquisition of property, plant and				
equipment	-	2.2	2.6	2.5
Long-term receivables	-	-	-	2.0
Other prepayments	0.1	0.1	-	-
Other financial assets ⁽²⁾	-	-	-	42.2
Interest bearing loans and borrowings	-	46.4	215.2	277.8
Lease liability	9.5	-	-	-
Trade and other payables	71.4	59.6	26.5	35.6
Advances received	0.0	0.0	1.2	0.2

Notes:

- ⁽¹⁾ As at 30 September 2019, the amounts are presented excluding the balances related to the disposal group held for sale. See "*Operating and Financial Review*—*Recent TMK IPSCO disposal*".
- ⁽²⁾ Other financial assets represented bank deposits with original maturities of more than three months.

As at 30 September 2019 and 31 December 2018, the outstanding debts of other related parties guaranteed by the Group amounted to U.S.\$ 61.9 million.

As at 30 September 2019 and 31 December 2018 and 2017, allowance for expected credit losses (allowance for doubtful debts) in respect of receivables from other related parties amounted to U.S.\$ 6.8 million, U.S.\$ 5.4 million and U.S.\$ 1.9 million, respectively.

The Group uses unsecured letters of credit to facilitate settlements with its counterparties, including payments under certain contracts to purchase raw materials from entities under common control with the Group. As at 30 September 2019 and 31 December 2018 and 2017, for the letters of credits in the total amount of U.S.\$ 93.1 million, U.S.\$ 82.8 million and U.S.\$ 63.4 million, respectively, the bank paid cash to the related party, following its request, earlier than the original maturities per purchase contracts. The original due dates of Group's payables were not changed and the respective amounts were included in trade and other payables.

The summary of transactions with other related parties for the nine months ended 30 September 2019 and 2018 and the years ended 31 December 2018, 2017 and 2016 are set out below.

	Nine mo ended 30 Sep			Year ended 1 December	
	2019	2018	2018	2017	2016
		(millio	ns of U.S. dolla	rs)	
	(unaudi	ited)			
Purchases of raw materials	445.7	428.8	624.1	560.3	1.5
Purchases of other goods and services	26.6	27.3	40.4	23.5	11.7
Finance costs	3.7	15.5	17.9	34.2	34.2
Sales revenue	195.6	88.5	149.0	52.0	53.6
Other income	8.3	8.6	10.9	9.9	7.8

Notes:

⁽¹⁾ The numbers include the discontinued operations:

- purchases in the amount of U.S.\$ 3.0 million and U.S.\$ 9.5 million for the nine months ended 30 September 2019 and 2018, respectively.

- sales in the amount of U.S.\$ 2.7 million and U.S.\$ 9.7 million for the nine months ended 30 September 2019 and 2018, respectively.

DESCRIPTION OF THE ISSUER AND THE INITIAL LOAN GUARANTOR

Issuer

The Issuer was incorporated as a *société anonyme* on 8 September 2006 for an unlimited duration with limited liability under the laws of the Grand Duchy of Luxembourg. Its Articles of Incorporation have been filed on 18 September 2006 and published on page 97588 of the *Mémorial C, Recueil des Sociétés et Associations* No. C-2034 dated 30 October 2006. The Issuer is registered with the Luxembourg Register of Commerce and Companies under number B119.081. Its registered office is located at 14, rue Edward Steichen, L-2450 Luxembourg, its telephone number is +352 422 229 584 and its fax number is: +352 426 443.

The Issuer's subscribed share capital amounts to U.S.\$50,000 divided into 500 registered shares with a par value of U.S.\$100 each. All of the shares are fully paid up. Four-hundred and ninety nine (499) shares are owned by Stichting TMK Capital, and one (1) share by Stichting Participatie Vistra.

The Issuer has a Board of Directors, currently consisting of three directors. The directors at present are:

- Panchoo Tarvesh Kumar, having his professional address at 14, rue Edward Steichen, L-2450 Luxembourg;
- Schlag Laura, having her professional address at 14, rue Edward Steichen, L-2450 Luxembourg; and
- Szczepankiewicz Agnieszka Katarzyna, having her professional address at 14, rue Edward Steichen, L-2450 Luxembourg.

There are no potential conflicts of interest between any duties of the members of the Board of Directors towards the Issuer and their private interests and/or other duties.

Vistra (Luxembourg) S.à r.l. is the domiciliation agent of the Issuer. Its duties include the provision of certain administrative and related services. It may terminate its appointment at any time upon not less than two months' prior notice in writing, provided that any such termination shall not be effective until a replacement acceptable to the Issuer has been suggested by Vistra (Luxembourg) S.à r.l.

The Issuer has been established as a structured entity of TMK for the purpose of issuing securities. The corporate object of the Issuer, as described in article 3 of its articles of incorporation is:

- the issue of loan participation notes and other debt securities for the purpose of financing loans to TMK;
- the granting of loans to TMK;
- the granting of security interests over its assets to a trustee in relation to the issuance of the loan participation notes and other debt securities;
- the making of deposits (including fiduciary deposits) at banks or with other depositaries; and
- the entering into all ancillary transactions, documents and agreements.

The Issuer may carry out any transactions, whether commercial or financial which are directly or indirectly connected with its corporate object at the exclusion of any banking activity.

In general, the Issuer may carry out any operation which it may deem useful or necessary in the accomplishment and the development of its corporate purpose.

Ernst & Young S.A., having its registered office 35E, Avenue John F. Kennedy, L-1855, Luxembourg and registered with the Luxembourg Register of Commerce and Companies under number B47.771, has been appointed to act as approved independent auditor (*réviseur d'entreprises agréé*) of the Issuer and is a member of the Luxembourg body of registered auditors ("Institut des Réviseurs d'Entreprises").

The Issuer's financial year begins on 1 January and ends on 31 December. The Issuer Financial Statements as at and for the years ended 31 December 2018 and 2017 are incorporated by reference in these Listing Particulars (See "*Documents Incorporated by Reference*").

Initial Guarantor

Incorporation and Status

The Initial Guarantor (full legal name: "Volzhsky Pipe Plant", Joint stock company) was founded on 25 May 2001 as a joint stock company existing under the laws of the Russian Federation. The registered office of the Initial Guarantor is 6, 7th Avtodoroga str., 404119 Volzhsky, Volgograd Region, Russian Federation, and its telephone number is +7 8443 25 69 02. The Initial Guarantor is registered in the Russian Federation under main state registration number 1023401997101.

Objects

The objects of the Initial Guarantor, as set out in its charter, include manufacturing and distribution of pipes, pipes products, metal constructions and other metal products, rendering of industrial services, development of new technologies, construction activity and trading activity.

Share Capital

The Initial Guarantor's share capital is RUB 1,440,910,000, represented by 1,440,910,000 registered ordinary shares, each with a nominal value of RUB 1, all of which have been issued and fully paid. All of the Initial Guarantor's issued shares are held by TMK.

Organisational Structure

The sole shareholder of the Initial Guarantor is TMK. Accordingly, the Initial Guarantor is legally and beneficially owned and controlled directly by TMK. The rights of TMK as the shareholder of the Initial Guarantor are contained in the charter of the Initial Guarantor, the Civil Code and the JSC Law and the Initial Guarantor will be managed in accordance with the provisions thereof.

The Initial Guarantor holds 99 per cent. participation interest in Blagoustroistvo LLC, with the remaining stake owned by TMK Trade House. The Initial Guarantor also holds 3.06 per cent in Joint-Stock Commercial Bank of Support to Commerce and Business (SKB-BANK). The other shareholders of SKB-BANK are AO Sinara Group (53.77 per cent.), TMK Steel (42.64 per cent.). Mr. Mikhail Ya. Khodorovskiy (0.00000071 per cent.), with the remaining 0.52999929 per cent. of SKB-BANK's shares owned by a number of minority shareholders. The Initial Guarantor does not have any indirect subsidiaries.

Business

The Initial Guarantor manufactures pipes of more than 900 sizes for various applications, including seamless casing and line pipe, spiral welded and longitudinal welded LDP for oil and gas pipelines, seamless pipes for steam boilers, seamless pipes for mechanical engineering and round and square steel billets. See "*Business*—*Production Facilities*— *Volzhsky*" for a further description of the Initial Guarantor's operations.

Management

The Initial Guarantor is managed by its General Meeting of Shareholders, Board of Directors and TMK as its management company.

The table below shows the current members of the Initial Guarantor's Board of Directors. All of the Initial Guarantor's current directors were elected on 6 June 2019, and their terms expire on the date of the Initial Guarantor's next ordinary meeting of shareholders, which is expected to be held in the time period from 1 March 2020 to 30 June 2020.

Name	Year of Birth	Position
Andrey Yu. Kaplunov	1960	Chairman of the Board of Directors
Andrey A. Zimin	1980	Member of the Board of Directors
Olga S. Nikolaeva	1979	Member of the Board of Directors
Tigran I. Petrosyan	1968	Member of the Board of Directors
Vyacheslav V. Popkov	1965	Member of the Board of Directors
Sergey G. Chetverikov	1960	Member of the Board of Directors
Alexander G. Shiryaev	1952	Member of the Board of Directors

See "Management and Corporate Governance – Board of Directors" for short biographies of Mr. Andrey Yu. Kaplunov, Andrey A. Zimin, Tigran I. Petrosyan, Vyacheslav V. Popkov and Alexander G. Shiryaev.

Olga S. Nikolaeva joined TMK in 2012. Ms. Nikolaeva graduated from the State University for Industry in Moscow in 2001. From 2008 to 2012, Ms. Nikolaeva was the Head of the Corporate Relations Department at Evraz Holding LLC. Since 2012, she has held the position of head of Corporate and Property Relations Department at TMK.

Sergey G. Chetverikov graduated from the Ural Polytechnic Institute (now known as Ural Federal University) in 1984. In 1984, Mr. Chetverikov started his career as an engineer at Sinarsky and in 2010 Mr. Chetverikov became a Managing director of Sinarsky. Mr. Chetverikov also held various positions at other Group companies (such as TMK Trade House and TMK-Premium Service). Since 2015, he has been a Managing director at Volzhsky.

The business address for each of the Initial Guarantor's directors is 6, 7th Avtodoroga str., 404119 Volzhsky, Volgograd Region, Russian Federation.

There are no potential conflicts of interest between any duties owed by members of the Initial Guarantor's Board of Directors to the Initial Guarantor and their private interests and/or other duties.

Auditors

Ernst & Young LLC, independent auditors, whose address is Sadovnicheskaya Nab., 77, bld. 1, Moscow, 115035 Russia, are the auditors of the financial statements of the Initial Guarantor, which are prepared in accordance with the Russian Federation rules on preparation of financial statements. The Initial Guarantor's financial year corresponds to the calendar year.

THE LOAN AGREEMENT

THIS AGREEMENT is dated 10 February 2020 between:

- (1) **PAO "TMK"**, a public joint stock company organised under the laws of the Russian Federation (the "**Borrower**"); and
- (2) TMK CAPITAL S.A., a company incorporated under the laws of Luxembourg as a société anonyme with registered office at 14, rue Edward Steichen, L-2450 Luxembourg, Grand Duchy of Luxembourg and registered with the Luxembourg Trade and Companies Register (*Registre de Commerce et des Sociétés, Luxembourg*) under number B119.081 (the "Lender").

WHEREAS:

The Lender and the Borrower wish to record herein the terms of the Loan to be made by the Lender to the Borrower. The Loan is to be unconditionally, irrevocably, jointly and severally guaranteed by the Initial Loan Guarantor under the Initial Loan Guarantee and the Borrower has undertaken hereunder that the Loan will be additionally guaranteed by each of the Additional Loan Guarantors once the Additional Loan Guarantors accede to the Deed of Loan Guarantee, by way of executing Additional Loan Guarantees not later than 90 calendar days after the Issue Date. The Borrower may also be obligated to procure Further Loan Guarantees upon the satisfaction of certain conditions set out in Clause 12.12 hereof.

It is intended that, concurrently with the extension of the Loan under this Agreement, the Lender will issue the Notes (as defined below) in the same aggregate nominal amount and bearing the same rate of interest as such Loan.

IT IS AGREED:

1 Definitions and Interpretation

1.1 Definitions

In this Agreement the following terms have the meanings given to them in this Clause 1.1:

"12-Month Adjusted EBITDA" means the aggregate Adjusted EBITDA for the four most recent consecutive Measurement Periods (for such time that the Borrower has published audited or reviewed IFRS financial statements in respect of at least four consecutive financial quarters (defined herein) and continues to publish such financial statements in respect of financial quarters) failing which, the two most recent consecutive Measurement Periods preceding any date of determination for which consolidated financial statements of the Group prepared in accordance with Accounting Standards are available.

"Acceleration Notice" has the meaning set forth in Clause 13.2.

"Account" means the account of the Lender with Bank of New York Mellon, London Branch, account number:

Cash Correspondent Name Cash Correspondent BIC ABA (If required) Paying Bank Name Paying Bank BIC Paying Bank Number Final Beneficiary Acct Name	THE BANK OF NEW YORK, NEW YORK IRVTUS3N 021000018 THE BANK OF NEW YORK, LONDON BRANCH IRVTGB2X 8033093455 TMK CAPITAL SA SECURED ACCOUNT CSH
Final Beneficiary Acct Name Final Beneficiary Acct Number	GB35IRVT70022576390400.

"Accounting Standards" means IFRS or any other internationally recognised set of accounting standards deemed equivalent to IFRS by the relevant regulators from time to time; provided however, that where such term is used with respect to the financial statements of the Subsidiaries of the Borrower, in this Agreement, it shall, where financial statements prepared in accordance with IFRS are not available, be deemed to include U.S. GAAP, Russian GAAP or any other generally accepted accounting standards of the jurisdiction of incorporation of the relevant Subsidiary from time to time.

"Additional Amounts" has the meaning set out in Clause 8.3.

"Additional Assets" means:

- (a) any assets of a nature or type that is used or usable in the ordinary course of a Core or Related Business of the Borrower or any of its Subsidiaries; or
- (b) the Capital Stock of a Person engaged in a Core or Related Business who, following the consummation of such Asset Swap, is to become a Subsidiary of the Borrower.

"Additional Loan Guarantees" means guarantees by way of the deeds of accession to the Deed of Loan Guarantee, substantially in the form set out in the Schedule to the Deed of Loan Guarantee executed by the Additional Loan Guarantors.

"Additional Loan Guarantors" means "Seversky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company and "Taganrog Metallurgical Plant", Public Joint stock company.

"Adjusted EBITDA" means, in respect of any period, profit/loss for such period excluding finance costs and finance income, income tax benefit/expense, depreciation and amortisation, foreign exchange gain/loss, impairment/reversal of impairment of non-current assets, movements in allowances and provisions (save for provisions for bonuses), gain/loss on disposal of property, plant and equipment, gain/loss on changes in fair value of financial instruments, share of profit/loss of associates and other non-cash, non-recurring and unusual items.

"Affiliate" of any specified Person means any other Person, directly or indirectly controlling, controlled by, or under direct or indirect common control with, such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling", "controlled by" and "under common control with"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

"Agency" means any agency, authority, central bank, department, committee, government, legislature, minister, minister, official or public or statutory person (whether autonomous or not).

"Agency Agreement" means the agency agreement dated 10 February 2020, as amended or supplemented from time to time, between the Lender, the Borrower, the Trustee and the Agents named therein;

"Asset Acquisition" means (i) an Investment by the Borrower or any Subsidiary of the Borrower in any other Person pursuant to which such Person shall become a Subsidiary of the Borrower or shall be consolidated or merged with the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition by the Borrower or any Subsidiary of the Borrower or (ii) the acquisition or line of business of such Person.

"Asset Sale" means any lease, sale, sale and lease-back, transfer or other disposition (including an Asset Swap) either in one transaction or in a series of related transactions, by the Borrower and/or any of the Subsidiaries of the Borrower to a Person or Persons that is/are outside the Group, of any Production Assets or Capital Stock of any Subsidiary of the Borrower the aggregate carrying value of which exceeds 10 per cent. of the value of the total Production Assets of the Group in any 12 month period (determined in each case by reference to the most recent publicly available consolidated audited or reviewed statement of financial position of the Borrower, prepared in accordance with Accounting Standards or, to the extent not disclosed therein, in accordance with the management accounts of the Borrower or the relevant Subsidiary); provided that "Asset Sale" shall not include (i) sales or other dispositions of inventory or stock in trade in the ordinary course of business; (ii) the lease, assignment or sublease of any real or personal property in the ordinary course of business, including the sales of accounts receivable in factoring arrangements entered into in the ordinary course of business; (iii) the sale, lease or other disposition of obsolete, worn out, negligible, surplus or outdated equipment or machinery; (iv) any disposition constituting or resulting from the enforcement of a Lien incurred in compliance with Clause 12.1; (v) the licensing or sub-licensing of rights to intellectual property or other intangibles in the ordinary course of business; (vi) sales or other dispositions of assets or property received by the Borrower or any of its Subsidiaries upon the foreclosure on a Lien granted in favour of the Borrower or any of its Subsidiaries or any other transfer of title with respect to any secured investment in default; (vii) sales or transfers of assets or property of the social infrastructure nature; (viii) sales or other disposals of Capital Stock of the Borrower acquired for employees for the purpose of its employee share incentive scheme; and provided where the Capital Stock of the relevant Subsidiary holding Production Assets is sold or disposed of, the proportion equal to the share of Capital Stock so sold or disposed of shall for these purposes be deemed to be the relevant proportion of the Production Assets subject to such Asset Sale and

provided further that if after any such disposal of Capital Stock any Subsidiary ceases to be a Subsidiary of the Borrower, the relevant proportion of such Subsidiary's Production Assets subject to such Asset Sale shall be deemed 100 per cent.

"Asset Swap" means an exchange (or concurrent purchase and sale) of (i) Production Assets or (ii) Capital Stock of Subsidiaries holding Production Assets for Additional Assets of another person. "Board of Directors" means, as to any Person, the board of directors of such Person or any duly authorised committee thereof.

"Borrower Further Loan Guarantee Event Notice" means a notice given by the Borrower to the Lender and the Trustee upon the occurrence of a Further Loan Guarantee Event.

"**Business Day**" means a day which is a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealings in foreign exchange and foreign currency deposits) in Moscow, Luxembourg, London and New York City.

"Call Settlement Date" has the meaning set forth in Clause 7.6 hereof.

"**Capital Stock**" means, with respect to any Person, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents (however designated, whether voting or non-voting) of such Person's equity, including any preferred stock of such Person, whether now outstanding or issued after the Issue Date, including without limitation, all series and classes of such Capital Stock but excluding any debt securities convertible into such Capital Stock.

"Cash and Cash Equivalents" means, at any time, and without duplication, any amounts and investments shown as cash and cash equivalents in the most recently published consolidated financial statements of the Group prepared in accordance with Accounting Standards, in each case not subject to any security interest (other than pursuant to any customary bankers' liens arising by operation of law).

"Change of Control" shall occur at any time that any person and persons acting together and/or in concert, other than one or more of the Permitted Holders is or becomes the beneficial owner (directly or indirectly) of more than 50 per cent. of the issued and outstanding voting Capital Stock of the Borrower.

"Change of Control Payment Date" means the date falling five Business Days after the expiration of the Change of Control Put Period or, if such day is not a Business Day, the next following Business Day.

"Change of Control Put Option" means the change of control put option granted to Noteholders pursuant to the Conditions.

"Change of Control Put Period" has the meaning given to it in the Conditions.

"Change of Law" means any of the enactment or introduction of any new law, the variation, amendment or repeal of an existing or new law, and any ruling on or interpretation or application by a competent authority of any existing or new law which, in each case, occurs after the date hereof and for this purpose the word "law" means all or any of the following whether in existence at the date hereof or introduced hereafter and with which it is obligatory or customary for banks or other financial institutions or, as the case may be, companies in the relevant jurisdiction to comply:

- (i) any statute, treaty, order, decree, instruction, letter, directive, instrument, regulation, ordinance or similar legislative or executive action by any national or international or local government or authority or by any ministry or department thereof and other agencies of state power and administration (including, but not limited to, taxation departments and authorities); and/or
- (ii) any letter, regulation, decree, instruction, request, notice, guideline, directive, statement of policy or practice statement given by, or required of, any central bank or other monetary authority, or by or of any Taxing Authority or fiscal or other authority or agency (whether or not having the force of law); and
- (iii) the decision or ruling on, the interpretation or application of, or a change in the interpretation or application of, any of the foregoing by any court of law, tribunal, central bank, monetary authority or agency or any Taxing Authority or fiscal or other competent authority or agency.

"Conditions" has the meaning given to it in the Trust Deed.

"Consolidated Net Indebtedness" means at any date of determination (and without duplication) all Indebtedness of the Group as calculated in accordance with the then most recently published consolidated financial statements of the Group prepared in accordance with Accounting Standards, reduced by (a) the aggregate Cash and Cash Equivalents of the Group; (b) the net obligations arising from any derivative transaction entered into in connection with protection against or benefit from fluctuation in any rate or price with respect to Indebtedness as determined in good faith by the Borrower; (c) any Indebtedness incurred in respect of any Project Financing; and (d) the liability under any lease or hire purchase contract existing at the date hereof and which would, in accordance with the IFRS in force immediately before the adoption of IFRS 16 (Leases), have been treated as operating leases (the "**Operating Lease Liability**"), in each case, as calculated in accordance with the then most recently published consolidated financial statements of the Group prepared in accordance with IFRS or, to the extent not disclosed therein, in accordance with management accounts of the Group.

"**Core or Related Business**" means the business of (a) producing steel and steel pipe products, (b) investing in property, plant or equipment for the production of steel and steel pipe products, (c) purchasing and processing of raw materials and manufacturing equipment for the production of steel and steel pipe products, (d) conducting business connected with the consumption and/or sale of steel and steel pipe products, (e) industrial construction for the production of steel and steel pipe products, (f) automobile, railway and ship transportation of steel and steel pipe products in connection with the Group's production of steel and steel pipe products, (g) conducting sales of steel and steel pipe products and related activities, (h) supplemental pipe services such as the repair or finishing of steel pipe products, (i) energy distribution ancillary to/necessary for the pipe business, (j) research activities relating to the scientific and technological development of the pipe industry and relevant business, or (k) evaluating, participating in or pursuing any other activity or opportunity that is related to those identified in paragraphs (a) to (j) above.

"**Deed of Loan Guarantee**" means the deed of loan guarantee, substantially in the form set out in the Schedule hereto, containing the Loan Guarantees, as such Deed of Loan Guarantee may be amended or supplemented from time to time.

"**Disinterested Director**" means, with respect to any transaction or series of related transactions, a member of the Board of Directors of the Borrower who does not have any material direct or indirect financial interest in or with respect to such transaction or series of related transactions. A Person shall not be ineligible to constitute a Disinterested Director solely as a result of such Person owning any equity interests of the Borrower or any of its Subsidiaries or acting as an officer, director or employee of the Borrower or any of its Subsidiaries.

"Disposal Proceeds" has the meaning set forth in Clause 12.4.

"Dispute" has the meaning set forth in Clause 23.2.

"Environment" means living organisms including the ecological systems of which they form part and the following media:

- (a) air (including air within natural or man-made structures, whether above or below ground);
- (b) water (including territorial, coastal and inland waters, water under or within land and water in drains and sewers); and/or
- (c) land (including land under water).

"Environmental Law" means all applicable laws and regulations of any jurisdiction in which any member of the Group conducts business which:

- (a) have as a purpose or effect the protection of, and/or prevention of harm or damage to, the Environment;
- (b) provide remedies or compensation for harm or damage to the Environment; and
- (c) relate to Hazardous Substances or health or safety matters.

"Environmental Licence" means any authorisation, consent, approval, resolution, licence, exemption, filing or registration required at any time under Environmental Law in order to conduct the Core or Related Business.

"Event of Default" has the meaning set forth in Clause 13.1.

"Fair Market Value" means the value that would be paid by a willing buyer to an unaffiliated willing seller in a transaction not involving distress or necessity of either party, determined in good faith either by an Independent Appraiser, should the Borrower elect to obtain a report of an Independent Appraiser or the chief executive officer, chief financial officer or another competent officer of the Borrower or the relevant Subsidiary of the Borrower, as the case may be, whose determination shall be conclusive.

"Fitch" means Fitch Ratings Limited, any credit rating agency affiliate thereof or any successor to the rating agency business thereof.

"Further Loan Guarantor" means any Person who accedes to the Deed of Loan Guarantee as a result of the application of the requirements of Clause 12.12(b) hereof.

"Further Loan Guarantee" means any guarantee issued by means of accession to the Deed of Loan Guarantee as a result of the application of the requirements of Clause 12.12(b) hereof.

"Further Loan Guarantee Event" means (a) the failure of any Additional Loan Guarantee to be provided as specified pursuant to Clause 12.12(a) hereof or (b) the failure of any Further Loan Guarantee (if required) to be provided as specified pursuant to Clause 12.12(b) hereof.

"Further Loan Guarantee Event Notice" means the notice given by the Lender to the Noteholders in accordance with the terms and conditions of the Notes, specifying, *inter alia*, that a Further Loan Guarantee Event has occurred and providing particulars in respect of the Further Loan Guarantee Event Put Option.

"Further Loan Guarantee Event Payment Date" means five Business Days after the expiration of the Further Loan Guarantee Event Put Period.

"Further Loan Guarantee Event Put Option" means the option of any Noteholder to require the Lender to redeem a Note on the Further Loan Guarantee Event Payment Date at par together with accrued but unpaid interest up to but excluding the Further Guarantee Event Payment Date (if any) and plus any additional amounts or other amounts that may be due thereon.

"Further Loan Guarantee Event Put Period" means 60 calendar days after the Further Loan Guarantee Event Notice is given.

"**Group**" means the Borrower and its Subsidiaries, together with structured entities that are consolidated in the latest available consolidated financial statements of the Borrower prepared in accordance with Accounting Standards.

"Guarantee" means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Indebtedness of any other Person:

- (a) to purchase or pay, or advance or supply funds for the purchase or payment of, such Indebtedness of such other Person, whether arising by virtue of partnership arrangements, or by agreement to keepwell, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise, or
- (b) entered into for purposes of assuring in any other manner the obligee of such Indebtedness of the payment thereof or to protect such obligee against loss in respect thereof, in whole or in part,

provided, that "**Guarantee**" shall not include endorsements for collection or deposit in the ordinary course of business. "**Guarantee**" used as a verb has a corresponding meaning.

"Hazardous Substance" means any waste, pollutant, contaminant or other substance (including any liquid, solid, gas, ion, living organism or noise) that may be harmful to human health or other life or the Environment or a nuisance to any person.

"IFRS" means the International Financial Reporting Standards issued by the International Accounting Standards Board (as amended, supplemented or re-issued from time to time).

"Income Statements" means, in respect of any period, the then most recent consolidated income statement of the Group prepared in accordance with Accounting Standards.

"increased amounts of principal, interest or any other payment due hereunder" has the meaning set forth in Clause 8.1(b).

"Incur" means, with respect to any Indebtedness or other obligation of any Person, to create, issue, incur (including by conversion, exchange or otherwise), assume, Guarantee or otherwise become liable in respect of such Indebtedness or other obligation on statement of financial position of such Person, and "Incurrence, "Incurred" and "Incurring" shall have meanings correlative to the preceding. Indebtedness of any acquired Person or any of its Subsidiaries existing at the time such acquired Person becomes a Subsidiary (or is merged into or consolidated with the Borrower or any Subsidiary), whether or not such Indebtedness was Incurred in connection with, as a result of, or in contemplation of, such acquired Person becoming a Subsidiary (or being merged into or consolidated with the Borrower or any Subsidiary), shall be deemed Incurred at the time any such acquired Person becomes a Subsidiary or merges into or consolidates with the Borrower or any Subsidiary.

"Indebtedness" means, with respect to any Person at any date of determination (without duplication):

- (a) all indebtedness of such Person for borrowed money;
- (b) all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments;
- (c) all obligations of such Person in respect of uncovered letters of credit (including reimbursement obligations with respect thereto);
- (d) all obligations of such Person to pay the deferred and unpaid purchase price of property, assets or services, which purchase price is due more than 180 days after the earlier of the date of placing such property in service or taking delivery and title thereof or the completion of such services;
- (e) all Lease Liabilities of such Person;
- (f) the principal component of all Indebtedness of other Persons secured by a Lien on any assets of such Person whether or not such Indebtedness is assumed by such Person, provided, however, that the amount of such Indebtedness will be the lesser of (a) the Fair Market Value of such asset as such date of determination and (b) the outstanding amount of such Indebtedness of such other Persons;
- (g) the outstanding amount of the Indebtedness of other Persons guaranteed or indemnified by such Person to the extent such Indebtedness is guaranteed or indemnified by such Person;
- (h) to the extent not otherwise included in this definition, net obligations under any currency or interest rate hedging agreements (and when calculating the value of any such agreement, only the mark-to-market value shall be taken into account after any applicable netting or set-off in accordance with the Accounting Standards); and
- (i) any monies raised under any other transaction (including, but without limitation to, any forward sale or purchase agreement) having the economic or commercial effect of a borrowing.

For the avoidance of doubt Indebtedness of any Person does not include (i) bank guarantees, trade account payables, including, without limitation, trade letters of credit, bills of exchange, counter-indemnities in respect of any guarantee or indemnity or other negotiable instruments arising solely in the ordinary course of business of such Person and maturing in less than 270 days (other than promissory notes, other negotiable instruments, bills of exchange, trade letters of credit and similar obligations incurred for the purpose of a borrowing) and (ii) for the purposes of Clause 12.2 only, restructured tax payable; in each case as reported in the most recent statement of financial position prepared in accordance with Accounting Standards of such Person.

For the purpose of determining compliance with any U.S. Dollar-denominated restriction on Indebtedness, the U.S. Dollar Equivalent of Indebtedness denominated in another currency shall be calculated, provided, however, that if any such Indebtedness denominated in a different currency is subject to a currency hedging agreement with respect to U.S. dollars covering all principal, premium, if any, and interest payable on such Indebtedness, the amount of such Indebtedness expressed in U.S. dollars will be as provided in such currency hedging agreement. The principal amount of any Refinancing Indebtedness incurred in the same currency as the Indebtedness being Refinanced will be the U.S. Dollar Equivalent, as appropriate, of the Indebtedness Refinanced, except to the extent that (A) such U.S. Dollar Equivalent was determined based on a currency hedging agreement, in which case the principal amount of such Refinancing Indebtedness will be determined

in accordance with such currency hedging agreement, and (B) the principal amount of the Refinancing Indebtedness exceeds the principal amount of the Indebtedness being Refinanced, in which case the U.S. Dollar Equivalent of such excess, as appropriate, will be determined on the date such Refinancing Indebtedness is incurred. The principal amount of any Indebtedness to refinance other Indebtedness, if incurred in a different currency from the Indebtedness being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such Refinancing Indebtedness is denominated that is in effect on the date of the incurrence of such Refinancing Indebtedness.

"**Independent Appraiser**" means any of PricewaterhouseCoopers, KPMG, Deloitte & Touche, Ernst & Young or such investment banking, accountancy or appraisal firm generally recognised in the relevant jurisdiction selected by the competent management body of the Borrower or the relevant Subsidiary, *provided* it is not an Affiliate of the Borrower, or any Subsidiary.

"Initial Loan Guarantor" means "Volzhsky Pipe Plant", Joint stock company.

"Interest Payment Date" means 12 February and 12 August of each year in which the Loan remains outstanding, being the last day of the corresponding Interest Period, commencing on 12 August 2020, and the last such date being the Repayment Date.

"Interest Period" means, except as otherwise provided herein, any of those periods mentioned in Clause 4.

"Interest Rate" means, except as otherwise provided herein, the interest rate specified in Clause 5.2.

"Investment" means, with respect to any Person, directly or indirectly, any advance (other than advances to customers in the ordinary course of business), loan (including guarantees), or other extension of credit (including guarantees) or capital contribution to (by means of any transfer of cash) or other property to others or any payment for property or services for the account or use of others, or any purchase, acquisition or ownership by such Person of any Capital Stock, bonds, notes, debentures, or other securities (including, without limitation, any interests in any partnership or joint venture) or evidence of Indebtedness issued or owned by any Person and all other items that would be classified as investments on a statement of financial position prepared in accordance with Accounting Standards; provided that:

- (a) hedging obligations entered into in the ordinary course of business and in compliance with the terms of this Agreement; and
- (b) endorsements of negotiable instruments in the ordinary course of business,

shall in each case be deemed not to be an Investment.

"**Investment Grade Rating**" means a rating equal to or higher than (i) Baa3 (or the equivalent) by Moody's (ii) BBB- (or the equivalent) by Standard & Poor's and (iii) BBB- (or the equivalent) by Fitch or in each case the equivalent thereof from any duly approved substitute Rating Agency.

"Investment Grade Status" means that the Notes have an Investment Grade Rating from any two Rating Agencies.

"Issue Date" means 12 February 2020.

"Lease Liabilities" means an obligation that is required to be classified and accounted for as lease liabilities for financial reporting purposes in accordance with Accounting Standards and the amount of Indebtedness represented by such obligation will be the determined in accordance with the Accounting Standards.

"Leverage Ratio" means, at the date of the Incurrence of the Indebtedness giving rise to the need to calculate the Leverage Ratio and subject to provisions of Clause 12.2, the ratio of (i) Consolidated Net Indebtedness (ii) to 12-Month Adjusted EBITDA, after giving effect, as determined in good faith by a responsible financial or accounting officer of the Borrower, on a *pro forma* basis to:

(a) the Incurrence of any Indebtedness the permissibility of which is then being measured, the Incurrence or repayment of any other Indebtedness since the date of the then most recently published consolidated financial statements of the Group prepared in accordance with Accounting Standards and, in each case, the receipt and application of the proceeds (if applicable) therefrom;

- (b) the exclusion from the aggregate Cash and Cash Equivalents of the Group of the portion of Cash and Cash Equivalents associated with the incurrence of any Indebtedness the permissibility of which is then being measured; and
- (c) the exclusion of Adjusted EBITDA associated with any Asset Sales or the inclusion of Adjusted EBITDA associated with any Asset Acquisitions (including, without limitation, any Asset Acquisition giving rise to the need to make such calculation as a result of the Incurrence or assumption of Indebtedness) occurring on or after the first day of the Measurement Period relevant for such calculation as if any such Asset Sale or Asset Acquisition occurred on the first day of the first Measurement Period used in the calculation of 12-Month Adjusted EBITDA,

provided, however, that any such *pro forma* Adjusted EBITDA in respect of an Asset Acquisition may only be so included if such *pro forma* Adjusted EBITDA shall have been derived from (i) financial statements of, or relating to or including, such acquired entity, that have been prepared in accordance with Accounting Standards or (ii) such other financial statements or financial reports of the acquired entity that the chief financial officer of the Borrower believes in good faith to present fairly the financial position and results of operations of the acquired entity so as to permit such a pro forma Adjusted EBITDA to be prepared on the basis of reasonable assumptions and estimates.

"Lien" means any mortgage, pledge, security interest, encumbrance, lien or charge of any kind (including, without limitation, any conditional sale or other title retention agreement or lease in the nature thereof, any sale with recourse against the seller or any Affiliate of the seller, or any agreement to give any security interest) securing any obligation of any Person.

"Loan" means the U.S.\$500,000,000 term loan granted to the Borrower by the Lender pursuant to the terms of this Agreement.

"Loan Guarantees" means the guarantees of the Loan Guarantors under the Deed of Loan Guarantee.

"Loan Guarantors" means the Initial Loan Guarantor together with the Additional Loan Guarantors and any other Person who becomes a guarantor pursuant to Clause 12.12 hereof and "Loan Guarantor" means any of them.

"Luxembourg" means the Grand Duchy of Luxembourg.

"**Make Whole Premium**" the excess, if any, of (a) the present value of the aggregate principal amount of the Loan outstanding at the Call Settlement Date, plus any required interest payments that would otherwise be due to be paid on the Loan from the Call Settlement Date through to the Repayment Date calculated using a discount rate equal to the Treasury Rate at the Call Settlement Date plus 50 basis points, over (b) the outstanding aggregate principal amount of the Loan at the Call Settlement Date, provided that if the value of the Make Whole Premium at any time would otherwise be less than zero, then in such circumstances, the value of the Make Whole Premium will be equal to zero.

"Material Adverse Effect" means any material adverse effect on the business, financial condition or results of operations of the Borrower and its Subsidiaries taken as a whole.

"Material Subsidiary" means at any relevant time a Subsidiary of the Borrower:

whose Production Assets represent not less than 10 per cent. of the total consolidated Production Assets of the Borrower or whose revenues (excluding intercompany revenues) represent not less than 10 per cent. of the consolidated revenues of the Borrower (determined by reference to the most recent publicly available annual or interim financial statements of the Borrower prepared in accordance with Accounting Standards and the latest financial statements of the Subsidiary determined in accordance with Accounting Standards (or, if unavailable, such Subsidiary's most recent management accounts)); or

(b) to which is transferred all or substantially all the assets and undertakings of a Subsidiary which immediately prior to such transfer is a Material Subsidiary,

save that each Loan Guarantor shall at all times be deemed to be a Material Subsidiary,

and as identified in an Officer's Certificate of the Borrower delivered to the Lender (and the Trustee) at the same time as the most recent financial statements referred to herein or within 10 days of a request therefor.

"Measurement Period" means each financial quarter ending on 31 March, 30 June, 30 September or 31 December (each a "financial quarter" and together "financial quarters"), for such time that the Borrower has published audited or reviewed IFRS financial statements for the three, six, nine or twelve months of a financial year covering at least four consecutive financial quarters and continues to publish such financial statements, failing which each financial half-year ending on 30 June or 31 December. For the avoidance of doubt, (i) Adjusted EBITDA for a Measurement Period of a financial half-year ending on 31 December of any year shall be calculated by subtracting (a) Adjusted EBITDA for the Measurement Period of a financial half-year ending on 30 June of that year from (b) Adjusted EBITDA for that year, (ii) Adjusted EBITDA for a Measurement Period of a financial quarter ending on 30 June of any year shall be calculated by subtracting (a) Adjusted EBITDA for the Measurement Period of the financial quarter ending on 31 March of that year from (b) Adjusted EBITDA for the financial half-year ending on 30 June of that year, (iii) Adjusted EBITDA for a Measurement Period of a financial quarter ending on 30 September of any year shall be calculated by subtracting (a) Adjusted EBITDA for the financial half-year ending on 30 June in that year from (b) Adjusted EBITDA for the 9 months ending on 30 September in that year and (iv) Adjusted EBITDA for a Measurement Period of a financial quarter ending on 31 December of any year shall be calculated by subtracting (a) Adjusted EBITDA for the 9 months ending on 30 September in that year from (b) Adjusted EBITDA for that year.

"Moody's" means Moody's Investors Service Limited, any credit rating agency affiliate thereof or any successor to the rating agency business thereof.

"Noteholder" means the person in whose name the Note is registered in the register of the noteholders (or in the case of joint holders, the first named holder thereof).

"Notes" means the U.S.\$500,000,000 4.3 per cent. loan participation notes due 2027 proposed to be issued by the Lender in its capacity as issuer pursuant to the Trust Deed for the purpose of financing the Loan.

"**Officer**" means, with respect to a Person, the Chairman of the Board of Directors, the General Director, the Chief Executive Officer, the President, the Chief Financial Officer, the Controller, the Treasurer or the General Counsel of such Person or any duly authorised representative or any other officer of such Person who is authorised to bind such Person by virtue of such Person's constitutive documents.

"Officer's Certificate" means a certificate signed by an Officer of the Borrower.

"Permitted Holders" means any and all of:

- (a) TMK Steel Holding Limited;
- (b) any direct or indirect beneficial owner of the Capital Stock of TMK Steel Holding Limited at the Issue Date;
- (c) the legal representatives of any of the foregoing and the trustees of *bona fide* trusts of which the foregoing are the only beneficiaries;
- (d) any Affiliate of a party described in (a) or (c) above;
- (e) any spouse, family member or relative of any individual described in (b) above, any partnership for the benefit of any such individual, family member or relative, or the estate, executor, administrator or beneficiaries of any such individual, family member or relative; or
- (f) any Subsidiary of any of the foregoing parties.

"Permitted Indebtedness" means:

(a) the Incurrence by the Borrower or any Subsidiary of the Borrower of intercompany Indebtedness to the Borrower and/or any Subsidiary of the Borrower; provided that (i) any disposition, pledge or transfer of the rights under any such Indebtedness to any Person other than a disposition, pledge or transfer to the Borrower or a Subsidiary of the Borrower and (ii) any transaction pursuant to which any Subsidiary of the Borrower that has Indebtedness owing to it from the Borrower or another Subsidiary ceases to be a Subsidiary of the Borrower, shall, in each case, be deemed to be an Incurrence of such Indebtedness which shall not be permitted by this paragraph (a);

- (b) Refinancing Indebtedness in respect of (1) Indebtedness outstanding on the date hereof, and (2) Indebtedness Incurred pursuant to Clause 12.2 (including, for the avoidance of doubt, Permitted Indebtedness);
- (c) Net obligations under hedging agreements entered into in the ordinary course of business for the purposes of protection against or benefiting from fluctuations in the interest rates, FX rates or prices and not for speculative purposes unrelated to transactions undertaken in the ordinary course of business;
- (d) Indebtedness in respect of performance, bid, appeal and surety bonds and completion bonds and guarantees provided by the Borrower or any Subsidiary of the Borrower and that do not secure other Indebtedness, in amounts and for purposes customary in the Core or Related Business;
- (e) Indebtedness arising from netting arrangements and the honouring by a bank or other financial institution of a cheque, draft or similar instrument drawn against insufficient funds in the ordinary course of business; provided, however, that such Indebtedness is extinguished within five Business Days of its Incurrence;
- (f) Indebtedness arising from agreements of the Borrower or a Subsidiary of the Borrower providing for indemnification, adjustment of purchase price or similar obligations, in each case, incurred or assumed in connection with the disposition of any business, assets or Capital Stock of any Subsidiary of the Borrower; provided that (A) the maximum aggregate liability in respect of all such Indebtedness shall at no time exceed the gross proceeds (including the Fair Market Value of non-cash consideration) actually received by (or held in escrow as a collateral for such Indebtedness) the Borrower and its Subsidiaries in connection with such disposition (without giving effect to any subsequent changes in value) and (B) such Indebtedness is not reflected in the statement of financial position of the Borrower or any Subsidiary of the Borrower (contingent obligations referred to in a footnote to financial statements and not otherwise reflected on the statement of financial position shall not be deemed to be reflected on such statement of financial position for purposes of this paragraph (f));
- (g) Indebtedness Incurred in respect of workers' compensation claims or claims arising under similar legislation, or pursuant to self-insurance obligations and not in connection with the borrowing of money or the obtaining of advances or credit; provided that such Indebtedness is reimbursed within 30 days of its Incurrence;
- (h) Indebtedness outstanding on the Issue Date;
- (i) Indebtedness of a Subsidiary of the Borrower incurred and outstanding on or prior to the date on which such Subsidiary became a Subsidiary of the Borrower (other than Indebtedness incurred in connection with, or to provide all or any portion of the funds or credit support utilised to consummate, the transaction or series of related transactions pursuant to which such Subsidiary became a Subsidiary of the Borrower); provided, however, that on the date of such acquisition and after giving pro forma effect thereto, the Borrower would either have been entitled to incur at least U.S.\$1.00 of additional Indebtedness pursuant to Clause 12.2;
- (j) Indebtedness in respect of any Project Financing;
- (k) any guarantee by the Borrower or any of its Subsidiaries of Indebtedness of the Borrower or any of its Subsidiaries; in each case, to the extent that the guaranteed Indebtedness was permitted to be incurred by another provision of Clause 12.2; or
- (1) (A) Indebtedness in the form of any liability in respect of any purchase price for raw materials for the production of steel and steel pipe products ("Raw Materials"); or (B) Indebtedness incurred under any revolving credit facility for working capital purposes the proceeds from which are used for, or in the context of, purchasing and processing of Raw Materials, provided that (x) the deferral of the purchase price in the context of part (A) of this paragraph (l) is more than 180 days and not more than 365 days; and (y) the maturity of any advance under any revolving credit facility referred to in part (B) of this paragraph (l) is not more than 365 days and the total principal amount outstanding in the context of the arrangements set out in this paragraph (l) does not exceed U.S.\$150,000,000 at any one time.

- (m) Indebtedness in respect of Lease Liabilities (other than Operating Lease Liability) and Purchase Money Indebtedness, provided that the aggregate principal amount of such Indebtedness does not exceed the aggregate of the lesser of the Fair Market Value (on the date of the Incurrence thereof) or the purchase price or cost of the property, plant, equipment or capital assets acquired, constructed, improved or leased or the Capital Stock so acquired (where such property, plant, equipment or capital assets are purchased through the acquisition of Capital Stock of a Person that owns such property, plant, equipment or capital assets) and expenses in connection therewith, and provided further that the aggregate principal amount of such Indebtedness Incurred under this paragraph (m) does not exceed EUR300 million (or its equivalent in other currencies) at any time outstanding, but excluding any accrued but unpaid interest, fees and/or reimbursable expenses which may be owing in connection therewith, whether or not added to the principal amount of such Indebtedness (for the avoidance of doubt, it being understood that the Borrower or any Subsidiary may repay, redeem or otherwise retire Indebtedness Incurred pursuant to this paragraph (m) at any time); or
- (n) Indebtedness in an aggregate principal amount up to U.S.\$300 million (or its equivalent in other currencies) at any time outstanding, but excluding any accrued but unpaid interest, fees and/or reimbursable expenses which may be owing in connection therewith, whether or not added to the principal amount of such Indebtedness, at any one time Incurred by the Borrower or a Subsidiary of the Borrower (for the avoidance of doubt, it being understood that the Borrower or any Subsidiary may repay, prepay, redeem or otherwise retire Indebtedness Incurred pursuant to this paragraph (n) at any time.

"Permitted Liens" means:

- (a) Liens granted by: (i) a Subsidiary of the Borrower (including any Loan Guarantor) in favour of the Borrower or any Loan Guarantor, or (ii) a Subsidiary of the Borrower other than a Loan Guarantor in favour of another Subsidiary of the Borrower, or (iii) by the Borrower in favour of a Loan Guarantor, in each case with respect to the property or assets, or any income or profits therefrom, of the Borrower or such Subsidiary of the Borrower, as the case may be;
- (b) any Lien existing on the Issue Date;
- (c) Liens imposed by law, including but without limitation, Liens of landlords and carriers, warehousemen, mechanics, suppliers, material men, repairmen or other similar Liens arising in the ordinary course of business;
- (d) any Lien on any property, income or assets of any Person existing at the time such Person is acquired, merged or consolidated with or into the Borrower or any of its Subsidiaries and not created in contemplation of such event; provided that no such Lien shall extend to any other property, income or assets of such Person or to any other property or assets of the Subsidiaries of such Person or the Borrower or any of its Subsidiaries;
- (e) any Lien existing on any property, income or assets prior to the acquisition thereof by the Borrower or any of its Subsidiaries and not created in contemplation of such acquisition; provided that no such Lien shall extend to any other property, income or assets of the Borrower or any of its Subsidiaries;
- (f) any Lien on the property, income or assets of the Borrower or any of its Subsidiaries securing working capital facilities with disbursements of a tenor of 180 days or less with an aggregate principal amount outstanding at any time not to exceed U.S.\$400 million;
- (g) any Lien on any property or assets of the Borrower or any Subsidiary securing Indebtedness incurred for the purpose of financing all or part of the acquisition, maintenance, repair or construction of such property or assets provided that (i) such Lien is created solely for the purpose of securing Indebtedness incurred by the Borrower or relevant Subsidiary in compliance with Clause 12.2, (ii) no such Lien shall extend to any other property or assets of the Borrower or any of its Subsidiaries, (iii) the aggregate principal amount of all Indebtedness secured by Liens under this paragraph (g) on such property or assets does not exceed the purchase price of such property or assets (including customs duties, transport, insurance, construction and installation costs and other incidental costs and expenses of purchase and any VAT or similar taxes thereon) and (iv) (A) in the case of property or assets acquired, maintained or repaired, such Lien attaches to such property or assets concurrently with the maintenance or repair thereof or within 180 days after the acquisition thereof and (B) in the case of property or assets constructed, within 180 days after the completion of construction thereof

and the recognition of such property or asset as a fixed asset under Accounting Standards, as the case may be;

- (h) any Lien granted in favour of a Person providing Project Financing if the Lien is solely on the property, income, assets or revenues of the project for which the financing was incurred provided that (i) the person or persons providing such financing limits its recourse primarily to the property, income, assets or revenues subject to such Lien, (ii) such Lien is created solely for the purpose of securing Indebtedness incurred by the Borrower or any Subsidiary in compliance with Clause 12.2, and (iii) no such Lien shall extend to any other property, income, assets or revenues of the Borrower or any Material Subsidiaries;
- (i) any Lien securing the Loan and any Guarantee under the Deed of Loan Guarantee or any other Guarantees in connection with the Loan (including, but not limited to, any Additional Loan Guarantees and Further Loan Guarantees);
- (j) any Lien incurred, or pledges or deposits in connection with workers' compensation, unemployment insurance and other social security benefits and other obligations of like nature in the ordinary course of business;
- (k) any deposits to secure the performance of bids, trade contacts, government contracts, leases, statutory obligations, customs duties, surety and appeal bonds, performance or return-of-money bonds or liabilities to insurance carriers under insurance or self-insurance arrangements and other obligations of like nature, in each case so long as, such Liens do not secure obligations constituting Indebtedness for borrowed money and are Incurred in the ordinary course of business;
- (1) easements, rights of way, restrictions (including zoning restrictions), reservations, permits, servitudes, minor defects or irregularities in title and other similar charges and encumbrances, and Liens arising under leases or subleases granted to others, in each case not interfering in any material respect with the business of the Borrower or any of its Subsidiaries and existing, arising or incurred in the ordinary course of business;
- (m) any Lien on any receivables securing pre-export financing undertakings;
- (n) any Lien securing Indebtedness of which Purchase Money Indebtedness is a part provided that the related Purchase Money Indebtedness shall not be secured by any property or other assets of the Borrower or a Subsidiary of the Borrower other than the property, plant, equipment or capital assets so acquired, improved, constructed or leased or the shares so acquired (where such property, plant, equipment or capital assets are purchased through the acquisition of shares of a Person that owns such property, plant, equipment or capital assets) and any rights under any Indebtedness incurred by the Borrower or a Subsidiary of the Borrower to the Borrower or a Subsidiary of the Borrower in connection with such acquisition, construction, improvement or lease of such property, plant, equipment or capital assets or such shares, and the Lien securing such Indebtedness shall be created within 180 days of such acquisition, construction, improvement or lease;
- (o) any Lien securing reimbursement obligations of the Borrower or any of its Subsidiaries with respect to letters of credit encumbering only documents and other property relating to such letters of credit and other property relating to such letters of credit and the products or proceeds thereof in the ordinary course of business;
- (p) any Lien in respect of obligations arising under hedging agreements so long as the related indebtedness is permitted to be incurred under the terms of this Agreement and any such hedging agreement is not speculative;
- (q) a right of set-off, right to combine accounts, right of direct debit or any analogous right which any bank or other financial institution may have relating to any credit balance of any member of the Group;
- (r) any Lien for ad valorem, income or property taxes or assessments, customs charges and similar charges which either are not delinquent or are being contested in good faith by appropriate proceedings for which the Borrower or relevant Material Subsidiary has set aside in its accounts reserves to the extent required by Accounting Standards;

- (s) any extension, renewal or replacement of any Lien described in paragraphs (a) to (r) above, provided that the amount of Indebtedness secured by such Lien is not increased (except by an amount necessary to pay any premium required to be paid under the terms of the instrument governing such Indebtedness and plus the amount of reasonable fees and expenses related to such extension, renewal or replacement); and
- (t) any Lien on the property, Capital Stock, income or other assets of the Borrower or any Subsidiaries of the Borrower securing Indebtedness of the Borrower or any Subsidiaries of the Borrower incurred in an aggregate principal amount outstanding at any one time not to exceed 20 per cent. of the total assets of the Group (determined by reference to the then most recent publicly available annual or interim financial statements of the Group prepared in accordance with Accounting Standards and measured on the date the underlying Indebtedness giving rise to any such Lien is Incurred). For the avoidance of doubt this paragraph (t) does not include any Lien created in accordance with paragraphs (a) to (s) hereof.

"**Person**" means any individual, corporation, partnership, joint venture, trust, unincorporated organisation or government or any Agency or political subdivision thereof.

"**Potential Event of Default**" means any condition, event or act which, with the lapse of time and/or the issue, making or giving of any notice, certification, declaration, demand, determination and/or request and/or the taking of any similar action and/or the fulfilment of any similar condition, would constitute, an Event of Default.

"Production Assets" means property, plant and equipment of the Group or any member of the Group determined in accordance with Accounting Standards.

"**Project Financing**" means any financing of all or part of the costs of the acquisition, construction, development or operation of any asset or project if the person or persons providing such financing limits its recourse solely to the asset or project financed and the revenues derived from such asset or project as the source of repayment for the moneys advanced.

"Purchase Money Indebtedness" means Indebtedness:

- (a) incurred for purchase of property, plant, equipment or capital assets where the aggregate principal amount of such Indebtedness does not exceed (i) the lesser of (x) the Fair Market Value of the property, plant, equipment or capital assets purchased for use in the business of the Group as at the date of the Incurrence thereof and (y) the purchase price or cost of such acquired property, plant, equipment or capital assets or (ii) if such property, plant, equipment or capital assets or (ii) if such property, plant, equipment or capital assets or capital assets or (ii) if such property, plant, equipment or capital assets are purchased through the acquisition of the Capital Stock of a Person that owns such property, plant, equipment or capital assets, the lesser of (x) the Fair Market Value of such acquired Capital Stock as at the date of the Incurrence of such Indebtedness and (y) the purchase price or cost of such acquired Capital Stock, including in all cases any refinancing of such Indebtedness that does not increase the aggregate principal amount (or accreted amount, if less) thereof as of the date of refinancing and the maturity of such Indebtedness does not exceed the anticipated useful life of such property, plant, equipment or capital assets being acquired; and
- (b) Incurred to finance the acquisition, construction, improvement or lease of such property, plant, equipment or capital assets, including additions and improvements thereto or the acquisition of the Capital Stock, as the case may be;

provided, however, that such Indebtedness is Incurred, prior to but in contemplation of, or within 180 days after, the acquisition, construction, improvement or lease of such property, plant, equipment or capital assets or the acquisition of such shares by the Borrower or a Subsidiary.

"Qualifying Jurisdiction" means any jurisdiction the transfer or assignment of the Loan (or any rights, benefits and/or obligations hereunder) to which would not, at the time of such transfer or assignment, cause the Borrower to have to provide payments of increased amounts of principal, interest or any other payment due hereunder or Additional Amounts when interest, principal and any other amounts paid under this Loan Agreement is paid to or from such jurisdiction.

"Qualified Securitisation Transaction" means (i) any transaction by which an entity acquires or provides finance against the security of assets (financial or otherwise) or any rights arising from or by reference to such assets from the Borrower or any of its Subsidiaries and that entity funds such acquisition or financing

from external funding sources (including, but not limited to, debt securities or banking facilities) on terms that such funding will be repaid primarily from the cashflows and/or values and/or rights attributable to such assets, or (ii) any asset-backed financing, receivables financing or comparable secured loan financing or similar arrangement pursuant to which, at any time, the aggregate principal amount of the funding raised does not at the initial funding thereof exceed 10 per cent. of the consolidated total assets of the Borrower as determined at any time by reference to the most recent consolidated statement of financial position of the Borrower prepared in accordance with Accounting Standards.

"**Rating Agencies**" means Fitch, Moody's and Standard & Poor's or, if any or all of Fitch, Moody's or Standard & Poor's shall not provide a publicly available rating on the Notes, an internationally recognised securities rating agency or agencies, as the case may be, selected by the Lender and the Guarantor with the prior written approval of the Trustee, which shall be substituted for Fitch, Moody's and/or Standard & Poor's, with respect to the Notes, and "**Rating Agency**" means any one of them.

"**Redeemable Capital Stock**" means any Capital Stock that, either by its terms or by the terms of any security into which it is convertible or exchangeable or otherwise, is or upon the happening of an event or passage of time would be, required to be redeemed prior to 180 days after the Repayment Date or is redeemable at the option of the holder thereof at any time prior to 180 days after the Repayment Date, or is convertible into or exchangeable for debt securities at any time prior to 180 days after the Repayment Date at the option of the holder thereof.

"**Refinance**" means, in respect of any security or Indebtedness, to refinance, extend, renew, refund, repay, prepay, redeem, defease or retire, or to issue a security or incur Indebtedness in exchange or replacement for, such security or Indebtedness in whole or in part and "**Refinanced**" and "**Refinancing**" shall have correlative meanings.

"**Refinancing Indebtedness**" means any Refinancing by the Borrower or any Subsidiary of the Borrower, to the extent that such Refinancing does not:

- (a) result in an increase in Consolidated Indebtedness as of the date of such proposed Refinancing (plus the amount of any premium required to be paid under the terms of the instrument governing such Indebtedness and plus the amount of reasonable fees and expenses incurred by the Borrower in connection with such Refinancing); or
- (b) create Indebtedness with:
 - (i) a Weighted Average Life to Maturity that is less than the Weighted Average Life to Maturity of the Indebtedness being Refinanced, or
 - (ii) a final maturity earlier than the final maturity of the Indebtedness being Refinanced,

for the avoidance of doubt, it being understood that any Incurrence of additional Indebtedness for Refinancing purposes and the related Refinancing of any existing Indebtedness may not be concurrent, and that a lapse of time of up to 180 Business Days between the Incurrence of additional Indebtedness for Refinancing purposes and the related Refinancing of existing Indebtedness (or vice versa) shall not prejudice the determination that such transaction falls within the definition of Refinancing Indebtedness.

"Repayment Date" means 12 February 2027, or if such day is not a Business Day, the next succeeding Business Day.

"Russia" shall mean the Russian Federation and any province or political subdivision or Agency thereof or therein, and "Russian" shall be construed accordingly.

"Russian GAAP" means generally accepted accounting principles, standards and practices in the Russian Federation.

"**Same-Day Funds**" means Dollar funds settled through the New York Clearing House Interbank Payments System or such other funds for payment in Dollars as the Lender may at any time determine to be customary for the settlement of international transactions in New York City of the type contemplated hereby.

"**Standard & Poor's**" means Standard & Poor's Credit Market Services Europe Limited, any credit rating agency affiliate thereof or any successor to the rating agency business thereof.

"Stated Maturity" means:

- (a) with respect to any Indebtedness, the date specified in such Indebtedness as the fixed date on which the final instalment of principal of such Indebtedness is due and payable; and
- (b) with respect to any scheduled instalment of principal of or interest on any Indebtedness, the date specified in such Indebtedness as the fixed date on which such instalment is due and payable.

"**Subsidiary**" of any Person means (a) any corporation more than 50 per cent. of the outstanding voting power of the Capital Stock of which is owned or controlled, directly or indirectly, by such Person or by one or more other Subsidiaries of such Person, or by such Person and one or more other Subsidiaries thereof, (b) any limited partnership of which such Person or any Affiliate of such Person is a general partner or (c) any other Person in which such Person, or one or more other Subsidiaries of such Person and one or more other Subsidiaries, directly or indirectly, has more than 50 per cent. of the outstanding partnership or similar interests or has the power, by contract or otherwise, to direct or cause the direction of the policies, management and affairs thereof.

"Taxes" has the meaning set out in Clause 8.1(a).

"Taxing Authority" has the meaning set out in Clause 8.1(a).

"Treasury Rate" means the yield to maturity at the time of computation of United States Treasury securities with a constant maturity most nearly equal to the period from the Call Settlement Date to the Repayment Date. The Borrower will obtain such yield to maturity from information compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) which has become publicly available at least two Business Days (but not more than five Business Days) prior to the Call Settlement Date (or, if such Statistical Release is not so published or available, any publicly available source of similar market data selected by the Borrower in good faith)); provided, however, that if the period from the Call Settlement Date to the Repayment Date is not equal to the constant maturity of a United States Treasury security for which a weekly average yield is given, the Treasury Rate shall be obtained by linear interpolation (calculated to the nearest one-twelfth of a year) from the weekly average yields of United States Treasury securities for which such yields are given, except that if the period from the Call Settlement Date is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year shall be used.

"**Trust Deed**" means the trust deed to constitute the Notes for the equal and rateable benefit of the Noteholders to be dated the Issue Date between the Lender, in its capacity as issuer, and the Trustee as amended, varied or supplemented from time to time.

"Trustee" means BNY Mellon Corporate Trustee Services Limited, as trustee under the Trust Deed and any successor thereto as provided thereunder.

"unpaid sum" has the meaning set forth in Clause 14.1.

"U.S. Dollar Equivalent" means with respect to any amount denominated in a currency other than U.S. Dollars, at any time for the determination thereof, the amount of U.S. Dollars obtained by converting such other currency involved into U.S. Dollars at the spot rate for the purchase of U.S. Dollars with such other currency as most recently published under "Currency Rates" in the section of the *Financial Times* entitled "Currencies, Bonds & Interest Rates" or, in case of Roubles, the official exchange U.S.Dollar/Rouble exchange rate published by the Central Bank of the Russian Federation.

"U.S. GAAP" means generally accepted accounting principles, standards and practices in the United States of America.

"Weighted Average Life to Maturity" means, when applied to any Indebtedness at any date, the number of days obtained by dividing:

- (a) the sum of the products obtained by multiplying:
 - (i) the amount of each then remaining outstanding instalment, sinking fund, serial maturity or other required payment of principal or liquidation preference, as the case may be, including payment at final maturity, in respect thereof, by

- (ii) the number of days which will elapse between such date and the scheduled repayment date of such Indebtedness
- (b) the then outstanding aggregate principal amount or liquidation preference, as the case may be, of such Indebtedness.

"€", "EUR" and "euro" denote the single currency of each member state of the European Union that adopts or has adopted, and in each case continues to adopt, the euro as its lawful currency in accordance with legislation of the European Union relating to Economic and Monetary Union.

Other Definitions:

the "Lender" shall be construed so as to include it and any of its subsequent successors, assignees and chargees in accordance with their respective interests;

"**repay**" (or any derivative form thereof) shall, subject to any contrary indication, be construed to include "prepay" (or, as the case may be, the corresponding derivative form thereof); and

"VAT" shall be construed as a reference to value added tax including any similar tax which may be imposed in place thereof from time to time.

1.2 Interpretation

Unless the context otherwise requires,

- (a) a term has the meaning assigned to it;
- (b) an accounting term not otherwise defined has the meaning assigned to it in accordance with Accounting Standards consistently applied;
- (c) "or" is not exclusive;
- (d) words in the singular include the plural, and words in the plural include the singular;
- (e) provisions apply to successive events and transactions;
- (f) references to "U.S.\$" or "U.S. dollars" are to United States dollars; and
- (g) references to the "Loan Guarantee" are to any Loan Guarantee which may exist from time to time in accordance with the provisions hereof; in the event that no such Loan Guarantee exists at any time, the relevant provisions and references in this Agreement shall be deemed to be amended accordingly.

1.3 Statutes

Any reference in this Agreement to a statute shall be construed as a reference to such statute as the same may have been, or may from time to time be, amended or re-enacted.

1.4 Headings

Clause and Schedule headings are for ease of reference only.

1.5 Amended Documents

Except where the contrary is indicated, any reference in this Agreement to this Agreement, the Loan Guarantee or any other agreement or document shall be construed as a reference to this Agreement, the Loan Guarantee or, as the case may be, such other agreement or document as the same may have been, or may from time to time be, amended, varied, novated or supplemented.

2 The Loan

The Lender grants to the Borrower, upon the terms and subject to the conditions hereof, a single disbursement term loan facility in the amount of U.S.\$500,000,000.

3 Availability of the Loan

The Loan will be available by way of a single advance which will be made by the Lender to the Borrower, and the Borrower will draw down the Loan, on 12 February 2020, or such later date as may otherwise be agreed by the parties to this Agreement, if:

- (1) the Lender has not, prior to 12 February 2020, or such later date as may otherwise be agreed by the parties to this Agreement, notified the Borrower that it has not received the condition precedent documents as listed in the agreements entered into in connection with the Notes in form and substance satisfactory to the Lender;
- (2) the Lender has received the arranged funding for the Loan; and
- (3) no event has occurred or circumstance arisen which would, whether or not with the giving of notice and/or the passage of time constitute an event described under Clause 13.

4 Interest Periods

The period for which the Loan is outstanding shall be divided into successive semi-annual periods, ending on and excluding 12 February and 12 August, each of which, other than the first (which shall commence on, and shall include, 12 February 2020) shall start on, and shall include, the last day of the preceding such period (each, an "Interest Period").

5 Payment and Calculation of Interest

5.1 Payment of Interest

Not later than 10.00 am (New York City time) one Business Day prior to each Interest Payment Date, the Borrower shall pay in the Same-Day Funds to the Account, or, following a notice from the Lender, to such other account as the Lender may specify, all accrued and unpaid interest, any increased amounts of principal, interest or any other payment due hereunder and any Additional Amounts, calculated to the last day of each Interest Period, on the outstanding principal amount of the Loan.

5.2 Calculation of Interest

The amount of interest payable for any Interest Period shall be calculated by applying the rate of 4.3 per cent. per annum (the "**Interest Rate**") to the amount of the Loan, dividing the product by two and rounding the resulting figure to the nearest cent, half a cent being rounded upwards. When interest is required to be calculated for any other period, it shall be calculated on the basis of a 360 day year consisting of 12 months of 30 days each, and in the case of an incomplete month, the actual number of days elapsed.

6 Repayment

Subject to Clause 13.2, not later than 10:00 am (New York City time) one Business Day prior to the Repayment Date, the Borrower shall repay in the Same-Day Funds in full the outstanding principal amount of the Loan and, to the extent not already paid in accordance with Clause 5.1, all accrued and unpaid interest, any increased amounts of principal, interest or any other payment due hereunder and any Additional Amounts, calculated to the last day of the last Interest Period.

7 Prepayment

7.1 Prepayment for Tax Reasons

If, as a result of the application of or any amendment or clarification to, or change (including a change in interpretation or application) in, or determination under, the double taxation treaty between Russia and Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) or the laws or regulations of Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) or of any successor thereto is resident for tax purposes) or of any political sub-division thereof or any Agency therein, the Borrower would thereby be required to pay any increased amounts of principal, interest or any other payment due hereunder in respect of Taxes pursuant to Clause 8.1, or pay any Additional Amounts pursuant to Clause 8.3, then the Borrower may (without premium or penalty), upon not less than 30 calendar days' written irrevocable notice to the Lender and the Trustee, including an Officer's Certificate of the Borrower, to the effect that the Borrower would be required to pay such increased amounts of principal,

interest or any other payment due hereunder or Additional Amounts prepay the Loan in whole (but not in part) at any time together with all accrued and unpaid interest, any increased amounts of principal, interest or any other payment due hereunder and any Additional Amounts; provided, however, that no such notice shall be given earlier than 90 calendar days prior to the earliest date on which the Borrower would be obligated to pay such increased amounts of principal, interest or any other payment due hereunder or Additional Amounts, as the case may be.

7.2 Prepayment for Reasons of Increased Costs or Illegality

The Borrower may, if it is required to make any payment by way of indemnity under Clause 10.1, subject to giving to the Lender not less than 30 calendar days' prior written notice to that effect (without premium or penalty), prepay the whole, but not part only, of the amount of the Loan, together with any amounts then payable under Clause 10.1 and accrued and unpaid interest, any increased amounts of principal, interest or any other payment due hereunder and Additional Amounts, if any.

If, at any time after the date of this Agreement, it is unlawful for the Lender to make, fund or allow to remain outstanding the Loan made or to be made by it hereunder or to maintain the Notes, the Borrower may, if it is so required by the Lender and subject to Clause 10.3 hereof, prepay without premium or penalty the Loan together with accrued and unpaid interest thereon and all other amounts owing to the Lender hereunder.

7.3 Reduction of a Loan Upon Cancellation of corresponding Notes

The Borrower or any Subsidiary or affiliate of the Borrower or any other company acting for the benefit of the Borrower may from time to time purchase any Notes (or may provide funding to the Lender to purchase the Notes in the open market, by tender or by private agreement) at any price and on such other terms as the Borrower may determine. The Borrower (or any Subsidiary or affiliate of the Borrower) may from time to time surrender to the Lender for cancellation Notes, together with an authorisation addressed to the agent of the Lender designated for such purpose (or instruct the Lender to cancel the Notes it has purchased at the request of the Borrower), whereupon the Lender shall have the relevant Notes cancelled and the principal amount of the Loan corresponding to the principal amount of such Notes is deemed to have been repaid by the Borrower for all purposes as of the date of such cancellation and no further payments shall be made by the Borrower in respect of such amounts.

7.4 Noteholder Put

- **7.4.1** As soon as practicable, and in any event, within 10 calendar days after the date of a Further Loan Guarantee Event pursuant to Clause 12.12(a) or 12.12(b) the Borrower shall deliver to the Lender and the Trustee a Borrower Further Loan Guarantee Event Notice, which notice shall be irrevocable; and
- **7.4.2** If, following a Further Loan Guarantee Event, any Noteholder has exercised its Further Loan Guarantee Event Put Option, the Borrower shall on the Business Day before the Further Loan Guarantee Event Payment Date, prepay the relevant proportion of the Loan which corresponds to the aggregate principal amount of the Notes (as notified to the Borrower and the Lender by the Paying Agents) in relation to which the Further Loan Guarantee Event Put Option has been duly exercised at par, together with accrued but unpaid interest to the Further Loan Guarantee Event Payment Date (if any) and plus the Additional Amounts and increased amounts of principal, interest or any other payment due hereunder (if any) in accordance with the terms and conditions of the Notes.

7.5 Prepayment in the Event of Change of Control

- **7.5.1** Promptly, and in any event within 10 Business Days after the date on which the Borrower becomes aware of a Change of Control, the Borrower shall deliver to the Lender a written notice in the form of an Officer's Certificate, which notice shall be irrevocable, stating that a Change of Control has occurred and stating the circumstances and relevant facts giving rise to such Change of Control.
- **7.5.2** If, following a Change of Control, any Noteholder has exercised its Change of Control Put Option, the Borrower shall, not later than three Business Days prior to the Change of Control Payment Date, prepay the principal amount of the Loan in an amount which corresponds to the aggregate principal amount of the Notes in relation to which the Change of Control Put Option has been duly exercised (as notified to the Borrower and the Lender by the Paying Agents) in accordance with the Conditions.

7.5.3 The Lender shall notify the Borrower not more than three Business Days after receipt of notice thereof from the Principal Paying Agent of the amount of the Loan to be prepaid as a consequence of the exercise of the Change of Control Put Option by any Noteholders.

7.6 Optional Redemption at Make Whole

At any time prior to the Repayment Date, but on one occasion only, the Borrower may, at its option, having given not less than 30 nor more than 60 days' irrevocable notice to the Lender (the "**Call Option Notice**"), prepay the Loan in whole but not in part at the price which shall be the following:

- (i) its principal amount; plus
- (ii) the Make Whole Premium; plus
- (iii) interest and any additional amounts or other amounts that may be due thereon (if any) accrued but unpaid to but excluding the date on which the call option is to be settled (the "Call Settlement Date").

The Call Option Notice shall specify the Call Settlement Date. The Borrower shall be bound to repay the Loan in accordance with this Clause 7.6 one Business Day prior to the Call Settlement Date.

7.7 Optional Prepayment at Par

The Borrower may, at any time on or after the date three months prior to the Repayment Date, on giving not less than 30 nor more than 60 days' notice to the Lender (which notice shall be irrevocable and shall specify the date fixed for prepayment (the "**Par Optional Prepayment Date**")), prepay the Loan in whole but not in part at its principal amount plus accrued and unpaid interest on the Loan so prepaid to but excluding the Par Optional Prepayment Date.

7.8 Notice of Prepayment

Without prejudice to any other requirement in this Agreement, any notice of prepayment given by the Borrower pursuant to Clause 7.1 or Clause 7.2 hereof, shall be irrevocable, shall specify the date upon which such prepayment is to be made and shall oblige the Borrower to make such prepayment one Business Day prior to such date.

7.9 Costs of Prepayment

The Borrower shall, on the date of prepayment, pay all accrued and unpaid interest, any increased amounts of principal, interest or any other payment due hereunder and any Additional Amounts (each only with respect to the amount subject to such prepayment), as of such date of prepayment and all other amounts payable to the Lender hereunder in connection with such prepayment. The Borrower shall indemnify the Lender on demand against any costs and expenses reasonably incurred and properly documented by the Lender on account of any prepayment made in accordance with this Clause 7.

7.10 No Other Repayments

The Borrower shall not repay the whole or any part of the amount of the Loan except at the times and in the manner expressly provided for in this Agreement.

8 Certain Additional Payments

8.1 No Withholding and increased amounts of principal, interest or any other payment

(a) Subject to Clause 8.1(b), all payments made by the Borrower under or with respect to the Loan will be made free and clear of, and without withholding or deduction for, or on account of any present or future tax, duty, levy, impost, assessment, or other governmental charge (including penalties, interest and other liabilities related thereto) (collectively, "Taxes") imposed or levied by or on behalf of any government or political subdivision or territory or possession of any government or authority or Agency therein or thereof having the power to tax (each, a "Taxing Authority") within Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes), unless the Borrower is required to withhold or deduct Taxes by law or by the interpretation or administration thereof. For the avoidance of doubt, this Clause 8.1 shall not apply to any taxes on income payable by the Lender.

- (b) If the Borrower shall be required by applicable law to make any deduction or withholding from any payment under this Agreement for or on account of Taxes imposed or levied by or on behalf of any Taxing Authority within Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes), it shall, on the due date for such payment, increase the payment of principal or interest or any other payment due hereunder to such amount as may be necessary to ensure that the Lender receives a net amount in U.S. dollars equal to the full amount which it would have received had payment not been made subject to such taxes ("increased amounts of principal, interest or any other payment due hereunder").
- (c) The Borrower will also:
 - (i) make such withholding or deduction; and
 - (ii) remit the full amount deducted or withheld to the relevant authority in accordance with applicable law.
- (d) If the Lender pays any amount in respect of such Taxes in respect of which increased amounts of principal, interest or any other payment due hereunder are payable (without prejudice to, and duplication of, the provisions of Clause 8.3), the Borrower shall pay to the Lender an increased amount of principal, interest or any other payment due hereunder equal to such amount in U.S. dollars on demand.
- (e) Whenever this Agreement mentions, in any context, the payment of amounts based upon the principal or premium, if any, interest or of any other amount payable under or with respect to the Loan, this includes, without duplication, payment of any increased amounts of principal, interest or any other payment due hereunder and Additional Amounts as defined in Clause 8.3 that may be applicable such as shall be verified by supporting documentation provided by the Lender to the Borrower.

The foregoing provisions shall apply, modified as necessary, to any Taxes imposed or levied by any Taxing Authority in any jurisdiction in which any successor of the Borrower is organised.

8.2 Exemption assistance

The Lender shall assist the Borrower in ensuring that all payments made under this Agreement are exempt from deduction or withholding of Tax.

8.3 Additional Amounts

Without prejudice to, and without duplication of, the provisions of Clause 8.1,

- (a) if at any time the Lender makes or is required to make any payment to a Person (other than to or for the account of the Noteholders) on account of Tax (other than Taxes on income payable by the Lender) in respect of the Loan or in respect of any instruments issued to, or documents entered into with, the Noteholders imposed by any Taxing Authority of or in Russia, Luxembourg or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes, or any liability in respect of any such Tax is asserted, imposed, levied or assessed against the Lender, the Borrower shall, as soon as reasonably practicable following, and in any event within 30 calendar days of, written demand made by the Lender (setting out in reasonable detail the nature and the extent of the obligation), pay to the Lender an amount sufficient to cover such payment, together with any interest, penalties, costs and expenses payable or incurred in connection therewith; and
- (b) if at any time a Taxing Authority of or in Russia, Luxembourg or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes imposes an obligation on the Lender to withhold or deduct any amount on any payment made or to be made by the Lender to or for the account of the Noteholders and the Lender is required by the Notes to pay additional amounts to such Noteholders in connection therewith, the Borrower shall, as soon as reasonably practicable following, and in any event within 30 calendar days of, written demand made by the Lender (setting out in reasonable detail the nature and the extent of the obligation), pay to the Lender such additional amounts as may be necessary so that the net amount received by the Noteholders (including such additional amounts) in U.S. dollars after such withholding or deduction will not be less than the

amount such Noteholders would have received if such withholdings or deductions had not been made and free from liability in respect of such withholding or deduction. Notwithstanding the previous provisions of Clause 8.3(b), such additional amounts shall be paid by the Borrower to the Lender no later than one Business Day prior to the due date for any relevant payment under the Notes. The Lender shall, as soon as reasonably practicable, provide the Borrower in writing with reasonable details as to the reasons for such withholding or deduction.

Any payments required to be made by the Borrower under this Clause 8.3 are collectively referred to as "Additional Amounts". For the avoidance of doubt, the provisions of this Clause 8.3 shall not apply to any withholding or deductions of Taxes with respect to the Loan which are subject to payment of increased amounts of principal, interest or any other payment due hereunder under Clause 8.1.

8.4 Tax Claims

If the Lender intends to make a claim for any Additional Amounts pursuant to Clause 8.3, it shall notify the Borrower thereof; provided that nothing herein shall require the Lender to disclose any confidential information relating to the organisation of its affairs.

8.5 Tax Credits and Tax Refunds

- If any increased amounts of principal, interest or any other payment due hereunder are paid under (a) Clause 8.1 or Additional Amounts are paid under Clause 8.3 by the Borrower for the benefit of the Lender and the Lender, in its reasonable opinion, determines that it has received or been granted a credit against, a relief or remission for, or a repayment of, any Tax, then, if and to the extent that the Lender, in its reasonable opinion, determines that such credit, relief, remission or repayment is in respect of or calculated with reference to the deduction or withholding giving rise to such increased amounts of principal, interest or any other payment due hereunder or, in the case of Additional Amounts, with reference to the liability, expense or loss to which the payment giving rise to such Additional Amounts relates, the Lender shall, to the extent that it can do so without prejudice to the retention of the amount of such credit, relief, remission or repayment, pay to the Borrower such amount as the Lender shall, in its reasonable opinion, have concluded to be attributable to such deduction or withholding or, as the case may be, such liability, expense or loss; provided that the Lender shall not be obliged to make any payment under this Clause 8.5 in respect of such credit, relief, remission or repayment until the Lender is, in its reasonable opinion, satisfied that its tax affairs for its tax year in respect of which such credit, relief, remission or repayment was obtained have been finally settled. Any such payment shall, in the absence of manifest error and subject to the Lender specifying in writing in reasonable detail the calculation of such credit, relief, remission or prepayment and of such payment and providing relevant supporting documents evidencing such matters, be conclusive evidence of the amount due to the Borrower hereunder and shall be accepted by the Borrower in full and final settlement of its rights of reimbursement hereunder in respect of such deduction or withholding. Nothing contained in this Clause 8.5 shall interfere with the right of the Lender to arrange its tax affairs generally in whatever manner it thinks fit nor oblige the Lender to disclose any information relating to its tax affairs generally or any computations in respect thereof. The Lender shall use reasonable endeavours to obtain any tax credits or tax refunds available to the Lender and shall notify the Borrower of any such available tax credits or tax refunds.
- (b) If as a result of a failure to obtain relief from deduction or withholding of any Tax imposed by Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) (i) such Tax is deducted or withheld by the Borrower and pursuant to Clause 8.1 an increased amount is paid by the Borrower to the Lender in respect of such deduction or withholding, and (ii) following the deduction or withholding of Tax as referred to above, (A) the Borrower applies on behalf of the Lender to the relevant Russian Taxing Authorities for a tax refund and such tax refund is credited by the Russian Taxing Authorities to the Lender or (B) if such tax refund is otherwise credited by a relevant Taxing Authority to the Lender pursuant to a final decision of such Taxing Authority, the Lender shall as soon as reasonably possible notify the Borrower of the receipt of such tax refund and promptly transfer the amount equal to the tax refund to a bank account of the Borrower specified for that purpose by the Borrower.

8.6 Representations and Undertakings of the Lender

The Lender represents that (a) it is a company which at the date hereof is a resident of Luxembourg for Luxembourg domestic purposes as well as under the Luxembourg-Russia double tax treaty, is subject to taxation in Luxembourg on the basis of its registration as a legal entity, location of its management body or another similar criterion and it is not subject to taxation in Luxembourg merely on income from sources in Luxembourg or connected with property located in Luxembourg; (b) at the date hereof, it does not have a permanent establishment in Russia; and (c) does not have any current intention to effect, during the term of the Loan, any corporate action or reorganisation or change of taxing jurisdiction that would result in the Lender ceasing to be a resident of Luxembourg and subject to taxation in Luxembourg.

The Lender shall make reasonable and timely efforts to assist the Borrower to obtain relief from withholding of Russian income tax pursuant to the double taxation treaty between Russia and the jurisdiction in which the Lender is incorporated, including its obligations under Clause 8.8. The Lender makes no representation as to the application or interpretation of any double taxation treaty between Russia and the jurisdiction in which the Lender is incorporated.

The Lender shall not take any action or do any thing likely to cause it to cease to be resident for taxation purposes in Luxembourg or a Qualifying Jurisdiction, other than as required by a Change of Law.

8.7 Exceptions

The Lender agrees promptly, upon becoming aware of such, to notify the Borrower if it ceases to be resident in Luxembourg or a Qualifying Jurisdiction or establishes a permanent establishment in Russia or if any of the representations set forth in Clause 8.6 are no longer true and correct. If the Lender ceases to be resident in Luxembourg or a Qualifying Jurisdiction, then, except in circumstances where the Lender has ceased to be resident in Luxembourg or a Qualifying Jurisdiction by reason of any Change of Law (including a change in a double taxation treaty or in such law or treaty's application or interpretation), in each case taking effect after the date of this Agreement, the Borrower shall not be liable to pay to the Lender under Clause 8.1 or Clause 8.3 any sum in excess of the sum it would have been obliged to pay if the Lender had not ceased to be resident in Luxembourg or a Qualifying Jurisdiction.

8.8 Delivery of Forms

The Lender shall, not more than 30 days prior to the first Interest Payment Date and within 30 calendar days of the request of the Borrower, to the extent it is able to do so under applicable laws including Russian laws, deliver to the Borrower (i) a certificate issued by the competent Taxing Authority in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) confirming that the Lender is a tax resident in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) and (ii) such other information or forms as the Borrower may need to be duly completed and delivered by the Lender, to enable the Borrower to apply to obtain relief from deduction or withholding of Russian Tax after the date of this Agreement or, as the case may be, to apply to obtain a tax refund if a relief from deduction or withholding of Russian Tax has not been obtained.

The Lender shall, within 30 calendar days of the request of the Borrower, to the extent it is able to do so under applicable laws including Russian laws, from time to time deliver to the Borrower any additional duly completed application forms as need to be duly completed and delivered by the Lender to enable the Borrower to apply to obtain relief from deduction or withholding of Russian Tax or, as the case may be, to apply to obtain a tax refund if a relief from deduction or withholding of Russian Tax has not been obtained.

The certificate and, if required, other forms referred to in this Clause 8.8 shall be duly signed by the Lender, if applicable, and stamped or otherwise approved by the competent Taxing Authority in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) and apostilled or otherwise legalised.

If a relief from deduction or withholding of Russian Tax under this Clause 8.8 has not been obtained and further to an application of the Borrower to the relevant Russian Taxing Authorities the latter requests the Lender's Rouble bank account details, the Lender shall at the request of the Borrower (x) use reasonable efforts to procure that such Rouble bank account of the Lender is duly opened and maintained, and (y) thereafter furnish the Borrower with the details of such Rouble bank account. The Borrower shall pay for all costs associated, if any, with opening and maintaining such Rouble bank account.

9 Tax Receipts

9.1 Notification of Requirement to Deduct Tax

If, at any time, the Borrower is required by law to make any deduction or withholding from any sum payable by it hereunder, or if thereafter there is any change in the rates at which or the manner in which such deductions or withholdings are calculated, the Borrower shall promptly notify the Lender.

9.2 Evidence of Payment of Tax

The Borrower will make all reasonable endeavours to obtain certified copies, and translations into English, of tax receipts evidencing the payment of any Taxes so deducted or withheld from each Taxing Authority imposing such Taxes. The Borrower will furnish to the Lender and/or the Trustee, within 60 calendar days after the date the payment of any Taxes so deducted or withheld is due pursuant to applicable law, either certified copies of tax receipts evidencing such payment by the Borrower or, if such receipts are not obtainable, other evidence of such payments by the Borrower.

10 Changes in Circumstances

10.1 Increased Costs

If, by reason of (i) any Change of Law, other than a Change of Law which relates only to the basis or rate of Tax on the net income of the Lender or the amounts due pursuant to Clauses 18.1 and/or 18.4:

- (a) the Lender incurs an additional cost as a result of the Lender's entering into or performing its obligations, including its obligation to make the Loan, under this Agreement (excluding Taxes payable by the Lender on its net income); or
- (b) the Lender becomes liable to make any additional payment on account of Tax or otherwise, not being a tax imposed on its net income or the amounts due pursuant to Clauses 18.1 and/or 18.4, on or calculated by reference to the amount of the Loan and/or to any sum received or receivable by it hereunder except where compensated under Clause 8.1 or under Clause 8.3,

then the Borrower shall, from time to time within 30 calendar days of written demand of the Lender, pay to the Lender amounts sufficient to cover such properly documented (1) cost or (2) liability; provided that the Lender will not be entitled to indemnification where such increased cost or liability arises as a result of the gross negligence, fraud or wilful default of the Lender.

10.2 Increased Costs Claims

If the Lender intends to make a claim pursuant to Clause 10.1, it shall notify the Borrower thereof and provide a written description in reasonable detail of the relevant Change of Law, including a description of the relevant affected jurisdiction or country and the date on which the change in circumstances took effect; provided that nothing herein shall require the Lender to disclose any confidential information relating to the organisation of its or any other person's affairs. The written description shall demonstrate the connection between the change in circumstance and the increased costs and shall be accompanied by relevant supporting documentation evidencing the matters described therein.

10.3 Illegality

If, at any time after the date of this Agreement, it is unlawful for the Lender to make, fund or allow to remain outstanding the Loan made or to be made by it hereunder or to maintain the Notes, then the Lender shall, after becoming aware of the same, deliver to the Borrower a written notice, setting out in reasonable detail the nature and extent of the relevant circumstances, to that effect and:

- (a) if the Loan has not then been made, the Lender shall not thereafter be obliged to make the Loan; and
- (b) if the Loan is then outstanding and the Lender so requests by written notice to the Borrower, the Borrower shall: (i) on the latest date permitted by the relevant law or such earlier date as the Borrower elects (to be notified to the Lender not less than 30 calendar days prior to the date set for repayment by written notice), or (ii) if such request is received after the latest date permitted by the relevant law, on the date which is three Business Days after such request is received by the Borrower; repay the Loan pursuant to Clause 7.2.

10.4 Mitigation

If circumstances arise which would result in:

- (a) any payment falling due to be made by or to the Lender or for its account pursuant to Clause 10.3;
- (b) any payment falling due to be made by the Borrower pursuant to Clause 8.1; or
- (c) a claim for indemnification pursuant to Clause 8.3 or Clause 10.1,

then, without in any way limiting, reducing or otherwise qualifying the rights of the Lender or the Borrower's obligations under any of the above mentioned provisions, the Lender shall, upon becoming aware of the same, notify the Borrower thereof and, in consultation with the Borrower and to the extent it can lawfully do so and without prejudice to its own position, take reasonable steps to remove such circumstances or mitigate the effects of such circumstances including, without limitation, by transfer of its rights or obligations under this Agreement to another entity; provided that the Lender shall be under no obligation to take any such action if, in its opinion, to do so might have any adverse effect upon its business, operations or financial condition or might be in breach of any arrangements which it may have made with the Noteholders.

11 Financial Information

The Borrower will, at its own expense, so long as the Loan remains outstanding, furnish to the Lender and the Trustee:

11.1 as promptly as practicable, copies of such publicly available information concerning the business and financial condition of the Borrower as the Lender may from time to time reasonably request;

11.2

- **11.2.1** its audited annual consolidated financial statements, prepared in accordance with Accounting Standards consistently applied with the corresponding financial statements for the preceding period (subject to any amendments or revisions to the applicable Accounting Standards), within 180 days of the end of the financial year to which such statements relate;
- **11.2.2** its reviewed consolidated financial statements for the six-months period ended 30 June, prepared in accordance with Accounting Standards consistently applied with the corresponding financial statements for the preceding period (subject to any amendments or revisions to the applicable Accounting Standards), within 150 days of the end of the period to which such statements relate; and
- **11.2.3** its other interim consolidated financial statements (if the Borrower prepares any such other interim consolidated financial statements), prepared in accordance with Accounting Standards consistently applied with the corresponding financial statements for the preceding period (subject to any amendments or revisions to the applicable Accounting Standards), within 150 days of the end of the period to which such statements relate, provided that the Borrower shall not be required to deliver any other interim consolidated financial statements if such financial statements are prepared solely for internal purposes,

in each case together with an Officer's Certificate signed by the individual then responsible for the financial matters of the Group stating that since the date of the last certificate or, if none, the Issue Date each of the Borrower and the Guarantors has performed its obligations under, and complied with, the terms of this Agreement and is not in default in the performance of any of the terms of this Agreement (or, if an Event of Default or Potential Event of Default shall have occurred, describing all such Events of Default or Potential Event of Default, of which he may have knowledge).

11.3 If so requested by the Lender, the Borrower shall deliver to the Lender and/or the Trustee, within 14 Business Days of such request, an Officer's Certificate (a) stating that to the best of the Officer's knowledge (i) the Borrower has kept, observed, performed and fulfilled each and every covenant, and complied with the covenants and conditions contained in this Agreement and (ii) the Borrower is not in default in the performance or observance of any of the terms, provisions and conditions hereof (or, if a Potential Event of Default or Event of Default shall have occurred, describing all such Potential Events of Default or Events of Default of which he may have knowledge) and (b) setting out the calculations of the ratios set out in Clause 12.2.

12 Covenants

For so long as any amount remains outstanding hereunder:

12.1 Limitation on Liens

Neither the Borrower nor any of its Material Subsidiaries shall, directly or indirectly, create, incur, assume or suffer to exist any Lien, other than a Permitted Lien, on any of its assets, now owned or hereafter acquired, or any income or profits therefrom, securing any Indebtedness unless, at the same time or prior thereto, the Loan or the relevant Loan Guarantee, as the case may be, (a) is secured equally and rateably therewith or (b) has the benefit of other security or other arrangement, in each case to the satisfaction of the Trustee.

12.2 Incurrence of Indebtedness

- (a) Neither the Borrower nor any Subsidiary of the Borrower shall incur any Indebtedness, other than in circumstances where, (i) no Potential Event of Default nor Event of Default shall have occurred and be continuing at the time, or would occur as a consequence, of the incurrence of such Indebtedness, and (ii) the Leverage Ratio is 3.5 or lower.
- (b) At any time when the conditions set forth in Clause 12.2(a) hereof are not met, the Borrower and its Subsidiaries may only Incur additional Indebtedness if it is Permitted Indebtedness.
- (c) Notwithstanding any other provision of this Clause 12.2, the maximum amount that the Borrower or a Subsidiary of the Borrower may Incur pursuant to this Clause 12.2 shall not be deemed to be exceeded, with respect to outstanding Indebtedness, due solely to the result of fluctuations in the exchange rate of currencies.
- (d) For the purposes of determining compliance with this covenant:
 - (i) in the event that an item of Indebtedness (or any portion thereof) on Incurrence meets the criteria of more than one of the types of Indebtedness described in this Clause 12.2 or the definition of Permitted Indebtedness, the Borrower, in its sole discretion, will classify such item of Indebtedness (or any portion thereof) at the time of Incurrence and will only be required to include the amount and type of such Indebtedness in one of the classifications as described in Clause 12.2(a), Clause 12.2(b) or one of the paragraphs under the definition of Permitted Indebtedness; and
 - (ii) the Borrower will be entitled to divide and classify such item of Indebtedness which meets the criteria of more than one of the types of Indebtedness described in this Clause 12.2 or the definition of Permitted Indebtedness and may at any time change the classification of such item of Indebtedness (or any portion thereof) to any other type of Indebtedness that it meets the criteria of.

12.3 Transactions with Affiliates

Neither the Borrower nor any Subsidiary or the Borrower shall, directly or indirectly, enter into or make or amend any transaction or series of related transactions (including, without limitation, the sale, purchase, exchange or lease of assets, property or services) with any Affiliate of the Borrower or any other Subsidiary of the Borrower unless such transaction or series of related transactions is entered into in good faith and in writing and such transaction or series of related transactions is on terms that are no less favourable to the Borrower or the relevant Subsidiary or the Borrower, as the case may be, than those that would be available in a comparable transaction at arm's-length with an unrelated third party, provided, however, that this provision shall not apply to:

- (i) any employment agreement, collective bargaining agreement or employee benefit arrangements with any officer or director of the Borrower or any of its Subsidiaries, including under any stock option or stock incentive plans, entered into in the ordinary course of business;
- (ii) payment of reasonable fees and compensation to employees, officers, directors, consultants or agents in the ordinary course of business;
- (iii) transactions between the Borrower and any of its Subsidiaries or between its Subsidiaries;

- (iv) transactions undertaken pursuant to contractual obligations or rights in existence on the Issue Date (as in effect on the Issue Date) or any amendment thereto after the Issue Date (so long as such amendment is not disadvantageous to the Lender in any material respect in the reasonable opinion of the Borrower);
- (v) transactions with customers, clients, suppliers, purchasers or sellers of goods or services, in each case, in the ordinary course of business and otherwise in compliance with the terms of this agreement;
- (vi) sales of Capital Stock (other than Redeemable Capital Stock) of the Borrower
- (vii) sales or other transfers or dispositions of accounts receivables and other related assets customarily transferred in a Qualified Securitisation Transaction, and acquisitions of Investments in connection with a Qualified Securitisation Transaction, in each case to or from the relevant securitisation vehicle;
- (viii) any reorganisation (by way of a merger, accession, division, separation, transformation or other basis or procedure for reorganisation) undertaken by the Borrower or any of its Subsidiaries as may be permitted pursuant to Clause 12.5, or;
- (ix) any other affiliate transaction or a series of related transactions, provided that the Fair Market Value of each such affiliate transaction or a series of related transactions does not exceed U.S.\$35,000,000 (or its equivalent in any other currency or currencies).

12.4 Asset Sales

Neither the Borrower nor any Subsidiary of the Borrower shall consummate any Asset Sale, unless (A) in the case of an Asset Swap, the Fair Market Value of Additional Assets received or receivable by the Borrower or such Subsidiary in consideration of such Asset Swap is at least equal to the Fair Market Value of the Production Assets or Capital Stock that is the subject of such Asset Swap or (B) in all other cases, the proceeds received by the Borrower or the relevant Subsidiary of the Borrower, as the case may be, are at least equal to the Fair Market Value of the Fair Market Value of the assets sold or disposed of and an amount equal to such proceeds (less any costs incurred in relation to such Asset Sale) (the "**Disposal Proceeds**") is:

- (a) applied to repay any Indebtedness of the Group (other than Indebtedness subordinated to the Loan);
- (b) invested in assets of a nature or type that is used or usable in the ordinary course of a Core or Related Business of the Borrower or any of its Subsidiaries;
- (c) retained as cash deposited with a bank or invested in Cash and Cash Equivalents; and/or
- (d) applied to finance: (i) an acquisition of Capital Stock of a Person engaged in a Core or Related Business who, following the consummation of such Asset Sale, is to become a Subsidiary of the Borrower, or (ii) an acquisition of, or a merger, reorganisation or other combination of a business of the Group with, the business of a Person that is similar or related to the Core or Related Business,

in each case within 360 days of the date when such proceeds are received (it being understood that receipt by the Borrower or any Subsidiary of the Borrower of Capital Stock of any Person who, following the consummation of such Asset Sale is to become a Subsidiary of the Borrower, as consideration for such Asset Sale shall be deemed to satisfy the financing of the acquisition of Capital Stock requirement set out above);

provided that if the Disposal Proceeds are applied pursuant to Clause 12.4(c), the Borrower or the relevant Subsidiary, as the case may be, shall apply or invest the Disposal Proceeds on or prior to the date falling 540 days after the date when such proceeds are received either to (i) repay Indebtedness of the Group (other than Indebtedness subordinated to the Loan), (ii) invest in assets of a nature or type that is used or usable in the ordinary course of Core or Related Business of the Borrower or any of its Subsidiaries or (iii) applied to finance the acquisition of Capital Stock of, or merger, reorganisation or other combination of a business of the Group with the business of, a Person whose business is similar or related to the Core or Related Business.

12.5 Mergers and Similar Transactions

The Borrower shall not enter into or become subject to, and shall not permit any Material Subsidiary to enter into or become subject to, any reorganisation (as such term is construed by applicable legislation, including, without limitation and where applicable, any amalgamation, demerger, merger or corporate reconstruction) or other analogous event (as determined by the legislation of the relevant jurisdiction) if such reorganisation or other analogous event would have a Material Adverse Effect.

This Clause 12.5 shall not apply to:

- (a) any merger (*sliyaniye*) and amalgamation (*prisoedineniye*) (as such terms are defined in the Russian Civil Code) or similar reorganisation procedures under Russian law involving the Borrower and one or more Loan Guarantors, where the Borrower is the surviving entity; and(or)
- (b) any merger (*sliyaniye*), amalgamation (*prisoedineniye*), division (*razdeleniye*), spin-off (*vydeleniye*) or transformation (*preobrazovaniye*) (as such terms are defined in the Russian Civil Code) or similar reorganisation procedures under Russian law of any Loan Guarantor, provided that:
 - (i) in case of any merger (*sliyaniye*) and amalgamation (*prisoedineniye*) involving a Loan Guarantor and a Subsidiary of the Borrower (including any other Loan Guarantor), the surviving entity remains or becomes a Loan Guarantor, and
 - (ii) in case of any division (*razdeleniye*), spin-off (*vydeleniye*) or transformation (*preobrazovaniye*), each resulting entity remains or becomes a Loan Guarantor.

12.6 Environmental compliance

The Borrower and each Material Subsidiary shall comply in all respects with all Environmental Laws and obtain and maintain any Environmental Licence and take all reasonable steps in anticipation of known or expected future changes to or obligations under the same, save to the extent that such failure to do so would not reasonably be expected to have a Material Adverse Effect.

12.7 Maintenance of Authorisations

The Borrower and each Loan Guarantor shall obtain or make, and procure the continuance or maintenance of, all registrations, recordings, filings, consents, licences, approvals and authorisations, which may at any time be required to be obtained or made in any relevant jurisdiction for the purposes of the execution, delivery or performance of the Notes, this Agreement, the Deed of Loan Guarantee and the Trust Deed and for the validity and enforceability thereof, provided that, in any case, if the Borrower or the relevant Loan Guarantor remedies any failure to comply with this Clause 12.7 within 90 days of such failure or of the occurrence of such event, then this covenant shall be deemed not to have been breached.

12.8 Maintenance of Property

The Borrower and each Material Subsidiary shall cause all property used in the conduct of its or their Core or Related Business to be maintained and kept in good condition, repair and working order and supplied with all necessary equipment and shall cause to be made all necessary repairs, renewals, replacements and improvements thereof, all as, in the judgment of the Borrower or the relevant Material Subsidiary, may be reasonably necessary so that the Core or Related Business carried on in connection therewith may be properly conducted at all times; provided that if the Borrower or the relevant Material Subsidiary remedies any failure to comply with the above within 90 days or any failure would not have a Material Adverse Effect, this covenant shall be deemed not to have been breached.

12.9 Payment of Taxes and Other Claims

The Borrower and each of the Material Subsidiaries shall pay or discharge, or cause to be paid and discharged, before the same shall become overdue and without incurring penalties, (a) all Taxes levied or imposed upon, or upon the income, profits or property of the Borrower or the Material Subsidiaries and (b) all lawful claims for labour, materials and supplies which, if unpaid, might by law become a Lien (other than a Permitted Lien) upon the property of any of the Borrower or the Material Subsidiaries; provided that none of the Borrower or the Material Subsidiaries shall be in breach of this Clause 12.9 if the Borrower or any Material Subsidiary has failed to pay or discharge or cause to be paid or discharged any tax, assessment, charge or claim (i) if such amount, applicability or validity is being contested in good faith by appropriate proceedings and for which adequate reserves in accordance with Accounting Standards as consistently applied or other appropriate provisions have been or will be made (if applicable) or (ii) whose amount, together with all such other unpaid or undischarged taxes, assessments, charges and claims of the Group, not so contested and for

which adequate reserves in accordance with Accounting Standards as consistently applied or other appropriate provisions have been or will be made (if applicable) would not have a Material Adverse Effect.

12.10 Insurance

The Borrower and each of the Material Subsidiaries shall obtain and maintain insurance with an insurer or insurers of sufficient standing (in the reasonable judgment of the Borrower or the relevant Material Subsidiary) against such losses and risks and in such amounts as are prudent and customary in the Core or Related Business in which it is engaged in the jurisdiction(s) where it operates; save to the extent that such failure to do so would not reasonably be expected to have a Material Adverse Effect.

12.11 Change of Business

Neither the Borrower nor any of the Material Subsidiaries shall make any change to the Core or Related Business of the Group which would have a Material Adverse Effect.

12.12 Additional Loan Guarantees

(a) **Procurement of Additional Loan Guarantees**

- (i) The Borrower shall procure that the Additional Loan Guarantors, not later than 90 calendar days after the Issue Date, execute Additional Loan Guarantees in favour of the Lender whereby the Additional Loan Guarantors will, jointly and severally, unconditionally and irrevocably guarantee that if the Borrower does not pay any sum payable under the Loan Agreement by the time and on the date specified for such payment (whether on the normal due date, an acceleration or otherwise) the Additional Loan Guarantor will pay that sum to or to the order of the Borrower before the close of business that day.
- (ii) The Borrower shall also procure that the following opinions are delivered to the Lender and the Trustee on the date of the execution of the Additional Loan Guarantees:
 - (a) an opinion of counsel or tax advisors reasonably acceptable to the Lender and the Trustee, in form and substance satisfactory to the Lender and the Trustee, to the effect that neither the Lender nor any Noteholder will recognise any income, gain or loss for Tax purposes as a result of the addition of such Additional Loan Guarantees, subject to customary exceptions, qualifications and limitations; and
 - (b) an opinion of counsel reasonably acceptable to the Lender and the Trustee, in form and substance satisfactory to the Lender and the Trustee, stating that all legal conditions precedent in relation to such addition have been complied with and that each Additional Loan Guarantee constitutes legal, valid and binding obligations of the respective Additional Loan Guarantor, enforceable in accordance with its terms, subject to customary exceptions, qualifications and limitations.

(b) **Procurement of Further Loan Guarantees**

(i) The Borrower will use its reasonable best efforts to cause each Material Subsidiary to execute and deliver to the Lender (with a copy to the Trustee) a Further Loan Guarantee, pursuant to which such Material Subsidiary will unconditionally and irrevocably guarantee the payment of all moneys payable under this Agreement and will become vested with all the duties and obligations of a Loan Guarantor as if originally named a Loan Guarantor, as soon as practicable (but in any event no later than 90 calendar days) after the total Production Assets or the revenues (excluding intercompany revenues) of such Material Subsidiary (determined by reference to the most recent period for which financial statements of such Material Subsidiary prepared under Accounting Standards are available (or, if unavailable, such Material Subsidiary's most recent management accounts) or, if the relevant Material Subsidiary does not prepare financial statements in accordance with Accounting Standards, the most recent period for which audited financial or reviewed financial statements of such Material Subsidiary are available (or if unavailable, such Material Subsidiary's most recent management accounts)) equals or exceeds 20 per cent. of the Group's consolidated total Production Assets or 20 per cent. of the Group's consolidated revenues, respectively (determined by reference to the most recent period for which the Group's financial statements prepared in accordance with Accounting Standards are available).

- (ii) A Loan Guarantor will be automatically and unconditionally released and discharged from its Loan Guarantee: (i) upon any sale, exchange or transfer to any Person which is not an Affiliate of Borrower of all or substantially all of the Capital Stock of the Loan Guarantor held by Borrower and other Subsidiaries of Borrower (which sale, exchange or transfer is not prohibited by these Conditions) or (ii) upon the reorganisation (whether by way of merger, accession or division) of the relevant Loan Guarantor pursuant to which such Loan Guarantor accedes to or is merged into the Borrower or a Subsidiary of the Borrower which is or becomes a Loan Guarantor or each resulting entity becomes a Loan Guarantor.
- (iii) The Borrower will give notice to the Lender (with a copy to the Trustee) in accordance with Clause 22 hereof of any Loan Guarantor becoming or ceasing to be a Loan Guarantor and, so long as the Notes are listed on Euronext Dublin and/or any other stock exchange on which the Notes may be listed or quoted from time to time, shall comply with applicable rules of Euronext Dublin and/or such other exchange (including preparation of a supplemental offering circular) in relation to any Loan Guarantor becoming or ceasing to be a Loan Guarantor.

12.13 Other Information

The Borrower shall forthwith following a request by the Lender notify the Lender and the Trustee of any Notes held by or on behalf of the Borrower or any Loan Guarantor or any of their Affiliates, in each case as beneficial owner.

12.14 Claims Pari Passu

The Borrower shall, and shall procure the Guarantors to, refrain from any action which would result in the obligations of the Borrower under the Loan Agreement and each Loan Guarantor under the Deed of Loan Guarantee ceasing to rank at least *pari passu* in right of payment with all other unsecured and unsubordinated obligations of the Borrower or the Loan Guarantors, as the case may be, except as otherwise provided by mandatory provisions of applicable law.

12.15 Covenant Suspension

If on any date following the Closing Date (the "Suspension Date") (i) the Notes have Investment Grade Status and (ii) no Potential Event of Default or Event of Default has occurred and is continuing on such date (together, the "Suspension Conditions"), and such conditions are certified to the Trustee in an Officer's Certificate, then beginning on the Suspension Date and continuing until such time (the "Reversion Date"), if any, at which the Notes cease to have Investment Grade Status (such period, the "Suspension Period"), the Borrower and any of its Subsidiaries (as applicable) will not be obliged to comply with their respective obligations under Clauses 12.2, 12.3, 12.4, 12.5, 12.7, 12.8, 12.9, 12.10 and 12.11 (the "Suspended Covenants") and, in each case, any related Events of Default under Clause 12 will cease to be effective and will not be applicable to the Borrower or any of its Subsidiaries.

If a Reversion Date occurs, the Borrower and its Subsidiaries (as applicable) will thereafter again be subject to the Suspended Covenants until such time (if any) as the Suspension Conditions are again satisfied.

Notwithstanding that the Suspended Covenants may be reinstated upon the occurrence of a Reversion Date, no Potential Event of Default or Event of Default will be deemed to have occurred as a result of any (i) actions of the Borrower and any of its Subsidiaries taken or committed to be taken during the Suspension Period pursuant to law, court or government orders, resolutions of the relevant board of directors or other management body of a relevant member of the Group or a binding and legally effective contract; or (ii) any omission or failure by the Borrower and any of its Subsidiaries to act in respect of any of the Suspended Covenants during the Suspension Period.

If, following the occurrence of a Reversion Date, any act or omission of Borrower and any of its Subsidiaries, in respect of Clauses 12.8 or 12.9, which would have been a Potential Event of Default or Event of Default during the Suspension Period but for the operation of this Clause 12.15 is continuing, the Borrower shall have 60 days to cure and remedy any such event and during such period such act or omission shall not constitute a Potential Event of Default of an Event of Default.

On the Reversion Date, all Indebtedness incurred during the Suspension Period will be classified to have been incurred pursuant to one of the paragraphs of the definition of "Permitted Indebtedness" in Clause 1.1 (to the extent such Indebtedness would be permitted to be incurred thereunder as of the Reversion Date and after

giving effect to Indebtedness incurred prior to the Suspension Period and outstanding on the Reversion Date). To the extent such Indebtedness would not be so permitted to be incurred pursuant to one of the paragraphs of the definition of "Permitted Indebtedness", such Indebtedness will be deemed to have been outstanding on the Closing Date, so that it is classified as permitted under paragraph (h) of the definition of "Permitted Indebtedness".

On the Reversion Date, all disposals made during the Suspension Period and all Affiliate Transactions entered into during the Suspension Period will be classified to have been made or entered into, as the case may be, pursuant to one of the exceptions in Clause 12.4 or 12.5, respectively.

On the Reversion Date, all Liens made or entered into during the Suspension Period will be deemed to have been outstanding on the Closing Date, so that it is classified as permitted under paragraph (b) of the definition of "Permitted Liens".

13 Events of Default

13.1 Circumstances which constitute Events of Default

Each of the following constitutes an "Event of Default" with respect to the Loan:

- (a) default by the Borrower or any Loan Guarantor in the payment of principal of (or premium, if any, on) the Loan, in the currency and in the manner provided herein or in the Loan Guarantee, as the case may be, when the same becomes due and payable at maturity, upon acceleration, redemption or otherwise and such default continues for a period of 5 Business Days;
- (b) default by the Borrower or any Loan Guarantor in the payment of interest on the Loan, in the currency and in the manner provided herein or in the Loan Guarantee, as the case may be, when the same becomes due and payable if such default continues for a period of 7 Business Days;
- (c) failure by the Borrower or any Loan Guarantor to prepay the Loan in accordance with Clause 7.4 hereof and such default continues for a period of 10 Business Days;
- (d) default by the Borrower or any Loan Guarantor in the performance of any of its other obligations under this Agreement or the Loan Guarantee, as the case may be and (except where in any such case that failure is not capable of remedy) that failure continues for a period of 30 days following the submission by the Lender of a notice in writing requiring the breach to be remedied; provided that a failure in the performance by the Borrower of the provisions contained in Clauses 12.12 hereof shall be deemed not to constitute an Event of Default;
- (e) any Indebtedness of either the Borrower or any of its Subsidiaries is not paid when due (taking into account any originally applicable grace period), or any Indebtedness of either the Borrower or any of its Subsidiaries is declared to be due and payable prior to its Stated Maturity as a result of a default by the Borrower or its Subsidiaries pursuant to the terms of the relevant Indebtedness; provided, however, that the total amount of such Indebtedness which is not paid when due or becomes due and payable prior to its Stated Maturity is equal to or greater than U.S.\$50 million (or, to the extent non-U.S. dollar denominated, the U.S. Dollar Equivalent of such amount) disregarding any guarantee of the Borrower or its Subsidiaries given in respect of such Indebtedness owed by the Borrower or its Subsidiaries, as the case may be;
- (f) any final judgment or order (not covered by insurance) for the payment of money in excess of U.S.\$50 million (or, to the extent non-U.S. dollar denominated, the U.S. Dollar Equivalent of such amount) in the aggregate for all such final judgments or orders against all such Persons (treating any deductibles, self-insurance or retention as not so covered) shall be rendered against the Borrower or any Material Subsidiary and shall not be paid or discharged, and there shall be any period of 90 consecutive calendar days following entry of the final judgment or order that causes the aggregate amount for all such final judgments or orders outstanding and not paid or discharged against all such Persons to exceed U.S.\$50 million (or, to the extent non-U.S. dollar denominated, the U.S. Dollar Equivalent of such amount) during which a stay of enforcement of such final judgment or order, by reason of a pending appeal or otherwise, shall not be in effect;
- (g) the validity of this Agreement or the Loan Guarantee is contested by the Borrower or any Loan Guarantor or the Borrower or any Loan Guarantor shall deny any of its obligations under this Agreement or any Loan Guarantor shall deny any of its obligations under the Loan Guarantee; or it

is, or will become, unlawful for the Borrower or any Loan Guarantor to perform or comply with any of its obligations under or in respect of this Agreement or the Loan Guarantee, as the case may be, or any of such obligations shall become unenforceable or cease to be legal, valid and binding, (other than as a result of a merger or amalgamation of any Loan Guarantor with the Borrower or a Subsidiary of the Borrower which is permitted under Clause 12.6 of this Agreement);

- (h) a decree, judgment, or order by any Agency or a court of competent jurisdiction shall have been entered adjudging the Borrower or any of its Material Subsidiaries as bankrupt or insolvent, or approving as properly filed a petition seeking reorganisation of the Borrower or any of its Material Subsidiaries under any bankruptcy or similar law, and such decree or order shall have continued undischarged and unstayed for a period of 60 days; or a decree or order of a court of competent jurisdiction over the appointment of a receiver, liquidator, trustee, or assignee in bankruptcy or insolvency of the Borrower or any of its Material Subsidiaries, or any substantial part of the assets or property of any such Person, or for the winding up or liquidation of the affairs of any such Person, shall have been entered, and such decree, judgment or order shall have remained in force undischarged and unstayed for a period of 60 days, or any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in this Clause 13.1(h), in all cases excluding any solvent reorganisations which are not otherwise prohibited by this Agreement; or
- (i) the Borrower or any of its Material Subsidiaries shall institute proceedings to be adjudicated a voluntary bankrupt, or shall consent to the filing of a bankruptcy proceeding against it, or shall file a petition or answer or consent seeking reorganisation under any bankruptcy or similar law or similar statute, or shall consent to the filing of any such petition, or shall consent to the appointment of a custodian, receiver, liquidator, trustee or assignee in bankruptcy or insolvency of it or any substantial part of its assets or property, or shall make a general assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due, or shall, within the meaning of any bankruptcy law, become insolvent, fail generally to pay its debts as they become due, or takes any corporate action in furtherance of or to facilitate, conditionally or otherwise, any of the foregoing or any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in this Clause 13.1(i).

13.2 Rights of Lender upon occurrence of an Event of Default

- (a) If an Event of Default occurs under this Agreement and is continuing, the Lender and/or the Trustee may, by written notice (an "Acceleration Notice") to the Borrower in accordance with the provisions of the Trust Deed:
 - (i) declare the obligations of the Lender hereunder to be terminated, whereupon such obligations shall terminate; and
 - (ii) declare the principal amount of, premium, if any, and accrued and unpaid interest, increased amounts of principal, interest or any other payment due hereunder and Additional Amounts, if any, on the Loan to be immediately due and payable and the same shall become immediately due and payable.
- (b) If an Event of Default specified in Clause 13.1(h) or (i) occurs with respect to the Borrower or any of its relevant Material Subsidiaries, the obligations of the Lender hereunder shall immediately terminate, and the principal amount of, premium, if any, and accrued and unpaid interest, increased amounts of principal, interest or any other payment due hereunder and Additional Amounts, if any, on the Loan then outstanding shall *ipso facto* become and be immediately due and payable without any declaration or other act on the part of the Lender and/or the Trustee, all without diligence, presentment, demand of payment, protest or notice of any kind, which are expressly waived by the Borrower.

13.3 Other Remedies

If an Event of Default occurs and is continuing, the Lender by notice to the Borrower and/or the Loan Guarantors, as the case may be, and/or the Trustee may pursue any available remedy to collect the payment of principal or interest on the Loan or to enforce the performance of any provision of this Agreement or the Loan Guarantee. A delay or omission by the Lender and/or the Trustee in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. All remedies are cumulative to the extent permitted by law.

13.4 Notification of Potential Event of Default or Event of Default

The Borrower shall and shall procure that each of the Loan Guarantors shall promptly on becoming aware thereof inform the Lender of the occurrence of any Potential Event of Default or Event of Default and, upon receipt of a written request to that effect from the Lender, confirm to the Lender that, save as previously notified to the Lender or as notified in such confirmation, no Potential Event of Default or Event of Default has occurred.

14 Default Interest and Indemnity

14.1 Default Interest Periods

If any sum due and payable by the Borrower hereunder is not paid on the due date therefor in accordance with the provisions of Clause 17 or if any sum due and payable by the Borrower under any judgement of any court in connection herewith is not paid on the date of such judgment, the period beginning on such due date or, as the case may be, the date of such judgment and ending on the date upon which the obligation of the Borrower to pay such sum (the balance thereof for the time being unpaid being herein referred to as an "**unpaid sum**") is discharged shall be divided into successive periods, each of which, other than the first, shall start on the last day of the preceding such period and the duration of each of which shall, except as otherwise provided in this Clause 14, be selected by the Lender, but shall in any event not be longer than one month.

14.2 Default Interest

During each such period relating thereto as is mentioned in Clause 14.1 an unpaid sum shall bear interest at a rate per annum equal to the Interest Rate.

14.3 Payment of Default Interest

Any interest which shall have accrued under Clause 14.2 in respect of an unpaid sum shall be due and payable and shall be paid by the Borrower at the end of the period by reference to which it is calculated or on such other dates as the Lender may specify by written notice to the Borrower.

14.4 Borrower's Indemnity

The Borrower undertakes to the Lender, that if the Lender or any of its Affiliates, or any director, officer, employee or agent of the Lender or any such Affiliate and each Person controlling the Lender (each an "indemnified party") incurs any loss, liability, cost, claim, demand or damage, charge or expense (including without limitation taxes and legal fees, costs and expenses) (a "Loss") as a result of or in connection with the Loan, this Agreement or the Loan Guarantees (or enforcement thereof) (excluding a Loss that is the subject of the undertakings contained in Clauses 8.1, 8.3, and 16.2 of this Agreement (it being understood that the Lender may not recover twice in respect of the same Loss)), and/or the issue, constitution, sale, listing and/or enforcement of the Notes and/or the Notes being outstanding, the Borrower shall pay to the Lender on demand an amount equal to such Loss and all costs, charges and expenses which it or any indemnified party may pay or incur in connection with investigating, disputing or defending any such action or claim as such costs, charges and expenses are incurred unless such Loss was either caused by such indemnified party's negligence, default, bad faith or wilful misconduct or arises out of a breach of the representations and warranties of the Lender contained in this Agreement. The Lender shall not have any duty or obligation whether as fiduciary or trustee for any indemnified party or otherwise, to recover any such payment or to account to any other Person for any amounts paid to it under this Clause 14.

14.5 Unpaid Sums as Advances

Any unpaid sum shall, for the purposes of this Clause 14 and Clause 10.1, be treated as an advance and accordingly in this Clause 14 and Clause 10.1 the term "Loan" includes any unpaid sum and the term "Interest Period," in relation to an unpaid sum, includes each such period relating thereto as is mentioned in Clause 14.1.

15 Amendments to Agreements Relating to the Notes

Any amendment to, or waivers of any provision of, any agreements entered into in connection with the Notes shall be prohibited without the express written consent of the Borrower, which consent shall not be unreasonably withheld (other than amendments or waivers that are made pursuant to any legal, regulatory or

accounting requirement, with respect to which the Lender shall consult with the Borrower to the extent reasonably practicable).

16 Currency of Account and Payment

16.1 Currency of Account

The U.S. dollar is the currency of account and payment for each and every sum at any time due from the Borrower hereunder.

16.2 Currency Indemnity

If any sum due from the Borrower under this Agreement or any order or judgment given or made in relation hereto has to be converted from the currency (the "**first currency**") in which the same is payable hereunder or under such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Borrower, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation hereto, the Borrower shall indemnify and hold harmless the Lender from and against any loss suffered or reasonably incurred as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which the Lender may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

17 Payments

17.1 Alternative Payment Arrangements

If, at any time, it shall become impracticable, by reason of any action of any governmental authority or any Change of Law, exchange control regulations or any similar event, for the Borrower to make any payments hereunder in the manner specified in this Agreement, then the Borrower may agree with the Lender alternative arrangements for such payments to be made; provided that, in the absence of any such agreement, the Borrower shall be obliged to make all payments due to the Lender in the manner specified herein.

17.2 No Set-off

All payments required to be made by the Borrower hereunder shall be calculated without reference to any set-off or counterclaim and shall be made free and clear of and without any deduction for or on account of any set-off or counterclaim.

18 Costs and Expenses

18.1 Transaction Expenses and Fees

In consideration of the Lender making the Loan available to the Borrower, the Borrower hereby agrees that it shall pay to the Lender a fee including applicable front-end expenses incurred in connection with the financing of the Loan, the negotiation, preparation and execution of this Loan Agreement and all related documents and other expenses connected with and necessary for the extension of the Loan (the "Loan Arrangement Fee"), in the amount of U.S.\$3,600,000. The Lender shall promptly submit an invoice to the Borrower stating the amount due. The Borrower and the Lender shall enter into and sign a delivery and acceptance act ("Act of Acceptance"). Such Act of Acceptance shall specify (i) the net amount due, (ii) any applicable Russian income tax withholding (if any), (iii) any applicable Russian value added tax (if any) and (iv) the resulting total amount inclusive of tax.

18.2 Preservation and Enforcement of Rights

The Borrower shall, from time to time on demand of the Lender and following receipt from the Lender of a description in writing in reasonable detail of the relevant costs and expenses, together with the relevant supporting documents evidencing the matters described therein, reimburse the Lender for all costs and expenses, including legal fees, together with any VAT thereon properly incurred in or in connection with the preservation and/or enforcement of any of its rights under this Agreement except where the relevant claim is successfully defended by the Borrower.

18.3 Stamp Taxes

The Borrower shall pay all stamp, registration and other similar Taxes to which this Agreement or any judgement given against the Borrower in connection herewith is or at any time may be subject and shall, from time to time on demand of the Lender, indemnify the Lender against any properly documented liabilities, costs, expenses and claims resulting from any failure to pay or any delay in paying any such Tax.

18.4 Ongoing Fees and Expenses

In consideration of the Lender (i) making available the Loan hereunder and (ii) supporting such a continuing loan and managing the account, the Borrower shall pay to the Lender each year ongoing fees as increased by expenses as agreed in a separate fees side letter entered into, *inter alios*, between the Borrower and the Lender on or about the date hereof. In addition, the Borrower and the Lender shall enter and sign an Act of Acceptance in respect of the fees and expenses referred to herein as provided in Clause 18.1 above.

19 Assignments and Transfers

19.1 Binding Agreement

This Agreement shall be binding upon and inure to the benefit of each party hereto and its or any subsequent successors and assigns.

19.2 No Assignments and Transfers by the Borrower

The Borrower shall not be entitled to assign or transfer all or any of its rights, benefits and obligations hereunder, except as permitted under Clause 12.5.

19.3 Assignments by the Lender

The Lender may not assign or transfer all or any part of its rights and benefits or obligations hereunder except pursuant to (i) the charge by way of first fixed charge granted by the Lender in favour of the Trustee and (ii) the absolute assignment by the Lender to the Trustee of certain rights, interests and benefits hereunder, in each case pursuant to the provisions of the Trust Deed.

20 Calculations and Evidence of Debt

20.1 Basis of Accrual

Default interest payable hereunder shall accrue from day to day and shall be calculated on the basis of a year of 360 days consisting of 12 30-day months.

20.2 Evidence of Debt

The Lender shall maintain, in accordance with its usual practice, accounts evidencing the amounts from time to time lent by and owing to it hereunder; in any legal action or proceeding arising out of or in connection with this Agreement, in the absence of manifest error and subject to the provision by the Lender to the Borrower of written information describing in reasonable detail the calculation or computation of such amounts together with the relevant supporting documents evidencing the matters described therein, the entries made in such accounts shall be conclusive evidence of the existence and amounts of the obligations of the Borrower therein recorded.

20.3 Change of Circumstance Certificates

A certificate signed by two authorised signatories of the Lender describing in reasonable detail (a) the amount by which a sum payable to it hereunder is to be increased under Clause 8.1 or (b) the amount for the time being required to indemnify it against any such cost, payment or liability as is mentioned in Clause 8.3 or Clause 10.1 shall, in the absence of manifest error, be *prima facie* evidence of the existence and amounts of the specified obligations of the Borrower.

21 Remedies and Waivers, Partial Invalidity

21.1 Remedies and Waivers

No failure by the Lender to exercise, nor any delay by the Lender in exercising, any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy prevent any further or other exercise thereof or the exercise of any other right or remedy. The rights and remedies herein provided are cumulative and not exclusive of any rights or remedies provided by law.

21.2 Partial Invalidity

If, at any time, any provision hereof is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions hereof nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

22 Notices; Language

22.1 Communications in Writing

Each communication to be made hereunder (including notice of arbitration) shall be made in writing and, unless otherwise stated, shall be made by fax, letter or e-mail.

22.2 Delivery

Any communication or document to be made or delivered by one person to another pursuant to this Agreement (including notice of arbitration) shall, unless that other person has by 15 calendar days' written notice to the same, specified another address, be made or delivered to that other person at the address identified with its signature below and shall be effective, in the case of a letter, when left at that address, in the case of a fax, when received by the addressee, in the case of an electronic communication, when the relevant receipt of such communication being read is given, or where no read receipt is requested by the sender, at the time of sending, provided that no delivery failure notification is received by the sender within 24 hours of sending such communication. Provided that any communication or document to be made or delivered by one party to the other party shall be effective only when received by such other party and then only if the same is expressly marked for the attention of the department or officer identified with the such other party's signature below, or such other department or officer as such other party shall from time to time specify for this purpose.

22.3 Language

This Agreement shall be signed in English. Each communication and document made or delivered by one party to another pursuant to this Agreement shall be in the English language or accompanied by a translation thereof into English certified by an officer of the person making or delivering the same as being a true and accurate translation thereof.

23 Law and Jurisdiction

23.1 English Law

This Agreement and any non-contractual obligations arising out of or in connection with it shall be governed by, and construed in accordance with, English law.

23.2 Arbitration

The parties irrevocably agree that any dispute or claim arising out of, under or connected with this Agreement, including a dispute as to the validity, existence or termination of this Agreement or the consequences of its nullity and/or this Clause 23.2 or any non-contractual obligations arising out of or in connection with this Agreement (a "**Dispute**"), shall be referred to and finally settled by arbitration in London, England, conducted in the English language by three arbitrators, in accordance with the Arbitration Rules of the London Court of International Arbitration (the "**LCIA Rules**"), which rules are deemed to be incorporated by reference into this Clause 23.2 (such arbitration to also be administered by the LCIA in accordance with the Rules), save that, Article 5.6 of the LCIA Rules shall be amended as follows: "unless the parties agree otherwise, the third arbitrator, who shall act as chairman of the tribunal, shall be nominated by the two arbitrators nominated by or on behalf of the parties. If he is not so nominated within 30 days of the date of nomination of the later of

the two party-nominated arbitrators to be nominated, he shall be chosen by the LCIA Court. The parties agree to exclude the jurisdiction of the English courts under Sections 45 and 69 of the Arbitration Act 1996.

23.3 Consent to Enforcement, etc.

Each of the Lender and the Borrower consents generally in respect of any Dispute to the giving of any relief or the issue of any process in connection with such Dispute including, without limitation, the making, enforcement or execution against any property whatsoever, irrespective of its use or intended use, of any order or judgement which is made or given in such arbitral proceedings.

23.4 Contracts (Rights of Third Parties) Act 1999

A person who is not a party to this Agreement has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Agreement, but this does not affect any right or remedy of a third party which exists or is available apart from that Act.

23.5 Counterparts

This Agreement may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

23.6 Limited Recourse and Non-Petition

The Borrower hereby agrees that, notwithstanding any other provisions hereof, it shall have recourse in respect of any claim against the Lender only to sums in respect of principal, interest or other amounts (if any), as the case may be, received by or for the account of the Lender pursuant to this Agreement (after deduction or withholding of such taxes as may be required to be made by the Lender by law in respect of each such sum or in respect of the Notes and for which the Lender has not received a corresponding payment in respect thereof) (the "Lender Assets"), subject always to (i) the Security Interests (as defined in the Trust Deed) and (ii) to the fact that any claims of the Agents shall rank in priority to any claims of the Borrower hereunder and that any such claim by any and all such Agents and/or the Borrower shall be reduced pro rata so that the total of all such claims does not exceed the aggregate value of the Lender Assets after meeting claims secured on them.

Neither the Borrower nor any Person acting on behalf of it shall be entitled to take any further steps against the Lender to recover any further sums and no debt shall be owed by the Lender to the Borrower in respect of any such further sum. In particular, neither the Borrower nor any other Person acting on behalf of it shall be entitled at any time to institute against the Lender, or join in any institution against the Lender of any bankruptcy, administration, moratorium, reorganisation, controlled management, arrangement, insolvency, examinership, winding-up or liquidation proceedings or similar insolvency proceedings under any applicable bankruptcy or similar law in connection with any obligation of the Lender relating to the Notes or otherwise owed to the creditors, save for lodging a claim in the liquidation of the Lender which is initiated by another party or taking proceedings to obtain a declaration or judgment as to the obligations of the Lender.

No party to this Agreement shall have any recourse against any director, shareholder or officer of the Lender in respect of any obligations, covenants or agreement entered into or made by the Lender in respect of this Agreement, except to the extent that any such Person acts in bad faith or is negligent or is wilfully in default in the context of its obligations.

The provisions of this Clause 23.6 shall survive the termination of this Agreement.

AS WITNESS the hands of the duly authorised representatives of the parties hereto the day and year first before written.

SIGNATURE PAGE

SCHEDULE FORM OF DEED OF LOAN GUARANTEE

THIS DEED OF LOAN GUARANTEE is entered into on 10 February 2020

BETWEEN:

(1) "VOLZHSKY PIPE PLANT", JOINT STOCK COMPANY (the "Loan Guarantor"); and

(2) TMK CAPITAL S.A., a company incorporated under the laws of Luxembourg as a société anonyme with registered office at 14, rue Edward Steichen, L-2450 Luxembourg, Grand Duchy of Luxembourg and registered with the Luxembourg Trade and Companies Register (*Registre de Commerce et des Sociétés, Luxembourg*) under number B119.081 (the "Lender").

WHEREAS:

The Lender has agreed, pursuant to the terms of the Loan Agreement, to grant to the Borrower a single disbursement term loan facility in the amount of U.S.\$500,000,000 and the Loan Guarantor has agreed to guarantee all the obligations of the Borrower to the Lender under the Loan Agreement on an irrevocable and unconditional basis.

NOW THIS DEED WITNESS AS FOLLOWS:

INTERPRETATION

Terms defined in the Loan Agreement dated 10 February 2020 (the "Loan Agreement") between the Lender and PAO "TMK" as Borrower (the "Borrower") shall have the same meaning when used in this Loan Guarantee, except where the context otherwise requires and except that, for the purposes of this Loan Guarantee:

the term "Loan Guarantor" shall include any of the Borrower's Subsidiaries from time to time guaranteeing the obligations of the Borrower under the Loan Agreement; and

the term "**this Deed**" means this Deed of Loan Guarantee.

1 Loan Guarantee and Indemnity

1.1 Loan Guarantee and Indemnity

The Loan Guarantor irrevocably and unconditionally:

- (a) guarantees to the Lender the due and punctual performance by the Borrower of all the Borrower's obligations under the Loan Agreement;
- (b) undertakes with the Lender that whenever the Borrower does not pay any amount when due under or in connection with the Loan Agreement, the Loan Guarantor shall immediately on demand pay or cause to be paid in full that amount as if it was the principal obligor; and
- (c) agrees, as an independent primary obligation, that it shall pay to the Lender on demand sums sufficient to indemnify the Lender against any cost, loss or liability suffered by the Lender by reason of the non-payment, as and when the same shall become due and payable, of any sum expressed to be payable by the Loan Guarantor under this Loan Guarantee, whether by reason of any of the obligations guaranteed by the Loan Guarantor being or becoming unenforceable, invalid or illegal including any and all reasonable expenses properly documented, such as legal fees and expenses incurred by the Lender in enforcing any rights under the Loan Agreement or this Deed.

1.2 Continuing guarantee

This Deed is a continuing guarantee and extends to the total balance of sums payable by the Borrower under the Loan regardless of any intermediate payment or discharge in whole or in part.

1.3 Reinstatement

If any payment by the Borrower is avoided or reduced or any discharge given by the Lender or the Noteholders (whether in respect of the obligations of the Borrower or any security for those obligations or otherwise) as a result of any insolvency, reorganisation or similar event in respect of the Borrower:

- (a) the liability of the Loan Guarantor shall continue as if the payment, discharge, avoidance or reduction had not occurred; and
- (b) the Lender shall be entitled to recover the full amount of such payment from the Loan Guarantor, as if the payment, discharge, avoidance or reduction had not occurred.

1.4 Waiver of defences

As between the Loan Guarantor and the Lender, but without affecting the Borrower's obligations, the Loan Guarantor will be liable as if it were the sole principal debtor and not merely a surety. Accordingly, the Loan Guarantor will not be discharged nor will its liability be affected, by anything which would not discharge it or affect its liability if it were the sole principal debtor, including:

- (a) any time, waiver or consent granted to, or composition with, the Borrower or other person;
- (b) the release of the Borrower or any other person under the terms of any composition or arrangement with any creditor of any member of the Group;
- (c) the taking, variation, compromise, exchange, renewal or release of, or refusal or neglect to perfect, take up or enforce, any rights against, or security over assets of, the Borrower or other person or any non-presentation or non-observance of any formality or other requirement in respect of any instrument or any failure to realise the full value of any security;
- (d) any incapacity or lack of power, authority or legal personality of or dissolution or change in the members or status of the Borrower or any other person;
- (e) any amendment (however fundamental) or replacement of the Loan Agreement or any other document or security;
- (f) any unenforceability, illegality or invalidity of any obligation of any person under the Loan Agreement or any other document (including any other guarantee given in respect of the Loan) or security or the absence of any action to enforce the same;
- (g) any insolvency or similar proceedings of the Borrower or any other Loan Guarantor; or
- (h) any failure by any party to perform any requisite due diligence or to present any requisite document, claim, demand for payment, protest or notice with respect to the Loan Agreement.

1.5 Immediate recourse

The Loan Guarantor waives any right it may have of first requiring the Lender (or any trustee or agent on its behalf) to proceed against or enforce any other rights or security or claim payment from any person before claiming from the Loan Guarantor under this Deed. This waiver applies irrespective of any law or any provision of the Loan Agreement to the contrary.

1.6 Appropriations

Until all amounts which may be or become payable by the Borrower pursuant to the terms of the Loan Agreement have been irrevocably paid in full, the Lender (or any trustee or agent on its behalf) may:

- (a) refrain from applying or enforcing any other moneys, security or rights held or received by the Lender (or any trustee or agent on its behalf) in respect of those amounts, or apply and enforce the same in such manner and order as it sees fit (whether against those amounts or otherwise) and the Loan Guarantor shall not be entitled to the benefit of the same; and
- (b) hold in an interest-bearing suspense account any moneys received from the Loan Guarantor or on account of the Loan Guarantor's liability under this Deed.

1.7 Deferral of Loan Guarantor's rights

Until all amounts which may be or become payable by the Borrower pursuant to the terms of the Loan Agreement have been irrevocably paid in full the Loan Guarantor shall not exercise any rights which it may have by reason of the performance by it of its obligations under this Deed:

- (a) to be indemnified by the Borrower;
- (b) to claim any contribution from any other Loan Guarantor of the Borrower's obligations under the Loan Agreement; and/or
- (c) to take the benefit (in whole or in part and whether by way of subrogation or otherwise) of any rights of the Lender under the Loan Agreement or of any other guarantee or security taken pursuant to, or in connection with, the Loan Agreement by the Lender.

1.8 Additional security

This Deed is in addition to and is not in any way prejudiced by any other guarantee or security now or subsequently held by the Lender, for the avoidance of doubt including any other guarantee (present or future) given in connection with the Loan Agreement.

1.9 Acceleration

The Loan Guarantor further agrees that, as between it, on the one hand, and the Lender, on the other hand, (i) for the purposes of this Deed, the maturity of the obligations guaranteed by this Loan Guarantee may be accelerated as provided in Clauses 7 and 13 of the Loan Agreement, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed thereby; provided, however, that if a court of competent jurisdiction determines that the Loan was improperly accelerated pursuant to the terms thereof, then the maturity of such obligations may not be accelerated for the purposes of this Deed, and (ii) in the event of any acceleration of such obligations (whether or not due and payable) such obligations shall forthwith become due and payable by the Loan Guarantor for purposes of this Deed.

1.10 Termination and accession of Loan Guarantor

This Deed will be terminated in relation to the Loan Guarantor and the Loan Guarantor will be automatically and unconditionally released and discharged from its obligations hereunder upon: (i) any sale, exchange or transfer to any Person which is not an Affiliate of Borrower of all or substantially all of the Capital Stock of the Loan Guarantor held by Borrower and/or other Subsidiaries of Borrower (which sale, exchange or transfer is not prohibited under the Loan Agreement) or (ii) upon the reorganisation (whether by way of merger, accession or division) of the relevant Loan Guarantor pursuant to which such Loan Guarantor accedes to or is merged into the Borrower or a Subsidiary of the Borrower which is or becomes a Loan Guarantor or each resulting entity becomes a Loan Guarantor.

The Borrower will give notice to the Lender and the Trustee in accordance with Clause 12.12 of the Loan Agreement of any Loan Guarantor becoming or ceasing to be a Loan Guarantor and, so long as the Notes are listed on Euronext Dublin and/or any other stock exchange on which the Notes may be listed or quoted from time to time, shall comply with applicable rules of Euronext Dublin and/or such other exchange (including preparation of a supplemental prospectus) in relation to any Loan Guarantor becoming or ceasing to be a Loan Guarantor.

1.11 Suspense Account

Provided that the Trustee, acting in the best interests of the Noteholders, instructs the Lender to do so, the Lender may place any amount, received or recovered by or on behalf of itself from any of the Loan Guarantors in respect of any sum payable by the Borrower under the Loan Agreement, in a suspense account and keep it there for as long as the Lender (on instructions of the Trustee, acting in the best interests of the Noteholders) considers appropriate.

2 Covenants of the Loan Guarantor

The provisions of Clause 12 of the Loan Agreement are incorporated by reference and shall be enforceable as if expressly set out herein. The Loan Guarantor hereto undertakes that it shall comply with and perform and observe all covenants in Clause 12 of the Loan Agreement which are applicable to it as if it had been

made an original party to the Loan Agreement. The Issuer shall be entitled to enforce the obligations expressed to be imposed upon the Loan Guarantor under the Loan Agreement as if such Loan Guarantor had been made an original party to the Loan Agreement.

3 Taxation

- 3.1 No withholding and increased amounts of principal, interest or any other payment
 - (a) Subject to Clause 3.1(b) below, all payments made by the Loan Guarantor under or with respect to this Deed will be made free and clear of and without withholding or deduction for or on account of any present or future tax, duty, levy, impost, assessment, or other governmental charge (including penalties, interest and other liabilities related thereto) (collectively, "Taxes") imposed or levied by or on behalf of any government or political subdivision or territory or possession of any government or authority or Agency therein or thereof having the power to tax (each, a "Taxing Authority") within Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes), unless the Loan Guarantor is required to withhold or deduct Taxes by law or by the interpretation or administration thereof. For the avoidance of doubt, this Clause 3.1 shall not apply to any Taxes on income payable by the Lender.
 - (b) If at any time the Loan Guarantor is required by applicable law to make any deduction or withholding from any payment under this Agreement for or on account of Taxes imposed or levied by or on behalf of any Taxing Authority within Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes), it shall, on the due date for such payment, increase the payment of principal, interest or any other payment due hereunder to such amount as may be necessary to ensure that the Lender receives a net amount in U.S. dollars equal to the full amount which it would have received had payment not been made subject to such taxes ("increased amount of principal, interest or any other payment due hereunder").
 - (c) The Loan Guarantor will also:
 - (i) make such withholding or deduction; and
 - (ii) remit the full amount deducted or withheld to the relevant authority in accordance with applicable law.
 - (d) If the Lender pays any amount in respect of such Taxes, in respect of which increased amounts of principal, interest or any other payment due hereunder are payable (without prejudice to, and duplication of, the provisions of Clause 3.3 below), the Loan Guarantor shall pay to the Lender an increased amount of principal, interest or any other payment due hereunder equal to such amount in U.S. dollars on demand.
 - (e) Whenever this Deed mentions, in any context, the payment of amounts based upon the principal or premium, if any, interest or of any other amount payable under or with respect to the Loan or this Deed, this includes, without duplication, payment of any increased amounts of principal, interest or any other payment due hereunder and Additional Amounts that may be applicable.

The foregoing provisions shall apply, modified as necessary, to any Taxes imposed or levied by any Taxing Authority in any jurisdiction in which any Loan Guarantor or any successor of the Borrower or of any Loan Guarantor is organised.

3.2 Exemption assistance

The Lender shall assist the Loan Guarantor in ensuring that all payments made under this Deed are exempt from deduction or withholding of Tax.

3.3 Additional Amounts

Without prejudice to, and without duplication of, the provisions of Clause 3.1 above,

(a) if at any time the Lender makes or is required to make any payment to a Person (other than to or for the account of the Noteholders) on account of Tax (other than Taxes on income payable by the Lender) in respect of this Deed or in respect of any instruments issued to, or documents entered into with, the Noteholders, imposed by any Taxing Authority of or in Russia, Luxembourg or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes, or any liability in respect of any such Tax is asserted, imposed, levied or assessed against the Lender, the Loan Guarantor shall, as soon as reasonably practicable following, and in any event within 30 calendar days of, written demand made by the Lender (setting out in reasonable detail the nature and the extent of the obligation), pay to the Lender an amount sufficient to cover such payment, together with any interest, penalties, costs and expenses payable or incurred in connection therewith; and

(b) if at any time a Taxing Authority of or in Russia, Luxembourg or any Qualifying Jurisdiction in which the Lender or any successor thereof is resident for tax purposes imposes an obligation on the Lender to withhold or deduct any amount on any payment made or to be made by the Lender to or for the account of the Noteholders and the Lender is required by the Notes, to pay additional amounts to such Noteholders in connection therewith, the Loan Guarantor shall, as soon as reasonably practicable following, and in any event within 30 calendar days of, written demand made by the Lender (setting out in reasonable detail the nature and the extent of the obligation), pay to the Lender such additional amounts as may be necessary so that the net amount received by the Noteholders (including such additional amounts) in U.S. dollars after such withholding or deduction will not be less than the amount such Noteholders would have received if such withholdings or deductions had not been made and free from liability in respect of such withholding or deduction. Notwithstanding the previous provisions of this Clause 3.3(b), such additional amounts should be paid by the Loan Guarantor to the Lender no later than the Business Day prior to the due date for any relevant payment under the Notes. The Lender shall, as soon as reasonably practicable and in any event no later than three Business Days prior to the relevant payment of such additional amounts to be made by the Loan Guarantor, provide the Loan Guarantor in writing with reasonable details as to the reasons for such withholding or deduction.

Any payments required to be made by the Loan Guarantor under this Clause 3.3 are collectively referred to as "Additional Amounts". For the avoidance of doubt, the provisions of this Clause 3.3 shall not apply to any withholding or deductions of Taxes with respect to this Deed which are subject to payment of increased amounts of principal, interest or any other payment due hereunder under Clause 3.1 above.

3.4 Tax Claims

If the Lender intends to make a claim for any Additional Amounts pursuant to Clause 3.3 above, it shall notify the Loan Guarantor thereof and provide the reasons therefor as set out in Clause 3.3; provided that nothing herein shall require the Lender to disclose any confidential information relating to the organisation of its affairs.

3.5 Tax Credits and Tax Refunds

(a) If any increased amounts of principal, interest or any other payment due hereunder are paid under Clause 3.1 above or Additional Amounts are paid under Clause 3.3 above by the Loan Guarantor for the benefit of the Lender and the Lender, in its reasonable opinion, determines that it has received or been granted a credit against, a relief or remission for, or a repayment of, any Tax, then, if and to the extent that the Lender, in its reasonable opinion, determines that such credit, relief, remission or repayment is in respect of or calculated with reference to the deduction or withholding giving rise to such increased amounts of principal, interest or any other payment due hereunder or, in the case of Additional Amounts, with reference to the liability, expense or loss to which the payment giving rise to such Additional Amounts relates, the Lender shall, to the extent that it can do so without prejudice to the retention of the amount of such credit, relief, remission or repayment, pay to the Loan Guarantor such amount as the Lender shall, in its reasonable opinion, have concluded to be attributable to such deduction or withholding or, as the case may be, such liability, expense or loss; provided that the Lender shall not be obliged to make any payment under this Clause 3.5 in respect of such credit, relief, remission or repayment until the Lender is, in its reasonable opinion, satisfied that its tax affairs for its tax year in respect of which such credit, relief, remission or repayment was obtained have been finally settled. Any such payment shall, in the absence of manifest error and subject to the Lender specifying in writing in reasonable detail the calculation of such credit, relief, remission or prepayment and of such payment and providing relevant supporting documents evidencing such matters, be conclusive evidence of the amount due to the Loan Guarantor hereunder and shall be accepted by the Loan Guarantor in full and final settlement of its rights of reimbursement hereunder in respect of such deduction or withholding. Nothing contained in this Clause 3.5 shall interfere with the right of the Lender to arrange its tax affairs generally in whatever manner it thinks fit nor oblige the Lender to disclose any information relating to its tax affairs generally or any computations in respect thereof. The Lender shall use reasonable endeavours to obtain any tax credits

or tax refunds available to the Lender and shall notify the Loan Guarantor of any such available tax credits or tax refunds.

(b) If as a result of a failure to obtain relief from deduction or withholding of any Tax imposed by Russia or Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) (i) such Tax is deducted or withheld by the Loan Guarantor and pursuant to Clause 3.1 above an increased amount is paid by the Loan Guarantor to the Lender in respect of such deduction or withholding, and (ii) following the deduction or withholding of Tax as referred to above, (A) the Loan Guarantor applies on behalf of the Lender to the relevant Taxing Authorities for a tax refund and such tax refund is credited by the relevant Taxing Authorities to the Lender or (B) if such tax refund is otherwise credited by a relevant Taxing Authority to the Lender pursuant to a final decision of such Taxing Authority, the Lender shall as soon as reasonably possible notify the Loan Guarantor of the receipt of such tax refund and promptly transfer an amount equal to the tax refund to a bank account of the Loan Guarantor specified for that purpose by the Loan Guarantor.

3.6 Representations and Undertakings of the Lender

The Lender represents that it is a company which at the date hereof is a resident of Luxembourg, is subject to taxation in Luxembourg on the basis of its registration as a legal entity, location of its management body or another similar criterion and it is not subject to taxation in Luxembourg merely on income from sources in Luxembourg or connected with property located in Luxembourg; (b) at the date hereof, it does not have a permanent establishment in Russia and (c) does not have any current intention to effect, during the term of the Loan, any corporate action or reorganisation or change of taxing jurisdiction that would result in the Lender ceasing to be a resident of Luxembourg and subject to taxation in Luxembourg.

The Lender shall make reasonable and timely efforts to assist the Loan Guarantor to obtain relief from the withholding of income tax in any jurisdiction in which the Loan Guarantor is resident for tax purposes, pursuant to the double taxation treaty between the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Lender is incorporated, including its obligations under Clause 3.8 below The Lender makes no representation as to the application or interpretation of any double taxation treaty between the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Loan Guarantor is resident for tax purposes and the jurisdiction in which the Lender shall not take any action or do any thing likely to cause it to cease to be resident for taxation purposes in Luxembourg or a Qualifying Jurisdiction, other than as required by a Change of Law.

3.7 Exceptions

The Lender agrees promptly, upon becoming aware of such, to notify the Loan Guarantor if it ceases to be resident in Luxembourg or a Qualifying Jurisdiction or if any of the representations set forth in Clause 3.6 above are no longer true and correct. If the Lender ceases to be resident in Luxembourg or a Qualifying Jurisdiction, then, except in circumstances where the Lender has ceased to be resident in Luxembourg or a Qualifying Jurisdiction by reason of any Change of Law (including a change in a double taxation treaty or in such law or treaty's application or interpretation), in each case taking effect after the date of this Deed, the Loan Guarantor shall not be liable to pay to the Lender under Clause 3.1 above or Clause 3.3 above any sum in excess of the sum it would have been obliged to pay if the Lender had not ceased to be resident in Luxembourg or a Qualifying Jurisdiction.

3.8 Delivery of Forms

The Lender shall within 30 calendar days of the request of the Loan Guarantor, to the extent it is able to do so under applicable law including the laws of the jurisdiction in which the Loan Guarantor is resident for tax purposes, deliver to the Loan Guarantor a certificate issued by the competent Taxing Authority in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) confirming that the Lender is a tax resident in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) confirming that the Lender is resident for tax purposes) and such other information or forms as the Loan Guarantor may need to be duly completed and delivered by the Lender to enable the Loan Guarantor to apply to obtain relief from deduction or withholding of the relevant Tax after the date of this Loan Guarantor, to the extent it is able to do so under applicable laws, including the laws of the jurisdiction in which the Loan Guarantor, to the extent it is able to do so under applicable laws, including the laws of the jurisdiction in which the Loan Guarantor, to the extent it is able to do so under applicable laws, including the laws of the jurisdiction in which the Loan Guarantor any additional duly completed application forms as need to be duly completed and delivered by the Lender to enable the Loan Guarantor, to apply to obtain relief from deduction or withholding of the relevant Tax or, as the case may be, to apply to obtain a tax refund if a relief and delivered by the Lender to enable the Loan Guarantor, to the extent it is able to do so under applicable laws, including the laws of the jurisdiction in which the Loan Guarantor is resident for tax purposes, from time to time deliver to the Loan Guarantor any additional duly completed application forms as need to be duly completed and delivered by the Lender to enable the Loan Guarantor to apply to obtain relief from deduction or withholding of the relevant Tax or,

to apply to obtain a tax refund if a relief from deduction or withholding of the relevant Tax has not been obtained. The certificate and, if required, other forms referred to in this Clause 3.8 shall be duly signed by the Lender, if applicable, and stamped or otherwise approved by the competent Taxing Authority in Luxembourg (or any Qualifying Jurisdiction in which the Lender or any successor thereto is resident for tax purposes) and apostilled or otherwise legalised. If a relief from deduction or withholding of the relevant Tax under this Clause 3.8 has not been obtained and further to an application of the Loan Guarantor to the relevant Taxing Authorities the latter requests the Lender's rouble bank account details, the Lender shall at the request of the Loan Guarantor (x) use reasonable efforts to procure that such rouble bank account of the Lender is duly opened and maintained, and (y) thereafter furnish the Loan Guarantor with the details of such rouble bank account. The Loan Guarantor shall pay for all costs associated, if any, with opening and maintaining such rouble bank account.

3.9 Notification of Requirement to Deduct Tax

If, at any time, the Loan Guarantor is required by law to make any deduction or withholding from any sum payable by it hereunder, or if thereafter there is any change in the rates at which or the manner in which such deductions or withholdings are calculated, the Loan Guarantor shall promptly notify the Lender.

3.10 Evidence of Payment of Tax

The Loan Guarantor will make all reasonable endeavours to obtain certified copies, and translations into English, of tax receipts evidencing the payment of any Taxes so deducted or withheld from each Taxing Authority imposing such Taxes. The Loan Guarantor will furnish to the Lender and the Trustee, within 60 calendar days after the date the payment of any Taxes so deducted or withheld is due pursuant to applicable law, either certified copies of tax receipts evidencing such payment by the Loan Guarantor or, if such receipts are not obtainable, other evidence of such payments by the Loan Guarantor.

4 Currency of Account and Payment

4.1 Currency of Account

The U.S. dollar is the currency of account and payment for each and every sum at any time due from the Loan Guarantor hereunder.

4.2 Currency Indemnity

If any sum due from the Loan Guarantor under this Deed or any order or judgment given or made in relation hereto has to be converted from the currency (the "**first currency**") in which the same is payable hereunder or under such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Loan Guarantor, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation hereto, the Loan Guarantor shall indemnify and hold harmless the Lender from and against any loss suffered or reasonably incurred as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which the Lender may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

5 Assignments and Transfers

5.1 No Assignments and Transfers by the Loan Guarantor

The Loan Guarantor shall not be entitled to assign or transfer all or any of its rights, benefits and obligations hereunder.

5.2 Assignments by the Lender

The Lender may not assign or transfer all or any part of its rights and benefits or obligations hereunder except pursuant to (i) the charge by way of first fixed charge granted by the Lender in favour of the Trustee (as Trustee) and (ii) the absolute assignment by the Lender to the Trustee of certain rights, interests and benefits hereunder, in each case pursuant to the provisions of the Trust Deed.

6 Partial Invalidity

If, at any time, any provision hereof is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions hereof nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

7 Notices; Language

7.1 Communications in Writing

Each communication to be made hereunder (including notice of arbitration) shall be made in writing and, unless otherwise stated, shall be made by fax, letter or e-mail.

7.2 Delivery

Any communication or document (including notice of arbitration) to be made or delivered by one person to another pursuant to this Deed shall, unless that other person has by 15 calendar days' written notice to the same specified another address, be made or delivered to that other person at the address identified with its signature below and shall be effective , in the case of a letter, when left at that address, in the case of a fax, when received by the addressee, in the case of an electronic communication, when the relevant receipt of such communication being read is given, or where no read receipt is requested by the sender, at the time of sending, provided that no delivery failure notification is received by the sender within 24 hours of sending such communication. Provided that any communication or document to be made or delivered by one party to the other party shall be effective only when received by such other party and then only if the same is expressly marked for the attention of the department or officer identified with the such other party's signature below, or such other department or officer as such other party shall from time to time specify for this purpose.

7.3 Language

This Deed shall be signed in English. Each communication and document made or delivered by one party to another pursuant to this Deed shall be in the English language or accompanied by a translation thereof into English certified by an officer of the person making or delivering the same as being a true and accurate translation thereof.

8 Governing Law and Jurisdiction

8.1 English Law

This Deed and any non-contractual obligations arising out of or in connection with it shall be governed by, and construed in accordance with, English law.

8.2 Arbitration

The parties irrevocably agree that any dispute or claim arising out of, under or connected with this Deed, including a dispute as to the validity, existence or termination of this Deed or the consequences of its nullity and/or this Clause 8.2 or any non-contractual obligations arising out of or in connection with this Deed (a "**Dispute**"), shall be referred to and finally settled by arbitration in London, England, conducted in the English language by three arbitrators, in accordance with the Arbitration Rules of the London Court of International Arbitration (the "**LCIA Rules**"), which rules are deemed to be incorporated by reference into this Clause (such arbitration to also be administered by the LCIA in accordance with the Rules), save that, Article 5.6 of the LCIA Rules shall be amended as follows: "unless the parties agree otherwise, the third arbitrator, who shall act as chairman of the tribunal, shall be nominated by the two arbitrators nominated by or on behalf of the parties. If he is not so nominated within 30 days of the date of nomination of the later of the two partynominated arbitrators to be nominated, he shall be chosen by the LCIA Court. The parties agree to exclude the jurisdiction of the English courts under Sections 45 and 69 of the Arbitration Act 1996".

8.3 Consent to Enforcement, etc.

The Loan Guarantor consents generally in respect of any Dispute to the giving of any relief or the issue of any process in connection with such Dispute including, without limitation, the making, enforcement or execution against any property whatsoever, irrespective of its use or intended use, of any order or judgement which is made or given in such arbitration proceedings.

8.4 Contracts (Rights of Third Parties) Act 1999

A person who is not a party to this Deed has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Deed, but this does not affect any right or remedy of a third party which exists or is available apart from that Act.

IN WITNESS whereof this Deed has been entered into as a deed by the Loan Guarantor on the date which appears first on page 1.

SIGNATURE PAGE

Schedule Form of Loan Guarantor Deed of Accession

To: TMK CAPITAL S.A.

From: [Subsidiary]

Dated:

Dear Sirs,

We refer to a deed of loan guarantee dated as of 10 February 2020 and made between TMK CAPITAL S.A. as Issuer, and the Loan Guarantor named therein as the initial loan guarantor (the "**Deed of Loan Guarantee**").

Terms defined in the Deed of Loan Guarantee shall bear the same meaning herein.

In accordance with Clause 12.12 of the Loan Agreement, [Subsidiary] hereby becomes an [Additional/Further] Loan Guarantor.

[Subsidiary] is a [corporate form] duly organised under the laws of [name of relevant jurisdiction].

[*Subsidiary's*] administrative details are as follows:

Address:

Fax.:

Telephone:

Contact Name:

This Deed of Accession and any non-contractual obligations arising out of or in connection with it shall be governed by, and construed in accordance with, English law. If any dispute or difference of whatever nature howsoever arises from or in connection with this Deed of Accession, or any supplement, modifications or additions thereto (each a "**Dispute**"), each party hereto agrees that, such claim shall be settled by arbitration in accordance with the following provisions. Each party hereby agrees that the Dispute shall be referred to and finally settled by arbitration in London, England, conducted in the English language by three arbitrators, in accordance with the Arbitration Rules of the London Court of International Arbitration (the "**LCIA Rules**"), which rules are deemed to be incorporated by reference into this Clause (such arbitration to also be administered by the LCIA in accordance with the Rules), save that, Article 5.6 of the LCIA Rules shall be amended as follows: "unless the parties agree otherwise, the third arbitrator, who shall act as chairman of the tribunal, shall be nominated by the two arbitrators nominated by or on behalf of the parties. If he is not so nominated within 30 days of the date of nomination of the later of the two party-nominated arbitrators to be nominated, he shall be chosen by the LCIA Court. The parties agree to exclude the jurisdiction of the English courts under Sections 45 and 69 of the Arbitration Act 1996".

Executed as a deed by

[Subsidiary]

and signed and delivered as a deed by

and

on its behalf in the presence of:

Witness:

Signature:

Name:

Address:

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the Terms and Conditions of the Notes which contains summaries of certain provisions of the Trust Deed and which will be endorsed on each Individual Note Certificate in definitive form (if issued) and will be attached and (subject to the provisions hereof) apply to the Global Note Certificate:

The US\$500,000,000 4.3 per cent. Loan Participation Notes due 2027 (the "Notes", which expression includes any further notes issued pursuant to Condition 14 and forming a single series therewith) of TMK Capital S.A., a company incorporated as a société anonyme under the laws of the Grand Duchy of Luxembourg, having its registered office at 14, rue Edward Steichen, L-2450 Luxembourg and registered with the Luxembourg Trade and Companies Register (Registre de Commerce et des Sociétés, Luxembourg) under number B119081 (the "Issuer") are constituted by, are subject to and have the benefit of, a trust deed (as amended or supplemented from time to time, the "Trust Deed") dated 12 February 2020 between the Issuer and BNY Mellon Corporate Trustee Services Limited as trustee (the "Trustee", which expression includes all persons from time to time appointed trustee or trustees under the Trust Deed). The Issuer has authorised the creation, issue and sale of the Notes for the sole purpose of financing the U.S.\$500,000,000 loan (the "Loan") to PAO "TMK" (the "Borrower"). The Loan is unconditionally and irrevocably guaranteed (the "Initial Loan Guarantee") by "Volzhsky Pipe Plant", Joint stock company (the "Initial Loan Guarantor") under a Deed of Loan Guarantee in favour of the Issuer as Lender under the Loan Agreement dated 10 February 2020 (the "Deed of Loan Guarantee"), and the Borrower has undertaken pursuant to clause 12.12(a) of the Loan Agreement that the Loan will be additionally so guaranteed (the "Additional Loan Guarantees") by each of "Seversky Pipe Plant", Public Joint stock company, "Sinarsky Pipe Plant", Public Joint stock company and "Taganrog Metallurgical Plant", Public Joint stock company (the "Additional Loan Guarantors" and, together with the Initial Loan Guarantor and Further Loan Guarantors (as defined below), the "Loan Guarantors") executing a deed of accession to the Deed of Loan Guarantee, substantially in the form set out in the Schedule to the Deed of Loan Guarantee, not later than 90 calendar days after the Closing Date. The Borrower may also be obligated to procure certain further loan guarantees from further loan guarantors ("Further Loan Guarantors") upon the satisfaction of certain conditions set out in clause 12.12(b) of the Loan Agreement (the "Further Loan Guarantees"). The Initial Loan Guarantee, Additional Loan Guarantees and Further Loan Guarantees are together referred to as the "Loan Guarantees". Loan Guarantors may be automatically released in accordance with the Loan Agreement.

In each case where amounts of principal, interest, additional amounts, or any other amounts due pursuant to Condition 8 are stated herein or in the Trust Deed to be payable in respect of the Notes, the obligation of the Issuer to make any such payment shall constitute an obligation only to account to the Noteholders (as defined in Condition 2), on each date upon which such amounts are due in respect of the Notes, for an amount equivalent to the sums of principal, interest, increased amounts of principal, interest or any other payment due or any other amounts actually received by, or for the account of, the Issuer pursuant to the Loan Agreement or the Loan Guarantees, as the case may be, less any amount in respect of the Reserved Rights (as defined below). Noteholders must therefore rely solely and exclusively upon the Borrower's covenant to pay under the Loan Agreement or each Loan Guarantor's covenant to pay under the Loan Guarantees, as the case may be, and the credit and financial standing of the Borrower or each Loan Guarantor, respectively. Noteholders shall have no recourse (direct or indirect) to any other assets of the Issuer.

Security

Pursuant to the Trust Deed, the Issuer has:

- (A) charged by way of first fixed security to the Trustee: (i) its present and future rights, title, interest and benefit to principal, interest and other amounts paid and payable to it under the Loan Agreement and the Initial Loan Guarantee; (ii) its present and future right, title, interest and benefit to receive amounts paid and payable to it under any claim, award or judgment relating to the Loan Agreement and the Initial Loan Guarantee; in each case other than its right to amounts in respect of any rights, title, interests and benefits of the Issuer under the following clauses of the Loan Agreement: clause 7.9, second sentence thereof, clause 8.3(a), clause 10, clause 14.4, clause 18, and (to the extent that the Issuer's claim is in respect of one of the aforementioned clauses of the Loan Agreement) clause 16.2; and the following clauses of the Initial Loan Guarantee: clauses 2 and 3.3, and (to the extent that the Issuer's claim is in respect of one of the aforementioned clauses of the Initial Loan Guarantee) clause 5.2 (such rights referred to herein as the "Reserved Rights") and will so charge its rights, title, interest and benefit under the Additional Loan Guarantees and the Further Loan Guarantees;
- (B) charged by way of first fixed security to the Trustee its rights, title, interest and benefit sums held on deposit from time to time, in an account in London in the name of the Issuer with the Account Bank (as defined in the Trust Deed), account number 7639048400, together with the debt represented thereby (other than interest, if any, from time to time earned thereon and sums held in respect of the Reserved Rights) (the "Account"); and

(C) has assigned absolutely to the Trustee all of its present and future rights, title, interest and benefit in and under the Loan Agreement and the Initial Loan Guarantee and will so assign its rights, title, interest and benefit under the Additional Loan Guarantees and the Further Loan Guarantees (save in each case for those rights charged or excluded in (A) and (B) above) (the "Loan Assignment" and the "Loan Guarantee Assignment", respectively and, together, the "Security Interests").

In addition, the Issuer has granted a power of attorney by way of security in favour of the Trustee in respect of the Security Interests created pursuant to the Trust Deed.

In certain circumstances, the Trustee can (subject to it being indemnified and/or secured and/or prefunded to its satisfaction) be required by Noteholders holding at least one quarter of the principal amount of the Notes outstanding or by an Extraordinary Resolution (as defined in the Trust Deed) of the Noteholders to enforce the Security Interests pursuant to Condition 13 (*Enforcement*)).

The Notes are the subject of an agency agreement dated 10 February 2020 (as amended or supplemented from time to time, the "Agency Agreement") among the Issuer, the Trustee, The Bank of New York Mellon, London Branch, at its specified office in London, as the principal paying agent (the "Principal Paying Agent", which expression shall include any successor principal paying agent appointed from time to time in connection with the Notes), The Bank of New York Mellon SA/NV, Luxembourg Branch, at its specified office in Luxembourg, as the registrar and a transfer agent (the "Registrar" and the "Transfer Agent", which expressions shall include any successors appointed from time to time in connection with the Notes). References herein to the "Agents" are to the Registrar, the Principal Paying Agent and the Transfer Agent, and any reference to an "Agent" is to any one of them.

Certain provisions of these terms and conditions ("**Conditions**") are summaries of the Trust Deed, the Deed of Loan Guarantee, the Loan Agreement and the Agency Agreement and are subject to their detailed provisions. The Noteholders are bound by, and are deemed to have notice of, all the provisions of the Trust Deed, the Deed of Loan Guarantee, the Loan Agreement and all the provisions of the Agency Agreement applicable to them. Copies of the Trust Deed, the Deed of Loan Guarantee, the Loan Guarantee, the Loan Agreement and the Agency Agreement are available for inspection during normal business hours at the registered office for the time being of the Trustee, being at the date hereof One Canada Square, London E14 5AL, United Kingdom and at the Specified Offices (as defined in the Agency Agreement) of the Registrar, the Principal Paying Agent, any Transfer Agent and any Paying Agent. The initial Specified Offices of the initial Agents are set out below.

Unless otherwise stated, terms not defined herein shall have the same meanings given to them in the Trust Deed.

1 Form and Denomination

Form and denomination: The Notes are in registered form in amounts of U.S.\$200,000 and higher integral multiples of U.S.\$1,000 (each an "**Authorised Holding**").

2 Title, Register and Transfers

- (a) Register: The Registrar will maintain, outside the United Kingdom, a register (the "Register") in respect of the Notes in accordance with the provisions of the Agency Agreement. In these Conditions, the "Holder" of a Note means the person in whose name such Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "Noteholder" shall be construed accordingly. A certificate (each, a "Note Certificate") will be issued to each Noteholder in respect of its registered holding. Each Note Certificate will be numbered serially with an identifying number which will be recorded on the relevant Note Certificate and in the Register. An up-to-date copy of the Register will be kept with the Issuer at its registered office (each, an "Issuer's Register"). Under the terms of the Agency Agreement, the Register will provide to the Issuer an updated copy of the Register. In case of inconsistency between the Register and the corresponding Issuer's Register, the Issuer's Register shall prevail.
- (b) *Title:* The title to the Notes passes only by registration in the Register. The holder of each Note shall (except as otherwise required by law or as ordered by a court of competent jurisdiction) be treated as the absolute owner of such Note for all purposes, whether or not such Note is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing thereon (other than the endorsed form of transfer) or any notice of any previous loss or theft of the relative Note Certificate, and no person shall be liable for so treating such holder.

- (c) Transfers: Subject to Conditions 2(f) (and 2(g) below, a Note may be transferred in whole or in part upon surrender of the relevant Note Certificate, with the endorsed form of transfer duly completed (including any certificates as to compliance with restrictions on transfer included therein), at the Specified Office of the Registrar or Transfer Agent, together with such evidence as the Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; provided however, that a Note may not be transferred unless the principal amount of the Notes transferred and (where not all of the Notes held by a holder are being transferred) the principal amount of the balance of the surrendered Note Certificate are the subject of the transfer, a new Note Certificate in respect of the balance of the Notes will be issued to the transferor in accordance with Condition 2(d) below.
- (d) Registration and delivery of Note Certificates: Subject to Condition 2(g) within five business days of the surrender of a Note Certificate in accordance with Condition 2(c) above, the Registrar will register the transfer in question and deliver a new Note Certificate of a like principal amount to the Note(s) transferred to the relevant Holder at the Registrar's Specified Office or (as the case may be) the Specified Office of a Transfer Agent or (at the request and risk of any such relevant Holder) by uninsured first class mail (airmail if overseas) to the address specified for the purpose by such relevant Holder. In this paragraph, "business day" means a day on which commercial banks are open for business (including dealings in foreign currencies) in the city where the Registrar has its Specified Office. In the case of the transfer of part only of the Notes, a new Note Certificate in respect of the balance of the Notes not transferred will be so delivered or (at the risk and, if mailed at the request of the transferor otherwise than by ordinary uninsured mail, at the expense of the transferor.
- (e) *No charge:* The transfer of a Note will be effected without charge by or on behalf of the Issuer or the Registrar, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.
- (f) *Closed periods:* Noteholders may not require transfers to be registered during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Notes.
- (g) Regulations concerning transfers and registration: All transfers of Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Notes scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Trustee, the Registrar and the Borrower. A copy of the current regulations will be mailed (free of charge) by the Registrar and/or any Transfer Agent to any Noteholder who requests in writing a copy of such regulations and will be available at the office of the Registrar in Luxembourg and the Transfer Agent in Luxembourg.

3 Status

The sole purpose of the issue of the Notes is to provide the funds for the Issuer to finance the Loan. The Notes constitute obligations of the Issuer to apply an amount equal to the gross proceeds from the issue of the Notes for financing the Loan and to account to the Noteholders for an amount equivalent to sums of principal, interest, increased amounts of principal, interest or any other payment due (as defined in clause 8.1 of the Loan Agreement) and Additional Amounts (as defined in clause 8.3 of the Loan Agreement), if any, actually received by, or for the account of, the Issuer pursuant to the Loan Agreement and/or any Loan Guarantee, as the case may be (less any amounts in respect of the Reserved Rights), the right to receive which is, *inter alia*, being charged by way of security to the Trustee by virtue of the Security Interests (as defined in the Trust Deed) as security for the Issuer's payment obligations under the Trust Deed and in respect of the Notes.

Payments in respect of the Notes equivalent to the sums actually received by or for the account of the Issuer by way of principal, interest, increased amounts of principal, interest or any other payment due or Additional Amounts, if any, pursuant to the Loan Agreement and/or any Loan Guarantee, as the case may be (less any amounts in respect of the Reserved Rights) will be made *pro rata* among all Noteholders (subject to Conditions 6(c) and Condition 8), on the corresponding payment dates (as provided in the Loan Agreement) of, and in the currency of, and subject to the conditions attaching to, the equivalent payment in accordance with the Loan Agreement and/or any Loan Guarantee, as the case may be. The Issuer shall not be liable to make any payment in respect of the Notes other than as expressly provided herein and in the Trust Deed. The Issuer shall be under no obligation to exercise in favour of the Trustee or the Noteholders any rights of set-off or of banker's lien or to combine accounts or counterclaim that may arise out of other transactions between the Issuer and the Borrower and/or the Issuer and any of the Loan Guarantors, as the case may be.

Noteholders are deemed to have accepted that:

- (i) neither the Issuer nor the Trustee makes any representation or warranty in respect of, and shall at no time have any responsibility for, or liability, or obligation in respect of the performance and observance by the Borrower or any of the Loan Guarantors, as the case may be, of its obligations under the Loan Agreement or any Loan Guarantee, respectively, or the recoverability of any sum of principal, interest, increased amounts of principal, interest or any other payment due or Additional Amounts, if any, due or to become due from the Borrower or any of the Loan Guarantors, as the case may be, under the Loan Agreement or any Loan Guarantee, respectively;
- (ii) none of the Issuer, the Agents or the Trustee shall at any time have any responsibility for, or obligation or liability in respect of, the condition (financial, operational or otherwise), creditworthiness, affairs, status, nature or prospects of the Borrower or any of the Loan Guarantors, as the case may be;
- (iii) none of the Issuer, the Agents or the Trustee shall at any time have any responsibility for, or obligation or liability in respect of, any misrepresentation or breach of warranty or any act, default or omission of the Borrower or any of the Loan Guarantors, as the case may be, under or in respect of the Loan Agreement or any Loan Guarantee, respectively;
- (iv) neither the Issuer nor the Trustee shall at any time have any responsibility for, or liability or obligation in respect of, the performance and observance by the Registrar, the Principal Paying Agent, any Transfer Agent or any Paying Agent of their respective obligations under the Agency Agreement;
- (v) the financial servicing and performance of the terms of the Notes depend solely and exclusively upon performance by the Borrower and each Loan Guarantor, as the case may be, of their respective obligations under the Loan Agreement and/or the Loan Guarantees, the Borrower's covenant to pay under the Loan Agreement and each Guarantor's covenant to pay under its respective Loan Guarantee, respectively and their respective credit and financial standings;
- the Issuer (and, pursuant to the Loan Assignment, the Trustee) will rely on self-certification by the (vi) Borrower and any Loan Guarantor and certification by third parties as a means of monitoring whether the Borrower or such Loan Guarantor is complying with its obligations under the Loan Agreement or the relevant Loan Guarantee, respectively, (including, without limitation, compliance with the covenants in clause 12 of the Loan Agreement) and shall not otherwise be responsible for investigating any aspect of the Borrower's or any Loan Guarantor's performance or compliance in relation thereto and, subject as further provided in the Trust Deed, the Trustee will not be liable for any failure to make the usual or any investigations which might be made by a security holder in relation to the property which is the subject of the Security Interests and held by way of security for the Notes, and shall not be bound to enquire into or be liable for any defect or failure in the right or title of the Issuer to the secured property whether such defect or failure was known to the Trustee or might have been discovered upon examination or enquiry or whether capable of remedy or not, nor will it have any liability for the enforceability of the security created by the Security Interests whether as a result of any failure, omission or defect in registering or filing or otherwise protecting or perfecting such security and the Trustee will have no responsibility for the value of such security;
- (vii) the Issuer will not be liable for any withholding or deduction or for any payment on account of Taxes (as defined in the Loan Agreement) (not being a tax imposed on the Issuer's net income) required to be made by the Issuer on or in relation to any sum received by it under the Loan Agreement or any Loan Guarantee, as the case may be, which will or may affect payments made or to be made by the Borrower or any of the Loan Guarantors, as the case may be under the Loan Agreement or any Loan Guarantee, respectively, save to the extent that it has received increased amounts of principal, interest or any other payment due or Additional Amounts under the Loan Agreement or any Loan Guarantee, as the case may be, in respect of such withholding or deduction; the Issuer shall, furthermore, not be obliged to take any actions or measures as regards such deductions or withholdings other than those set out in this context in clause 8 and clause 10.4 of the Loan Agreement and in clause 3 of the Deed of Loan Guarantee; and
- (viii) where the Trustee or the Issuer is required, pursuant to the Loan Agreement or the Loan Guarantee, to determine whether a matter or amount is "material" or "substantial" or has a Material Adverse Effect (as defined in the Loan Agreement), the Trustee shall be entitled to direct the Issuer to obtain advice in relation thereto from an Independent Appraiser (as defined in the Loan Agreement) on which advice the Trustee will be entitled to rely without liability to any person and without further enquiry and shall have no liability for any failure by the Issuer to appoint such Independent Appraiser.

Save as otherwise expressly provided herein and in the Trust Deed, no proprietary or other direct interest in the Issuer's rights under or in respect of the Loan Agreement or any Loan Guarantee exists for the benefit of the Noteholders. Subject to the terms of the Trust Deed, no Noteholder will have any entitlement to enforce any of the provisions in the Loan Agreement or any Loan Guarantee or have direct recourse to the Borrower or any of the Loan Guarantors except through action by the Trustee under the Security Interests. Neither the Issuer nor the Trustee pursuant to the Loan Assignment or the Loan Guarantee Assignment, as the case may be, shall be required to take proceedings to enforce payment under the Loan Agreement or any Loan Guarantee, as the case may be, unless it has been indemnified and/or secured and/or prefunded by the Noteholders to its satisfaction against all liabilities, proceedings, claims and demands to which it may thereby become liable and all costs, charges and expenses which may be incurred by it in connection therewith.

As provided in the Trust Deed, the obligations of the Issuer are solely to make payments of amounts in aggregate equivalent to each sum actually received by or for the account of the Issuer from the Borrower or the Loan Guarantors, as the case may be, in respect of principal, interest, increased amounts of principal, interest or any other payment due or Additional Amounts, if any, as the case may be, pursuant to the Loan Agreement or any Loan Guarantee, as the case may be, (less any amount in respect of the Reserved Rights), the right to which is being assigned by way of security to the Trustee as aforesaid. Noteholders must therefore rely solely and exclusively upon the Borrower and the Loan Guarantors complying with their obligations under the Loan Guarantors and the ability of the Issuer (or, in certain circumstances as described in Condition 13, the Trustee) to enforce such obligations against the Borrower and the Loan Guarantors under the Loan Guarantors or the Loan Guarantees, as the case may be.

The obligations of the Issuer to make payments as stated in the previous paragraph constitute direct and general obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

Payments to be made by the Borrower under the Loan Agreement or by any of the Loan Guarantors under the Loan Guarantees to the Account (before such time that the Issuer has been required by the Trustee, pursuant to the terms of the Trust Deed, to pay to or to the order of the Trustee) will satisfy *pro tanto* the obligations of the Issuer to make payments in respect of the Notes unless there is subsequent failure to pay such amounts to Noteholders.

4 Issuer's Covenant

As provided in the Trust Deed, so long as any of the Notes remain outstanding (as defined in the Trust Deed), the Issuer will not, without the prior written consent of the Trustee or an Extraordinary Resolution or Written Resolution (each as defined in the Trust Deed), agree to any amendments to or any modification or waiver of, or authorise any breach or proposed breach of, the terms of the Loan Agreement or the Deed of Loan Guarantee and will act at all times in accordance with any instructions of the Trustee from time to time with respect to the Loan Agreement and/or the Loan Guarantees, as the case may be, except as otherwise expressly provided in the Trust Deed, the Loan Agreement and/or the Loan Guarantees. Any such amendment, modification, waiver or authorisation made with the consent of the Trustee shall be binding on the Noteholders and any such amendment or modification shall be notified by the Issuer to the Noteholders in accordance with Condition 15.

5 Interest

(a) Accrual of interest: The Notes bear interest from 12 February 2020 (the "Closing Date") at the rate of 4.3 per cent. per annum (the "Interest Rate") payable semi-annually in arrear on 12 February and 12 August in each year (each, other than the Closing Date, an "Interest Payment Date"), subject as provided in Condition 7. Each period from (and including) the Closing Date or any Interest Payment Date to (but excluding) the next (or first) Interest Payment Date is herein called an "Interest Period".

Each Note will cease to bear interest from the due date for redemption unless, upon due presentation of the relevant Note Certificate, payment of principal is improperly withheld or refused, in which case interest will continue to accrue (before or after any judgment) from the due date for redemption to, but excluding, the date on which payment in full of the principal is made under the Notes.

The amount of interest payable in respect of each Note for any Interest Period shall be calculated by applying the Interest Rate to the principal amount of such Note, dividing the product by two and rounding the resulting figure to the nearest cent (half a cent being rounded upwards). When interest

is required to be calculated in respect of a period other than an Interest Period, it shall be calculated on the basis of a 360 day year consisting of 12 months of 30 days each, and in the case of an incomplete month, the actual number of days elapsed.

(b) Default Interest under the Loan Agreement: In the event that, and to the extent that, the Issuer actually receives any amounts in respect of interest on unpaid sums from the Borrower and/or a Loan Guarantor, as the case may be, pursuant to clause 14 of the Loan Agreement the Issuer shall account to the Noteholders for an amount equivalent to the amounts in respect of interest on unpaid sums actually so received. Any payments made by the Issuer under this Condition 5(b) will be made on the next following Business Day (as defined in Condition 7(c)) after the day on which the Issuer receives such amounts from the Borrower and/or the Loan Guarantor, as the case may be, and, save as provided in this Condition 5(b), all subject to and in accordance with Condition 7.

6 Redemption and Purchase

- (a) Final redemption: Unless previously prepaid pursuant to clauses 7.1, 7.2, 7.3, 7.4, 7.5, 7.6 or 7.7 of the Loan Agreement or repaid in accordance with clause 10.3 of the Loan Agreement, the Borrower or the Loan Guarantors, as the case may be, will be required to repay the Loan on the Business Day prior to its due date as provided in the Loan Agreement and, subject to such repayment, all the Notes will be redeemed at their principal amount on 12 February 2027 together with interest accrued and unpaid to the date fixed for redemption and any additional amounts, subject as provided in Condition 7.
- (b) *Redemption by the Issuer:* Under the Loan Agreement:
 - (i) the Borrower may, in the circumstances set out in clause 7.1 or 7.2 of the Loan Agreement prepay the Loan in whole but not in part; and
 - (ii) the Issuer may require the Borrower to prepay the Loan in whole but not in part in the circumstances set out in clause 10.3 of the Loan Agreement.

If the Loan should become repayable pursuant to clauses 7.1, 7.2 or 10.3 of the Loan Agreement prior to the Repayment Date, as set forth in the Loan Agreement, all Notes then remaining outstanding will thereupon become due and redeemable or repayable at 100 per cent. of the principal amount thereof together with interest accrued and unpaid to the date fixed for redemption and any additional amounts in respect thereof pursuant to Condition 8 (subject to the Loan being repaid together with such accrued interest and/or additional amounts or equivalent amounts being paid under the Loan Guarantees) and shall be redeemed or repaid by the Issuer on the date specified pursuant to the Loan Agreement and the Issuer will give not less than 30 days' notice thereof to the Trustee, the Principal Paying Agent and the Noteholders in accordance with Condition 15.

The Issuer shall deliver to the Trustee an Officer's Certificate (as defined in the Trust Deed) of the Issuer stating that the Issuer is entitled to effect such redemption in accordance with this Condition 6(b). A copy of the Borrower's notice of prepayment or details of the circumstances contemplated by clause 10.3 of the Loan Agreement and the date fixed for redemption shall be set out in the notice. The Trustee shall be entitled to accept and rely on (without further enquiry and without liability to any person) any notice or certificate delivered by the Issuer in accordance with this Condition 6(b) as sufficient evidence of the satisfaction of the applicable circumstances in which event they shall be conclusive and binding on the Noteholders.

(c) Redemption at the Option of the Noteholders on the failure to procure any Additional Loan Guarantee or Further Loan Guarantee: If a Further Loan Guarantee Event (as defined below) shall have occurred, the holder of a Note will have the option (the "Further Loan Guarantee Event Put Option") to require the Issuer to redeem such Note on the Further Loan Guarantee Event Payment Date (as defined below) at par together with accrued but unpaid interest up to but excluding the Further Guarantee Event Payment Date (as defined below) (if any) and plus any additional amounts or other amounts that may be due thereon.

Promptly, upon the Issuer receiving written notice from the Borrower in accordance with clause 7.4.1 of the Loan Agreement (the "**Borrower Further Loan Guarantee Event Notice**") that a Further Loan Guarantee Event has occurred, the Issuer shall give notice (a "**Further Loan Guarantee Event Notice**") to the Noteholders in accordance with Condition 15, the Trustee and the Principal Paying Agent, specifying (i) that a Further Loan Guarantee Event has occurred (ii) the details relating to the

occurrence of the Further Loan Guarantee Event, (iii) the purchase price in connection with the Further Loan Guarantee Event Put Option, (iv) the Further Loan Guarantee Event Put Period (v) the procedure for exercising the Further Loan Guarantee Event Put Option (vi) that any Note not properly tendered or not tendered at all prior to the Further Loan Guarantee Event Payment Date will remain outstanding and continue to accrue interest and additional amounts (if any) and (vii) that Noteholders can tender their Notes in part and will be issued a new Note Certificate in respect of the unredeemed portion, providing that such unredeemed portion is an Authorised Holding.

In order to exercise the Further Loan Guarantee Event Put Option, the holder of a Note must deliver no later than 60 calendar days after the Further Loan Guarantee Event Notice is given (the "Further Loan Guarantee Event Put Period"), to the specified office of the Principal Paying Agent, evidence satisfactory to the Principal Paying Agent of such holder's entitlement to such Note and a duly completed additional guarantee put option notice (a "Further Loan Guarantee Event Put Option Notice") specifying the principal amount of the Notes in respect of which the Further Loan Guarantee Event Put Option is exercised, in the form obtainable from the Principal Paying Agent. The Principal Paying Agent will provide such Noteholder with a non-transferable receipt. On the Business Day (as defined in the Loan Agreement) following the end of the Further Loan Guarantee Event Put Period, the Principal Paying Agent shall notify in writing the Issuer and the Borrower of the exercise of the Further Loan Guarantee Event Put Option specifying the aggregate principal amount of the Notes to be redeemed in accordance with the Further Loan Guarantee Event Put Option. Provided that the Notes that are the subject of any such Further Loan Guarantee Event Put Option Notice have been delivered to the Principal Paying Agent prior to the expiry of the Further Loan Guarantee Event Put Period, then the Issuer shall (subject (i) to the receipt of sufficient funds to do so from the Borrower pursuant to the Loan Agreement or from the Initial Loan Guarantor pursuant to the Deed of Loan Guarantee and (ii) as provided in Condition 7) redeem all such Notes on the date falling 5 Business Days after the expiration of the Further Loan Guarantee Event Put Period (the "Further Loan Guarantee Event Payment Date"). No Further Loan Guarantee Event Put Option Notice, once delivered to the Principal Paying Agent in accordance with this Condition 6(c), may be withdrawn.

For the purposes of these Conditions "**Further Loan Guarantee Event**" means (a) the failure of any Additional Loan Guarantee to be provided as specified pursuant to clause 12.12(a) of the Loan Agreement or (b) the failure of any Further Loan Guarantee (if required) to be provided as specified pursuant to clause 12.12(b) of the Loan Agreement.

(d) Redemption upon a change of control: If a Change of Control Put Event (as defined below) shall have occurred, the holder of a Note will have the option (the "Change of Control Put Option") to require the Issuer to redeem such Note on the Change of Control Put Settlement Date (as defined below) at 100 per cent. of its principal amount together with accrued, but unpaid, interest (if any) to, but excluding, the Change of Control Put Settlement Date.

Promptly upon the Issuer becoming aware (by receiving written notice from the Borrower) that a Change of Control Put Event has occurred, the Issuer shall give notice (a "**Change of Control Put Event Notice**") to the Noteholders in accordance with Condition 15 and to the Trustee, and the Principal Paying Agent, specifying the details relating to the occurrence of the Change of Control Put Event and the procedure for exercising the Change of Control Put Option.

In order to exercise the Change of Control Put Option, the holder of a Note must deliver no later than 30 days after the Change of Control Put Event Notice is given (the "Change of Control Put Period"), to the specified office of the Principal Paying Agent, evidence satisfactory to the Principal Paying Agent or Paying Agent of such holder's entitlement to such Note and a duly completed put option notice (a "Change of Control Put Option Notice") specifying the principal amount of the Notes in respect of which the Change of Control Put Option is exercised, in the form obtainable from the Principal Paying Agent or any Paying Agent. The Principal Paying Agent or Paying Agent will provide such Noteholder with a non-transferable receipt. On the first Business Day (as defined in the Loan Agreement) following the end of the Change of Control Put Period, the relevant Paying Agent shall notify the Issuer and the Borrower in writing of the exercise of the Change of Control Put Option specifying the aggregate principal amount of the Notes to be redeemed in accordance with the Change of Control Put Option. Provided that the Notes that are the subject of any such Change of Control Put Option Notice have been delivered to the Principal Paying Agent or a Paying Agent prior to the expiry of the Change of Control Put Period, then the Issuer shall (subject (i) to the receipt of sufficient funds to do so from the Borrower; and (ii) as provided in Condition 8) redeem all such Notes on the date falling five Business Days (as defined in the Loan Agreement) after the expiration of the Change of Control Put Period (the "Change of Control Put Settlement Date"). No Change

of Control Put Option Notice, once delivered in accordance with this Condition 6(d), may be withdrawn.

"Change of Control Put Event" means the occurrence of a Change of Control (as defined in the Loan Agreement).

The Trustee shall not be required to take any steps to ascertain whether a Change of Control Put Event or any event which could lead to the occurrence of a Change of Control Put Event has occurred and will not be responsible or liable to any holder of a Note for any loss arising from any failure by it to do so. The Trustee may assume until notified otherwise pursuant to this Condition 6 that no Change of Control Put Event has occurred and shall have no liability to any person for so doing.

- (e) *Optional Redemption at Make Whole*: At any time prior to the Repayment Date, but on one occasion only, the Borrower may, at its option, on giving not less than 30 nor more than 60 days' irrevocable notice to the Issuer (the "**Call Option Notice**"), prepay the Loan in whole but not in part, at the price which shall be the following:
 - (i) the principal amount; plus
 - (ii) the Make Whole Premium (as defined in the Loan Agreement); plus
 - (iii) interest and any additional amounts or other amounts that may be due thereon (if any) accrued but unpaid to but excluding the date on which the call option is to be settled (the "Call Settlement Date").

The Call Option Notice shall specify the Call Settlement Date.

Immediately on receipt of such notice, the Issuer shall forward it to the Noteholders (in accordance with Condition 15), the Trustee and the Principal Paying Agent. The Loan shall be repaid one Business Day prior to the Call Settlement Date. The Issuer's obligations in respect of this Condition 6 to redeem and make payment for the Notes shall constitute an obligation only to account to Noteholders on the Call Settlement Date for an amount equivalent to the sums received by or for the account of the Issuer pursuant to the Loan Agreement.

(f) Redemption at par: At any time on or after the date three months prior to the Repayment Date, the Borrower may, on giving not less than 30 nor more than 60 days' notice to the Issuer (which notice shall be irrevocable and shall specify the date fixed for prepayment (the "Par Optional Prepayment Date")), prepay in whole but not in part at its principal amount plus accrued and unpaid interest on the Loan so prepaid to but excluding the Par Optional Prepayment Date (the "Par Call Option").

Immediately on receipt of such notice, the Issuer shall forward it to the Noteholders (in accordance with Condition 15), the Trustee and the Principal Paying Agent. If, as a result of the Par Call Option, the Loan is repaid by the Borrower as set forth in the Loan Agreement prior to the Repayment Date, the Notes will thereupon become due and repayable and the Issuer shall, subject to receipt of the relevant amounts from the Borrower under the Loan, redeem the Notes on the Par Optional Prepayment Date.

The Issuer's obligations in respect of this Condition 6(e) to redeem and make payment for the Notes shall constitute an obligation only to account to Noteholders on the Par Optional Prepayment Date for an amount equivalent to the sums received by or for the account of the Issuer pursuant to the Loan Agreement.

- (g) *No other redemption:* Except where the Loan is accelerated pursuant to clause 13.2 of the Loan Agreement, the Issuer shall not be entitled to redeem the Notes otherwise than as provided in Conditions 6(a), 6(b), 6(c), 6(d), 6(e) and 6(f) above.
- (h) Purchase and Cancellation: The Issuer or the Borrower or any of its Subsidiaries or affiliates (each as defined in the Loan Agreement) or any other company acting for the benefit of the Borrower may at any time purchase Notes in the open market or otherwise and at any price. Such Notes may be held, reissued, resold or, at the option of the Issuer, the Borrower or any of its Subsidiaries, as the case may be, delivered to the Issuer together with a request for the Issuer to redeem and thereafter cancel such Notes, whereupon the Issuer shall, pursuant to the Agency Agreement, instruct the Principal Paying Agent and the Registrar to cancel such Notes. Upon the cancellation of such Notes,

the Loan shall be treated as prepaid by the Borrower in an amount corresponding to the aggregate principal amount of the Notes surrendered for cancellation, together with accrued interest (if any) thereon and no further payment shall be made in respect of such Notes.

7 Payments

- (a) *Principal:* Payments of principal shall be made by transfer to a U.S. dollar account maintained by, the payee, upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificate(s) at the Specified Office of the Principal Paying Agent and/or the Transfer Agent.
- (b) *Interest:* Payments of interest shall be made by transfer to a U.S. dollar account maintained by the payee, and (in the case of interest payable on redemption in whole) upon surrender of the relevant Note Certificate(s) at the Specified Office of the Principal Paying Agent or the Transfer Agent.
- (c) Payments on Business Days: Where payment is to be made by transfer to a U.S. dollar account, payment instructions (for value the due date for payment, or, if the due date for payment is not a Business Day, for value the next succeeding Business Day) will be initiated (i) (in the case of payments of principal and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Note Certificate is surrendered (or, in the case of payments of interest payable of the Registrar and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from the due date for a payment not being a Business Day. In this Condition 7, "Business Day" means any day (other than a Saturday or Sunday) on which banks generally are open for business in New York City and in the city where the specified office of the Principal Paying Agent is located.
- (d) *Partial payments:* If the Principal Paying Agent makes a partial payment in respect of any Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Note Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Note Certificate.
- (e) *Record date:* Each payment in respect of a Note will be made to the person shown as the Holder in the Register at the opening of business in the place of the Specified Office of the Registrar on the fifteenth day before the due date for such payment (the "**Record Date**") whether or not a Business Day.
- (f) Payment to the Account: Save as the Trustee may otherwise direct at any time after the Charge (as defined in the Trust Deed) created pursuant to the Trust Deed becomes enforceable, the Issuer will pursuant to the provisions of clause 8.1 of the Agency Agreement require the Borrower or the Loan Guarantors, as the case may be, to make all payments of principal and interest to be made pursuant to the Loan Agreement or the Loan Guarantees, respectively, less any amounts in respect of the Reserved Rights, to the Account (as defined in the Loan Agreement).
- (g) Payment obligations limited: The obligations of the Issuer to make payments under Conditions 6 and 7 shall constitute an obligation only to account to the Noteholders on such date upon which a payment is due in respect of the Notes, for an amount equivalent to sums of principal, interest, increased amount of principal, interest or any other payment due or Additional Amounts, if any, actually received by or for the account of the Issuer pursuant to the Loan Agreement and/or any Loan Guarantee less any amount in respect of the Reserved Rights.
- (h) Payments Subject to Fiscal Laws: All payments are subject in all cases to any applicable fiscal or other laws, regulations and directives in the place of payment or other laws to which the Issuer or its Agents agree to be subject and the Issuer will not be liable for any taxes or duties of whatever nature imposed or levied by such laws, regulations, directives or agreements, but without prejudice to the provisions of Condition 8. No commission or expenses shall be charged to the Noteholders in respect of such payments.

8 Taxation

All payments of principal and interest by or on behalf of the Issuer in respect of the Notes shall be made to, or for the account of, each Holder free and clear of, and without withholding or deduction for, any Taxes imposed or levied by the Grand Duchy of Luxembourg ("Luxembourg") or the Russian Federation or any political subdivision or any authority thereof or therein having power to tax, unless such withholding or

deduction is required by law. In that event, the Issuer shall, subject as provided below, pay such additional amounts as will result in the receipt by the Noteholders of such amounts as would have been received by them if no such withholding or deduction had been made or required to be made. No such additional amounts shall be payable in respect of any Note:

- (a) held by a Holder who is liable for such Taxes in respect of such Note by reason of its having some connection with Luxembourg other than the mere holding of such Note (including being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in, or being physically present in, Luxembourg); or
- (b) where the additional amount is required by virtue of the law dated 23 December 2005 on final withholding tax levied on certain saving income derived by Luxembourg individuals as amended; or
- (c) where (in the case of a payment of principal or interest on redemption) the relevant Note Certificate is surrendered for payment more than 30 days after a Relevant Date except to the extent that the relevant Holder would have been entitled to such additional amounts if it had surrendered the relevant Note Certificate on the last day of such period of 30 days; or
- (d) for any Taxes that would not have been imposed but for the failure of the relevant Holder to comply with the Issuer's written request, addressed to the relevant Holder and delivered at least 30 days prior to the date when the relevant payment is due, to provide information with respect to any reasonable certification, documentation, information or other reporting requirement concerning the nationality, residence, identity or connection with the taxing jurisdiction of the relevant Holder; or
- (e) presented for payment by or on behalf of a Holder who would be able to avoid such withholding or deduction by presenting the relevant Note to another Paying Agent in a Member State of the European Union.

Notwithstanding the foregoing provisions, the Issuer shall only make payments of additional amounts to the Noteholders pursuant to this Condition 8 to the extent and at such time as it shall have actually received an equivalent amount for such purposes from the Borrower and/or the Loan Guarantors under the Loan Agreement and/or any Loan Guarantee, as the case may be, by way of increased amount of principal, interest or any other payment due or Additional Amounts or otherwise.

To the extent that the Issuer receives a lesser sum, in respect of an increased amount of principal, interest or any other payment due from the Borrower and/or the Loan Guarantors for the account of the Noteholders, the Issuer shall account to each Noteholder entitled to receive an additional amount pursuant to this Condition 8 for an additional amount equivalent to a *pro rata* portion of such increased amounts of principal, interest or any other payment due (if any) as is actually received by, or for the account of, the Issuer pursuant to the provisions of the Loan Agreement and/or any Loan Guarantee on the date of, in the currency of, and subject to any conditions attaching to the payment of such increased amounts of principal, interest or any other payment due to the Issuer.

In these Conditions, "**Relevant Date**" means whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in London by the Principal Paying Agent or the Trustee on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders.

Any reference in these Conditions to principal or interest shall be deemed to include any additional amounts in respect of principal or interest (as the case may be) which may be payable under this Condition 8 or any undertaking given in addition to or in substitution of this Condition 8 pursuant to the Trust Deed, the Loan Agreement or the Deed of Loan Guarantee.

If the Issuer becomes subject at any time to any taxing jurisdiction other than Luxembourg, references in these Conditions to Luxembourg shall be construed as references to Luxembourg and/or such other jurisdiction.

9 Prescription

Claims for principal shall become void unless the relevant Note Certificates are surrendered for payment within ten years, and claims for interest due shall become void unless made within five years, in each case of the appropriate Relevant Date.

10 Replacement of Note Certificates

If any Note Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Registrar or any Paying Agent, subject to all applicable laws and stock exchange requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer, the Registrar or Paying Agent may reasonably require. Mutilated or defaced Note Certificates must be surrendered before replacements will be issued.

11 Trustee and Agents

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility in certain circumstances, including provisions relieving it from taking proceedings to enforce payment unless indemnified and/or secured and/or prefunded to its satisfaction, and to be paid its costs and expenses in priority to the claims of Noteholders. In addition, the Trustee is entitled to enter into business transactions with the Issuer, the Borrower, any of the Loan Guarantors and any entity relating to the Issuer, the Borrower or any of the Loan Guarantors without accounting for any profit.

In connection with the exercise by it of any of its trusts, powers, authorities and discretions (including, without limitation, any modification, waiver, authorisation, determination or substitution), the Trustee shall have regard to the general interests of the Noteholders as a class but shall not have regard to any interests arising from circumstances particular to individual Noteholders (whatever their number) and, in particular but without limitation, shall not have regard to the consequences of any such exercise for individual Noteholders (whatever their number) resulting from their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any particular territory or any political sub-division thereof and the Trustee shall not be entitled to require, nor shall any Noteholder be entitled to claim, from the Issuer, the Trustee or any other person any indemnification or payment in respect of any tax consequence of any such exercise upon individual Noteholders except to the extent already provided for in Condition 8 and/or any undertaking given in addition to, or in substitution for, Condition 8 pursuant to the Trust Deed.

In acting under the Agency Agreement and in connection with the Notes, the Agents act solely as agents of the Issuer and (to the extent provided therein) the Trustee and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders.

The initial Agents and their initial Specified Offices are outlined in the Agency Agreement. The Issuer reserves the right (with the prior written approval of the Trustee) at any time to vary or terminate the appointment of any Agent and to appoint a successor registrar or principal paying agent or additional or successor other paying agents and transfer agents; provided, however, that so long as the Notes are listed on the Stock Exchange and the rules of such exchange so require the Issuer shall, maintain a transfer and paying agent with a specified office in Dublin or such other place as may be approved by the Stock Exchange and shall maintain the register at all times outside the United Kingdom. Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Noteholders.

12 Meetings of Noteholders; Modification and Waiver; Substitution

Meetings of Noteholders: The Trust Deed contains provisions for convening meetings of (a) Noteholders to consider matters relating to the Notes, including the modification of any provision of the Loan Agreement, the Loan Guarantees or any provision of these Conditions or the Trust Deed. Any such modification may be made if sanctioned by an Extraordinary Resolution (as defined in the Trust Deed). Such a meeting may be convened on no less than 21 days' notice by the Trustee, the Borrower or the Issuer or by the Trustee upon the request in writing of Noteholders holding not less than one-tenth of the aggregate principal amount of the outstanding Notes, provided it shall have been indemnified and/or secured and/or prefunded to its satisfaction. The quorum at any meeting convened to vote on an Extraordinary Resolution will be two or more persons holding or representing more than half of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, two or more persons being or representing Noteholders whatever the principal amount of the Notes held or represented; provided, however, that certain proposals (including but not limited to any proposal to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes, to alter the method of calculating the amount of any payment in respect of the Notes or the date for any such payment, to change the currency of payments under the Notes, to change the quorum requirements relating to meetings or the majority required to pass an Extraordinary Resolution, to alter the governing law of the Conditions, the Trust Deed, the Loan Agreement or any Loan Guarantee, to

change any date fixed for payment of principal or interest under the Loan Agreement or any Loan Guarantee, to alter the method of calculating the amount of any payment under the Loan Agreement or any Loan Guarantee or to change the currency of payment or events of default under the Loan Agreement or any Loan Guarantee (each, a "**Reserved Matter**") may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which two or more persons holding or representing not less than three-quarters or, at any adjourned meeting, one quarter of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders, whether present or not.

The Trust Deed provides that a resolution in writing signed by or on behalf of the holders of not less than three-quarters in principal amount of the Notes outstanding shall for all purposes be as valid and effective as an Extraordinary Resolution passed at a meeting of Noteholders duly convened and held. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

(b) Modification and waiver: The Trustee may, without the consent of the Noteholders, agree to any modification of these Conditions, the Trust Deed or following the Loan Assignment, the Loan Agreement or any Loan Guarantee (i) (other than in respect of a Reserved Matter) which is, in the opinion of the Trustee, proper to make if, in the opinion of the Trustee, such modification will not be materially prejudicial to the interests of Noteholders or (ii) which is, in the opinion of the Trustee, of a formal, minor or technical nature or is to correct a manifest error.

In addition, the Trustee may, without the consent of the Noteholders, authorise or waive any breach or proposed breach of the Notes or the Trust Deed by the Issuer or, following the Loan Assignment, the Loan Agreement or the Deed of Loan Guarantee by the Borrower or any Loan Guarantor, as the case may be, or determine that any event which would or might otherwise give rise to a right of acceleration under the Loan Agreement or any Relevant Event (as defined below) shall not be treated as such (other than a proposed breach or breach relating to a Reserved Matter) if, in the opinion of the Trustee, the interests of the Noteholders will not be materially prejudiced thereby, provided always that the Trustee may not exercise such power of waiver in contravention of a written request given by holders of one-quarter in aggregate principal amount of the Notes then outstanding or any express direction by Extraordinary Resolution or Written Resolution.

Unless the Trustee agrees otherwise, any such authorisation, waiver or modification shall be notified to the Noteholders in accordance with Condition 15 as soon as practicable thereafter.

(c) *Substitution:* The Trust Deed contains provisions under which the Issuer may, without the consent of the Noteholders, transfer the obligations of the Issuer as principal debtor under the Trust Deed and the Notes to a third party provided that certain conditions specified in the Trust Deed are fulfilled.

13 Enforcement

At any time after the Trustee has actual notice that an Event of Default (as defined in the Loan Agreement) has occurred and is continuing or a Relevant Event (as defined below) has occurred, the Trustee may, at its discretion and without notice, institute such steps, actions or proceedings as it thinks fit to enforce its rights under the Trust Deed in respect of the Notes (including, after a Relevant Event, enforcing the Security Interests and, where applicable, after an Event of Default, directing the Issuer to enforce its rights against the Borrower and/or the Loan Guarantors under the Loan Agreement or the Deed of Loan Guarantee), but it shall not be bound to do so unless:

- (a) it has been so requested in writing by the Holders of at least one-quarter in principal amount of the outstanding Notes or has been so directed by an Extraordinary Resolution; and
- (b) it has been indemnified and/or provided with security and/or prefunded to its satisfaction against all liabilities, proceedings, claims and demands to which it may thereby become liable and all costs, charges and expenses which may be incurred by it in connection therewith.

No Noteholder may proceed directly against the Issuer unless the Trustee, having become bound to do so, fails to do so within a reasonable time and such failure is continuing.

The Trust Deed also provides that, in the case of an Event of Default, or a Relevant Event, the Trustee may, and shall if requested to do so by Noteholders of at least one-quarter in principal amount of the Notes outstanding or if directed to do so by an Extraordinary Resolution and, in either case, subject to it being

indemnified and/or secured and/or prefunded to its satisfaction, (1) require the Issuer to declare all amounts payable under the Loan Agreement by the Borrower to be due and payable (in the case of an Event of Default), or (2) enforce the security created in the Trust Deed in favour of the Noteholders (in the case of a Relevant Event). Upon repayment of the Loan following an Event of Default, the Notes will be redeemed or repaid at the principal amount thereof together with interest accrued to the date fixed for redemption together with any additional amounts due in respect thereof pursuant to Condition 8 and thereupon shall cease to be outstanding.

For the purposes of these Conditions, "**Relevant Event**" means the earlier of any of (i) the failure by the Issuer to make any payment of principal or interest on the Notes when due, (ii) the filing of an application for the institution of controlled management ("*gestion contrôlée*"), suspension of payment (*sursis de paiement*), liquidation by decision of the court ("*liquidation judiciaire*"), bankruptcy ("*faillite*"), moratorium, insolvency, composition proceedings ("*concordat préventif de la faillite*"), general agreement with any of its creditors or any other similar legal procedure, (iii) the appointment of a "*commissaire à la gestion contrôlée*", a "*liquidateur judiciaire*", a "*curateur*", a "*commissaire*" or any similar officer in respect of the Issuer, or (iv) the taking of any action in furtherance of the dissolution of the Issuer.

14 Further Issues

The Issuer may from time to time, with the consent of the Borrower and the Loan Guarantors and without the consent of the Noteholders and in accordance with the Trust Deed, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single series with the Notes. Such further notes shall be issued under a deed supplemental to the Trust Deed containing such provisions as the Trustee may require. In relation to any further issue which is to be consolidated and form a single series with the Notes, the Issuer will enter into a loan agreement with the Borrower on the same terms as the Loan Agreement (or on the same terms except for the first payment of interest) and supplemental to the Loan Agreement, or may amend and restate the same with the Borrower on substantially the same terms as the Loan Agreement and supplemental deeds of loan guarantee to the Deed of Loan Guarantee (which shall be included within the definition of "Deed of Loan Guarantee" for the purposes of these Conditions) or may amend and restate the same with the Loan Guarantors on substantially the same terms as the Deed of Loan Guarantee. The Issuer will provide a first fixed charge in favour of the Trustee in respect of certain of its rights and interests under such loan agreement and supplemental deed of loan guarantee and will assign absolutely to the Trustee certain of its rights under such loan agreement and supplemental deed of loan guarantee, which will secure both the Notes and such further notes and which will supplement the Security Interests in relation to the existing Notes or may amend and supplement the Security Interests for such purpose. Any further securities forming a single series with the outstanding securities of any series (including the Notes) constituted by the Trust Deed or any deed supplemental to it shall, and any other securities may (with the consent of the Trustee), be constituted by a deed supplemental to the Trust Deed. The Trust Deed contains provisions for convening a single meeting of the Noteholders and the holders of securities of other series where the Trustee so decides. Application will be made for such further notes or bonds to be listed and admitted to trading on the stock exchange on which the Notes are from time to time listed or quoted.

15 Notices

Notices to the Noteholders will be sent to them by first class mail (or its equivalent) or (if posted to an overseas address) by airmail at their respective addresses on the Register. Any such notice shall be deemed to have been given on the fourth day after the date of mailing. The Issuer shall also ensure that all notices are duly published (if such publication is required) in a manner which complies with the rules and regulations of any stock exchange or other relevant authority on which the Notes are for the time being listed and/or admitted to trading. Any such notice shall be deemed to have been given on the date of such notice.

In case by reason of any other cause it shall be impracticable to publish any notice to holders of Notes as provided above, then such notification to such holders as shall be given with the approval of the Trustee in accordance with the rules of the stock exchange or other relevant authority on which the Notes are for the time being listed and/or admitted to trading shall constitute sufficient notice to such holders for every purpose hereunder.

16 Governing Law and Jurisdiction

(a) *Governing law:* The Trust Deed, the Agency Agreement, the Notes, the Loan Agreement, the Deed of Loan Guarantee, all other agreements entered into in connection therewith and any non-contractual obligations arising out of or in connection therewith shall be governed by, and construed in

accordance with, English law. The provisions of Articles 470-1 to 470-19 of the Luxembourg law of 10 August 1915 on commercial companies, as amended, are hereby excluded.

(b) Jurisdiction: The Issuer has submitted in the Trust Deed to the jurisdiction of the courts of England. Without prejudice to the foregoing provisions, (i) the Issuer has in the Loan Agreement, the Deed of Loan Guarantee and the Agency Agreement, (ii) the Borrower has, in the Loan Agreement and the Agency Agreement, and (iii) the Loan Guarantors have, in the Deeds of Guarantee, agreed that any disputes which may arise out of or in connection therewith (as the case may be), including any questions regarding their existence, validity or termination may be referred to and finally resolved by arbitration under the LCIA Rules.

17 Contracts (Rights of Third Parties) Act 1999

No person shall have any right to enforce any term of condition of the Notes under the Contracts (Rights of Third Parties) Act 1999.

SUMMARY OF THE PROVISIONS RELATING TO THE NOTES IN GLOBAL FORM

The Notes will be represented by a Global Certificate. The Global Certificate contains provisions which apply to the Notes in respect of which the Global Certificate is issued, some of which modify the effect of the Terms and Conditions of the Notes. Terms defined in the Terms and Conditions of the Notes have the same meanings as in the paragraphs below. The following is a summary of those provisions.

The Global Certificate

The Notes will be evidenced on issue by the Global Certificate registered in the name of a nominee for, and deposited with a common depository on behalf of, Euroclear and Clearstream, Luxembourg. Beneficial interests in the Global Certificate may be held only through Euroclear or Clearstream, Luxembourg at any time. See "*Clearing and Settlement* — *Book-Entry Procedures for the Global Certificate*". By acquisition of a beneficial interest in the Global Certificate, the purchaser thereof will be deemed to represent, among other things, that it is not a U.S. person, that it is located outside the United States and that, if it determines to transfer such beneficial interest prior to the expiration of the "distribution compliance period" (as such term is defined in Rule 902 of Regulation S), it will transfer such interest only (a) to a non-U.S. person in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S.

Beneficial interests in Global Certificate will be subject to certain restrictions on transfer set forth therein and in the Trust Deed and the Agency Agreement.

Except in the limited circumstances described below, owners of beneficial interests in Global Certificate will not be entitled to receive physical delivery of Individual Note Certificates. The Notes are not issuable in bearer form.

Exchange For Individual Note Certificates

Exchange

Subject to receipt by the Issuer of the funds necessary to cover the cost realised from the Borrower, each Global Certificate will be exchangeable, free of charge to the holder, on or after its Exchange Date (as defined below), in whole but not in part, for Notes in definitive form if: (i) a Global Certificate is held by or on behalf of Euroclear or Clearstream, Luxembourg, as the case may be, and Euroclear or Clearstream, Luxembourg, as the case may be, is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention to permanently cease business or does in fact do so, by the holder giving notice to the Registrar or any Transfer Agent and the Issuer or (ii) the Issuer or the Borrower would suffer a material disadvantage in respect of the Notes as a result of a change in the laws or regulations (taxation or otherwise) of any jurisdiction referred to in Condition 8 of the Terms and Conditions of the Notes which would not be suffered were the Notes in definitive form and a note to such effect signed by the requisite number of signatories of the Issuer or the Borrower is delivered to the Trustee. The Issuer shall notify the Trustee and the Noteholders of the receipt of a notice from a holder (in the case of (i) above) and the Trustee shall notify the Noteholders of the receipt of notice from the Issuer or the Borrower (in the case of (ii) above), in each case of its intention to exchange the relevant Global Certificate for Individual Note Certificates or (iii) the Trustee has instituted or has been directed to institute any judicial proceeding in a court to enforce the rights of the Noteholders under the Notes and the Trustee has been advised by counsel that in connection with such proceeding it is necessary or appropriate for the Trustee to obtain possession of the Notes, by the Trustee giving notice to the relevant Registrar or any Transfer Agent and the Noteholders.

The Registrar will not register the transfer of, or exchange of interests in, a Global Certificate for Individual Note Certificates for a period of 15 calendar days ending on the date for any payment of principal or interest in respect of the Notes.

Delivery

In such circumstances, the Global Certificate shall be exchanged in full for Individual Note Certificates and the Issuer will, at the cost of the Issuer (and against such indemnity as the Registrar or any relevant Transfer Agent may require in respect of any tax or other duty of whatever nature which may be levied or imposed in connection with such exchange), cause sufficient Individual Note Certificates to be executed and delivered to the Registrar for completion, authentication and dispatch to the relevant Noteholders. A person having an interest in a Global Certificate must provide the Registrar with a written order containing instructions and such other information as the Issuer and the Registrar may require to complete, execute and deliver such Notes.

Legends

The holder of an Individual Note Certificate may transfer the Notes evidenced thereby in whole or in part in the applicable minimum denomination by surrendering it at the specified office of the relevant Registrar or any Transfer Agent, together with the completed form of transfer thereon.

In addition, the Global Certificate will contain provisions which modify the Terms and Conditions of the Notes as they apply to the Notes evidenced by the Global Certificate. The following is a summary of these provisions.

Payments

Payments of principal and interest in respect of Notes evidenced by a Global Certificate shall be made to the person who appears at the relevant time on the register of Noteholders as holder of the relevant Global Certificate against presentation and (if no further payment falls to be made on it) surrender thereof to or to the order of the Principal Paying Agent (or to or to the order of such other Paying Agent as shall have been notified to the Noteholders for this purpose) which shall endorse such payment or cause such payment to be endorsed in Schedule A to the relevant Global Certificate (such endorsement being prima facie evidence that the payment in question has been made). No person shall, however, be entitled to receive any payment on the relevant Global Certificate falling due after the date of exchange of the relevant Global Certificate for the relevant Individual Note Certificates, unless the exchange of the relevant Global Certificate for the relevant Individual Note Certificates is improperly withheld or refused by or on behalf of the Issuer.

Notices

Notwithstanding Condition 14 of the Terms and Conditions of the Notes, so long as the Global Certificate is held by or on behalf of Euroclear, Clearstream, Luxembourg or any other clearing system (an "Alternative Clearing System"), notices to Noteholders represented by the Global Certificate may be given by delivery of the relevant notice to Euroclear, Clearstream, Luxembourg or (as the case may be) such Alternative Clearing System.

Payment

All payments in respect of Notes represented by a Global Certificate will be made to, or to the order of, the person whose name is entered on the Register at the close of business on the Clearing System Business Day immediately prior to the date for payment, where Clearing System Business Day means Monday to Friday inclusive except 25 December and 1 January.

Meetings

The holder of the Global Certificate will be treated as being two persons for the purposes of any quorum requirements of, or the right to demand a poll at, a meeting of Noteholders and in any such meeting as having one vote in respect of each U.S.\$1,000 in principal amount of Notes represented by the relevant Global Certificate.

Trustee's Powers

In considering the interests of Noteholders whilst the Global Certificate is held on behalf of a clearing system, the Trustee, to the extent it considers it appropriate to do so in the circumstances, may have regard to any information provided to it by such clearing system or its operator as to the identity (either individually or by category) of its accountholders with entitlements to the Global Certificate and may consider such interests as if such accountholders were the holders of the Global Certificate.

Cancellation

Cancellation of any Note required by the Terms and Conditions of the Notes to be cancelled will be effected by reduction in the principal amount of the Global Certificate by a record made in the relevant Register.

Prescription

Claims in respect of principal, interest and other amounts payable in respect of the Global Certificate will become void unless they are presented for payment within a period of 10 years (in the case of principal) and five years (in the case of interest or any other amounts) from the appropriate Relevant Date (as defined in Condition 8 of the Terms and Conditions of the Notes).

Enforcement

For the purposes of enforcement of the provisions of the Trust Deed against the Trustee, the persons named in a certificate of the holder of the Notes in respect of which the relevant Global Certificate is issued shall be recognised as the beneficiaries of the trusts set out in the Trust Deed to the extent of the principal amount of their interest in the Notes set out in the certificate of the holder as if they were themselves the holders of Notes in such principal amounts.

Benefit of the Conditions

Unless a Global Certificate has been exchanged or cancelled the holder hereof shall, except as provided in the relevant Global Certificate, be entitled to the same rights and benefits and subject to the Terms and Conditions of the Notes as if such holder were the holder of the relevant Individual Note Certificates for which the Global Certificate may be exchanged.

Each Global Certificate shall not be valid or become obligatory for any purpose until authenticated by or on behalf of the relevant Registrar.

The Global Certificate and any non-contractual obligations arising out of or in connection with them shall be governed by and construed in accordance with English law.

CLEARING AND SETTLEMENT

Book-Entry Procedures for the Global Certificate

Custodial and depository links are to be established between Euroclear and Clearstream, Luxembourg to facilitate the initial issue of the Notes and cross-market transfers of the Notes associated with secondary market trading. See "— *Book-Entry Ownership*" and "— *Settlement and Transfer of Notes*."

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each hold securities for their customers and facilitate the clearance and settlement of securities transactions through electronic book-entry transfer between their respective accountholders. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions which clear through or maintain a custodial relationship with an accountholder of either system. Euroclear and Clearstream, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective customers may settle trades with each other. Their customers are worldwide financial institutions including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Investors may hold their interests in the Global Certificate directly through Euroclear or Clearstream, Luxembourg if they are accountholders ("**Direct Participants**") or indirectly ("**Indirect Participants**" and together with Direct Participants, "**Participants**") through organisations which are accountholders therein.

Book-Entry Ownership

Euroclear and Clearstream, Luxembourg

The Global Certificate will have an ISIN and a Common Code and will be registered in the name of a nominee for, and deposited with a common depositary on behalf of, Euroclear and Clearstream, Luxembourg.

The address of Euroclear is 1 Boulevard du Roi Albert 11, B-1210 Brussels, Belgium, and the address of Clearstream, Luxembourg is 42 Avenue J.F Kennedy, L-1855, Luxembourg.

Relationship of Participants with Clearing Systems

Each of the persons shown in the records of Euroclear or Clearstream, Luxembourg as the holder of a Note evidenced by a Global Certificate must look solely to Euroclear or Clearstream, Luxembourg (as the case may be) for his share of each payment made by the Issuer to the holder of such Global Certificate and in relation to all other rights arising under that Global Certificate, subject to and in accordance with the respective rules and procedures of Euroclear or Clearstream, Luxembourg (as the case may be). The Issuer expects that, upon receipt of any payment in respect of Notes evidenced by a Global Certificate, the common depositary by whom such Note is held, or nominee in whose name it is registered, will immediately credit the relevant participants' or accountholders' accounts in the relevant clearing system with payments in amounts proportionate to their respective beneficial interests in the principal amount of the relevant Global Certificate as shown on the records of the relevant clearing system or its nominee. The Issuer also expects that payments by Direct Participants in any clearing system to owners of beneficial interests in such Global Certificate held through such Direct Participants in any clearing system will be governed by standing instructions and customary practices. Save as aforesaid, such persons shall have no claim directly against the Issuer in respect of payments due on the Notes for so long as the Notes are evidenced by such Global Certificate and the obligations of the Issuer will be discharged by payment to the registered holder, as the case may be, of such Global Certificate in respect of each amount so paid. None of the Issuer, the Trustee or any Agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of ownership interests in any Global Certificate or for maintaining, supervising or reviewing any records relating to such ownership interests.

Settlement and Transfer of Notes

Subject to the rules and procedures of each applicable clearing system, purchases of Notes held within a clearing system must be made by or through Direct Participants, which will receive a credit for such Notes on the clearing system's records. The ownership interest of each actual purchaser of each such Note (the "**Beneficial Owner**") will in turn be recorded on the Direct Participants' or Indirect Participants' records (as the case may be).

Beneficial Owners will not receive written confirmation from any clearing system of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic

statements of their holdings, from the Direct Participant or Indirect Participant (as the case may be) through which such Beneficial Owner entered into the transaction.

Transfers of ownership interests in Notes held within the clearing system will be affected by entries made on the books of Direct Participants or Indirect Participants (as the case may be) acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in such Notes, unless and until interests in any Global Certificate held within a clearing system is exchanged for a Definitive Certificate.

No clearing system has knowledge of the actual Beneficial Owners of the Notes held within such clearing system and their records will reflect only the identity of the Direct Participants to whose accounts such Notes are credited, which may or may not be the Beneficial Owners. The Direct Participants will remain responsible for keeping account of their holdings on behalf of their customers. Conveyance of notices and other communications by the clearing systems to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants or Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

The laws of some jurisdictions may require that certain persons take physical delivery in definitive form of securities. Consequently, the ability to transfer interests in the Global Certificate to such persons may be limited.

Trading between Euroclear and/or Clearstream, Luxembourg Participants

Secondary market sales of book-entry interests in the Notes held through Euroclear or Clearstream, Luxembourg to purchasers of book-entry interests in the Notes held through Euroclear or Clearstream, Luxembourg will be conducted in accordance with the normal rules and operating procedures of Euroclear and Clearstream, Luxembourg and will be settled using the procedures applicable to conventional Eurobonds.

SUBSCRIPTION AND SALE

Each of J.P. Morgan Securities plc and Renaissance Securities (Cyprus) Limited (the "Global Coordinators") and AO "ALFA-BANK" (acting jointly with Alfa Capital Holdings (Cyprus) Limited), Alfa Capital Holdings (Cyprus) Limited (acting jointly with AO "ALFA-BANK"), GPB Financial Services Hong Kong Limited, Merrill Lynch International, Sova Capital Limited, Public Joint-Stock Company "Sovcombank", UBS AG London Branch and VTB Capital plc (the "Lead Managers" and together with the Global Coordinators, the "Joint Lead Managers" and each a "Joint Lead Manager") have, in a subscription agreement dated 10 February 2020 (the "Subscription Agreement") among the Issuer, TMK and the Joint Lead Managers upon the terms and subject to the conditions contained therein, jointly and severally agreed to subscribe and pay for the Notes at their issue price of 100 per cent. of their principal amount.

The Joint Lead Managers are entitled to commissions and reimbursement of expenses pursuant to the Subscription Agreement and a mandate letter between TMK and the Joint Lead Managers. The Subscription Agreement provides that the obligation of the Joint Lead Managers to purchase the Notes is subject to the satisfaction of certain conditions, including, among other things, the delivery of legal opinions by legal counsel and tax opinions by tax advisers. The Joint Lead Managers are entitled in certain circumstances to be released and discharged from their obligations under the Subscription Agreement prior to the closing of the issue of the Notes.

The Joint Lead Managers or their respective affiliates from time to time have provided in the past and may provide in the future investment banking, commercial lending, consulting, financial advisory and commercial banking services to TMK and other members of the Group and their respective affiliates in the ordinary course of business for which they have received or may receive customary advisory and transaction fees and commissions and expense reimbursement.

United States of America

The Securities have not been and will not be registered under the Securities Act and, subject to certain exceptions, may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in transactions exempt from the registration requirements of the Securities Act. Each of the Joint Lead Managers has severally, but not jointly, agreed that, except as permitted by the Subscription Agreement, it will not offer or sell the Notes and the Loan, (i) as part of their distribution at any time and (ii) otherwise until 40 days after the later of the commencement of the offering or the closing date, within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each dealer to which it sells the Notes and the Loan during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Notes and the Loan in the United States or to, or for the account or benefit of, U.S. persons. Terms used in this paragraph have the meanings given to them by Regulation S under the Securities Act.

The Notes and the Loan are being offered and sold outside of the United States in reliance on Regulation S. In addition, until 40 days after the commencement of the offering of the Notes and the Loan, an offer or sale of the Notes or the Loan within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act.

These Listing Particulars has been prepared by the Issuer for use in connection with the offer and sale of the Notes and the Loan outside the United States. The Issuer and the Joint Lead Managers reserve the right to reject any offer to purchase the Notes, in whole or in part, for any reason. These Listing Particulars does not constitute an offer to any person in the United States. Distribution of these Listing Particulars by any non-U.S. person outside the United States to any U.S. person or to any other person within the United States, is unauthorised and any disclosure without the prior written consent of the Issuer of any of its contents to any such U.S. person or other person within the United States is prohibited.

United Kingdom

Each Joint Lead Manager has severally and not jointly nor jointly and severally represented, warranted and undertaken with the Issuer and TMK and each other Joint Lead Manager that:

1. **Financial promotion:** it has only communicated or caused to be communicated, and will only communicate or cause to be communicated, any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended ("**FSMA**")) received by it in connection with the issue or sale of any Notes in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and

2. **General compliance**: it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Prohibition of Sales to EEA and UK Retail Investors

Each of the Joint Lead Managers has severally and not jointly nor jointly and severally represented, warranted and undertaken with the Issuer and TMK and each other Joint Lead Manager that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes to any retail investor in the European Economic Area. For the purposes of this provision:

- 1. the expression "retail investor" means a person who is one (or more) of the following:
 - 1.1 a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or
 - 1.2 a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as professional client as defined in point (10) of Article 4(1) of MiFID II.
- 2. the expression an "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

The Russian Federation

Each of the Joint Lead Managers has severally agreed that the Notes will not be offered, transferred or sold as part of their initial distribution or at any time thereafter to or for the benefit of any persons (including legal entities) resident, incorporated, established or having their usual residence in the Russian Federation or to any person located within the territory of the Russian Federation unless and to the extent otherwise permitted under Russian law.

Hong Kong

Each Joint Lead Manager has represented and agreed that (i) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "**SFO**") and any rules made under the SFO; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "**C(WUMP)O**") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and (ii) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Singapore

Each the Joint Lead Manager has acknowledged that the Listing Particulars have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Joint Lead Manager represents and agrees that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, the Listing Particulars or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions of, any other applicable provision of the SFA.

General

No representation is made by the Issuer, TMK or any Joint Lead Manager that any action has been or will be taken in any jurisdiction by the Issuer, TMK or any Joint Lead Manager that would permit a public offering of the Notes, or possession or distribution of these Listing Particulars in any country or jurisdiction where action for that purpose is

required. Each Joint Lead Manager will comply to the best of its knowledge and belief in all material respects with all applicable securities laws and regulations in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes these Listing Particulars.

In connection with the issue of the Notes, one or more of the Joint Lead Managers and any of its respective affiliates acting as an investor for its own account may subscribe for or purchase Notes and in that capacity may retain, subscribe for, purchase or sell the Notes for its own account, and the amount of such subscription may be significant. Any such subscription for a significant amount of the Notes by any initial purchaser could adversely affect future liquidity of, and the development of a trading market in, the Notes.

On 29 January 2020, the Issuer, TMK and BLACK SEA TRADE AND DEVELOPMENT BANK ("**BSTDB**") entered into a framework agreement with respect to the possibility that BSTDB may purchase Notes up to a maximum aggregate principal amount of U.S.\$50,000,000, subject to certain conditions described therein (the "**Framework Agreement**"). Among other things, the Framework Agreement includes certain undertakings by the Issuer and TMK, including the Issuer's and TMK's undertaking to comply with BSTDB's environmental and social requirements if BSTDB acquires any Notes and for as long as BSTDB holds any such Notes. BSTDB is under no obligation to acquire any Notes notwithstanding the Issuer, TMK and BSTDB having entered into the Framework Agreement.

TAXATION

The following is a general description of certain Russian Federation and Luxembourg tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in those countries or elsewhere. Prospective purchasers of the Notes should consult their own advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of the Notes and receiving payments of interest, principal and/or other amounts under such Notes and the consequences of such actions under the tax laws of those countries. This summary is based upon the law as in effect on the date of these Listing Particulars and is subject to any change in law that may take effect after such date.

Also, investors should note that an appointment by an investor in the Notes, or any person through which an investor holds Notes, of a custodian, collection agent or similar person in relation to such Notes in any jurisdiction may have tax implications. Investors should consult their own tax advisers in relation to the tax consequences for them of any such appointment.

Russian Federation

General

The following is a summary of certain Russian tax considerations relevant to the purchase, ownership and disposition of the Notes as well as taxation of payments of interest on the Loan and the Guarantees. The summary is based on the laws of the Russian Federation in effect on the date of these Listing Particulars. The summary does not seek to address the applicability of, and procedures in relation to, taxes levied by regions, municipalities or other non-federal authorities of the Russian Federation, nor does the summary seek to address the availability of double tax treaty relief in respect of the Notes, and it should be noted that there may be practical difficulties involved in claiming double tax treaty relief. Prospective investors should consult their own advisors regarding the tax consequences of investing in the Notes in their own particular circumstances. No representation with respect to Russian tax consequences to any particular Noteholder is made hereby.

For the purposes of this summary, a "Resident Noteholder" means:

- a Russian legal entity which acquires, holds and disposes the Notes, and a legal entity or an organisation, in each case organised under a non-Russian law, which acquires, holds and disposes the Notes through its permanent establishment in Russia, or a foreign entity or an organisation recognised as a Russian tax resident in accordance with the requirements set out in the Russian Tax Code which acquires, holds and disposes of the Notes;
- an individual who satisfies the criteria for being a Russian tax resident. A "Russian tax resident" is an individual who is actually present in Russia for an aggregate period of 183 calendar days or more in any period comprised of 12 consecutive months, who acquires, holds and disposes of the Notes. Presence in the Russian Federation for tax residency purposes is not considered interrupted if an individual departs from the Russian Federation for short periods of time (less than six months) for medical treatment, education purposes or completion of employment or other duties related to work (rendering services) at offshore hydrocarbon fields.

For the purposes of this summary, the term "Non-Resident Noteholder" means:

- a legal entity or an organisation in each case not organised under the Russian law which holds and disposes of the Notes otherwise than through its permanent establishment in the Russian Federation (the "Non-Resident Noteholder Legal Entity"), and
- a Noteholder who is an individual not actually present in the Russian Federation for an aggregate period of 183 days or more in a period comprised of 12 consecutive months (the "**Non-Resident Noteholder Individual**"). The interpretation of this definition by the Russian Ministry of Finance states that for tax withholding purposes an individual's tax residency status should be determined on the date of the income payment (based on the number of days in Russia in the 12-month period preceding the date of the payment). The individual's final tax liability in Russia for the reporting calendar year should be determined based on the number of days spent in Russia in such calendar year.

Tax residency rules and the Russian Federation's rights with regard to taxation rules may be affected by an applicable double tax treaty. The Russian tax treatment of interest payments made by TMK to the Issuer (or to the Trustee, as the case may be) under the Loan Agreement may affect the Noteholders. See "*—Taxation of Interest on the Loan and Payments under the Guarantees*" below.

Taxation of the Notes

Resident Noteholders

Resident Noteholders will be subject to all applicable Russian taxes in respect of income derived by them in connection with the acquisition, ownership and/or disposition of the Notes. Resident Noteholders should consult their own tax advisers with respect to the effect that the acquisition, holding and/or disposition of the Notes may have on their tax position.

Non-Resident Noteholders

A Non-Resident Noteholder generally should not be subject to any Russian taxes in respect of payment of interest and repayment of principal on the Notes received from the Issuer. A Non-Resident Noteholder also generally should not be subject to any Russian taxes in respect of any gains or other income realised on redemption, sale or other disposition of the Notes, provided that the proceeds from such disposition are not received from a source within the Russian Federation.

Taxation of Non-Resident Noteholders – Individuals

Acquisition of the Notes

The acquisition of the Notes by Non-Resident Noteholders – Individuals may constitute a taxable event for Russian personal income tax purposes pursuant to provisions of the Russian Tax Code relating to the material benefit (deemed income) received by individuals as a result of the acquisition of securities. In particular, if the acquisition price of the Notes is below the lower margin of the fair market value of the Notes calculated under a specific procedure for the determination of market prices of securities for Russian personal income tax purposes, the difference may become subject to Russian personal income tax at the rate of 30 per cent. (or such other tax rate as may be effective at the time of acquisition), which is, arguably, subject to reduction or elimination under the applicable double tax treaty.

According to the Russian Tax Code, taxation of income of Non-Resident Noteholders – Individuals will depend on whether this income is qualified as received from Russian or non-Russian sources. Although the Russian tax law does not contain any provisions in relation to how the related material benefit should be sourced, in practice the Russian tax authorities may infer that such income should be considered as Russian source income if the Notes are purchased in Russia. In the absence of any additional guidance as to what should be considered as a purchase of securities in Russia, the Russian tax authorities may apply various criteria in order to determine the source of the relating material benefit, including looking at the place of conclusion of the acquisition transaction, location or residence of the broker executing the transaction, location of the issuer, or other similar criteria. There is no assurance, therefore, that, as a result, any material benefit received by the Non-Resident Noteholders – Individuals in connection with the acquisition of the Notes will not become taxed in Russia.

Interest on the Notes

The Non-Resident Noteholders – Individuals generally should not be subject to any Russian taxes in respect of payment of interest on the Notes received from the Issuer. Taxation of interest on the Notes may however be affected by the taxation treatment of income from sale of the Notes and taxation of interest on the Loan (see "*—Taxation of Non-Resident Noteholders – Individuals – Sale or other Disposition of the Notes*" and "*—Taxation of Interest on the Loan and Payments under the Guarantees*" below).

Sale or other Disposition of the Notes

A Non-Resident Noteholder – Individual should not be subject to any Russian taxes in respect of gain or other income realised on a redemption, sale or other disposal of the Notes outside of Russia, provided that the proceeds of such sale, redemption, or disposal are not treated to be received from a source within Russia.

Subject to any available tax treaty relief, if the receipt of any proceeds from sale or other disposition of the Notes by a Non-Resident Noteholder – Individual is classified as income from a source within the Russian Federation for Russian personal income tax purposes, these proceeds will become subject to Russian personal income tax at a rate of 30 per cent. (or such other tax rate as may be effective at the time of payment).

Since the Russian Tax Code does not contain any additional guidance as to when the sales or disposal proceeds should be deemed to be received from Russian sources by an individual not qualifying as a tax resident for Russian personal income tax purposes, in practice the Russian tax authorities may infer that such income should be considered as Russian source income, if the Notes are sold or disposed of in Russia. In the absence of any guidance as to what should be considered as a sale or other disposal of securities in Russia, the Russian tax authorities may apply various criteria in order to determine the source of the sale or other disposal, including looking at the place of conclusion of the transaction, the location of the Issuer, or other similar criteria. There exists a remote risk that the Russian tax authorities may treat the disposal proceeds as those received in Russia by Non-resident Noteholders - Individuals and tax them accordingly, but this risk is unlikely to be significant as the tax authorities generally treat income from securities issued by non-Russian companies and traded outside Russia as a foreign source income. If the disposal proceeds are considered as being derived from Russian sources, the tax will apply to the gross amount of proceeds received upon the sale or other disposition of the Notes (including accrued and paid interest on the Notes) decreased by the amount of any available duly documented cost deductions (including the original acquisition costs and other documented expenses related to the acquisition, holding and sale or other disposition of the Notes) provided that such documentation is duly executed and is available to the person required to calculate and withhold the tax in a timely manner. There is a risk that, if the documentation supporting the cost deductions is deemed insufficient by the Russian tax authorities or the person remitting the respective income to the Non-Resident Noteholders - Individuals (where such person is considered the tax agent obliged to calculate and withhold Russian personal income tax and remit it to the Russian budget), the deduction will be disallowed. In such case, the tax rate will apply to the gross amount of sales proceeds.

Before 1 January 2020, if the disposition proceeds (including accrued and paid interest on the Notes) were paid to a Non-Resident Noteholder – Individual, the applicable Russian personal income tax at the rate of 30 per cent. (or such other tax rate as may be in force at the time of payment) should have been withheld at source by a licensed Russian broker or an asset manager, carrying out operations for the benefit of the Non-Resident Noteholder – Individual under an asset management agreement, brokerage agreement, agency agreement, commission agreement or a commercial mandate agreement, who was considered the tax agent. However, starting from 1 January 2020, the list of tax agents responsible for withholding personal income tax from payment to an individual associated with the disposition of the Notes was extended to include any Russian entities or individual entrepreneurs that make payments to individuals under contracts for sale or exchange of securities.

The amount of tax withheld is calculated after taking into account available documented deductions for the original acquisition cost and related expenses on the acquisition, holding and sale or other disposition of the Notes to the extent such deductions and expenses can be determined by a tax agent making the payment of income to the Non-Resident Noteholder – Individual. Depending on its status, the tax agent would be required to report to the Russian tax authorities in respect of its inability to withhold personal income tax in full within one month upon termination of the agreement (see above) or by 1 March of the year following the calendar year in which the income was received. Failure or inability of the tax agent to timely withhold the applicable Russian personal income tax in full will place the onus of reporting and payment of such tax on the Non-Resident Noteholder – Individual, unless a tax audit of the tax agent establishes such failure to be wrongful and the tax agent pays the outstanding amounts of tax arrears.

If the duly documented acquisition costs and other documented expenses related to the acquisition, holding and the sale or other disposal of the Notes were born within the relationship with a party other than the tax agent obliged to calculate and withhold Russian personal income tax in relation to the sales proceeds from a particular transaction, then these original duly documented costs and other documented expenses related to the acquisition, holding and the sale or other disposal of the Notes may be taken into account by the tax agent upon written application of the Non-Resident Noteholder – Individual and presentation of the documents confirming the costs and expenses.

Where the Notes are directly sold to individuals who are not individual entrepreneurs, generally no Russian personal income tax should be withheld at source by these persons. The Non-Resident Noteholder – Individual would be liable to file a personal income tax return individually, report on the amount of income realised to the Russian tax authorities and apply for a deduction in the amount of the acquisition and other expenses related to the acquisition, holding and sale or other disposition of the Notes confirmed by the supporting documentation. The applicable personal income tax would then have to be paid by the Non-Resident Noteholder – Individual on the basis of the filed personal income tax return.

Under certain circumstances gains received and losses incurred by a Non-Resident Noteholder – Individual as a result of sale or other disposition of the Notes and other securities of the same category (i.e., securities qualified as traded or non-traded for Russian personal income tax purposes) occurring within the same tax year may be aggregated for the Russian personal income tax purposes which would affect the total amount of personal income tax payable by a Non-Resident Noteholder – Individual in Russia.

Any gain derived by a Non-Resident Noteholder – Individual from the disposition of the Notes may be affected by changes in the exchange rate between the currency of acquisition of the Notes, the currency of disposition of the Notes and roubles.

Non-Resident Noteholders – Individuals should consult their own tax advisors with respect to tax consequences arising upon the disposition of the Notes, including the receipt of sales proceeds from a source within Russia further to their disposition.

Taxation of Non-Resident Noteholders – Legal Entities

Acquisition of the Notes

The acquisition of the Notes by Non-Resident Noteholders – Legal Entities (whether upon their issue or in the secondary market) should not constitute a taxable event under Russian tax law and there should be no tax implications for the Non-Resident Noteholders – Legal Entities associated with acquisition of the Notes.

Interest on the Notes

The Non-Resident Noteholders – Legal Entities generally should not be subject to any Russian taxes in respect of payment of interest on the Notes received from the Issuer. Taxation of interest on the Notes may however be affected by the taxation treatment of interest on the corresponding Loan (see "*—Taxation of Interest on the Loan and Payments under the Guarantees*" below).

Disposition of the Notes

Generally, no Russian withholding tax should arise upon disposition of the Notes by Non-Resident Noteholders – Legal Entities, There is, however, some residual uncertainty regarding tax treatment of the portion of the sales or disposition proceeds received from source within the Russian Federation, if any, attributable to the accrued interest on the Notes.

Tax Treaty Relief

The Russian Federation has concluded double tax treaties with a number of countries and honours a number of double tax treaties concluded by the former Union of Soviet Socialist Republics. These double tax treaties may contain provisions allowing the reduction or elimination of Russian income taxes applicable to income received by a Non-Resident Noteholder from Russian sources in connection with the acquisition, holding, sale or other disposal of the Notes.

In order to obtain benefits available under the applicable double tax treaties, Non-Resident Noteholders must comply with the certification, information, and reporting requirements in force in the Russian Federation (relating, in particular, to the confirmation of the entitlement and eligibility to treaty benefits).

In an unlikely scenario where a Non-Resident Noteholder – Legal Entity receives income subject to Russian income tax withholding, it will need to provide the payer of income which is regarded a tax agent with a certificate of tax residence issued by the competent tax authority of the relevant treaty country in advance of payment of income. The certificate should confirm that the respective Non-Resident Noteholder – Legal Entity is the tax resident of the relevant double tax treaty country for the purposes of the applicable double tax treaty. This certificate generally should be apostilled or legalised and needs to be renewed on an annual basis. A notarised Russian translation of the certificate will have to be provided to the person which is regarded a tax agent as well. The tax residency of Non-Resident Noteholders – Legal Entities which are banks in jurisdictions which have concluded double tax treaties with the Russian Federation and which have the actual right to receive income can be confirmed by public information guides (e.g. Bankers Almanac) in lieu of the tax residency certificate.

There is also an obligation for a Non-Resident Noteholder – Legal Entity to provide a tax agent with the confirmation that it has an actual right to receive income in order to enjoy the double tax treaty benefits. This confirmation is also required in advance of payment of income. The payer of income in practice may request additional documents confirming the entitlement and eligibility of such Non-Resident Noteholder to the benefits of the relevant double tax treaty in relation to income concerned.

In order to enjoy the benefits of the applicable double tax treaty, a Non-Resident Noteholder – Individual must provide to the tax agent a passport of a foreign citizen to prove his/her tax residency status in the foreign jurisdiction. If this document is not sufficient to prove the residency status, the tax agent will request the Non-Resident Noteholder – Individual to provide a tax residency certificate issued by the competent authorities in his/her country of residence for tax purposes. It is not clear from the law how the tax agent shall determine whether a passport is sufficient to confirm the individual's eligibility to double tax treaty benefits.

Within 30 days upon payment of income subject to tax exemption or withholding at a reduced tax rate under the respective double tax treaty, the tax agent is required to submit information to the tax authorities on foreign individuals (passport details and citizenship) and income (type of income, amount of income and date of payment).

The procedure of elimination of double taxation of Non-Resident Noteholders – Individuals in the case of absence of a tax agent is not explicitly indicated in the Russian Tax Code.

Non-Resident Noteholders should consult their own tax advisors regarding possible tax treaty relief and procedures required to be fulfilled for obtaining such relief with respect to any Russian taxes imposed in respect of interest income on the Notes or any income received in connection with the acquisition, holding, sale and other disposition of the Notes.

Refund of Tax Withheld

If Russian withholding tax on income derived from Russian sources by a Non-Resident Noteholder – Legal Entity was withheld at source, a claim for a refund of the tax that was excessively withheld at source can be filed by that Non-Resident Noteholder – Legal Entity with the Russian tax authorities within three years following the year in which the tax was withheld, provided such Non-Resident Noteholder – Legal Entity is entitled to the benefits of the applicable double tax treaty allowing it not to pay the tax or allowing it to pay the tax at a reduced tax rate in relation to such income. There is no assurance that such refund will be possible in practice.

If Russian personal income tax applicable to income derived from Russian sources by a Non-Resident Noteholder – Individual, for whom double tax treaty relief is available, was withheld at source notwithstanding the right of this Non-Resident Noteholder – Individual to rely on benefits of the applicable double tax treaty allowing the individual not to pay the tax in Russia or allowing the individual to pay the tax at the reduced tax rate in relation to such income, a claim for a refund of Russian personal tax which was excessively withheld at source and an application of the benefits of the applicable double tax treaty, together with a passport of a foreign individual/tax residency certificate issued by the competent authorities in his/her country of residence may be filed by that Non-Resident Noteholder – Individual with the tax agent within three years following the tax year when the corresponding income was received. In the absence of a tax agent who withheld the Russian personal income tax under consideration (for instance, in case of a liquidation of the tax agent), such an application for a refund may be filed with the Russian tax authorities within the same period (three years from the date when the tax was paid) accompanied by the Russian tax return, a tax residency certificate and documents evidencing tax withholding to the Russian tax authorities. There can be no assurance that the tax agent and/or the Russian tax authorities will refund this tax in practice.

Although the Russian Tax Code arguably contains an exhaustive list of documents and information which have to be provided by the foreign person to the Russian tax authorities for the tax refund purposes, the Russian tax authorities may, in practice, require a wide variety of documentation confirming the right of a Non-Resident Noteholder to obtain tax relief available under the applicable double tax treaty. Such documentation may not be explicitly required by the Russian Tax Code and may, to a large extent, depend on the position of local representatives of the tax inspectorates.

Obtaining a refund of Russian income taxes that were excessively withheld at source is likely to be a time consuming process requiring many efforts and no assurance can be given that such refund will be granted to the Non-Resident Noteholders in practice.

Non-Resident Noteholders should consult their own tax advisors regarding possible tax treaty relief and procedures required to be fulfilled in order to obtain treaty relief in practice with respect to any Russian taxes imposed on income received by a Non-Resident Noteholder upon the acquisition and disposition of the Notes.

Taxation of Interest on the Loan and Payments under the Guarantees

In general, payments of interest on borrowed funds made by a Russian entity to a non-resident legal entity or organisation having no registered presence and/or no permanent establishment in Russia are subject to Russian withholding tax at the rate of 20 per cent., which could potentially be reduced or eliminated under the terms of an applicable double tax treaty.

Exemption for eurobond structures

Generally, no withholding tax should arise in eurobond structures by virtue of the specific exemption envisaged by the Russian Tax Code (the "**Eurobond Exemption**"). The Russian Tax Code provides that Russian borrowers should be fully released from the obligation to withhold tax from interest and other payments made to foreign entities provided that the following conditions are all met:

- (1) interest is paid on debt obligations of Russian entities that arose in connection with the placement by foreign entities of "traded bonds", which are defined as bonds or other debt obligations (a) listed and/or admitted to trading on one of the qualifying foreign exchanges and/or (b) that have been registered with one of the qualifying foreign depository/clearing organisations;
- (2) the recipient of interest on any loan is a foreign entity which is the issuer of issued bonds (e.g., the Issuer), or a foreign entity authorised to receive interest income payable on the issued bonds, or a foreign entity to which rights and obligations under bonds issued by another foreign entity have been assigned;
- (3) there is a double tax treaty between Russia and the jurisdiction of tax residence of the recipient of payments on the loan which can be confirmed by a duly executed tax residency certificate.

The list of qualifying foreign exchanges and foreign depositary/clearing organisations was approved by the CBR (the "List"). The Irish Stock Exchange and the clearing systems Euroclear, Luxembourg and Clearstream were included in the List. TMK notes that Euronext Dublin (being the new trading name of the Irish Stock Exchange) is not expressly referred to in the List but the Irish Stock Exchange is. While one may theoretically argue that, due to the above technicality, the Eurobond exemption does not apply, TMK considers the risk of such interpretation to be remote. Firstly, the exchange is operated by the same legal entity as at the time of adopting the List. Furthermore, to the extent the Notes are deposited with a common depositary for, and registered in the name of nominee of, Euroclear and Clearstream, Luxembourg, the above risk becomes irrelevant as the condition for application of the Eurobond Exemption would in any event be complied with.

A debt obligation qualifies as connected with the issuance of "traded bonds" by foreign companies if it is expressly stated in the agreement governing the relevant debt obligation and/or in the terms and conditions and/or the prospectus for the issuance of "traded bonds", or if this fact is confirmed by the actual transfer of funds upon the issuance of "traded bonds".

The Eurobond Exemption applies not only to interest amounts, but also to other payments made by a Russian borrower, provided that such payments are contemplated by the terms of the relevant debt obligation or are made in connection with the terms of the relevant "traded bonds" and/or debt obligation (including the early buy-back or redemption thereof).

From purely technical standpoint, the Eurobond Exemption does not provide for an exemption to the foreign interest income recipients from Russian withholding tax, although currently there is no requirement in the Russian tax legislation for the foreign income recipients – legal entities to self-assess and pay the tax to the Russian tax authorities. The Ministry of Finance acknowledged in the information letter published on its website that the release from obligation to act as a tax agent means, in effect, that tax at source within Russia should not arise in connection with Eurobonds, since there is neither a mechanism nor obligation for a non-resident to independently calculate and pay such tax. There can be no assurance that such rules will not be introduced in the future or that the tax authorities would not make attempts to collect the tax from the foreign income recipients, including the Issuer or the Noteholders.

The Group's management believes that it should be possible to satisfy conditions established by the Russian Tax Code and obtain a release from the obligation to withhold Russian income tax from payments of interest and certain other amounts, as the case may be, on any Loan to the Issuer as long as the conditions set forth above are met throughout the term of any Loan and the Notes.

If interest and/or any other amounts due under any Loan become payable to the Trustee pursuant to the Trust Deed, there is some residual uncertainty whether the release from the obligation to withhold tax under the Russian Tax Code would be available to TMK.

Specifically, there is some uncertainty whether, following the enforcement of the Security, the Trustee will qualify as the "entity authorised to receive interest income payable on the issued bonds" containing in the Russian Tax Code. It is not expected that the Trustee will, or will be able to, claim a Russian withholding tax exemption under such circumstances. It creates a potential risk that in case payments under any Loan are made to the Trustee for the benefit of the Non-Resident Noteholders, the Russian withholding tax at the rate of 20 per cent. (or such other tax rate as may be effective at the time of payment) or Russian personal income tax at the rate of 30 per cent. (or such other tax rate as may be effective at the time of payment), should be deducted from the amount of interest and some other payments under any Loan.

Double tax treaty relief

Another available exemption from Russian tax withholding for interest on loans provided by Luxembourg tax residents to Russian tax resident borrowers is set forth by the Convention between the Grand Duchy of Luxembourg

and the Russian Federation for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and Capital of 28 June 1993 (the "**DTT**"). In order to qualify for the exemption, the Issuer needs to be a tax resident of Luxembourg, the income should not be attributable to a permanent establishment of the Issuer in Russia, and, as far as interest is concerned, the interest must be set at arm's length and the Issuer must be the beneficial owner of such income.

Although the DTT does not provide for definition of the term "beneficial owner", this concept was introduced to Russian domestic legislation in 2015. A person will not qualify for a beneficial owner if it has limited authorities regarding disposal of the income received; has only intermediary functions in respect of such income and does not perform any other functions or undertake any risks; distributes the income (fully or partially) to another person who would not be entitled to the benefits under a double tax treaty.

Prior to these amendments, on 30 December 2011, the Ministry of Finance issued a letter from which it follows that SPVs issuing notes in the context of loan participation structures (loan participation notes ("LPNs"), also known as Eurobonds) may not qualify as beneficial owners of interest on loans paid by Russian borrowers. Although the letter is worded rather vaguely, it appears that since (i) the SPVs referred to in the letter were established by Russian borrowers, and (ii) the amounts of principal and interest on the notes issued by the SPVs, as well as the interest payment dates and the term, coincided exactly with those of the loan extended by the SPVs to the Russian borrowers, the Ministry of Finance held that such SPVs do not have the right to determine the economic fate of income and act similarly to nominees of the noteholders. Thus, the Ministry of Finance concluded in the aforementioned letter that Russian borrowers raising funds through an LPN structure must determine the treaty relief based on the tax residency of the NPVs.

In light of the above, it is unlikely that the Issuer will qualify as a beneficial owner of income, and, therefore, 20 per cent. withholding tax may be applied to the interest paid by the Borrower to the Issuer. This, however, should not preclude application of the Eurobond Exemption or the look-through approach by TMK, provided that Noteholders are tax residents of jurisdictions with double tax treaties with Russia who are able to prove their beneficial ownership status and subject to several procedural limitations.

Guarantee payments

Payments by the Guarantors under the Loan to non-Russian lenders may be classified either as repayment of principal and interest and/or as so-called Russian-sourced "other income" and is thereby subject to 20 per cent. withholding tax (in part representing interest or other income). The DTT provides for a full exemption from Russian income taxes for amounts of "other income". However, this exemption is subject to DTT clearance conditions described above, which are unlikely to be met by the Issuer. In addition, the Russian Tax Code stipulates that the Eurobond Exemption should also apply to payments made under the guarantees provided by Russian companies in respect of the debt obligations that have arisen in connection with the issuance of "traded bonds" by foreign companies and/or "traded bonds".

The Group's management believes the Eurobond Exemption is applicable and no withholding obligation should arise for the Guarantors.

Payment gross-up

If any payments under any Loan or Deed of Guarantee become subject to Russian tax withholding (as a result of which the Issuer will be required to reduce payments made by it under the Notes by the amount of such withholding tax), TMK or the Guarantor will be obliged (subject to certain conditions) under the terms of the relevant Loan Agreement or Deed of Guarantee to increase payments under the relevant Loan or guarantee, as may be necessary, so that the net payments received by the Issuer will be equal to the amounts it would have received in absence of such tax withholding.

Value Added Tax (VAT)

Russian VAT is not applied to the rendering of financial services involving the provision of a loan in monetary form. Therefore, no VAT will be payable in the Russian Federation in respect of interest and principal payments under the Loan or payments under the Guarantees.

Luxembourg

The following is a general description of certain Luxembourg tax considerations relating to the Notes. It has been included for information purposes only and does not purport to be a complete analysis of all tax considerations relating to the Notes, whether in Luxembourg or elsewhere, relevant to the purchase of the Notes. This summary does not take into consideration the specific circumstances of the investors. Prospective purchasers of the Notes should consult their

own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing of the Notes and receiving payments of interest, principal and/or other amounts under the Notes and the consequences of such actions under the tax laws of Luxembourg. This summary is based upon the law, regulations and administrative and judicial interpretations that are in effect as at the date of these Listing Particulars and is subject to any change in law that may effect after such date. The information contained within this section is limited to Luxembourg taxation issues related to the Notes, and prospective investors should not apply any information set out below to other areas, including (but not limited to) the legality of transactions involving the Notes.

Any reference in this section to a tax, duty, levy, or other charge or withholding of a similar nature refers only to Luxembourg tax law and/or concepts under Luxembourg tax laws and practices. Also, a reference to Luxembourg income tax generally encompasses corporate income tax (*impôt sur le revenu des collectivités*), municipal business tax (*impôt commercial communal*), unemployment surcharge (*contribution au fonds pour l'emploi*) as well as personal income tax (*impôt sur le revenu des personnes physiques*). Noteholders may further be subject to net wealth tax (*impôt sur la fortune*) as well as other duties, levies or taxes.

Corporate income tax, municipal business tax, as well as the unemployment surcharge, invariably apply to most corporate taxpayers resident of Luxembourg for tax purposes. Individual taxpayers are generally subject to personal income tax and the unemployment surcharge. Under certain circumstances, where an individual taxpayer acts in the course of the management of a professional or business undertaking, municipal business tax may also apply.

Residence

A Noteholder will not become resident, or deemed to be resident, in Luxembourg by reason only of the holding of such Note or the execution, performance, delivery and/or enforcement of that or any other Note.

Withholding Tax

Taxation of Luxembourg Non-residents

Under Luxembourg general tax laws currently in effect, there is no withholding tax on payments of principal, premium or interest (including accrued but unpaid interest) payable to non-resident Noteholders so long as the interest rate is considered to be at arm's length. There is also no Luxembourg withholding tax upon repayment of principal in case of reimbursement, redemption, repurchase or exchange of the Notes held by non-resident Noteholders.

Please refer also to the subsections below concerning the taxation of capital gains, income and net wealth tax.

Notwithstanding anything in these Listing Particulars, Noteholders are advised to consult their own tax advisor for advice on their individual taxation with respect to the acquisition, sale and redemption of the Notes.

Taxation of Luxembourg Residents

Under Luxembourg general tax laws currently in force and subject to the law of 23 December 2005, as amended (the "**Relibi Law**") mentioned below, there is no withholding tax on payments of principal, premium or interest (including accrued but unpaid interest) payable to Luxembourg resident Noteholders, nor is any Luxembourg withholding tax payable upon redemption or repurchase of Notes held by Luxembourg resident Noteholders.

Under the Relibi Law, a 20 per cent. Luxembourg withholding tax is levied on interest or similar income payments made by Luxembourg paying agents to or for the immediate benefit of an individual beneficial owner who is resident in Luxembourg. This withholding tax also applies on accrued interest received upon disposal, redemption or repurchase of the Notes. Such withholding tax will be in full discharge of income tax if the beneficial owner is an individual acting in the course of the management of her/his private wealth.

Further, Luxembourg resident individuals acting in the course of the management of their private wealth, who are the beneficial owners of interest payments and other similar income made by a paying agent established outside Luxembourg in a Member State of the European Union or the European Economic Area may opt for a final 20 per cent. levy. In such case, the 20 per cent. levy is calculated on the same amounts as for the payments made by paying agents. The option for the 20 per cent. final levy must cover all interest payments made by paying agents to the beneficial owner during the entire civil year.

Please refer also to the subsections below concerning the taxation of capital gains, income and net wealth tax.

Taxes on Income and Capital Gains

A Noteholder who derives income from such Notes (including accrued but unpaid interest) or who realises a gain on the disposal, redemption, repurchase or exchange thereof will not be subject to Luxembourg taxation on such income or capital gains unless:

- (a) such holder is, or is deemed to be, a resident company fully taxable in Luxembourg; or
- (b) such income or gain is attributable to an enterprise or part thereof which is carried on through a permanent establishment, a permanent representative or a fixed base of business in Luxembourg.

Luxembourg resident individual Noteholders who hold Notes in their private capacity are not subject to taxation on capital gain upon disposal of a Note, unless such a disposal precedes the acquisition of the Note or the Note is disposed of within six months of its date of acquisition.

Luxembourg resident individual Noteholders, acting in the course of the management of their private wealth, are subject to Luxembourg income tax in respect of interest received, redemption premiums or issue discounts under the Notes, except if a final withholding tax has been levied on such payments in accordance with the Relibi Law.

Luxembourg resident Noteholders who benefit from a special tax regime, such as, for example, undertakings for collective investment subject to the amended law of 17 December 2010, specialized investment funds governed by the amended law of 13 February 2007, family wealth management companies governed by the amended law of 11 May 2007, or reserved alternative investment funds treated as specialized investment funds for Luxembourg tax purposes governed by the amended law of 23 July 2016 are exempt from income taxes in Luxembourg and thus income derived from the Notes, as well as gains realised thereon, are not subject to income taxes.

Net Wealth Tax

Luxembourg net wealth tax will not be levied on a Noteholder unless:

- (a) such holder is, or is deemed to be, a Luxembourg fully taxable resident company; or
- (b) such Note is attributable to an enterprise or part thereof which is carried on through a permanent establishment, a permanent representative or a fixed base of business in Luxembourg.

Net wealth tax does not apply to Luxembourg resident and non-resident individuals.

Inheritance and Gift Tax

Where the Notes are transferred for no consideration, note in particular:

- (a) no Luxembourg inheritance tax is levied on the transfer of the Notes upon death of a Noteholder in cases where the deceased holder was not a resident of Luxembourg for inheritance tax purposes; and
- (b) Luxembourg gift tax will be levied on the transfer of a Note by way of a gift by the Noteholder if this gift is registered in Luxembourg.

Value Added Tax

There is no Luxembourg value-added tax payable in respect of payments in consideration for the issue of the Notes or in respect of the payment of interest or principal under the Notes or the transfer of a Note. Luxembourg value added tax may, however, be payable in respect of fees charged for certain services rendered to the Issuer, if for Luxembourg value added tax purposes such services are rendered, or are deemed to be rendered, in Luxembourg and an exemption from value added tax does not apply with respect to such services.

Other Taxes and Duties

There is no Luxembourg registration tax, stamp duty or any other similar tax or duty payable in Luxembourg by the Noteholders as a consequence of the issuance of the Notes, nor will any of these taxes be payable as a consequence of a subsequent transfer, redemption or repurchase of the Notes (except in case of voluntary registration in Luxembourg or in case any document related to the issuance, transfer, redemption or repurchase of the Notes is appended to a document that requires mandatory registration).

GENERAL INFORMATION

- 1. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The Common Code and ISIN for the Notes are 211622245 and XS2116222451, respectively. The address of Euroclear is 1 Boulevard du Roi Albert II, B-1210 Brussels, Belgium and the address of Clearstream, Luxembourg is 42 Avenue JF Kennedy, L-1855 Luxembourg.
- 2. TMK has its registered offices at 40, Bldg. 2A, Pokrovka Street, 105062 Moscow, The Russian Federation, telephone +7 495 775 7600. TMK's state registration number is 1027739217758.
- 3. Application has been made to Euronext Dublin for the Notes to be admitted to the Official List of Euronext Dublin and to trading on the Global Exchange Market through Arthur Cox Listing Services Limited. Arthur Cox Listing Services Limited is acting solely in its capacity as listing agent for the Issuer in connection with the Notes and is not itself seeking admission of the Notes to the exchange regulated market of the Euronext Dublin.
- 4. The Legal Entity Identifier of the Issuer is 222100TBRQIOGYHYB529. The Legal Entity Identifier of TMK is 213800TF7S5EDO6V3K66. The Legal Entity Identifier of the Initial Loan Guarantor is 213800FYT591NMMOL156.
- 5. Copies of the following documents may be inspected at the offices of the Principal Paying Agent in London and the registered office of the Issuer in Dublin during usual business hours on any weekday (Saturdays and public holidays excepted) for so long as the Notes are listed on Euronext Dublin:
 - (a) a copy of these Listing Particulars, together with any supplement to these Listing Particulars;
 - (b) the constitution of the Issuer;
 - (c) the constitutional documents of TMK, the Initial Loan Guarantor and the Additional Loan Guarantors;
 - (d) the Financial Statements, including the reports thereon;
 - (e) the Issuer Financial Statements;
 - (f) the Loan Agreement;
 - (g) the Deeds of Loan Guarantee;
 - (h) the Agency Agreement; and
 - (i) the Trust Deed, which includes the form of the Global Certificate and the Definitive Certificate.

Each of the above documents will be available in hard copy at the offices of the Issuer, TMK and the Principal Paying Agent.

- 6. The Loan Agreement has been authorised by a decision of the Board of Directors of TMK, dated 28 January 2020. The issue of the Notes was authorised by a decision of the Board of Directors of the Issuer on 7 February 2020. The Initial Loan Guarantee was approved by a decision of the Sole Shareholder of the Initial Loan Guarantor dated 28 January 2020.
- 7. No consents, approvals, authorisations or orders of any regulatory authorities other than as disclosed in the Listing Particulars are required by the Issuer under the laws of Grand Duchy of Luxembourg for maintaining the Loan or the Initial Loan Guarantee or for issuing the Notes.
- 8. There has been no material adverse change in the financial position or prospects of the Issuer since 31 December 2018.
- 9. Save for the fees payable to the Joint Lead Managers, the Trustee and the Agents, so far as the Issuer is aware, no person involved in the issue of the Notes has an interest that is material to the issue of the Notes.

- 10. Save as disclosed in "Business—Strategic Ventures—Recent Sale of TMK IPSCO" and "Operating and Financial Review–Recent TMK IPSCO disposal", there has been no significant change in the financial or trading position of TMK, the Initial Loan Guarantor or of the Group since the nine months ended 30 September 2019 and no material adverse change in the prospects of TMK, the Initial Loan Guarantor or of the Group since 31 December 2018.
- 11. There have been no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which any of the Issuer, TMK or any of the Loan Guarantors is aware), during the previous 12 months in relation to the Issuer, TMK or any of the Loan Guarantors, which may have, or have had in the recent past, significant effects on the Issuer's, TMK's, the Loan Guarantors' and/or the Group's financial position or profitability.
- 12. The Trust Deed provides, *inter alia*, that the Trustee may rely on any certificate or report prepared by accountants pursuant to the Trust Deed (whether or not addressed to the Trustee), notwithstanding whether or not the accountants' liability in respect thereof is limited by a monetary cap or otherwise.
- 13. TMK has obtained all necessary consents, approvals and authorisations in the Russian Federation in connection with its entry into, and performance of its obligations under, the Loan Agreement
- 14. The Initial Loan Guarantor has obtained all necessary consents, approvals and authorisations in the Russian Federation in connection with its entry into, and performance of its obligations under, the Deed of Loan Guarantee.
- 15. The Bank of New York Mellon SA/NV, Luxembourg Branch will act as Registrar in relation to the Notes.
- 16. The loan to value ratio of the Notes is 100 per cent.
- 17. BNY Mellon Corporate Trustee Services Limited is a professional trustee company, which is providing its services in relation to the Notes on an arm's length basis in consideration of a fee. Under the terms of the Trust Deed, the power of appointing new trustees is vested in the Issuer (with the prior written consent of TMK) but a trustee so appointed must in the first place be approved by an Extraordinary Resolution of Noteholders. The Noteholders have the power, exercisable by Extraordinary Resolution, to remove any trustee or trustees. The removal of any trustee is only effective if following the removal there remains a trustee (being a trust corporation) in office after such removal. In addition, BNY Mellon Corporate Trustee Services Limited, or any other trustee duly appointed, may retire at any time upon giving not less than three months notice in writing to the Issuer (copied to TMK). The retirement of any trustee is only effective if, following the retirement, there remains a trustee (being a trust corporation) in office after such retirement. If the trustee has given notice of its desire to retire and the Issuer is unable to procure a new trustee to be appointed and the Issuer has not by the expiry of such notice (with the prior written consent of TMK) appointed a new trustee, the trustee shall have the power of appointing new trustee(s).
- 18. The Financial Statements, included in these Listing Particulars, have been audited or reviewed (as applicable) by Ernst & Young LLC, independent auditors, whose address is Sadovnicheskaya Nab., 77, bld. 1, Moscow, 115035 Russia. Ernst & Young LLC is a member of Self-regulated organisation of auditors "Russian Union of auditors" (Association).
- 19. The Issuer, TMK or the Initial Loan Guarantor do not intend to provide post-issuance information concerning the Notes, the Loan or the Initial Loan Guarantee.

GLOSSARY OF TECHNICAL TERMS

Alloy	A material with metallic properties consisting of several chemical elements. Changing the composition and hence the microstructure of alloys enables the targeted engineering of desired material properties.
API	American Petroleum Institute. API is the U.S. petroleum industry's primary trade association that, among other things, develops consensus standards for the oil and gas industry.
Billet	A round or square steel product that has been hot-worked by forging, rolling or extrusion. A billet is a semi-finished product used for the production of seamless pipes. Billets are delivered in bars of certain diameter and cut into pieces of certain length, according to the length of the desired finished pipe. Thereafter, billets are heated and pierced to form a tube hollow.
Casing pipes	Pipes used as structural retainers for the walls of the drilled hole of deep wells in order to prevent collapse.
Continuous casting	A method of producing billets and other semi-finished steel products in long lengths from steel that is continuously withdrawn from a furnace at a set casting speed. The need for primary and intermediate mills and the storage and use of large numbers of ingot moulds is eliminated in the continuous casting process.
Electric arc furnace (" EAF ")	A steel melting furnace in which heat is generated by electricity that arcs from the graphite electrodes to a metal bath. EAFs use scrap as the primary input in the production of steel. Among other advantages over open-hearth furnaces, EAFs melt steel significantly faster than open-hearth furnaces.
Electric Resistance Welded (" ERW ")	A welding technique using an electric current passed between the two edges of the steel sheet to heat the steel to a point at which the edges are forced together to form a bond without the use of welding filler material.
FQM	Fine Quality Mill.
HBI	Hot-briquetted iron
Heat treatment	A process where solid steel or components manufactured from steel are subject to treatment by heating to obtain required properties, and includes softening, normalising, stress relieving and hardening.
Hot rolling	A process whereby solidified steel, preheated to a high temperature, is continuously rolled between rotating cylinders.
HRC	hot rolled coil
HSS	hollow structural sections
ISO	International Standardisation Organisation.
kWh	Kilowatt hours.
LDP	Large diameter pipe.
Line pipes	Line steel pipes, usually seamless steel pipes, are used for construction of long distance pipelines for oil and gas, combustible liquids and gases, nuclear station pipelines, heating system pipelines and general purpose pipelines.
Longitudinal welded pipes	

Mandrel	A metal rod or bar around which material, such as metal, may be shaped.				
Non-destructing testing of pipes (" NDT ")	Method of testing that does not damage products				
OCTG	Oil Country Tubular Goods, consisting of drill pipe, surface casing, production casing and production tubing, made in accordance with API specifications.				
Open-hearth furnace	Steel is produced in the open hearth process by melting scrap and hot metal on the hearth of a combustion reverberating furnace bath. Scrap, flux and ore are charged into the furnace prior to heating. Fuel is burned in the furnace and the heat necessary to melt the raw materials is provided by radiation from the burning fuel. Open hearth furnaces are disadvantaged by relatively high operating costs due to high levels of energy consumption, high levels of pollutants, slow melting process and relatively low productivity.				
Rolling	The process of shaping metal by passing it between revolving rolls.				
R&D	Research and development				
Scrap	Iron containing material (mainly industrial or household waste) that generally is remelted into steel. The scrap could be used as part of a metal charge together with pig iron loaded into steel-melting furnaces.				
Slag	A by-product, containing inert materials, produced during the blast-furnace smelting process and other steel-making operations.				
Spiral welded pipes	Pipe made from coils of steel by bending and welding in such a manner that the weld seam spirals around the circumference of the pipe.				
Threaded connections	Threaded connections are similar to grooves on a bolt and enable sections of drill pipe and other kinds of pipe to be screwed together.				

INDEX TO FINANCIAL STATEMENTS

Unaudited Interim Condensed Consolidated Financial Statements of PAO "TMK" as of and for the nine months ended 30 September 2019	F-2
Report on Review of Interim Financial Information	F-4
Unaudited Interim Consolidated Income Statement	F-6
Unaudited Interim Consolidated Statement of Comprehensive Income	F-8
Unaudited Interim Consolidated Statement of Financial Position	F-9
Unaudited Interim Consolidated Statement of Changes in Equity	F-10
Unaudited Interim Consolidated Statement of Cash Flows	F-12
Notes to the Unaudited Interim Condensed Consolidated Financial Statements	F-13
Audited Consolidated Financial Statements of PAO "TMK" as of and for the year ended 31 December 2018.	F-29
Independent Auditors' Report	F-31
Consolidated Income Statement	F-36
Consolidated Statement of Comprehensive Income	F-37
Consolidated Statement of Financial Position	F-38
Consolidated Statement of Changes in Equity	F-39
Consolidated Statement of Cash Flows	F-41
Notes to the Consolidated Financial Statements	F-43
Audited Consolidated Financial Statements of PAO "TMK" as of and for the year ended 31 December 2017	F-85
Independent Auditors' Report	F-87
Consolidated Income Statement	F-92
Consolidated Statement of Comprehensive Income	F-93
Consolidated Statement of Financial Position	F-94
Consolidated Statement of Changes in Equity	F-95
Consolidated Statement of Cash Flows	F-97
Notes to the Consolidated Financial Statements	F-99

PAO TMK Unaudited Interim Condensed Consolidated Financial Statements

Nine-month period ended September 30, 2019

Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

Contents

Rej	Report on Review of Interim Financial Information				
Una	audited Interim Consolidated Income Statement	5			
Una	audited Interim Consolidated Statement of Comprehensive Income	7			
Una	audited Interim Consolidated Statement of Financial Position	8			
Un	audited Interim Consolidated Statement of Changes in Equity	9			
Un	audited Interim Consolidated Statement of Cash Flows	11			
Not	tes to the Unaudited Interim Condensed Consolidated Financial Statements	12			
1)	Corporate Information				
2)	Significant Accounting Policies	12			
3)	Segment Information	14			
4)	Cost of Sales				
5)	Selling and Distribution Expenses	17			
6)	General and Administrative Expenses	18			
7)	Research and Development Expenses	18			
8)	Other Operating Income and Expenses	18			
9)	Income Tax	19			
10)	Discontinued Operations	19			
11)	Cash and Cash Equivalents	20			
12)	Inventories	20			
13)	Property, Plant and Equipment	21			
14)	Goodwill and Other Intangible Assets	22			
15)	Trade and Other Payables	22			
16)	Provisions and Accruals	23			
17)	Interest-Bearing Loans and Borrowings	23			
18)	Fair Value of Financial Instruments	24			
19)	Other Current Liabilities	24			
20)	Related Parties Disclosures	24			
21)	Contingencies and Commitments	26			
22)	Equity	27			



Ernst & Young LLC Sadovnicheskaya Nab., 77, bld. 1 Moscow, 115035, Russia Tel: +7 (495) 705 9700 +7 (495) 755 9700 Fax: +7 (495) 755 9701 www.ey.com/ru 000 «Эрнст энд Янг» Россия, 115035, Москва Садовническая наб., 77, стр. 1 Тел.: +7 (495) 705 9700 +7 (495) 755 9700 Факс: +7 (495) 755 9701 ОКПО: 59002827 ОГРН: 1027739707203 ИНН: 7709383532

Report on Review of Interim Financial Information

To the shareholders and Board of Directors of $\ensuremath{\mathsf{PAO}}$ TMK

Introduction

We have reviewed the accompanying interim condensed consolidated financial statements of PAO TMK and its subsidiaries, which comprise the interim consolidated statement of financial position as at 30 September 2019, the interim consolidated income statement and interim consolidated statement of comprehensive income for the three-month and nine-month periods then ended, interim consolidated statement of changes in equity and interim consolidated statement of cash flows for the nine-month period then ended, and condensed explanatory notes (interim financial information). Management of PAO TMK is responsible for the preparation and presentation of this interim financial information in accordance with IAS 34, *Interim Financial Reporting*. Our responsibility is to express a conclusion on this interim financial information based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements 2410, *Review of Interim Financial Information Performed by the Independent Auditor of the Entity*. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

3



Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim financial information is not prepared, in all material respects, in accordance with IAS 34, *Interim Financial Reporting*.

D.M. Zhigulin Partner Ernst & Young LLC

19 November 2019

Details of the entity

Name: PAO TMK Registered on 17 April 2001. Record made in the State Register of Legal Entities on 19 September 2002, State Registration Number 1027739217758. Address: Russia 105062, Moscow, Pokrovka street, 40/2a.

Details of the auditor

Name: Ernst & Young LLC

Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203. Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1. Ernst & Young LLC is a member of Self-regulated organization of auditors "Russian Union of auditors" (Association) ("SRO RUA"). Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 11603050648.

Unaudited Interim Consolidated Income Statement Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

		Nine-month period ended						
		Se	ptember 30, 201			September 30, 2018		
		Continuing	Discontinued		Continuing	Discontinued		
	NOTES	operations	operations	Total	operations	operations	Total	
Revenue	3	2,904,558	761,952	3,666,510	2,851,690	983,257	3,834,947	
Cost of sales	4	(2,263,860)	(698,001)	(2,961,861)	(2,300,305)	(842,758)	(3,143,063)	
Gross profit		640,698	63,951	704,649	551,385	140,499	691,884	
Selling and distribution								
expenses	5	(165,313)	(10,235)	(175,548)	(166,697)	(9,533)	(176,230)	
Advertising and promotion		× , , ,						
expenses		(6,975)	(346)	(7,321)	(4,635)	(414)	(5,049)	
General and administrative								
expenses	6	(168,374)	(39,564)	(207,938)	(146,463)	(44,594)	(191,057)	
Research and development								
expenses	7	(1,634)	(3,163)	(4,797)	(1,523)	(4,189)	(5,712)	
Other operating								
income/(expenses)	8	(10,387)	(1,267)	(11,654)	(5,471)	(6,954)	(12,425)	
Operating profit		288,015	9,376	297,391	226,596	74,815	301,411	
Impairment of goodwill		-	-	-	(2,198)	-	(2,198)	
Foreign exchange								
gain/(loss)		27,115	(110)	27,005	(49,667)	253	(49,414)	
Finance costs		(168,884)	(4,282)	(173,166)	(182,431)	(2,818)	(185,249)	
Finance income		10,738	-	10,738	7,022	5	7,027	
Share of profit/(loss) of		(* * * * * *		(* * * * * * *				
associates		(3,849)	-	(3,849)	(7)	-	(7)	
Gain/(loss) on disposal of		2(0		2(0	(22,722)		(00,700)	
subsidiaries		360	-	360	(23,732)	-	(23,732)	
Other non-operating income/(expenses)		(5 /10)	(6,855)	(12,273)	(278)		(279)	
		(5,418)				- 72 255	(278)	
Profit/(loss) before tax		148,077	(1,871)	146,206	(24,695)	72,255	47,560	
Income tax	0	(40.742)	(202)	(41.020)	(12.202)	(15 (10)	(27.012)	
benefit/(expense)	9	(40,743)	(283)	(41,026)	(12,203)	(15,610)	(27,813)	
Profit/(loss) for the period		107,334	(2,154)	105,180	(36,898)	56,645	19,747	
Attributable to:								
Equity holders of the								
parent entity		104,627	(2,154)	102,473	(34,231)	56,645	22,414	
Non-controlling interests		2,707	-	2,707	(2,667)	-	(2,667)	
		107,334	(2,154)	105,180	(36,898)	56,645	19,747	
Earnings/(loss) per share								
attributable to the equity								
holders of the parent								
entity, basic and diluted		0.10		0.45	(0.00)	0.0-	0.00	
(in US dollars)		0.10	-	0.10	(0.03)	0.05	0.02	

The accompanying notes are an integral part of these unaudited interim condensed consolidated financial statements.

Unaudited Interim Consolidated Income Statement Nine-month period ended September 30, 2019 (continued)

(All amounts in thousands of US dollars, unless specified otherwise)

		Three-month period ended					
		Se	ptember 30, 201	9	September 30, 2018		
		Continuing	Discontinued		Continuing	Discontinued	
	NOTES	operations	operations	Total	operations	operations	Total
Revenue	3	916,732	185,465	1,102,197	865,740	340,881	1,206,621
Cost of sales	4	(703,277)	(177,677)	(880,954)	(695,798)	(289,964)	(985,762)
Gross profit		213,455	7,788	221,243	169,942	50,917	220,859
Selling and distribution							
expenses	5	(53,211)	(2,767)	(55,978)	(48,183)	(2,516)	(50,699)
Advertising and promotion					× · · ·		
expenses		(3,072)	(113)	(3,185)	(1,896)	(85)	(1,981)
General and administrative							
expenses	6	(69,946)	(11,626)	(81,572)	(45,831)	(15,004)	(60,835)
Research and development							
expenses	7	(570)	(756)	(1,326)	(465)	(1,327)	(1,792)
Other operating							
income/(expenses)	8	(4,637)	(935)	(5,572)	(1,270)	(3,249)	(4,519)
Operating profit		82,019	(8,409)	73,610	72,297	28,736	101,033
Impairment of goodwill		-	-	-	-	-	-
Foreign exchange							
gain/(loss)		(4,936)	109	(4,827)	(18,138)	(87)	(18,225)
Finance costs		(58,740)	(1,435)	(60,175)	(57,320)	(918)	(58,238)
Finance income		3,339	-	3,339	1,945	1	1,946
Share of profit/(loss) of							
associates		(802)	-	(802)	(25)	-	(25)
Gain/(loss) on disposal of					(22, 522)		(22 522)
subsidiaries		-	-	-	(23,732)	-	(23,732)
Other non-operating		(72()	(4 (40)	(5.205)	(20)		(20)
income/(expenses)		(736)	(4,649)	(5,385)	(36)	-	(36)
Profit/(loss) before tax		20,144	(14,384)	5,760	(25,009)	27,732	2,723
Income tax		(a. a. (a.)		(- (-0)	(= = =)	(<i>(</i> , , , , , , , , , , , , , , , , , , ,
benefit/(expense)	9	(9,065)	3,407	(5,658)	(5,004)	(5,624)	(10,628)
Profit/(loss) for the period		11,079	(10,977)	102	(30,013)	22,108	(7,905)
Attributable to:							
Equity holders of the							
parent entity		10,540	(10,977)	(437)	(29,281)	22,108	(7,173)
Non-controlling interests		539	-	539	(732)	-	(732)
-		11,079	(10,977)	102	(30,013)	22,108	(7,905)
Earnings/(loss) per share							
attributable to the equity							
holders of the parent							
entity, basic and diluted							
(in US dollars)		0.01	(0.01)	-	(0.03)	0.02	(0.01)

Information about the discontinued operations is presented in Note 10.

Unaudited Interim Consolidated Statement of Comprehensive Income Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars)

		Nine-month period ended September 30,		Three-month period ended September 30,	
NOTE Profit/(loss) for the period	S 2019 105,180	2018 19,747	2019 102	2018 (7,905)	
Items that may be reclassified subsequently to profit or					
<i>loss:</i> Exchange differences on translation to presentation currency ⁽ⁱ⁾	(35,913)	11,015	(9,366)	8,646	
Foreign currency gain/(loss) on hedged net investment in foreign operations, net of tax ⁽ⁱⁱ⁾ 22 (ii Reclassification of foreign currency reserves to the income	48,499	(79,438)	(13,173)	(26,528)	
statement, net of tax ⁽ⁱⁱ⁾	-	23,345	-	23,345	
Items that may not be reclassified subsequently to profit or loss:					
Change in fair value of equity instruments, net of tax(ii)	-	(4,707)	-	-	
Net actuarial gains/(losses) ⁽ⁱⁱ⁾	-	73	-	-	
Other comprehensive income/(loss) for the period, net of tax	12,586	(49,712)	(22,539)	5,463	
Total comprehensive income/(loss) for the period, net of tax	117,766	(19,112) (29,965)	(22,437)	(2,442)	
Attributable to:	112.022		(21, (02)	(272)	
Equity holders of the parent entity Non-controlling interests	112,922 4,844	(22,796) (7,169)	(21,692) (745)	(373) (2,069)	
	117,766	(29,965)	(22,437)		

(i) The amounts were attributable to equity holders of the parent entity and to non-controlling interests as presented in the table below:

	Nine-month period ended September 30,		Three-month period ended September 30,	
	2019	2018	2019	2018
Equity holders of the parent entity	(38,050)	15,517	(8,082)	9,983
Non-controlling interests	2,137	(4,502)	(1,284)	(1,337)
	(35,913)	11,015	(9,366)	8,646

(ii) The amounts were attributable to equity holders of the parent entity.

Unaudited Interim Consolidated Statement of Financial Position as at September 30, 2019

(All amounts in thousands of US dollars)

	NOTES	September	30, 2019	December	31, 2018
ASSETS					
Current assets					
Cash and cash equivalents	11	271,505		391,835	
Trade and other receivables		954,851		878,146	
Inventories	12	852,139		1,066,257	
Prepayments and input VAT		81,628		101,163	
Prepaid income taxes		6,472		12,397	
Other financial assets		333	2,166,928	409	2,450,207
			_,100,7_0	,	2,100,207
Assets of disposal group held for sale	10	994,346	994,346	-	-
Non-current assets					
Investments in associates and joint ventures		1,002		2,380	
Property, plant and equipment	13	1,820,899		2,075,193	
Goodwill	14	21,384		20,457	
Intangible assets	14	12,126		237,200	
Deferred tax asset		177,319		171,948	
Other non-current assets		79,921	2,112,651	47,098	2,554,276
TOTAL ASSETS			5,273,925	,	5,004,483
			- , - ,		-))
LIABILITIES AND EQUITY					
Current liabilities					
Trade and other payables	15	732,133		743,547	
Advances from customers		30,050		198,140	
Provisions and accruals	16	30,307		47,727	
Interest-bearing loans and borrowings	17	1,291,308		906,127	
Lease liability		9,883		10,327	
Income tax payable		9,535		3,249	
Other liabilities	19	111,920	2,215,136	86,280	1,995,397
Liabilities of disposal group held for sale	10	223,068	223,068	-	-
Non-current liabilities					
Interest-bearing loans and borrowings	17	1,748,600		1,978,152	
Lease liability	- /	72,877		75,437	
Deferred tax liability		87,384		91,617	
Provisions and accruals	16	16,902		24,255	
Employee benefits liability	10	17,345		18,083	
Other liabilities		1,808	1,944,916	3,938	2,191,482
Total liabilities		1,000	4,383,120	5,550	4,186,879
Equity	22				
Parent shareholders' equity					
Share capital		342,869		342,869	
Treasury shares		(1,040)		(946)	
Additional paid-in capital		235,005		234,825	
Reserve capital		17,178		17,178	
Retained earnings		1,252,326		1,191,729	
Foreign currency translation reserve		(1,012,956)		(1,023,405)	
Other reserves		8,592	841,974	8,592	770,842
Non-controlling interests			48,831		46,762
Total equity			890,805		817,604
TOTAL LIABILITIES AND EQUITY			5,273,925		5,004,483

As at September 30, 2019, the assets and liabilities of the disposal group held for sale are presented separately (Note 10).

Unaudited Interim Consolidated Statement of Changes in Equity Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars)

			Attribut	able to equity l	nolders of the p	arent				
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2019	342,869	(94	5) 234,825	17,178	1,191,729	(1,023,405)	8,592	770,842	46,762	817,604
Profit/(loss) for the period	-			-	102,473	-	-	102,473	2,707	105,180
Other comprehensive income/(loss) for the period, net of tax				-	-	10,449		10,449	2,137	12,586
Total comprehensive income/(loss) for the period, net of tax	-			-	102,473	10,449	-	112,922	4,844	117,766
Purchase of treasury shares	-	(94	+) -	-	-	-	-	(94)	-	(94)
Dividends declared by the Company to its shareholders (Note 22 iii)	-			-	(41,764)	-	-	(41,764)	-	(41,764)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners (Note 22 iv)	;			_		_		_	(1,198)	(1,198)
Change of participation in subsidiaries	_		- 180	_	(112)	_	-	68	(1,193)	(1,190)
At September 30, 2019	342,869	(1,040		17,178	1,252,326	(1,012,956)) 8,592	841,974	48,831	890,805

Unaudited Interim Consolidated Statement of Changes in Equity Nine-month period ended September 30, 2019 (continued)

(All amounts in thousands of US dollars)

			Attribut	able to equity	holders of the p	oarent				
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2018	342,869	(592) 234,655	17,178	1,237,524	(959,439)) 10,965	883,160	50,079	933,239
Profit/(loss) for the period	-	-	-	-	22,414	-	-	22,414	(2,667)	19,747
Other comprehensive income/(loss) for the period, net of tax			_	-		(40,576) (4,634)	(45,210)	(4,502)	(49,712)
Total comprehensive income/(loss) for the period, net of tax		-	_	-	22,414	(40,576)) (4,634)	(22,796)	(7,169)	(29,965)
Dividends declared by the Company to its shareholders	-	-	-	-	(37,025)	-	-	(37,025)	-	(37,025)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners	-	-		-	-	-	-	-	(981)	(981)
Disposal of subsidiaries	-	-	-	-	-	-	-	-	(4,294)	(4,294)
At September 30, 2018	342,869	(592) 234,655	17,178	1,222,913	(1,000,015) 6,331	823,339	37,635	860,974

Unaudited Interim Consolidated Statement of Cash Flows Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars)

		Nine-month p Septem	
	NOTES	2019	2018
Operating activities			
Profit/(loss) before tax		146,206	47,560
Adjustments to reconcile profit/(loss) before tax to operating cash flows:			
Depreciation of property, plant and equipment		163,833	199,651
Amortisation of intangible assets		2,591	3,563
(Gain)/loss on disposal of property, plant and equipment	8	6,190	8,937
Impairment of goodwill		-	2,198
Foreign exchange (gain)/loss Finance costs		(27,005) 173,166	49,414 185,249
Finance income		(10,738)	(7,027)
(Gain)/loss on disposal of subsidiaries		(360)	23,732
Other non-operating (income)/expenses		12,273	278
Share of (profit)/loss of associates		3,849	7
Movement in allowances and provisions		12,143	(12,919)
Operating cash flows before working capital changes		482,148	500,643
Working capital changes:			
Decrease/(increase) in inventories		(36,062)	(97,274)
Decrease/(increase) in trade and other receivables		(57,547)	(99,519)
Decrease/(increase) in prepayments		17,455	(4,457)
Increase/(decrease) in trade and other payables		47,385	29,792
Increase/(decrease) in advances from customers		(182,717)	(78,520)
Cash generated from operations Income taxes paid		270,662	250,665
Net cash flows from operating activities		(38,889) 231,773	(20,787) 229,878
Net cash nows nom operating activities		231,775	223,070
Investing activities			
Purchase of property, plant and equipment		(152,357)	(186,048)
Proceeds from sale of property, plant and equipment		909	4,444
Purchase of intangible assets Issuance of loans		(9,145) (118,951)	(11,919) (55,486)
Proceeds from repayment of loans issued		23,539	26,670
Interest received		6,905	5,807
Other cash movements		1,313	414
Net cash flows used in investing activities		(247,787)	(216,118)
Financing activities			
Purchase of treasury shares		(94)	_
Proceeds from borrowings		1,178,915	938,994
Repayment of borrowings		(1,098,336)	(995,644)
Interest paid		(147,765)	(166,236)
Payment of lease liabilities		(14,899)	(10,114)
Dividends paid by the Company to its shareholders		(41,466)	(37,860)
Dividends paid to non-controlling interest shareholders	10	(1,382)	(1,147)
Other cash movements Net cash flows used in financing activities	19	27,114 (97,913)	(7,609) (279,616)
		(113,927)	(265,856)
Net increase/(decrease) in cash and cash equivalents		,	
Net foreign exchange difference		(2,986)	2,788
Cash and cash equivalents at January 1		391,835	491,185
Cash and cash equivalents at September 30		274,922	228,117
Cash and cash equivalents attributable to:			
Continuing operations		271,505	228,117
Discontinued operations	10	3,417	

The amounts include cash flows of the disposal group held for sale (Note 10).

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

1) Corporate Information

These interim condensed consolidated financial statements of PAO TMK and its subsidiaries (the "Group") for the nine-month period ended September 30, 2019 were authorised for issue in accordance with a resolution of the General Director on November 19, 2019.

PAO TMK (the "Company"), the parent company of the Group, is a Public Joint-Stock Company. Both registered and principal office of the Company is 40/2a Pokrovka Street, Moscow, the Russian Federation.

The Company's controlling shareholder is TMK Steel Holding Limited. TMK Steel Holding Limited is ultimately controlled by D.A. Pumpyanskiy.

The Group is one of the world's leading producers of steel pipes for the oil and gas industry, a global company with extensive network of production facilities, sales companies and representative offices.

The principal activities of the Group are the production and sales of a wide range of steel pipes used in the oil and gas sector, chemical and petrochemical industries, energy and machine building, construction, agriculture and other economic sectors. The Group delivers its products along with an extensive package of services in heat treatment, protective coating, premium connections threading, pipe storage and repairing.

2) Significant Accounting Policies

i) Basis of Preparation

These interim condensed consolidated financial statements have been prepared in accordance with International Accounting Standard ("IAS") 34 *Interim Financial Reporting*. Accordingly, these interim condensed consolidated financial statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with the Group's annual consolidated financial statements for the year ended December 31, 2018. Operating results for the ninemonth period ended September 30, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019.

ii) Application of New and Amended IFRSs

In the preparation of these interim condensed consolidated financial statements, the Group followed the same accounting policies and methods of computation as compared with those applied in the annual consolidated financial statements for the year ended December 31, 2018, except for changes resulted from the adoption of new and amended IFRSs.

The nature and the impact of the adoption of new and amended standards, which became effective on January 1, 2019, are described below.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Application of New and Amended IFRSs (continued)

IFRS 9 Financial Instruments (amendments) - Prepayment Features with Negative Compensation

These amendments cover two issues: what financial assets can be measured at amortised cost and how to account for the modification of a financial liability. The amendments permit more financial assets to be measured at amortised cost than under the previous version of IFRS 9, in particular, some prepayable financial assets. The amendments confirm that when a financial liability measured at amortised cost is modified without this resulting in de-recognition, a gain or loss should be recognised immediately in profit or loss. The amendments did not have any impact on the Group's financial position or performancee.

IFRS 16 Leases

IFRS 16 replaced existing IFRS leases requirements. For lessees, the new standard marks a significant change from previous IFRS requirements. Under the new standard, the distinction between operating and finance leases is removed: an asset and a liability are recognised for almost all leases, with limited exemptions. The Group adopted the standard using the modified retrospective approach which means that the cumulative effect of the adoption is recognised in retained earnings as at January 1, 2019 and that comparatives are not restated.

On adoption of IFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as operating leases under the principles of IAS 17 *Leases*. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of January 1, 2019. The weighted average Group's incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 6.7%. The implementation of the standard resulted in the recognition of the liabilities under leases which were previously accounted as operating leases in the amount of 32 million US dollars including 19 million US dollars related to the disposal group held for sale (Note 10).

The associated right-of-use assets were measured at the amount equal to the lease liability, adjusted by prepaid or accrued lease payments relating to that lease and amounted to 32 million US dollars including 19 million US dollars related to the disposal group held for sale (Note 10). The recognised right-of-use assets mostly related to the land and buildings' rent.

In applying IFRS 16 for the first time, the Group used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- the accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019 as short-term leases;
- the exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application.

The Group also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made under IAS 17 *Leases* and IFRIC 4 *Determining whether an Arrangement contains a Lease*.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Application of New and Amended IFRSs (continued)

For leases previously classified as finance leases the Group recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application.

IAS 19 Employee Benefits (amendments) - Plan Amendment, Curtailment or Settlement

The amendments clarify the accounting for defined benefit plan amendments, curtailments and settlements. They confirm that entities must: i) calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement by using the updated assumptions from the date of the change; ii) any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement; iii) separately recognise any changes in the asset ceiling through other comprehensive income. These amendments will apply to future plan amendments, curtailments, or settlements.

IFRIC 23 Uncertainty over Income Tax Treatments

IFRIC 23 clarifies the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is an uncertainty over income tax treatments under IAS 12 *Income Taxes*. This interpretation did not have any impact on the financial position or performance.

Improvements to IFRSs

In December 2017, the IASB issued *Annual Improvements to IFRSs*. The document sets out amendments to IFRSs primarily with a view of removing inconsistencies and clarifying wording. The improvements did not have any impact on the financial position or performance of the Group.

3) Segment Information

Operating segments reflect the Group's management structure and the way financial information is regularly reviewed. The Group has three reportable segments:

- Russia segment represents the results of operations and financial position of plants located in the Russian Federation, a finishing facility in Kazakhstan, oilfield service companies in Russia, traders located in Russia, the United Arab Emirates and Switzerland;
- Americas segment represents the results of operations and financial position of plants and traders located in the United States of America and Canada;
- Europe segment represents the results of operations and financial position of plants located in Romania and traders located in Italy and Germany.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information (continued)

Management monitors the operating results of the segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on Adjusted EBITDA. Adjusted EBITDA is determined as profit/(loss) for the period excluding finance costs and finance income, income tax (benefit)/expense, depreciation and amortisation, foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions (except for provisions for bonuses), (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associates and other non-cash, non-recurring and unusual items. Group financing (including finance costs and finance income) is managed on a group basis and is not allocated to operating segments. Inter-segment revenues are eliminated upon consolidation.

On March 22, 2019, the Group signed the Stock Purchase Agreement for the sale of 100% interest in IPSCO Tubulars Inc. and its subsidiaries ("IPSCO") which represent the Americas segment. Information about this discontinued segment is provided in Note 10.

The tables below disclose the information regarding the Group's reportable segments' results. The reconciliation from the operating profit to the profit/(loss) before tax is provided in the income statement.

Nine-month period ended September 30, 2019	Russia	Americas	Europe	TOTAL
D	2 710 244	7(1.052	195 214	2 ((510
Revenue	2,719,244	761,952	185,314	3,666,510
Cost of sales	(2,121,551)	(698,001)	(142,309)	(2,961,861)
Gross profit	597,693	63,951	43,005	704,649
Selling, general and administrative expenses	(306,303)	(53,308)	(35,993)	(395,604)
Other operating income/(expenses)	(9,485)	(1,267)	(902)	(11,654)
Operating profit	281,905	9,376	6,110	297,391
Add back:				
Depreciation and amortisation	130,241	21,669	14,514	166,424
(Gain)/loss on disposal of property, plant and	100,211	21,009	1.,011	100,121
equipment	3,624	3,572	(1,006)	6,190
Movements in allowances and provisions	8,470	15,119	267	23,856
Other expenses	13,906	87	635	14,628
-	156,241	40,447	14,410	211,098
Adjusted EBITDA	438,146	49,823	20,520	508,489

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information (continued)

Nine-month period ended September 30, 2018	Russia	Americas	Europe	TOTAL
Revenue	2,619,565	983,257	232,125	3,834,947
Cost of sales	(2,129,021)	(842,758)	(171,284)	(3,143,063)
Gross profit	490,544	140,499	60,841	691,884
Selling, general and administrative expenses	(281,035)	(58,730)	(38,283)	(378,048)
Other operating income/(expenses)	(4,534)	(6,954)	(937)	(12,425)
Operating profit	204,975	74,815	21,621	301,411
Add back:				
Depreciation and amortisation	144,898	43,618	14,698	203,214
(Gain)/loss on disposal of property, plant and	,	,	· · · · ·	<i>,</i>
equipment	2,648	6,197	92	8,937
Movements in allowances and provisions	(3,177)	(4,244)	2,214	(5,207)
Other expenses	12,548	84	544	13,176
-	156,917	45,655	17,548	220,120
Adjusted EBITDA	361,892	120,470	39,169	521,531

Revenue from external customers for each group of products and services is disclosed below and include the continuing and discontinued operations:

Sales to external customers	Seamless pipes	Welded pipes	Other operations	TOTAL
Nine-month period ended September 30, 2019	2,606,210	926,461	133,839	3,666,510
Nine-month period ended September 30, 2018	2,600,001	1,004,235	230,711	3,834,947

The following table presents the breakdown of revenue by geographical area. The information is disclosed based on the location of the customer and include the continuing and discontinued operations.

	Russia	Americas	Europe	Middle East and North Africa	CIS	Eastern Asia, South- Eastern Asia and Far East	Sub- Saharan Africa	TOTAL
Revenue Nine-month period ended								
September 30, 2019 Nine-month period ended	2,144,578	906,376	360,885	58,617	176,153	19,901	-	3,666,510
September 30, 2018	2,083,609	1,170,056	256,922	179,049	137,263	7,094	954	3,834,947

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

4) Cost of Sales

	Nine-month	period ended	Three-month	period ended	
	Septem	ber 30,	September 30,		
	2019	2018	2019	2018	
Raw materials and consumables	1,970,242	2,088,687	591,296	699,823	
Staff costs including social security	382,704	399,757	121,545	126,607	
Energy and utilities	218,391	224,422	65,087	66,746	
Depreciation and amortisation	145,613	189,856	43,507	60,286	
Repairs and maintenance	62,732	56,273	22,144	18,757	
Contracted manufacture	54,765	57,857	12,830	16,210	
Freight	47,352	61,502	14,977	22,514	
Professional fees and services	25,302	26,625	8,119	9,859	
Import duties	18,086	13,846	6,911	7,375	
Taxes	11,532	22,790	3,706	7,263	
Rent	5,965	6,637	1,929	2,187	
Insurance	3,071	3,032	981	974	
Travel	1,391	1,335	453	421	
Communications	314	344	94	106	
Other	872	2,329	191	561	
Total production cost	2,948,332	3,155,292	893,770	1,039,689	
Change in own finished goods and work in progress	(33,080)	(42,366)	(34,589)	(64,824)	
Cost of sales of externally purchased goods	24,746	33,873	6,880	10,671	
Obsolete stock, write-offs/(reversal of allowances)	21,863	(3,736)	14,893	226	
Cost of sales	2,961,861	3,143,063	880,954	985,762	

The amounts include the continuing and discontinued operations.

5) Selling and Distribution Expenses

	Nine-month	period ended	Three-month	period ended	
	Septem	ber 30,	September 30,		
	2019	2018	2019	2018	
Freight	105,439	101,318	31,383	26,411	
Staff costs including social security	27,589	30,619	7,208	9,185	
Consumables	14,961	14,804	5,602	4,080	
Professional fees and services	12,681	15,169	4,637	5,569	
Impairment of receivables and write-offs	4,568	1,699	3,587	(196)	
Import duties	4,073	3,644	1,496	2,739	
Travel	1,615	1,665	558	625	
Depreciation and amortisation	1,007	1,345	344	433	
Utilities and maintenance	989	1,078	335	317	
Insurance	852	601	341	192	
Rent	842	3,350	231	1,021	
Communications	221	222	73	65	
Other	711	716	183	258	
	175,548	176,230	55,978	50,699	

The amounts include the continuing and discontinued operations.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

6) General and Administrative Expenses

	Nine-month	period ended	Three-month	period ended	
	Septem	ıber 30,	September 30,		
	2019	2018	2019	2018	
Staff costs including social security	131,086	109,177	56,592	32,185	
Professional fees and services	35,818	35,392	11,158	12,877	
Depreciation and amortisation	10,975	8,126	3,673	3,172	
Utilities and maintenance	7,989	7,527	2,789	2,529	
Travel	4,218	4,191	1,370	1,434	
Insurance	4,056	4,145	1,406	1,627	
Communications	3,279	3,875	1,104	1,211	
Transportation	3,015	2,632	1,102	814	
Taxes	2,427	2,012	724	597	
Consumables	1,905	1,626	685	499	
Rent	1,347	10,689	452	3,327	
Other	1,823	1,665	517	563	
	207,938	191,057	81,572	60,835	

The amounts include the continuing and discontinued operations.

7) Research and Development Expenses

	Nine-month	period ended	Three-month period ended		
	Septem	ıber 30,	September 30,		
	2019	2019 2018		2018	
taff costs including social security	2,780	2,515	776	937	
Depreciation and amortisation	628	1,813	56	436	
ther	1,389	1,384	494	419	
	4,797	5,712	1,326	1,792	

The amounts include the continuing and discontinued operations.

8) Other Operating Income and Expenses

		Nine-month period ended September 30,		period ended ber 30,
	2019	2019 2018		2018
Social and social infrastructure maintenance expenses	7,900	7,277	3,095	2,468
Sponsorship and charitable donations	6,728	5,899	1,589	2,338
Taxes and penalties	4,124	(55)	1,461	(1,174)
(Gain)/loss on disposal of property, plant and equipment	6,190	8,937	2,324	2,949
Other (income)/expenses	(13,288)	(9,633)	(2,897)	(2,062)
	11.654	12,425	5,572	4,519

The amounts include the continuing and discontinued operations.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

9) Income Tax

	Nine-month period ended September 30,		Three-month period ended September 30,	
	2019	2018	2019	2018
Current income tax	39,712	21,398	9,120	7,109
Adjustments in respect of income tax of previous periods	370	(863)	141	(26)
Deferred tax related to origination and reversal of temporary				
differences	944	7,278	(3,603)	3,545
	41,026	27,813	5,658	10,628

The amounts include the continuing and discontinued operations.

10) Discontinued Operations

On March 22, 2019, the Group signed the Stock Purchase Agreement with Tenaris, a manufacturer of seamless and welded pipe, for the sale of 100% interest in IPSCO for an aggregate, cash free, debt-free price of 1,209 million US dollars, which includes 270 million US dollars of working capital. The completion of the transaction is subject to the fulfillment of the conditions precedent in accordance with the Stock Purchase Agreement including, inter alia, the obtaining of all necessary permissions and approvals. From the date of that agreement IPSCO is classified as a disposal group held for sale and as discontinued operations. The results of the discontinued operations are presented separately in the income statement. The following assets and liabilities were reclassified as held for sale in relation to the discontinued operations:

	September 3	0, 2019
ASSETS		
Current assets		
Cash and cash equivalents	3,417	
Trade and other receivables	74,844	
Inventories	283,594	
Prepayments and input VAT	7,738	
Prepaid income taxes	10,840	
Other financial assets	148	380,581
Non-current assets		
Property, plant and equipment	385,134	
Intangible assets	224,772	
Other non-current assets	3,859	613,765
TOTAL ASSETS		994,346
LIABILITIES		
Current liabilities		
Trade and other payables	105,605	
Advances from customers	351	
Provisions and accruals	10,007	
Interest-bearing loans and borrowings	458	
Lease liability	6,680	
Other liabilities	-	123,101
Non-current liabilities		
Interest-bearing loans and borrowings	54,567	
Lease liability	19,343	
Deferred tax liability	13,235	
Provisions and accruals	10,216	
Employee benefits liability	2,543	
Other liabilities	63	99,967
TOTAL LIABILITIES		223,068

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

10) Discontinued Operations (continued)

The net cash flows of the disposal group held for sale were as follows:

	Nine-month period ended September 30,	
	2019	2018
Net cash flows from operating activities	42,247	39,397
Net cash flows used in investing activities	(30,901)	(35,869)
Net cash flows used in financing activities	(8,778)	(9,927)

11) Cash and Cash Equivalents

Cash and cash equivalents were denominated in the following currencies:

	September 30, 2019	December 31, 2018
Russian rouble	125,568	358,464
US dollar	79,164	23,807
Euro	66,157	7,003
Romanian lei	344	1,008
Other currencies	272	1,553
	271,505	391,835

The above cash and cash equivalents consisted primarily of cash at banks. As at September 30, 2019, the restricted cash amounted to 3,923 (December 31, 2018: 1,788).

As at September 30, 2019, the cash and cash equivalents are presented net of the amounts related to the disposal group held for sale (Note 10).

12) Inventories

	September 30, 2019	December 31, 2018
Finished goods	191,706	293,473
Work in progress	329,763	385,477
Raw materials and supplies	348,473	429,372
	869,942	1,108,322
Allowance for net realisable value of inventory	(17,803)	(42,065)
	852,139	1,066,257

As at September 30, 2019, the inventory is presented net of the amounts related to the disposal group held for sale (Note 10).

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

13) Property, Plant and Equipment

Movement in property, plant and equipment in the nine-month period ended September 30, 2019 was as follows:

	Land and buildings	Machinery and equipment	Transport and motor vehicles	Furniture and fixtures	Other	Construc- tion in progress	TOTAL
Cost							
Balance at January 1, 2019	949,492	2,546,283	75,676	68,898	6,129	184,781	3,831,259
Additions	-	-	-	-	-	183,670	183,670
Assets put into operation	40,044	75,553	3,507	4,439	331	(123,874)	-
Disposals	(4,230)	(30,161)	(1,055)	(684)	(17)	(26)	(36,173)
Reclassifications	20	11	(13)	17	-	(35)	-
Currency translation adjustments	47,506	113,225	2,767	3,207	398	12,834	179,937
Reclassified as held for sale	(176,185)	(627,127)	(440)	(21,394)	(496)	(12,572)	(838,214)
Balance at September 30, 2019	856,647	2,077,784	80,442	54,483	6,345	244,778	3,320,479
Accumulated depreciation and							
<u>impairment</u>							
Balance at January 1, 2019	(266,791)	(1,411,125)	(25,333)	(51,500)	(1,317)	-	(1,756,066)
Depreciation charge	(18,660)	(131,308)	(5,071)	(3,727)	(210)	-	(158,976)
Disposals	1,827	25,955	644	546	17	-	28,989
Reclassifications	(122)	99	24	(1)	-	-	-
Currency translation adjustments	(12,268)	(67,659)	(642)		(61)	-	(82,819)
Reclassified as held for sale	57,942	391,171	376	19,790	13	-	469,292
Balance at September 30, 2019	(238,072)	(1,192,867)	(30,002)	(37,081)	(1,558)	-	(1,499,580)
Net book value at September 30, 2019	618,575	884,917	50,440	17,402	4,787	244,778	1,820,899
Net book value at January 1, 2019	682,701	1,135,158	50,343	17,398	4,812	184,781	2,075,193

Capitalised Borrowing Costs

The amount of borrowing costs capitalised during the nine-month period ended September 30, 2019 was 3,353 (nine-month period ended September 30, 2018: 2,365). The capitalisation rate was 8.6% (nine-month period ended September 30, 2018: 7.1%).

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

14) Goodwill and Other Intangible Assets

Movement in intangible assets in the nine-month period ended September 30, 2019 was as follows:

	Patents and trademarks	Goodwill	Software	Customer and supplier relationships	Proprietary technology	Other	TOTAL
Cost							
Balance at January 1, 2019	210,776	510,568	26,391	472,300	19,295	14,398	1,253,728
Additions	167	-	1,999	-	-	2,210	4,376
Disposals	(2)	-	-	-	(5,195)	(27)	(5,224)
Reclassifications	(14)	-	265	-	-	(251)	-
Currency translation adjustments	108	2,915	1,225	-	-	830	5,078
Reclassified as held for sale	(208,700)	(464,791)	(10,073)) (472,300)	(14, 100)	(4,225)	(1,174,189)
Balance at September 30, 2019	2,335	48,692	19,807	_	-	12,935	83,769
Accumulated amortisation and							
<u>impairment</u>							
Balance at January 1, 2019	(1,091)	(490,111)	(13,980)) (472,300)	(14,100)	(4,489)	(996,071)
Amortisation charge	(163)	-	(1,708) -	-	(861)	(2,732)
Disposals	-	-	-	-	-	27	27
Reclassifications	5	-	(183)) –	-	178	-
Currency translation adjustments	(53)	(1,988)	(967) -	-	(341)	(3,349)
Reclassified as held for sale	-	464,791	543	472,300	14,100	132	951,866
Balance at September 30, 2019	(1,302)	(27,308)	(16,295) -	-	(5,354)	(50,259)
Net book value at September 30, 2019	1,033	21,384	3,512	-	-	7,581	33,510
Net book value at January 1, 2019	209,685	20,457	12,411	-	5,195	9,909	257,657

The Group determines whether goodwill and intangible assets with indefinite useful lives are impaired on an annual basis and when circumstances indicate that the carrying value may be impaired. As at September 30, 2019, there were no impairment indicators.

The carrying amounts of goodwill and intangible assets with indefinite useful lives were allocated among cash-generating units as follows:

	September 30, 2019	December 31, 2018
American division	-	208,700
Oilfield subdivision	14,973	13,884
European division	5,216	5,465
Other cash-generating units	1,195	1,108
	21,384	229,157

15) Trade and Other Payables

	September 30, 2019	December 31, 2018
Trade payables	606,943	584,395
Accounts payable for property, plant and equipment	56,331	58,517
Liabilities for VAT	29,582	48,925
Payroll liabilities	14,845	19,255
Accrued and withheld taxes on payroll	12,124	12,336
Liabilities for acquisition of non-controlling interests in subsidiaries	4,968	5,023
Liabilities for property tax	2,171	5,768
Liabilities for other taxes	773	1,112
Sales rebate payable	335	1,763
Dividends payable	308	61
Other payables	3,753	6,392
	732,133	743,547

As at September 30, 2019, the trade and other payables are presented net of the amounts related to the disposal group held for sale (Note 10).

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

16) Provisions and Accruals

	September 30, 2019	December 31, 2018
Current		
Provision for bonuses	5,891	20,701
Accrual for long-service bonuses	10,448	11,874
Accrual for unused annual leaves	2,292	2,166
Current portion of employee benefits liability	1,947	1,967
Environmental provision	42	351
Other provisions	9,687	10,668
	30,307	47,727
Non-current		
Accrual for unused annual leaves	16,453	13,085
Environmental provision	206	7,111
Provision for bonuses	243	1,056
Other provisions	-	3,003
	16,902	24,255

Other provisions include provisions for taxes, legal costs and claims not covered by insurance. As at September 30, 2019, the provisions and accruals are presented net of the amounts related to the disposal group held for sale (Note 10).

17) Interest-Bearing Loans and Borrowings

	September 30, 2019	December 31, 2018
Current		
Bank loans	522,257	380,064
Interest payable	31,125	17,159
Current portion of non-current borrowings	161,796	437,098
Current portion of bearer coupon debt securities	577,621	71,973
Unamortised debt issue costs	(1,491)	(167)
	1,291,308	906,127
Non-current		
Bank loans	1,544,558	1,270,451
Bearer coupon debt securities	206,254	715,919
Unamortised debt issue costs	(2,212)	(8,218)
	1,748,600	1,978,152

Breakdown of the Group's interest-bearing loans and borrowings by currencies was as follows:

	September 30, 2019	December 31, 2018
Russian rouble	1,759,637	1,531,695
US dollar	1,135,468	1,253,091
Euro	144,803	99,493
	3,039,908	2,884,279

As at September 30, 2019, the amounts disclosed in the tables above are presented excluding the balances of the disposal group held for sale (Note 10).

Unutilised Borrowing Facilities

As at September 30, 2019, the Group had unutilised borrowing facilities in the amount of 441,604 (including 63,554 related to the disposal group held for sale).

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

18) Fair Value of Financial Instruments

For cash and cash equivalents, trade and other accounts receivable, loans issued, trade and other payables, other similar financial instruments the carrying amounts approximate their fair values.

The following table shows financial instruments which carrying values differ from fair values:

	September	r 30, 2019	December 31, 2018			
	Nominal value	Fair value	Nominal value	Fair value		
Financial liabilities						
Long-term loans	1,549,756	1,542,111	1,276,085	1,226,290		
6.75 per cent loan participation notes	500,000	509,590	500,000	509,510		
Russian bonds	283,875	291,565	287,892	289,835		

As at September 30, 2019, the amounts in the table above are presented excluding the balances of the disposal group held for sale (Note 10).

For quoted debt instruments (bonds and loan participation notes) the fair values were determined based on quoted market prices. The fair values of unquoted debt instruments were estimated by discounting future cash flows using rates currently available for debt on similar terms, credit risk and remaining maturities.

19) Other Current Liabilities

The Group transferred some of its intercompany debts in exchange for cash under factoring arrangements. In the nine-month period ended September 30, 2019, the net cash inflows from these transactions amounted to 27,114 (nine-month period ended September 30, 2018: net cash outflows of 7,609). The respective liability in the amount of 111,920 was included in other current liabilities as at September 30, 2019 (December 31, 2018: 86,280).

20) Related Parties Disclosures

Compensation to Key Management Personnel of the Group

Key management personnel include members of the Board of Directors, the Management Board and certain executives of the Group.

The compensation to key management personnel included:

- Wages, salaries, social security contributions and other short-term benefits in the amount of 32,644 (nine-month period ended September 30, 2018: 11,255).
- Provision for performance bonuses in the amount of 2,029 (nine-month period ended September 30, 2018: 3,086).

The amounts disclosed above were recognised as general and administrative expenses in the income statement for the nine-month period ended September 30, 2019 and 2018 and include the continuing and discontinued operations.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

20) Related Parties Disclosures (continued)

Transactions with the Parent of the Company

In the nine-month period ended September 30, 2019, the amount of dividends attributable to the Parent of the Company was 27,186.

Transactions with Other Related Parties

Other related parties include entities under common control with the Company, associates, joint ventures and other related parties.

The following table provides balances with other related parties:

	September 30, 2019	December 31, 2018
Cash and cash equivalents	7,830	39,954
Loans issued	142,845	53,795
Trade and other receivables	171,688	157,354
Prepayments for acquisition of property, plant and equipment	-	2,159
Other prepayments	131	126
Interest-bearing loans and borrowings	-	46,434
Lease liability	9,457	-
Trade and other payables	71,433	59,649
Advances received	10	11

As at September 30, 2019, the amounts in the table above are presented excluding the balances related to the disposal group held for sale (Note 10).

The Group guaranteed debts of other related parties outstanding in the amount of 61,877 as at September 30, 2019 (December 31, 2018: 61,943).

Allowance for expected credit losses in respect of receivables from other related parties amounted to 6,782 as at September 30, 2019 (December 31, 2018: 5,390).

The Group uses unsecured letters of credit to facilitate settlements with its counterparties, including payments under certain contracts to purchase raw materials from entities under common control with the Company. As at September 30, 2019, for the letters of credits in the total amount of 93,145 the bank paid cash to the related party, following its request, earlier than the original maturities per purchase contracts (December 31, 2018: 82,769). The original due dates of Group's payables were not changed and the respective amounts were included in trade and other payables.

The following table provides the summary of transactions with other related parties:

	Nine-month	period ended	Three-month period ended			
	Septem	1ber 30,	September 30,			
	2019	2018	2019	2018		
Finance costs	3,676	15,480	1,469	4,461		
Purchases of raw materials	445,672	428,762	162,188	161,401		
Purchases of other goods and services	26,591	27,286	8,265	7,562		
Sales revenue	195,597	88,483	70,697	36,709		
Other income	8,288	8,606	3,240	4,220		

The above table includes the discontinued operations: sales revenue in the amounts of 2,690 and 9,669; purchases in the amounts of 2,991 and 9,515 for the nine-month period ended September 30, 2019 and 2018, respectively.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

21) Contingencies and Commitments

Operating Environment of the Group

Significant part of the Group's principal assets is located in the Russian Federation and the USA, therefore its significant operating risks relate to the activities of the Group in these countries.

The Russian economy is recovering gradually, after the economic recession in the past several years. Russia continues to be negatively impacted by sanctions imposed on certain companies and individuals as well as reduced access to international capital markets.

The US market situation is most likely to remain challenging with oil and steel price volatility, a slowdown in drilling activity and operators focusing on capital discipline, resulting in lower pipe demand and pressure on selling prices.

The future effects of the current economic situation are difficult to predict and current management's expectations and estimates could differ from actual results.

Taxation

Tax legislation is subject to varying interpretations and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and federal authorities. Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits, which will be required to settle these liabilities. Up to the date of authorisation of these consolidated financial statements for issuance, the court proceedings and pre-trial disputes had not been finalised for the claims in the amount of 7,319 which related to the disposal group held for sale. Management believes that the Group's position is justified and it is not probable that the ultimate outcome of these matters will result in material losses for the Group. Consequently, the amounts of the claims being contested by the Group were not accrued in the consolidated financial statements for the not accrued in the consolidated financial statements for the not accrued in the oroup. Consequently, the amounts of the nine-month period ended September 30, 2019.

Contractual Commitments

The Group had contractual commitments for the acquisition of property, plant and equipment from third parties in the amount of 71,270 as at September 30, 2019 (December 31, 2018: 68,937). Contractual commitments were expressed net of VAT.

As at September 30, 2019, the Group had advances of 15,355 with respect to commitments for the acquisition of property, plant and equipment (December 31, 2018: 10,617). These advances were included in other non-current assets.

Under contractual commitments disclosed above, the Group opened unsecured letters of credit in the amount of 18,982 (December 31, 2018: 19,300).

Insurance Policies

The Group maintains insurance against losses that may arise in case of property and equipment damage (including insurance against fires and certain other natural disasters), business interruption insurance, insurance for transported goods against theft or damage. The Group also maintains corporate product liability, directors and officers liability insurance policies. Nevertheless, any recoveries under maintained insurance coverage that may be obtained in the future may not offset the lost revenues or increased costs resulting from a disruption of operations.

Notes to the Unaudited Interim Condensed Consolidated Financial Statements Nine-month period ended September 30, 2019

(All amounts in thousands of US dollars, unless specified otherwise)

21) Contingencies and Commitments (continued)

Legal Claims

During the period, the Group was involved in a number of court proceedings (both as a plaintiff and a defendant) arising in the ordinary course of business. Management believes there are no current legal proceedings or other claims outstanding, which could have a material effect on the results of operations or financial position of the Group.

22) Equity

i) Share Capital

	September 30, 2019	December 31, 2018
Number of shares		
Authorised		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366
Issued and fully paid		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366

ii) Hedges of Net Investment in Foreign Operations

The Group uses US dollar-denominated borrowings as hedges of net investments in its foreign subsidiaries which functional currency is the US dollar. In the nine-month period ended September 30, 2019, the effective portion of gains from spot rate changes in the amount of 48,499 (presented net of tax in the amount of 12,125) was recognised in other comprehensive income/loss. The whole amount of gains related to the disposal group held for sale (Note 10).

iii) Dividends Declared by the Company to its Shareholders

On June 28, 2019, the general shareholders' meeting approved dividends in respect of the first quarter 2019 in the amount of 2,634,495 thousand Russian roubles (41,787 at the exchange rate at the date of approval) or 2.55 Russian roubles per share (0.04 US dollars per share). Dividends related to the treasury shares in possession of the Group amounted to 1,479 thousand Russian roubles (23 at the exchange rate at the date of approval).

iv) Dividends Declared by Subsidiaries of the Group to the Non-controlling Interest Owners

During the nine-month period ended September 30, 2019, the Group's subsidiaries declared dividends to the non-controlling interest owners in the amount of 1,198.

PAO TMK Consolidated Financial Statements

Year ended December 31, 2018

Consolidated Financial Statements Year ended December 31, 2018

Contents

Ind	lependent auditor's report	3
Co	nsolidated Income Statement	8
Co	nsolidated Statement of Comprehensive Income	9
Co	nsolidated Statement of Financial Position	10
Co	nsolidated Statement of Changes in Equity	11
Co	nsolidated Statement of Cash Flows	13
Not	tes to the Consolidated Financial Statements	15
1)	Corporate Information	15
2)	Significant Accounting Policies	15
3)	Segment Information	
4)	Cost of Sales	35
5)	Selling and Distribution Expenses	35
6)	General and Administrative Expenses	
7)	Research and Development Expenses	
8)	Other Operating Income and Expenses	
9)	Income Tax	
10)	Earnings per Share	
11)	Disposal of Subsidiaries	
12)	Cash and Cash Equivalents	
13)	Trade and Other Receivables	
14)	Inventories	
15)	Prepayments and Input VAT	40
16)	Property, Plant and Equipment	40
17)	Goodwill and Other Intangible Assets	42
18)	Other Non-Current Assets	44
19)	Trade and Other Payables	44
20)	Other Current Liabilities	44
21)	Provisions and Accruals	45
22)	Interest-Bearing Loans and Borrowings	45
23)	Finance Lease Liability	46
24)	Changes in Liabilities from Financing Activities	46
25)	Employee Benefits Liability	47
26)	Interests in Subsidiaries	48
27)	Related Parties Disclosures	49
28)	Contingencies and Commitments	50
29)	Equity	52
30)	Financial Risk Management Objectives and Policies	53



Ernst & Young LLC Sadovnicheskaya Nab., 77, bld. 1 Moscow, 115035, Russia Tel: +7 (495) 705 9700 +7 (495) 755 9700 Fax: +7 (495) 755 9701 www.ey.com/ru ООО «Эрнст энд Янг» Россия, 115035, Москва Садовническая наб., 77, стр. 1 Тел.: +7 (495) 705 9700 +7 (495) 755 9700 Факс: +7 (495) 755 9701 ОКПО: 59002827 ОГРН: 1027739707203 ИНН: 7709383532

Independent auditor's report

To the Shareholders and Board of Directors of PAO TMK

Opinion

We have audited the consolidated financial statements of PAO TMK and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2018, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2018 and its consolidated financial performance and its consolidated cash flows for 2018 in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.



We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter

How our audit addressed the key audit matter

Impairment of non-current assets

We focused on the impairment of non-current assets due to the significance of the carrying value of non-current assets to the consolidated financial statements and the inherent uncertainty involved in forecasting and discounting future cash flows with many of the key underlying assumptions being impacted by economic factors.

Information on non-current assets and impairment tests is disclosed in Notes 16 and 17 to the consolidated financial statements.

The Group operates in different tax jurisdictions

Valuation of deferred tax assets

(primarily Russia and the USA) with changing tax environment. We considered the valuation of deferred tax assets to be one of the matters of most significance in our audit because the assessment process is complex, includes a certain level of estimation uncertainty and the amounts involved are material to the financial statements.

Information on deferred tax asset is disclosed in Note 9 to the consolidated financial statements.

We focused on cash-generating units with the largest carrying values, those for which an impairment was recognized in the year and those with the lowest difference between recoverable amount and carrying amount.

Our audit procedures in respect of the impairment tests included the assessment of key management's assumptions, such as sales volumes and prices, production costs and discount rates as the recoverable amounts are the most sensitive to changes in those assumptions.

We identified and analysed changes in assumptions from prior periods and performed a comparison of assumptions with external market data where applicable. We involved our internal valuation specialists to assist us with these procedures.

We performed sensitivity analyses, evaluating whether a reasonably possible change in assumptions could cause the carrying amount to exceed the recoverable amount.

We performed a retrospective assessment of the accuracy of management's past projections by comparing historical forecasts to actual results.

We tested the mathematical integrity of the impairment models.

We evaluated the disclosures related to impairment tests included in the consolidated financial statements.

Our audit procedures included, among others, evaluating management's methodologies and assumptions that substantiate the probability that deferred tax assets recognized in the balance sheet will be recovered through taxable profit in future years. We involved our tax specialists to assist us with these procedures.

We compared management's forecasts of future taxable profit with the Group's budgets and forecasts used for non-current assets impairment tests.



Other information included in the Group's Annual report

Other information consists of the information included in the Annual Report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.



As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is D.M. Zhigulin.

D.M. Zhigulin Partner Ernst & Young LLC

28 February 2019

Details of the audited entity

Name: PAO TMK Registered on 17 April 2001. Record made in the State Register of Legal Entities on 19 September 2002, State Registration Number 1027739217758. Address: Russia 105062, Moscow, Pokrovka Street, 40/2a.

Details of the auditor

Name: Ernst & Young LLC Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203. Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1. Ernst & Young LLC is a member of Self-regulated organization of auditors "Russian Union of auditors" (Association) ("SRO RUA"). Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 11603050648.

Consolidated Income Statement Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

	Year ended December 31,				
NOTES	2018	2017			
3	5,098,776	4,393,653			
4	(4,183,177)	(3,521,159)			
	915,599	872,494			
5	(230,780)	(260,595)			
	(7,156)	(6,881)			
6	(250,410)	(231,233)			
	(7,257)	(11,465)			
8	(22,441)	(33,796)			
	397,555	328,524			
17	(16.613)	(21,979)			
	-	(1,615)			
16	-	16,263			
	(72,264)	27,515			
	(241,523)	(281,022)			
	9,464	12,679			
	-	(3,439)			
	606	(9)			
11	(23,732)	-			
	(8,678)	583			
	44,815	77,500			
9	(44,972)	(47,931)			
-	(11,57)	29,569			
	2,409	35,548			
		(5,979)			
	(157)	29,569			
10	0.00	0.03			
	3 4 5 6 7 8 17 16	NOTES20183 $5,098,776$ 4 $(4,183,177)$ 915,5995 $(230,780)$ $(7,156)$ 6 $(250,410)$ $(7,257)$ 8 $(22,441)$ 397,55517 $(16,613)$ 16 16-16-16-17 $(16,613)$ $(241,523)$ $9,464$ 11 $(23,732)$ $(8,678)$ 9 $(44,972)$ (157) 9 $(2,409)$ $(2,566)$ (157)			

Consolidated Statement of Comprehensive Income Year ended December 31, 2018

(All amounts in thousands of US dollars)

		Year ended December 31,			
	NOTES	2018	2017		
Profit/(loss) for the period		(157)	29,569		
<i>Items that may be reclassified subsequently to profit or loss:</i> Exchange differences on translation to presentation currency ⁽ⁱ⁾		22,117	28,431		
Foreign currency gain/(loss) on hedged net investment in foreign operations, net of tax ⁽ⁱⁱ⁾		(115,971)	14,153		
Reclassification of foreign currency reserves to the income statement, net of tax ⁽ⁱⁱ⁾	11	23,345	-		
Items that may not be reclassified subsequently to profit or loss: Change in fair value of equity instruments, net of tax ⁽ⁱⁱ⁾		(4,707)	-		
Net actuarial gains/(losses) ⁽ⁱ⁾	25	2,387	(615)		
Other comprehensive income/(loss) for the period, net of tax		(72,829)	41,969		
Total comprehensive income/(loss) for the period, net of tax		(72,986)	71,538		
Attributable to:					
Equity holders of the parent entity		(63,930)	74,925		
Non-controlling interests		(9,056)	(3,387)		
		(72,986)	71,538		

(i) The amounts were attributable to equity holders of the parent entity and to non-controlling interests as presented in the table below:

	Year ended December 31,			
	2018	2017		
Exchange differences on translation to presentation currency:				
Equity holders of the parent entity	28,660	25,824		
Non-controlling interests	(6,543)	2,607		
	22,117	28,431		
Net actuarial gains/(losses):				
Equity holders of the parent entity	2,334	(600)		
Non-controlling interests	53	(15)		
	2,387	(615)		

(ii) The amounts were attributable to equity holders of the parent entity.

Consolidated Statement of Financial Position as at December 31, 2018

(All amounts in thousands of US dollars)

	NOTES	December	31, 2018	December	31, 2017
ASSETS					
Current assets					
Cash and cash equivalents	12	391,835		491,185	
Trade and other receivables	13	878,146		871,320	
Inventories	14	1,066,257		1,121,203	
Prepayments and input VAT	15	101,163		125,278	
Prepaid income taxes		12,397		14,139	
Other financial assets		409	2,450,207	432	2,623,557
Non-current assets					
Investments in associates and joint ventures		2,380		482	
Property, plant and equipment	16	2,075,193		2,428,526	
Goodwill	17	20,457		43,377	
Intangible assets	17	237,200		228,755	
Deferred tax asset	9	171,948		171,259	
Other non-current assets	18	47,098	2,554,276	40,815	2,913,214
TOTAL ASSETS			5,004,483		5,536,771
LIABILITIES AND EQUITY					
Current liabilities					
Trade and other payables	19	743,547		807,240	
Advances from customers		198,140		142,661	
Provisions and accruals	21	47,727		60,482	
Interest-bearing loans and borrowings	22	906,127		600,957	
Finance lease liability	23	10,327		9,221	
Income tax payable		3,249		2,387	
Other liabilities	20	86,280	1,995,397	114,765	1,737,713
Non-current liabilities					
Interest-bearing loans and borrowings	22	1,978,152		2,663,489	
Finance lease liability	23	75,437		61,358	
Deferred tax liability	9	91,617		81,824	
Provisions and accruals	21	24,255		25,454	
Employee benefits liability	25	18,083		26,196	
Other liabilities		3,938	2,191,482	7,498	2,865,819
Total liabilities			4,186,879		4,603,532
Equity	29				
Parent shareholders' equity					
Share capital		342,869		342,869	
Treasury shares		(946)		(592)	
Additional paid-in capital		234,825		234,655	
Reserve capital		17,178		17,178	
Retained earnings		1,191,729		1,237,524	
Foreign currency translation reserve		(1,023,405)		(959,439)	
Other reserves		8,592	770,842	10,965	883,160
Non-controlling interests	26		46,762		50,079
Total equity			817,604		933,239
TOTAL LIABILITIES AND EQUITY			5,004,483		5,536,771

Consolidated Statement of Changes in Equity Year ended December 31, 2018

(All amounts in thousands of US dollars)

	Attributable to equity holders of the parent									
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2018	342,869	(592) 234,655	17,178	1,237,524	(959,439)	10,965	883,160	50,079	933,239
Profit/(loss) for the period	-	-	-	-	2,409	-	-	2,409	(2,566)	(157)
Other comprehensive income/(loss) for the period, net of tax	-	-		-	-	(63,966)	(2,373)	(66,339)	(6,490)	(72,829)
Total comprehensive income/(loss) for the period, net of tax	-	-	-	-	2,409	(63,966)	(2,373)	(63,930)	(9,056)	(72,986)
Purchase of treasury shares (Note 29 ii)	-	(354) -	-	-	-	-	(354)	-	(354)
Dividends declared by the Company to its shareholders (Note 29 v)	-	-	-	-	(37,025)	-	-	(37,025)	-	(37,025)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners (Note 29 vi)	-	-	-	-	-	-	-	-	(981)	(981)
Disposal of subsidiaries (Note 11)	-	-	-	-	-	-	-	-	(4,294)	(4,294)
Change of participation in subsidiaries within the Group (Note 29 vii)	-	-	-	-	(6,995)	-	-	(6,995)	6,995	-
Change of non-controlling interests' share in subsidiaries (Note 27)	_	-	170	-	(4,184)	_	_	(4,014)	4,019	5
At December 31, 2018	342,869	(946) 234,825	17,178	1,191,729	(1,023,405)	8,592	770,842	46,762	817,604

Consolidated Statement of Changes in Equity Year ended December 31, 2018 (continued)

(All amounts in thousands of US dollars)

		Attributable to equity holders of the parent								
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2017	342,869	(592	2) 234,655	17,178	1,237,758	(999,416)	11,565	844,017	54,731	898,748
Profit/(loss) for the period	-			-	35,548	-	-	35,548	(5,979)	29,569
Other comprehensive income/(loss) for the period, net of tax	-			-		39,977	(600)	39,377	2,592	41,969
Total comprehensive income/(loss) for the period, net of tax	-			-	35,548	39,977	(600)	74,925	(3,387)	71,538
Dividends declared by the Company to its shareholders (Note 29 v)	-			-	(35,782)	-	-	(35,782)	-	(35,782)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners (Note 29 vi)	_			-	-	_	_	_	(1,265)	(1,265)
At December 31, 2017	342,869	(592	2) 234,655	17,178	1,237,524	(959,439)	10,965	883,160	50,079	933,239

Consolidated Statement of Cash Flows Year ended December 31, 2018

(All amounts in thousands of US dollars)

		Year ended December 31,	
	NOTES	2018	2017
Operating activities			
Profit/(loss) before tax		44,815	77,500
Adjustments to reconcile profit/(loss) before tax to operating cash flows:			
Depreciation of property, plant and equipment		263,585	252,524
Amortisation of intangible assets	8	4,677	10,591
(Gain)/loss on disposal of property, plant and equipment Impairment of goodwill	8 17	11,736 16,613	21,070 21,979
Impairment of goodwin Impairment of property, plant and equipment	16	10,015	1,615
Reversal of impairment of property, plant and equipment	16		(16,263)
Foreign exchange (gain)/loss	10	72,264	(27,515)
Finance costs		241,523	281,022
Finance income		(9,464)	(12,679)
(Gain)/loss on disposal of subsidiaries	11	23,732	-
Other non-operating (income)/expenses		8,678	(583)
(Gain)/loss on derivatives		-	3,439
Share of (profit)/loss of associates		(606)	9
Movements in allowances and provisions		4,525	(10,691)
Operating cash flows before working capital changes		682,078	602,018
Working capital changes:			
Decrease/(increase) in inventories		(122,007)	(282,044)
Decrease/(increase) in trade and other receivables		(164,929)	(93,154)
Decrease/(increase) in prepayments		(233)	(22,846)
Increase/(decrease) in trade and other payables		66,292	158,871
Increase/(decrease) in advances from customers		75,859	(13,432)
Cash generated from operations		537,060	349,413
Income taxes paid		(26,715)	(37,683)
Net cash flows from operating activities		510,345	311,730
Turne din a seinidian		010,010	011,700
Investing activities			
Purchases of property, plant and equipment		(273,090)	(232,575)
Proceeds from sale of property, plant and equipment		5,046	4,792
Purchase of intangible assets		(16,147)	(3,034)
Issuance of loans		(60,006)	(33,604)
Proceeds from repayment of loans issued Interest received		80,158 9,018	15,346 13,796
Other cash movements		9,018	500
		114	500
Net cash flows used in investing activities		(254,607)	(234,779)

Consolidated Statement of Cash Flows Year ended December 31, 2018 (continued)

(All amounts in thousands of US dollars)

		Year ended December 31,	
	NOTES	2018	2017
Financing activities			
Purchase of treasury shares	29 (ii)	(354)	-
Proceeds from borrowings		1,205,188	1,275,261
Repayment of borrowings		(1,251,227)	(957,303)
Interest paid		(235,488)	(269,580)
Payment of finance lease liabilities		(13,532)	(9,509)
Dividends paid by the Company to its shareholders		(37,860)	(34,095)
Dividends paid to non-controlling interest shareholders		(1,147)	(1,487)
Other cash movements	20	(16,997)	117,329
Net cash flows (used in)/from financing activities		(351,417)	120,616
Net increase/(decrease) in cash and cash equivalents		(95,679)	197,567
Net foreign exchange difference		(3,671)	17,005
Cash and cash equivalents at January 1		491,185	276,613
Cash and cash equivalents at December 31		391,835	491,185

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

1) Corporate Information

These consolidated financial statements of PAO TMK and its subsidiaries (the "Group") for the year ended December 31, 2018 were authorised for issue in accordance with a resolution of the General Director on February 28, 2019.

PAO TMK (the "Company"), the parent company of the Group, is a Public Joint-Stock Company. Both registered and principal office of the Company is 40/2a Pokrovka Street, Moscow, the Russian Federation.

The Company's controlling shareholder is TMK Steel Holding Limited (the "Parent"). TMK Steel Holding Limited is ultimately controlled by D.A. Pumpyanskiy.

The Group is one of the world's leading producers of steel pipes for the oil and gas industry, a global company with extensive network of production facilities, sales companies and representative offices.

The principal activities of the Group are the production and sales of a wide range of steel pipes used in the oil and gas sector, chemical and petrochemical industries, energy and machine-building, construction, agriculture and other economic sectors. The Group delivers its products along with an extensive package of services in heat treatment, protective coating, premium connections threading, pipe storage and repairing.

- 2) Significant Accounting Policies
- *i)* Basis of Preparation

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements have been prepared on an accrual basis and under the historical cost convention, except as disclosed in the accounting policies below. All Group's subsidiaries, associates and joint ventures have a December 31 accounting year-end.

ii) Significant Estimates and Assumptions

The preparation of the consolidated financial statements requires management to exercise judgement and to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosures. These estimates and judgements are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from such estimates, and estimates can be revised in the future.

The estimates and assumptions which can cause a significant adjustment to the carrying amount of assets and liabilities are discussed below:

Impairment of Property, Plant and Equipment

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group estimates the asset's recoverable amount. This requires an estimation of the value in use of the cash-generating unit (CGU) to which the item is allocated.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Significant Estimates and Assumptions (continued)

The value in use calculation is based on discounted cash flow-based methods, which require the Group to estimate the expected future cash flows and to determine the suitable discount rate. These estimates may have a material impact on the recoverable value and the amount of the property, plant and equipment impairment.

Assets that suffered an impairment loss are tested for possible reversal of the impairment at each reporting date if indications exist that impairment losses recognised in prior periods no longer exist or have decreased.

Useful Lives of Items of Property, Plant and Equipment

The Group assesses the remaining useful lives of items of property, plant and equipment at least at each financial year-end. If expectations differ from previous estimates, the changes accounted for as changes in accounting estimates in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Fair Value of Assets and Liabilities Acquired in Business Combinations

The Group recognises separately, at the acquisition date, the identifiable assets, liabilities and contingent liabilities acquired or assumed in the business combination at their fair values, which involves estimates. Such estimates are based on valuation techniques, which require considerable judgment in forecasting future cash flows and developing other assumptions.

Impairment of Goodwill and Intangible Assets with Indefinite Useful Lives

The Group tests at least annually whether goodwill and intangible assets with indefinite useful lives have suffered any impairment. The recoverable amount of cash-generating unit to which goodwill and intangible assets with indefinite useful lives allocated is determined based on the value in use calculations. These calculations require the use of estimates. Revisions to the estimates may significantly affect the recoverable amount of the cash-generating unit.

Employee Benefits Liability

The Group companies provide a number of post-employment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, jubilee payments, etc.). Such benefits are recognised as defined benefit obligations. The Group uses the actuarial valuation method for the present value measurement of defined benefit obligations and related current service cost. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, rates of employee turnover and others. In the event that further changes in the key assumptions are required, the future amounts of the employment benefit costs may be affected materially.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Significant Estimates and Assumptions (continued)

Allowance for Expected Credit Losses (ECL)

The calculation of financial assets' impairment based on ECL model is a significant estimate. The ECL model is based on assumptions about future economic conditions, expected defaults and credit loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions and forward looking estimates at the end of each reporting period. Changes in the economy, industry or specific customer conditions may require adjustments to the allowance recorded in the consolidated financial statements.

Net Realisable Value Allowance

Inventories are stated at the lower of cost and net realisable value. Estimates of the net realisable value are based on the most reliable information available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the end of reporting period to the extent that such events confirm conditions existing at the end of the period.

Taxes

The Group is subject to taxes in different countries all over the world. Taxes and fiscal risks recognised in these consolidated financial statements reflect management's best estimate of the outcome based on the facts known at each reporting date in each individual country. These facts may include, but are not limited to, changes in tax laws and interpretations thereof in the various jurisdictions where the Group operates.

Tax legislation is subject to varying interpretations and changes occur frequently. Furthermore, the interpretation of tax legislation by tax authorities as applied to the transactions and activity of the Group's entities may not coincide with that of management. As a result, tax authorities may challenge transactions and Group's entities may be assessed additional taxes, penalties and interest, which can be significant. The final taxes paid are dependent upon many factors, including negotiations with tax authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from tax audits.

iii) Application of New and Amended IFRSs

The Group applied certain standards and amendments, which became effective for annual periods beginning on January 1, 2018. The nature and the impact of the adoption of new and revised standards are described below:

IFRS 2 Share-based Payment (amendments) - Classification and Measurement of Share-based Payment Transactions

The amendments address three main areas: the treatment of vesting and non-vesting conditions, the classification of share-based payment transactions with net settlement feature for withholding tax obligations and the accounting for a modification of a share-based payment transaction that changes its classification from cash-settled to equity-settled. The amendments did not have any impact on the Group's financial position or performance.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iii) Application of New and Amended IFRSs (continued)

IFRS 9 Financial Instruments

IFRS 9 replaces IAS 39 *Financial Instruments: Recognition and Measurement.* The standard introduces new requirements for classification and measurement of financial assets and financial liabilities, impairment and hedge accounting.

The adoption of IFRS 9 did not have a significant impact on classification of financial assets and liabilities in the consolidated financial statements of the Group. The Group's financial assets mostly comprise receivables and loans which fell under the category of financial assets measured at amortised costs according to IFRS 9. The Group concluded this standard had no impact on the accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Group does not have such liabilities.

The new impairment model requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses as it was the case under IAS 39. It applies to financial assets classified at amortised cost, debt instruments measured at FVOCI (fair value through other comprehensive income), contract assets under IFRS 15 *Revenue from Contracts with Customers*, lease receivables, loan commitments and certain financial guarantee contracts (with some practical expedients). The introduction of ECL model did not significantly affect amounts reported in the consolidated financial statements.

According to the new accounting rules, more hedge relationships might be eligible for hedge accounting. The Group's current hedge relationships qualify as continuing hedges.

The Group adopted the standard using the modified retrospective approach which means that the cumulative effect of the adoption is recognised in retained earnings as at January 1, 2018 and that comparatives are not restated. IFRS 9 did not have a material impact on the financial position of the Group, therefore opening equity as at January 1, 2018 was not restated.

IFRS 15 Revenue from Contracts with Customers

The standard replaces all previous revenue recognition requirements under IFRS and applies to all revenue arising from contracts with customers and sales of some non-financial assets. The standard outlines the principles an entity must apply to measure and recognise revenue. Under this standard revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to the customer.

The standard was applied using the modified retrospective approach without restating comparative information. IFRS 15 did not have a material impact on the financial position of the Group, therefore opening equity as at January 1, 2018 was not restated.

IAS 40 Investment Property (amendments) - Transfers of Investment Property

The amendments clarify the requirements on transfers into, or out of, investment property specifying that such transfers should only be made when there has been a change in use of the property. The amendments did not have any impact on the Group's financial position or performance.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iii) Application of New and Amended IFRSs (continued)

IFRIC 22 Foreign Currency Transactions and Advance Consideration

The interpretation clarifies how to determine the date of the transaction when an entity either pays or receives consideration in advance for foreign currency denominated contracts. The interpretation did not have any impact on the Group's financial position or performance.

Improvements to IFRSs

In December 2016, the IASB issued *Annual Improvements to IFRSs*. The document sets out amendments to IFRSs primarily with a view of removing inconsistencies and clarifying wording. The improvements did not have an impact on the financial position or performance of the Group.

iv) New Accounting Pronouncements

The following new or amended (revised) IFRSs have been issued but are not yet effective and not applied by the Group. These standards and amendments are those that potentially may have an impact on disclosures, financial position and performance when applied at a future date. The Group intends to adopt these standards when they become effective.

IFRS 3 Business Combinations (amendments) – Definition of a Business (effective for financial years beginning on or after January 1, 2020)

These amendments revise the definition of a business. The amendments are not expected to have a significant impact on the Group's financial position or performance.

IFRS 9 Financial Instruments (amendments) – Prepayment Features with Negative Compensation (effective for financial years beginning on or after January 1, 2019)

These amendments cover two issues: what financial assets can be measured at amortised cost and how to account for the modification of a financial liability. The amendments permit more financial assets to be measured at amortised cost than under the previous version of IFRS 9, in particular, some prepayable financial assets. The amendments confirm that when a financial liability measured at amortised cost is modified without this resulting in de-recognition, a gain or loss should be recognised immediately in profit or loss. The amendments are not expected to have a significant impact on the Group's financial position or performance.

IFRS 16 Leases (effective for financial years beginning on or after January 1, 2019)

IFRS 16 replaces existing IFRS leases requirements. For lessees, the new standard marks a significant change from current IFRS requirements. Under the new standard, the distinction between operating and finance leases is removed: an asset and a liability will be recognised for almost all leases, with limited exemptions. The standard will affect primarily the accounting of the Group's operating leases. According to preliminary estimates, one-off effect from the implementation of the standard will be the recognition of right-of-use assets and liabilities under lease in the amount of approximately 35–45 million US dollars.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iv) New Accounting Pronouncements (continued)

IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (amendments) – Definition of Material (effective for financial years beginning on or after January 1, 2020)

The amendments clarify the definition of material and make IFRSs more consistent by: i) using a consistent definition of materiality throughout IFRSs and the *Conceptual Framework for Financial Reporting*; ii) clarifying the explanation of the definition of material; and iii) incorporating some of the guidance in IAS 1 about immaterial information. The amendments are not expected to have a significant impact on the Group's financial position or performance.

IAS 19 Employee Benefits (amendments) – Plan Amendment, Curtailment or Settlement (effective for financial years beginning on or after January 1, 2019)

The amendments clarify the accounting for defined benefit plan amendments, curtailments and settlements. They confirm that entities must: i) calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement by using the updated assumptions from the date of the change; ii) any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement; iii) separately recognise any changes in the asset ceiling through other comprehensive income. These amendments will apply to future plan amendments, curtailments, or settlements.

IFRIC 23 Uncertainty over Income Tax Treatments (effective for financial years beginning on or after January 1, 2019)

IFRIC 23 Uncertainty over Income Tax Treatments clarifies the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is an uncertainty over income tax treatments under IAS 12 Income Taxes. The Group does not expect that this interpretation will have a significant impact on the financial position or performance.

The Conceptual Framework for Financial Reporting (revised) (effective for financial years beginning on or after January 1, 2020)

In March 2018, the IASB issued a revised version of the *Conceptual Framework for Financial Reporting*. The *Conceptual Framework for Financial Reporting* is not a standard, and none of the concepts override those in any standard or any requirements in a standard. It includes a comprehensive set of concepts for financial reporting, standard setting, guidance for preparers in developing consistent accounting policies and assistance to others in their efforts to understand and interpret the standards. The revision includes some new concepts, provides updated definitions and criteria and clarifies some important concepts. The changes to the *Conceptual Framework* are not expected to have a significant impact on the financial position or performance of the Group.

Imrovements to IFRSs (effective for financial years beginning on or after January 1, 2019)

In December 2017, the IASB issued *Annual Improvements to IFRSs*. The document sets out amendments to International Financial Reporting Standards primarily with a view of removing inconsistencies and clarifying wording. Amendments are generally intended to clarify requirements rather than result in substantive changes to current practice. The improvements will not have a significant impact on the financial position or performance of the Group.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

v) Basis of Consolidation

Subsidiaries are those investees, including structured entities, that the Group controls because the Group (i) has power to direct the relevant activities of the investees that significantly affect their returns, (ii) has exposure, or rights, to variable returns from its involvement with the investees, and (iii) has the ability to use its power over the investees to affect the amount of the investor's returns. The existence and effect of substantive rights, including substantive potential voting rights, are considered when assessing whether the Group has power over another entity. For a right to be substantive, the holder must have a practical ability to exercise that right when decisions about the direction of the relevant activities of the investee need to be made. The Group may have power over an investee even when it holds less than the majority of the voting power in an investee. In such a case, the Group assesses the size of its voting rights relative to the size and dispersion of holdings of the other vote holders to determine if it has de-facto power over the investee's activities or apply only in exceptional circumstances, do not prevent the Group from controlling an investee. Subsidiaries are consolidated from the date on which control is transferred to the Group and are deconsolidated from the date on which control ceases.

All intragroup balances, transactions and unrealised gains on transactions between the Group companies are eliminated. Unrealised losses are also eliminated unless the transactions provide evidence of an impairment of the asset transferred. Where necessary, accounting policies in subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. The interests of non-controlling shareholders may be initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement basis is made on an acquisition-by-acquisition basis. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. Any difference between the purchase consideration and the carrying amount of non-controlling interest acquired is recorded as a capital transaction directly in equity. The Group recognises the difference between sales consideration and the carrying amount of non-controlling interest sold as a capital transaction in the statement of changes in equity.

When the Group grants put options to non-controlling interest shareholders at the date of acquiring control of a subsidiary the Group considers the terms of transaction to conclude on accounting treatment.

Where the terms of the put option provide the Group with a present ownership interest in the shares subject to the put, the shares are accounted for as acquired. Financial liabilities in respect of put options are recorded at fair value at the time of entering into the options, and are subsequently remeasured to fair value with the change in fair value recognised in the income statement.

When the terms of the put option do not provide a present ownership interest in the shares subject to the put, the Group determined that its accounting policy is to partially recognise non-controlling interests and to account such put options as the following:

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

- 2) Significant Accounting Policies (continued)
- v) Basis of Consolidation (continued)
- The Group determines the amount recognised for the non-controlling interest, including its share of profits and losses (and other changes in equity) of the subsidiary for the period;
- The Group derecognises the non-controlling interest as if it was acquired at that date;
- The Group records the fair value of financial liability in respect of put options; and
- The Group accounts for the difference between the non-controlling interest derecognised and the fair value of financial liability as a change in the non-controlling interest as an equity transaction.

When the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- Derecognises the carrying amount of any non-controlling interest;
- Derecognises the cumulative translation differences, recorded in equity;
- Recognises the fair value of the consideration received;
- Recognises the fair value of any investment retained;
- Recognises any surplus or deficit in profit or loss;
- Reclassifies the parent's share of components previously recognised in other comprehensive income/loss to profit or loss or retained earnings, as appropriate.
- vi) Foreign Currency Translation

Functional and Presentation Currency

The presentation currency for the purpose of these consolidated financial statements of the Group is the US dollar because the presentation in US dollars is convenient for the major current and potential users of the Group's financial statements.

The functional currency of the Group's entities is the currency of their primary economic environment. The functional currencies of the Group's entities are the Russian rouble, US dollar, Euro, Romanian lei and Canadian dollar.

Transactions and Balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at period end exchange rates are generally recognised in profit or loss. They are deferred in other comprehensive income/loss if they relate to qualifying cash flow hedges and qualifying net investment hedges.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the date of the initial transactions.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

vi) Foreign Currency Translation (continued)

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Foreign exchange differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss.

Group Companies

The results and financial position of the Group companies that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities are translated at the period-end exchange rates;
- Income and expenses are translated at weighted average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions);
- All resulting exchange differences are recognised in other comprehensive income/loss.
- vii) Business Combination and Goodwill

Acquisition of Subsidiaries

Business combinations are accounted for using the acquisition method. The consideration for the acquisition is measured at the aggregate of the fair values of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in profit or loss as incurred. Where applicable, the consideration for the acquisition includes any asset or liability resulting from a contingent consideration arrangement, measured at its acquisition-date fair value. Subsequent changes in such fair values are adjusted against the cost of acquisition where they qualify as measurement period adjustments. All other subsequent changes in the fair value of contingent consideration classified as an asset or liability are accounted for in accordance with relevant IFRS. Where a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to fair value at the acquisition date and the resulting gain or loss, if any, is recognised in profit or loss.

Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

The measurement period is the period from the date of acquisition to the date the Group obtains complete information about facts and circumstances that existed as of the acquisition date and is subject to a maximum of one year.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

vii) Business Combination and Goodwill (continued)

Good will

Goodwill arising in a business combination is recognised as an asset at the date that control is acquired. Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any noncontrolling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the identifiable assets acquired and the liabilities assumed.

If, after reassessment, the Group's interest in the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. On disposal of a subsidiary, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

viii) Cash and Cash Equivalents

Cash and cash equivalents include cash in hand and at banks, demand deposits and other short-term highly liquid investments with original maturities of three months or less. Cash and cash equivalents are carried at fair value.

ix) Financial Assets

Initial Recognition and Measurement

The Group classifies its financial assets into the following categories: financial assets at amortised cost, financial assets at fair value through other comprehensive income (FVOCI) and financial assets at fair value through profit or loss (FVPL). The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristic and the Group's business model for managing the asset.

Financial assets are initially recognised at fair value plus, in the case of a financial asset not at FVPL, directly attributable transaction costs. Trade and other receivables, which do not contain a significant financing component, are initially measured at transaction price determined in accordance with IFRS 15.

Financial Assets at Amortised Cost

The Group classifies its financial assets at amortised cost if both of the following criteria are met: a) the asset is held within a business model with the sole business objective to hold the asset in order to collect the contractual cash flows, and b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in the profit or loss when the asset is derecognised, modified or impaired.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ix) Financial Assets (continued)

Financial Assets at Fair Value through Other Comprehensive Income

The Group classifies its financial assets at FVOCI if both of the following conditions are met: a) the financial asset is held within a business model with the objective of both to collect contractual cash flows and selling, and b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For debt instruments at FVOCI interest income, foreign exchange gains and losses, impairment losses and reversals are recognised in the income statement. The remaining fair value changes are recognised in other comprehensive income/loss (OCI). Upon derecognition, the cumulative fair value change recognised in OCI is recycled to profit or loss.

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at FVOCI when they meet the definition of equity. The classification is determined on an instrument-by instrument basis. Gains and losses on these equity instruments are never recycled to profit or loss. Dividends are recognised in the income statement when the right of payment has been established, except when the Group benefits from such dividends as a recovery of part of the cost of a financial asset, in which case, such income is recorded in OCI. Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial Assets at Fair Value through Profit or Loss

Financial assets at FVPL include financial assets held for trading, financial assets designated at FVPL upon initial recognition, derivatives (unless they are designated as effective hedging instruments) and other financial assets that are not qualified for measurement at amortised cost or at FVOCI.

Financial assets at FVPL are carried in the statement of financial position at fair value with net changes in fair value recognised in the income statement. Dividends on the equity instruments included in this category are also recognised in the income statement when the right of payment has been established.

Derivatives

Derivatives are financial instruments that change their values in response to changes in the underlying variable, require no or little net initial investment and are settled at a future date. Derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative. Derivatives are primarily used to manage exposures to foreign exchange risk, interest rate risk and other market risks. Derivatives are subsequently remeasured at fair value on a regular basis and at each reporting date. The method of the resulting gain or loss recognition depends on whether the derivative is designated as a hedging instrument.

Hedge Accounting

For the purpose of hedge accounting, derivatives are designated as instruments hedging the exposure to changes in the fair value of a recognised asset or liability (fair value hedges) and as instruments hedging the exposure to variability in cash flows attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedges). At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group applies hedge accounting and the risk management objective and strategy for undertaking the hedge. The Group assesses effectiveness of the hedges at inception and verifies at regular intervals and at least on a quarterly basis, using prospective and retrospective testing.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ix) Financial Assets (continued)

Impairment of Financial Assets

The Group recognises an allowance for expected credit losses for all financial assets, except those measured at FVPL. The Group's financial assets mostly comprise trade and other receivables measured at amortised costs, which do not contain a significant financing component. For such financial assets, the Group applies a simplified approach in calculating ECL permitted by IFRS 9. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECL at each reporting date. The Group has established a provision matrix based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

x) Inventories

Inventories are stated at the lower of cost and net realisable value. The cost of inventories is determined on the weighted average basis and includes all costs in bringing the inventory to its present location and condition. The cost of work in progress and finished goods includes the purchase costs of raw materials and conversion costs such as direct labour and an allocation of fixed and variable production overheads. The purchase costs comprise the purchase price, transport, handling and other costs directly attributable to the acquisition of inventories.

Net realisable value represents the estimated selling price for inventories less estimated costs to completion and selling costs. Where appropriate, an allowance for obsolete and slow-moving inventory is recognised. An allowance for impairment of inventory to their net realisable value and an allowance for obsolete and slow-moving inventory are included in the consolidated income statement as cost of sales.

xi) Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and impairment losses, if any.

Depreciation is calculated on a straight-line basis. Average depreciation periods, which represent estimated useful economic lives of respective assets, are as follows:

Land	Not depreciated
Buildings	8-150 years
Machinery and equipment	5-30 years
Other	2-15 years

Costs incurred to replace a component of an item of property, plant and equipment that is recognised separately, including major inspection and overhaul expenditure, are capitalised. Subsequent costs are capitalised only when it is probable that future economic benefits associated with the item will flow to the Group and the costs can be measured reliably. All other repair and maintenance costs are recognised in the profit or loss as an expense when incurred.

xii) Intangible Assets (Other than Goodwill)

Intangible assets (other than goodwill) are stated at cost less accumulated amortisation and impairment losses, if any. The useful lives of intangible assets are assessed as either finite or indefinite.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xii) Intangible Assets (Other than Goodwill) (continued)

Intangible assets with finite lives are amortised over the useful economic life using the straight-line method over the period up to 20 years. Amortisation period and amortisation method for an intangible asset with a finite life are reviewed at least at each year end. Changes in expected useful life or expected pattern of consumption of future economic benefits embodied in the asset are treated as changes in accounting estimates. Amortisation expense of intangible assets is recognised in the income statement in the expense category consistent with the function of an intangible asset.

Intangible assets with indefinite useful lives are not amortised, they are tested for impairment annually either individually or at the cash-generating unit level.

Research and Development

Costs incurred on development (relating to design and testing of new or improved products) are recognised as intangible assets only when the Group can demonstrate technical feasibility of completing intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, availability of resources to complete and ability to measure reliably the expenditure during the development. Other development expenditures are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Development costs that have been capitalised are amortised from commencement of commercial production of the product on a straight-line basis over the period of its expected benefit. The carrying value of development costs is reviewed for impairment annually when the asset is not yet in use or more frequently when an indication of impairment arises during the reporting year.

xiii) Impairment of Goodwill and Other Non-Current Assets

Goodwill, intangible assets with indefinite useful life and intangible assets not yet available for use are reviewed for impairment annually or more frequently if events or changes in circumstances indicate that their carrying amount may be impaired. Other non-current assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An assessment is made at each reporting date to determine whether there is an objective evidence that an asset or a group of assets may be impaired. When there is an indication that an asset may be impaired, the recoverable amount is assessed and, when impaired, the asset is written down to its recoverable amount, which is the higher of the fair value less costs to sell and the value in use.

Fair value less costs to sell is the amount obtainable from the sale of an asset in an orderly transaction between market participants, after deducting any direct incremental disposal costs. Value in use is the present value of estimated future cash flows expected to arise from continuing use of an asset and from its disposal at the end of its useful life.

In assessing value in use, estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of time value of money and risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, recoverable amount is determined for the cash-generating unit to which the asset belongs.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xiii) Impairment of Goodwill and Other Non-Current Assets (continued)

Impairment loss is recognised for the difference between estimated recoverable amount and carrying value. Carrying amount of an asset is reduced to its estimated recoverable amount and the amount of loss is included in the income statement for the period.

Impairment loss recognised for non-current assets (other than goodwill) is reversed if there is an indication that impairment loss recognised in prior periods may no longer exist or may be decreased and if subsequent increase in recoverable amount can be related objectively to event occurring after the impairment loss was recognised. Impairment loss is only reversed to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognised. Impairment loss recongnised for goodwill is not reversed in subsequent period.

xiv) Financial Liabilities

Initial Recognition and Measurement

Financial liabilities include trade and other payables, interest-bearing loans and borrowing, financial liabilities at FVPL, derivatives and other liabilities. Financial liabilities are initially recognised at fair value minus, in the case of a financial liability not at FVPL, directly attributable transaction costs.

Subsequent Measurement

Financial liabilities are subsequently measured at amortised cost using the effective interest method, except for financial liabilities at FVPL and derivatives designated as hedging instruments in an effective hedge.

Interest-Bearing Loans and Borrowings

After the initial recognition, interest-bearing loans and borrowings are measured at amortised cost using the effective interest method. Any difference between the initial fair value less transaction costs and the redemption amount is recognised within finance costs over the period of the borrowings. Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of cost of respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

xv) Leases

The determination of whether an arrangement is, or contains a lease is based on the substance of the arrangement at the inception date of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

Finance leases, which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are recognised at the commencement of the lease term as assets and liabilities at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to finance costs in the income statement.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xv) Leases (continued)

The depreciation policy for depreciable leased assets is consistent with that for depreciable assets which are owned. If there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term or its useful life.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the income statement on a straight-line basis over the lease term.

xvi) Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that outflow of resources will be required to settle an obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

If the effect of time value of money is material, provisions are determined by discounting expected future cash flows at a pre-tax rate that reflects current market assessments of time value of money and where appropriate, risks specific to the liability. Where discounting is used, increase in provision due to the passage of time is recognised as a finance cost.

xvii) Employee Benefits Liability

Short-Term Employee Benefits

Short-term employee benefits paid by the Group include wages, salaries, social security contributions, paid annual leave and paid sick leave, bonuses and non-monetary benefits (such as medical care). Such employee benefits are accrued in the period in which the associated services are rendered by employees of the Group.

Defined Benefit Obligations

The Group companies provide a number of post-employment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, financial support to pensioners, jubilee payments, etc.).

All post-employment benefit plans are unfunded. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period stipulated in the plan. The liability recognised in the statement of financial position in respect of post-employment and other long-term employee benefits is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets (if any). The defined benefit obligation is calculated by external consultants using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using yields on high-quality corporate bonds or, in countries where there is no deep market in such bonds, yields on government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related obligation.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xvii) Employee Benefits Liability (continued)

Net benefit expense charged to the income statement consists of current service cost, interest expense, past service cost, gains and losses from settlement. Past service costs are recognised in profit or loss on the earlier of: the date of the plan amendment or curtailment, and the date when the Group recognises restructuring-related costs. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are reflected in other comprehensive income/loss in the period in which they arise.

Defined Contribution Plans

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

xviii) Government Grants

Grants from the government are recognised when there is a reasonable assurance that the grant will be received and the Group will comply with all conditions attached to it.

When the grant relates to an expense item, it is recognised as the decrease of respective expenses over the periods when the costs, which the grant is intended to compensate, are incurred.

Government grants relating to assets are included in non-current liabilities as deferred government grants and are credited to other income in the income statement on a straight-line basis over the expected lives of the related assets.

xix) Deferred Income Tax

Deferred income taxes are provided for all temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes, except where deferred income tax arises from initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit or loss. Deferred income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income/loss or directly in equity, in which case, it is also recognised in other comprehensive income/loss or directly in equity.

Deferred tax assets are recorgnised only to the extent that it is probable that taxable profit will be available to utilise deductible temporary differences and losses.

Deferred tax assets and liabilities are measured at tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on the tax rates that have been enacted or substantively enacted at the end of the reporting period.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where timing of reversal of temporary differences can be controlled and it is probable that temporary differences will not be reversed in the near future.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xx) Equity

Share Capital

Ordinary shares are classified as equity. External costs directly attributable to the issue of new shares, other than on a business combination, are shown as a deduction from proceeds in equity.

Treasury Shares

Own equity instruments which are acquired by the Group (treasury shares) are deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of treasury shares.

Dividends

Dividends are recognised as a liability and deducted from equity in the period in which they are approved by the shareholders. Retained earnings legally distributable are based on the amounts available for distribution in accordance with the applicable legislation and as reflected in the statutory financial statements of the individual entities of the Group. These amounts may differ significantly from the amounts calculated on the basis of IFRS.

xxi) Revenue

Revenue Recognition

Revenue is income arising in the course of ordinary activities of the Group. Revenue is recognised when control of the goods or services is transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services, excluding amounts collected on behalf of third parties. In determining the revenue amount, the Group considers the effects of variable consideration, the existence of significant financing components and consideration payable to the customer, if any. Revenue is recognised net of discounts, sales rebates, value-added taxes, other similar items.

Sales of Goods

The Group's performance obligation generally consists of the promise to sell pipe to the customers. Revenue is recognised at a point in time when control of the products has transferred, being when the products are delivered, the customer has full discretion over the goods, and there is no unfulfilled obligation that could affect the customer's acceptance of the products. The delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied. For product sales where the customer requests a bill-and-hold arrangement, revenue is recognized when the product is ready for the physical transfer to the customer. Products are specific to each customer's order, are separately identified and the Group does not have the ability to use or direct the product to another customer. The Group's sales terms generally do not allow for a right of return except for matters related to any manufacturing defects on its part.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xxi) Revenue (continued)

Transportation Services

When the contract with a customer contains a promise to deliver the goods to the customer the Group usually engages a third party contractor to provide transportation services. These services are rendered to the customers before or after they obtain control over the goods. The accounting for these services depends on when control over the goods is passed to the customer. Transportation services rendered by the Group before control over the goods is transferred to the customers do not represent a separate performance obligation. The Group acts as a principal in such arrangements and revenue is recognised when the goods are delivered. If the Group provides transportation services after obtaining control over the goods by the customers, the Group acts as an agent rather than a principal. Thus, the Group allocates the transaction price to respective performance obligations and recognise revenue from these services and the associated costs on a net basis.

Contract Costs

Incremental costs of obtaining a contract, such as sales commissions, are capitalised if they are expected to be recovered. Incremental costs include only those costs that would not have been incurred if the contract had not been obtained. Costs to fulfill a contract are capitalised if they relate directly to a contract and to future performance, and they are expected to be recovered unless other standards are required to account for such costs differently.

xxii) Earnings per Share

Basic Earnings per Share

Basic earnings/loss per share is calculated by dividing the profit/loss attributable to equity holders of the parent by the weighted average number of ordinary shares outstanding during the reporting period, excluding treasury shares.

Diluted Earnings per Share

Diluted earnings/loss per share adjusts the figures used in the determination of basic earnings/loss per share to take into account:

- The after income tax effect of interest and other costs associated with dilutive potential ordinary shares, and
- The weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all potentially dilutive ordinary shares.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information

Operating segments reflect the Group's management structure and the way financial information is regularly reviewed. The Group has three reportable segments:

- Russia segment represents the results of operations and financial position of plants located in the Russian Federation, a plant in the Sultanate of Oman (till the disposal date, Note 11), a finishing facility in Kazakhstan, oilfield service companies in Russia and Canada, traders located in Russia, the United Arab Emirates and Switzerland;
- Americas segment represents the results of operations and financial position of plants and traders located in the United States of America and Canada;
- Europe segment represents the results of operations and financial position of plants located in Romania and traders located in Italy and Germany.

Management monitors the operating results of the segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on Adjusted EBITDA. Adjusted EBITDA is determined as profit/(loss) for the period excluding finance costs and finance income, income tax (benefit)/expense, depreciation and amortisation, foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions (except for provisions for bonuses), (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associates and other non-cash, non-recurring and unusual items. Group financing (including finance costs and finance income) is managed on a group basis and is not allocated to operating segments. Inter-segment revenues are eliminated upon consolidation.

In 2018, the Group changed the composition of reportable segments to reflect changes in its internal management structure. The comparative information in these consolidated financial statements was adjusted accordingly.

The tables below disclose the information regarding the Group's reportable segments' results. The reconciliation from the operating profit to the profit/(loss) before tax is provided in the income statement:

Year ended December 31, 2018	Russia	Americas	Europe	TOTAL
Revenue	3,442,047	1,349,202	307.527	5,098,776
Cost of sales	(2,790,143)	(1,167,580)	(225,454)	(4,183,177)
Gross profit	<u>651,904</u>	181,622	82,073	915,599
Selling, general and administrative expenses	(366,094)	(76,568)	(52,941)	(495,603)
Other operating income/(expenses)	(13,580)	(7,796)	(1,065)	(22,441)
Operating profit	272,230	97,258	28,067	397,555
Add back:				
Depreciation and amortisation	188,332	60,489	19,441	268,262
(Gain)/loss on disposal of property, plant and				
equipment	3,937	7,659	140	11,736
Movements in allowances and provisions	3,361	(1,688)	3,156	4,829
Other expenses	17,067	103	662	17,832
-	212,697	66,563	23,399	302,659
Adjusted EBITDA	484,927	163,821	51,466	700,214

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information (continued)

Year ended December 31, 2017	Russia	Americas	Europe	TOTAL
Revenue	3,162,589	989,304	241,760	4,393,653
Cost of sales	(2,507,612)	(819,670)	(193,877)	(3,521,159)
Gross profit	654,977	169,634	47,883	872,494
Selling, general and administrative expenses	(395,341)	(76,832)	(38,001)	(510,174)
Other operating income/(expenses)	(33,094)	(406)	(296)	(33,796)
Operating profit	226,542	92,396	9,586	328,524
Add back:				
Depreciation and amortisation	191,522	54,296	17,297	263,115
(Gain)/loss on disposal of property, plant and	-)-		.,	, -
equipment	14,302	6,421	347	21,070
Movements in allowances and provisions	13,155	(39,305)	651	(25,499)
Other expenses	17,229	-	484	17,713
-	236,208	21,412	18,779	276,399
Adjusted EBITDA	462,750	113,808	28,365	604,923

The following table presents the revenues from external customers for each group of products and services:

Sales to external customers	Seamless pipes	Welded pipes	Other operations	TOTAL
Year ended December 31, 2018	3,550,125	1,271,529	277,122	5,098,776
Year ended December 31, 2017	3,074,224	1,086,360	233,069	4,393,653

The Group sells products to major oil and gas companies. In the year ended December 31, 2018, revenue from the external customer with the share of more than 10% of the consolidated revenue amounted to 707,442 (year ended December 31, 2017: 788,151). This revenue related to the Russia operating segment.

The following tables present the geographical information. The revenue information is disclosed based on the location of the customer. Non-current assets are disclosed based on the location of the Group's assets and include property, plant and equipment, intangible assets and goodwill.

	Russia	Americas	Europe	Middle East and North Africa	CIS	Eastern Asia, South- Eastern Asia and Far East	Sub- Saharan Africa	TOTAL
Revenue								
For the year ended December 31,								
2018	2,748,838	1,628,341	320,419	201,245	190,335	8,617	981	5,098,776
For the year ended December 31,								
2017	2,668,113	1,158,683	261,075	144,633	152,624	8,450	75	4,393,653
Non-current assets								
December 31, 2018	1,462,544	580,676	282,418	358	6,854	-	-	2,332,850
December 31, 2017	1,725,145	596,470	293,586	77,318	8,139	-	-	2,700,658

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

4) Cost of Sales

	Year ended December 31,		
	2018	2017	
Raw materials and consumables	2,805,383	2,380,346	
Staff costs including social security	530,666	498,054	
Energy and utilities	302,124	290,810	
Depreciation and amortisation	249,699	246,929	
Freight	82,291	61,335	
Contracted manufacture	78,706	77,158	
Repairs and maintenance	74,700	67,917	
Professional fees and services	37,056	31,428	
Taxes	26,750	26,919	
Rent	8,927	9,676	
Insurance	3,991	3,483	
Travel	1,917	1,540	
Communications	429	384	
Other	2,516	2,888	
Total production cost	4,205,155	3,698,867	
Change in own finished goods and work in progress	(67,827)	(165,272)	
Cost of sales of externally purchased goods	42,390	29,977	
Obsolete stock, write-offs/(reversal of allowances)	3,459	(42,413)	
Cost of sales	4,183,177	3,521,159	

5) Selling and Distribution Expenses

	Year ended December 31,		
	2018	2017	
Freight	130,618	144,696	
Staff costs including social security	39,234	39,443	
Professional fees and services	19,621	32,873	
Consumables	18,986	15,923	
Impairment of receivables and write-offs	4,305	8,148	
Rent	3,868	4,362	
Travel	2,278	2,263	
Depreciation and amortisation	1,722	9,418	
Utilities and maintenance	1,455	1,494	
Insurance	909	659	
Communications	299	317	
Other	7,485	999	
	230,780	260,595	

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

6) General and Administrative Expenses

	Year ended December 31,	
	2018	2017
Staff costs including social security	141,522	135,895
Professional fees and services	47,071	42,022
Rent	12,511	14,588
Depreciation and amortisation	11,087	6,233
Utilities and maintenance	10,566	8,902
Travel	5,810	4,499
Insurance	5,455	5,148
Communications	5,144	4,780
Transportation	3,437	3,545
Taxes	2,467	1,526
Consumables	2,431	2,135
Other	2,909	1,960
	250,410	231,233

7) Research and Development Expenses

	Year ended December 31,		
	2018 2017		
Staff costs including social security	3,305	5,552	
Depreciation and amortisation	2,200	3,277	
Other	1,752	2,636	
	7,257	11,465	

8) Other Operating Income and Expenses

	Year ended D	Year ended December 31,		
	2018	2017		
Social and social infrastructure maintenance expenses	10,021	9,767		
Sponsorship and charitable donations	7,811	7,946		
Taxes and penalties	3,380	5,037		
(Gain)/loss on disposal of property, plant and equipment	11,736	21,070		
Other (income)/expenses	(10,507)	(10,024)		
	22,441	33,796		

9) Income Tax

	Year ended December 31,		
	2018 2017		
Current income tax	27,482	25,580	
Adjustments in respect of income tax of previous periods	(339)	(760)	
Deferred tax related to origination and reversal of temporary differences	17,829	23,111	
	44,972	47,931	

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

9) Income Tax (continued)

The income tax is different from that which would be obtained by applying the Russian Federation statutory income tax rate to profit/(loss) before tax. A reconciliation between the theoretical and the actual tax is provided below:

	Year ended December 31,	
	2018	2017
Profit/(loss) before tax	44,815	77,500
Theoretical tax at statutory rate in Russia of 20%	8,963	15,500
Adjustments in respect of income tax of previous periods	(339)	(760)
Effect of items which are not deductible for taxation purposes or not taxable	10,650	924
Effect of different tax rates in countries other than Russia	5,627	19,698
Tax on dividends distributable inside the Group	4,711	6,427
Deferred income tax benefit due to changes in tax rates	-	(2,083)
Deferred tax expenses arising from write-down of deferred tax assets	3,320	3,803
Disposal of subsidiaries	5,714	-
Effect of unrecognised tax credits, tax losses and temporary differences of previous		
periods	6,139	4,385
Other	187	37
	44,972	47,931

In December 2017, the U.S. enacted significant changes to U.S. tax law. The reform was complex and considered a number of changes to the U.S. corporate income tax system by, among other things, a permanent reduction in the corporate income tax rate from 35% to 21% and introduction of transition tax on unremitted earnings. The rate reduction was effective from January 1, 2018. Transition tax on unremitted earnings was effective for the year ended December 31, 2017. In February 2017, the Omani government introduced certain amendments to the income tax law, in particular, the standard rate of income tax was increased to 15% from 12%. The Group revised its calculation of income tax, accordingly.

Deferred income tax assets and liabilities, their movements for the year ended December 31, 2018 were as follows:

	2018	Reflected in the income statement	Reflected in other com- prehensive income/(loss)	Disposal of subsidiaries	Currency translation adjustments	2017
Valuation and depreciation of property, plant and						
equipment	(158,783)	(2,055)	-	4,818	19,027	(180,573)
Valuation and amortisation of intangible assets	(16,099)	(6,513)	-	-	(67)	(9,519)
Tax losses available for offset	233,507	(3,020)	28,993	(7,771)	(34,585)	249,890
Valuation of inventory	2,548	(4,202)	-	(196)	883	6,063
Provisions and accruals	14,425	148	-	-	(1,579)	15,856
Finance lease obligations	10,156	778	-	-	(1,743)	11,121
Valuation of accounts receivable	2,901	321	-	(5)	(1,022)	3,607
Other	(8,324)	(3,286)	1,176	-	796	(7,010)
	80,331	(17,829)	30,169	(3,154)	(18,290)	89,435
Reflected in the statement of financial position as follows:						
Deferred tax liability	(91,617)	(23,019)	1,176	-	12,050	(81,824)
Deferred tax asset	171,948	5,190	28,993	(3,154)	(30,340)	171,259

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

9) Income Tax (continued)

Deferred income tax assets and liabilities, their movements for the year ended December 31, 2017 were as follows:

	2017	Reflected in the income statement	Reflected in other com- prehensive income/(loss)	Disposal of subsidiaries	Currency translation adjustments	2016
Valuation and depreciation of property, plant and						
equipment	(180,573)	35,662	-	-	(7,352)	(208,883)
Valuation and amortisation of intangible assets	(9,519)	(3,373)	-	-	-	(6,146)
Tax losses available for offset	249,890	(21,697)	(3,538)	-	9,171	265,954
Valuation of inventory	6,063	(19,540)	-	-	(104)	25,707
Provisions and accruals	15,856	1,830	-	-	485	13,541
Finance lease obligations	11,121	(527)	-	-	642	11,006
Valuation of accounts receivable	3,607	895	-	-	(207)	2,919
Other	(7,010)	(16,361)	-	-	(102)	9,453
	89,435	(23,111)	(3,538)	-	2,533	113,551
Reflected in the statement of financial position as follows:						
Deferred tax liability	(81,824)	13,573	-	-	(5,566)	(89,831)
Deferred tax asset	171,259	(36,684)	(3,538)	-	8,099	203,382

Deferred tax assets were recognised for tax losses carry-forward to the extent that the realisation of the related tax benefit through future taxable profits is probable.

As at December 31, 2018, the Group has not recognised deferred tax liability in respect of 611,273 (December 31, 2017: 702,716) temporary differences associated with investments in subsidiaries as the Group is able to control the timing of the reversal of those temporary differences and does not expect to reverse them in the foreseeable future.

10) Earnings per Share

	Year ended E	December 31,	
	2018 2017		
Profit/(loss) for the period attributable to the equity holders of the parent entity Weighted average number of ordinary shares outstanding	2,409 1,033,044,169	35,548 1,033,081,789	
Earnings/(loss) per share attributable to the equity holders of the parent entity, basic and diluted (in US dollars)	0.00	0.03	

11) Disposal of Subsidiaries

In 2018, the Group partially disposed of its ownership interest in TMK Gulf International Pipe Industry L.L.C., the company based in the Sultanate of Oman and specialising in the manufacture of welded steel pipes for 2,312. The Group recognised loss in the amount of 23,732 on this transaction (including the reclassification of foreign currency reserves related to the hedged net investment in foreign operation from other comprehensive loss to the income statement in the amount of 23,345, net of tax in the amount of 5,836). The carrying value of net assets and liabilities derecognised amounted to 8,736, the carrying value of non-controlling interests derecognised was 4,294. The retained ownership interest in the company was recorded at its fair value of 1,743 as part of investments in associates and joint ventures.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

12) Cash and Cash Equivalents

Cash and cash equivalents were denominated in the following currencies:

	December 31, 2018	December 31, 2017
Russian rouble	358,464	329,513
US dollar	23,807	154,932
Euro	7,003	5,177
Romanian lei	1,008	616
Other currencies	1,553	947
	391,835	491,185

The above cash and cash equivalents consisted primarily of cash at banks. As at December 31, 2018, the restricted cash amounted to 1,788 (December 31, 2017: 13,746).

13) Trade and Other Receivables

	December 31, 2018	December 31, 2017
Trade receivables	859,206	836,612
Officers and employees	510	899
Other accounts receivable	54,352	72,907
	914,068	910,418
Allowance for expected credit losses ⁽ⁱ⁾	(35,922)	(39,098)
	878,146	871,320

⁽ⁱ⁾ Allowance for doubtful debts in accordance with IAS 39 as at December 31, 2017.

14) Inventories

	December 31, 2018	December 31, 2017
Finished goods	293,473	313,846
Work in progress	385,477	394,165
Raw materials and supplies	429,372	458,034
	1,108,322	1,166,045
Allowance for net realisable value of inventory	(42,065)	(44,842)
	1,066,257	1,121,203

The amount of inventories carried at net realisable value was 102,844 as at December 31, 2018 (December 31, 2017: 125,544).

The following table summarises the changes in the allowance for net realisable value of inventory:

	Year ended D	December 31,	
	2018 2017		
Balance at January 1	44,842	85,948	
Increase/(decrease) in allowance	888	(42,144)	
Disposal of subsidiaries	(1,189)	-	
Currency translation adjustments	(2,476)	1,038	
Balance at December 31	42,065	44,842	

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

15) Prepayments and Input VAT

	December 31, 2018	December 31, 2017
Prepayments for VAT, input VAT	70,143	79,897
Prepayments for services, inventories	19,795	28,376
Prepayments for other taxes	926	9,000
Prepayments for insurance	2,768	2,627
Other prepayments	7,604	5,485
	101,236	125,385
Allowance for impairment	(73)	(107)
-	101,163	125,278

16) Property, Plant and Equipment

Movement in property, plant and equipment for the year ended December 31, 2018 was as follows:

	Land and buildings	Machinery and equipment	Transport and motor vehicles	Furniture and fixtures	Other	Construc- tion in progress	TOTAL
Cost							
Balance at January 1, 2018	1,022,100	2,858,148	52,060	70,260	5,136	230,623	4,238,327
Additions	-	-	-	-	-	303,713	303,713
Assets put into operation	90,566	180,098	36,782	8,486	1,862	(317,794)	-
Disposals	(7,856)	(59,633)	(3,077)	(938)	-	(1,942)	(73,446)
Disposal of subsidiaries	(18,337)	(84,903)	(426)	(448)	-	-	(104,114)
Reclassifications	(37)	(160)	(12)	163	-	46	-
Currency translation adjustments	(136,944)	(347,267)	(9,651)	(8,625)	(869)	(29,865)	(533,221)
Balance at December 31, 2018	949,492	2,546,283	75,676	68,898	6,129	184,781	3,831,259
Accumulated depreciation and							
<u>impairment</u>							
Balance at January 1, 2018	(285,450)	(1,444,657)	(25,230)	(53,219)	(1,245)	-	(1,809,801)
Depreciation charge	(25,349)	(225,955)	(5,415)	(5,378)	(211)	-	(262,308)
Disposals	3,728	47,995	1,697	894	-	-	54,314
Disposal of subsidiaries	4,309	24,979	344	353	-	-	29,985
Reclassifications	(1,015)	1,019	5	(9)	-	-	-
Currency translation adjustments	36,986	185,494	3,266	5,859	139	-	231,744
Balance at December 31, 2018	(266,791)	(1,411,125)	(25,333)	(51,500)	(1,317)	-	(1,756,066)
Net book value at December 31, 2018	682,701	1,135,158	50,343	17,398	4,812	184,781	2,075,193
Net book value at January 1, 2018	736,650	1,413,491	26,830	17,041	3,891	230,623	2,428,526

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

16) Property, Plant and Equipment (continued)

Movement in property, plant and equipment for the year ended December 31, 2017 was as follows:

	Land and buildings	Machinery and equipment	Transport and motor vehicles	Furniture and fixtures	Other	Construc- tion in progress	TOTAL
Cost							
Balance at January 1, 2017	961,277	2,602,772	48,074	59,123	4,568	179,347	3,855,161
Additions	-	-	-	-	-	288,659	288,659
Assets put into operation	18,201	213,477	6,062	9,782	346	(247,868)	-
Disposals	(4,673)	(73,964)	(5,491)	(901)	-	(192)	(85,221)
Reclassifications	372	(415)	1	(49)	-	91	-
Currency translation adjustments	46,923	116,278	3,414	2,305	222	10,586	179,728
Balance at December 31, 2017	1,022,100	2,858,148	52,060	70,260	5,136	230,623	4,238,327
Accumulated depreciation and							
impairment							
Balance at January 1, 2017	(253,851)	(1,232,397)	(23,677)	(46,675)	(1,024)	-	(1,557,624)
Depreciation charge	(26,522)	(221,012)	(3,173)	(5,680)	(193)	-	(256,580)
Disposals	2,477	52,089	3,228	841	-	-	58,635
Impairment	(613)	(1,002)	-	-	-	-	(1,615)
Reversal of impairment	5,280	10,983	-	-	-	-	16,263
Reclassifications	(248)	246	-	2	-	-	-
Currency translation adjustments	(11,973)	(53,564)	(1,608)	(1,707)	(28)	-	(68,880)
Balance at December 31, 2017	(285,450)	(1,444,657)	(25,230)	(53,219)	(1,245)	-	(1,809,801)
Net book value at December 31, 2017	736,650	1,413,491	26,830	17,041	3,891	230,623	2,428,526
Net book value at January 1, 2017	707,426	1,370,375	24,397	12,448	3,544	179,347	2,297,537

Capitalised Borrowing Costs

The amount of borrowing costs capitalised during the year ended December 31, 2018 was 2,977 (year ended December 31, 2017: 2,910). The capitalisation rate was 8.3% (year ended December 31, 2017: 8.8%).

Leased Assets

The carrying value of the leased assets included in property, plant and equipment was as follows:

	December 31, 2018	December 31, 2017
Machinery and equipment	42,471	51,126
Transport, motor vehicles and other assets	29,401	5,305
	71,872	56,431

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

17) Goodwill and Other Intangible Assets

Movement in intangible assets for the year ended December 31, 2018 was as follows:

	Patents and trademarks	Goodwill	Software	Customer and supplier relationships	Proprietary technology	Other	TOTAL
Cost							
Balance at January 1, 2018	211,046	557,563	20,939	473,668	19,379	9,519	1,292,114
Additions	158	-	8,978	-	322	7,436	16,894
Disposals	(285)	-	(61)	(1,368)	(405)	(474)	(2,593)
Disposal of subsidiaries	-	(38,439)	(4)) –	-	-	(38,443)
Reclassifications	249	-	5	-	-	(254)	-
Currency translation adjustments	(392)	(8,556)	(3,466)	-	(1)	(1,829)	(14,244)
Balance at December 31, 2018	210,776	510,568	26,391	472,300	19,295	14,398	1,253,728
<u>Accumulated amortisation and</u> impairment							
Balance at January 1, 2018	(888)	(514,186)	(13,305)	(472,846)	(14, 100)	(4,657)	(1,019,982)
Amortisation charge	(248)	-	(3,189)	(826)	-	(986)	(5,249)
Impairment	-	(16,613)	-	-	-	-	(16,613)
Disposals	61	-	61	1,368	-	143	1,633
Disposal of subsidiaries	-	38,439	1	-	-	-	38,440
Reclassifications	(195)	-	(1)	- (-	196	-
Currency translation adjustments	179	2,249	2,453	4	-	815	5,700
Balance at December 31, 2018	(1,091)	(490,111)	(13,980)	(472,300)	(14,100)	(4,489)	(996,071)
Net book value at December 31, 2018	209,685	20,457	12,411	-	5,195	9,909	257,657
Net book value at January 1, 2018	210,158	43,377	7,634	822	5,279	4,862	272,132

Movement in intangible assets for the year ended December 31, 2017 was as follows:

	Patents and trademarks	Goodwill	Software	Customer and supplier relationships	Proprietary technology	Other	TOTAL
Cost							
Balance at January 1, 2017	210,522	554,426	12,692	473,668	18,650	7,781	1,277,739
Additions	90	-	7,292	-	729	2,265	10,376
Disposals	(83)	-	(78)	-	-	(364)	(525)
Reclassifications	402	-	193	-	-	(595)	-
Currency translation adjustments	115	3,137	840	-	-	432	4,524
Balance at December 31, 2017	211,046	557,563	20,939	473,668	19,379	9,519	1,292,114
Accumulated amortisation and							
impairment							
Balance at January 1, 2017	(602)	(491,543)	(11,793)	(464,201)	(14,100)	(3,963)	(986,202)
Amortisation charge	(218)	-	(897)	(8,644)	-	(832)	(10,591)
Impairment	-	(21,979)	-	-	-	-	(21,979)
Disposals	8	-	53	-	-	321	382
Reclassifications	(33)	-	-	-	-	33	-
Currency translation adjustments	(43)	(664)	(668)	(1)	-	(216)	(1,592)
Balance at December 31, 2017	(888)	(514,186)	(13,305)	(472,846)	(14,100)	(4,657)	(1,019,982)
Net book value at December 31, 2017	210,158	43,377	7,634	822	5,279	4,862	272,132
Net book value at January 1, 2017	209,920	62,883	899	9,467	4,550	3,818	291,537

Patents and trademarks include intangible assets with indefinite useful lives with the carrying value of 208,700 (December 31, 2017: 208,700).

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

17) Goodwill and Other Intangible Assets (continued)

The carrying amounts of goodwill and intangible assets with indefinite useful lives were allocated among cash-generating units as follows:

	December 31, 2018	December 31, 2017
American division	208,700	208,700
Oilfield subdivision	13,884	16,745
European division	5,465	5,713
Other cash-generating units	1,108	20,919
	229,157	252,077

Goodwill and intangible assets with indefinite useful lives were tested for impairment as at December 31, 2018. In performing impairment tests, the Group determined value in use of each of its cash-generating units. The value in use was calculated using cash flow projections based on the operating plans approved by management covering a period of five years with the adjustments to reflect the expected market conditions. Cash flows beyond five year period were extrapolated using zero growth rate.

The pre-tax discount rates used in the calculations are presented in the table below:

	December 31, 2018	December 31, 2017
American division	9.1 %	10.2 %
Middle East division	-	11.6 %
Oilfield subdivision	11.4 %	12.1 %
European division	10.8 %	11.1 %
Other cash-generating units	11.5 %	11.6 %

Discount rates represent the current market assessment of the risks specific to each CGU, taking into consideration the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and its operating segments and is derived from its weighted average cost of capital (WACC). As a result of the tests, the Group recognised an impairment loss in the amount of 14,415 in respect of goodwill of the Tagmet CGU (part of other CGUs). The specific assumptions used in the impairment test of the Tagmet CGU were as follows:

- forecast sales prices increase by 11%-11.5% in 2019 and remain stable thereafter;
- forecast sales volumes of seamless pipes increase by 7.5% in 2019, by 2.2% in 2020 and 2021 and remain stable thereafter;
- forecast sales volumes of welded pipes increase by 3.4% in 2019 and remain stable thereafter;
- forecast costs of production increase by 12.6% in 2019, by 1% in 2020 and 2021 and remain stable thereafter.

As at December 31, 2018, the Group determined that the recoverable amount of the Tagmet CGU was 290,272. It was the most sensitive to changes in prices and costs.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

18) Other Non-Current Assets

	December 31, 2018	December 31, 2017
Loans to related parties	15,360	30
Prepayments for acquisition of property, plant and equipment	10,617	12,126
Equity instruments at FVOCI ⁽ⁱ⁾	7,097	14,871
Restricted cash deposits for fulfillment of guaranties	4,207	4,156
Loans to employees	817	1,106
Long-term trade receivables	127	1,065
Other	9,293	8,063
	47,518	41,417
Allowance for impairment	(420)	(602)
	47,098	40,815

⁽ⁱ⁾ Available-for-sale financial assets in accordance with IAS 39 as at December 31, 2017.

19) Trade and Other Payables

	December 31, 2018	December 31, 2017
Trade payables	584,395	640,857
Accounts payable for property, plant and equipment	58,517	77,358
Liabilities for VAT	48,925	32,283
Payroll liabilities	19,255	20,351
Accrued and withheld taxes on payroll	12,336	12,196
Liabilities for property tax	5,768	6,399
Liabilities for acquisition of non-controlling interests in subsidiaries	5,023	5,153
Sales rebate payable	1,763	2,688
Liabilities for other taxes	1,112	938
Dividends payable	61	68
Other payables	6,392	8,949
	743,547	807,240

20) Other Current Liabilities

The Group transferred some of its intercompany debts in exchange for cash under factoring arrangements. In the year ended December 31, 2018, the net cash outflows from these transactions in the amount of 16,997 were reported as part of other cash movements from financing activities (year ended December 31, 2017: the net cash inflows in the amount of 116,224). The respective liability in the amount of 86,280 was included in other current liabilities as at December 31, 2018: (December 31, 2017: 114,765) (Note 24).

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

21) Provisions and Accruals

	December 31, 2018	December 31, 2017
Current		
Provision for bonuses	20,701	21,509
Accrual for long-service bonuses	11,874	12,429
Accrual for unused annual leaves	2,166	2,925
Current portion of employee benefits liability	1,967	1,968
Environmental provision	351	323
Other provisions	10,668	21,328
•	47,727	60,482
Non-current		
Accrual for unused annual leaves	13,085	14,892
Environmental provision	7,111	6,812
Provision for bonuses	1,056	744
Other provisions	3,003	3,006
-	24,255	25,454

Other provisions include provisions for taxes, legal costs and claims not covered by insurance.

22) Interest-Bearing Loans and Borrowings

	December 31, 2018	December 31, 2017
Current		
Bank loans	380,064	254,919
Interest payable	17,159	25,198
Current portion of non-current borrowings	437,098	89,761
Current portion of bearer coupon debt securities	71,973	231,367
Unamortised debt issue costs	(167)	(288)
	906,127	600,957
Non-current		
Bank loans	1,270,451	1,828,099
Bearer coupon debt securities	715,919	847,221
Unamortised debt issue costs	(8,218)	(11,831)
	1,978,152	2,663,489

Breakdown of the Group's interest-bearing loans and borrowings by currencies and interest rates was as follows:

Currencies	Interest rates	December 31, 2018	December 31, 2017
Russian rouble	Fixed interest rates	1,240,051	1,323,645
	Coupon	291,644	351,036
	Coupon	505,258	742,158
US dollar	Fixed interest rates	665,976	687,713
	Variable interest rates	81,857	84,124
	Fixed interest rates	40,646	287
Euro	Variable interest rates	58,847	75,483
		2,884,279	3,264,446

Unutilised Borrowing Facilities

As at December 31, 2018, the Group had unutilised borrowing facilities in the amount of 423,420 (December 31, 2017: 812,278).

Pledges

As at December 31, 2018, certain bank borrowings in the total amount of 187,869 were secured by the Group's assets (December 31, 2017: 222,556).

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

23) Finance Lease Liability

The Group's finance lease obligations primarily related to machinery, equipment and transport with certain leases having renewal and purchase options at the end of the lease term.

Future minimum lease payments were as follows:

	December	r 31, 2018	December 31, 2017		
	Minimum Present value of		Minimum	Present value of	
	payments	payments	payments	payments	
Less than 1 year	13,880	10,327	12,100	9,221	
1 to 5 years	43,613	33,900	33,140	25,507	
> 5 years	47,755	41,537	42,886	35,851	
Total minimum lease payments	105,248	85,764	88,126	70,579	
Less amounts representing finance charges	(19,484)	-	(17,547)	-	
Present value of minimum lease payments	85,764	85,764	70,579	70,579	

24) Changes in Liabilities from Financing Activities

Changes in liabilities arising from financing activities were as follows in the year ended December 31, 2018:

	Interest-bearing loans and borrowings	Finance lease liability	Other liabilities	TOTAL
Balance at January 1, 2018	3,264,446	70,579	114,765	3,449,790
Foreign exchange (gain)/loss	138,226	9,856	-	148,082
Finance costs	230,898	3,591	-	234,489
Disposal of subsidiaries	(58,879)	-	-	(58,879)
Acquisition of assets by means of finance lease	-	26,753	-	26,753
Net cash flows (used in)/from financing activities	(281,423)	(13,532)	(16,997)	(311,952)
Other	2,382	-	-	2,382
Currency translation adjustments	(411,371)	(11,483)	(11,488)	(434,342)
Balance at December 31, 2018	2,884,279	85,764	86,280	3,056,323

Changes in liabilities arising from financing activities were as follows in the year ended December 31, 2017:

	Interest-bearing loans and borrowings	Finance lease liability	Other liabilities	TOTAL
Balance at January 1, 2017	2,857,105	60,724	-	2,917,829
Foreign exchange (gain)/loss	(31,233)	479	-	(30,754)
Finance costs	274,567	2,578	-	277,145
Acquisition of assets by means of finance lease	-	12,725	-	12,725
Net cash flows (used in)/from financing activities	49,580	(9,509)	116,224	156,295
Other	2,911	-	-	2,911
Currency translation adjustments	111,516	3,582	(1,459)	113,639
Balance at December 31, 2017	3,264,446	70,579	114,765	3,449,790

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

25) Employee Benefits Liability

The Group operates post-employment and other long-term employee benefit schemes in accordance with agreements, local regulations and practices. These plans include benefits in the form of lump-sum post-employment payments, pensions, financial support to pensioners, jubilee payments to employees and pensioners, etc. These benefits generally depend on years of service, level of compensation and amount of benefit under the plan. The Group pays the benefits when they fall due for payment. All employee benefit schemes are unfunded.

The following table summarises changes in the present value of the defined benefit obligation by country:

	Russia		Other cou	Intries	тот	AL
	2018	2017	2018	2017	2018	2017
Balance at January 1	22,635	19,252	5,529	4,426	28,164	23,678
Current service cost	714	744	1,054	1,131	1,768	1,875
Interest expense	1,608	1,711	115	79	1,723	1,790
Past service cost	(1,074)	974	-	-	(1,074)	974
Other	(46)	51	-	-	(46)	51
Net benefit expense recognised in profit or loss	1,202	3,480	1,169	1,210	2,371	4,690
(Gains)/losses arising from changes in demographic		-	_			
assumptions	(150)	74	(85)	(47)	(235)	27
(Gains)/losses arising from changes in financial						
assumptions	(1,631)	885	(387)	117	(2,018)	1,002
Experience (gains)/losses	(430)	(468)	296	54	(134)	(414)
Actuarial (gains)/losses recognised in other						
comprehensive (income)/loss	(2,211)	491	(176)	124	(2,387)	615
Benefits paid	(1,695)	(1,643)	(325)	(371)	(2,020)	(2,014)
Disposal of subsidiaries	-	-	(2,221)	-	(2,221)	-
Exchange differences	(3,788)	1,055	(69)	140	(3,857)	1,195
Balance at December 31	16,143	22,635	3,907	5,529	20,050	28,164
Short-term	1,701	1,759	266	209	1,967	1,968
Long-term	14,442	20,876	3,641	5,320	18,083	26,196

Net benefit expense was recognised as cost of sales, general and administrative expenses and selling and distribution expenses in the income statement for the years ended December 31, 2018 and 2017.

The principal actuarial assumptions used in determining the Group's defined benefit obligations are shown below:

	Ru	ssia	Other countries		
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017	
Discount rate	8.8 %	7.7 %	4.4% - 4.7%	3.8% - 4.4%	
Inflation	4.1 %	4.1 %	-	-	
Average long-term rate of compensation increase	4.6 %	4.6 %	2.5% - 3%	3 %	
	Age-related	Age-related	Age-related	Age-related	
Turnover	statistical	statistical	statistical	statistical	
	distribution	distribution	distribution	distribution	

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

25) Employee Benefits Liability (continued)

A quantitative sensitivity analysis for significant assumptions as at December 31, 2018 is provided below:

			Russia		Other countries	
	Volatility range		Effect on obligation increase/ (decrease)		Effect on obligation increase/ (decrease)	
Discount rate	-1 %	1 %	1,583	(1,296)	194	(168)
Inflation	-1 %	1 %	(1,367)	1,583	-	-
Average long-term rate of						
compensation increase	-1 %	1 %	(374)	432	(137)	141
Turnover	-3%1%	1% - 3%	1,727	(1,583)	129	(108)

26) Interests in Subsidiaries

Principal Subsidiaries

The major subsidiaries included in these consolidated financial statements are presented below:

	Location	Effective ownership interest	
		December 31, 2018 December 31, 20	
Manufacturing facilities			
"Volzhsky Pipe Plant", Joint stock company	Russia	100.00 %	100.00 %
"Sinarsky Pipe Plant", Public Joint stock company	Russia	97.65 %	97.65 %
"Taganrog Metallurgical Plant", Public Joint stock company	Russia	96.38 %	96.38 %
"Seversky Pipe Plant", Public Joint stock company	Russia	96.55 %	96.55 %
Limited Liability Company TMK-INOX	Russia	97.65 %	97.65 %
"TMK-CPW" Joint Stock Company	Russia	49.31 %	49.31 %
"Orsky Machine Building Plant", Joint stock company	Russia	75.00 %	75.00 %
IPSCO Tubulars Inc.	USA	100.00 %	100.00 %
IPSCO Koppel Tubulars, L.L.C.	USA	100.00 %	100.00 %
IPSCO Tubulars (KY), L.L.C.	USA	100.00 %	100.00 %
Ultra Premium Services, L.L.C.	USA	100.00 %	100.00 %
TMK-ARTROM S.A.	Romania	92.73 %	92.73 %
TMK-RESITA S.A.	Romania	92.73 %	100.00 %
LLP "TMK-Kaztrubprom"	Kazakhstan	100.00 %	100.00 %
TMK Gulf International Pipe Industry L.L.C. (Note 11)	Oman	27.74 %	55.47 %
Services for oilfield and gas industries			
Truboplast Pipe Coating Company	Russia	100.00 %	100.00 %
TMK NGS-Nizhnevartovsk	Russia	100.00 %	100.00 %
LLC TMK NGS - Buzuluk	Russia	100.00 %	100.00 %
TMK Completions LTD. and its subsidiaries	Canada, USA	-	75.00 %
Sales and procurement			
"Trade House "TMK" Joint Stock Company	Russia	100.00 %	100.00 %
TMK IPSCO International, L.L.C.	USA	100.00 %	100.00 %
TMK IPSCO Canada, Ltd.	Canada	100.00 %	100.00 %
TMK Europe GmbH	Germany	100.00 %	100.00 %
TMK Italia s.r.l.	Italy	100.00 %	100.00 %
TMK M.E. FZCO	UAE	100.00 %	100.00 %
TMK Global S.A.	Switzerland	100.00 %	100.00 %
Research and development			
The Russian Research Institute of the Tube & Pipe Industries, Joint			
Stock Company	Russia	97.36 %	97.36 %
TMK R&D	Russia	100.00 %	100.00 %

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

26) Interests in Subsidiaries (continued)

Non-controlling Interests

The information about non-controlling interests in subsidiaries is presented in the following table:

	December 31, 2018		December 31, 2017	
	Non- controlling interest, %	Non- controlling interest in net assets	Non- controlling interest, %	Non- controlling interest in net assets
"Orsky Machine Building Plant", Joint stock company	25.00 %	10,048	25.00 %	11,819
TMK-ARTROM S.A.	7.27 %	9,500	7.27 %	8,909
TMK-RESITA S.A.	7.27 %	6,784	-	-
Joint Stock Company "Sinarskaya Power Plant"	32.82 %	7,548	32.82 %	8,390
TMK Gulf International Pipe Industry L.L.C.	-	-	44.53 %	5,957
"Sinarsky Pipe Plant", Public Joint stock company	2.35 %	4,405	2.35 %	5,851
"Seversky Pipe Plant", Public Joint stock company	3.45 %	5,278	3.45 %	5,744
"Taganrog Metallurgical Plant", Public Joint stock company	3.62 %	1,964	3.62 %	3,832
Other		1,235		(423)
		46,762		50,079

27) Related Parties Disclosures

Compensation to Key Management Personnel of the Group

Key management personnel include members of the Board of Directors, the Management Board and certain executives of the Group.

The compensation to key management personnel included:

- Wages, salaries, social security contributions and other short-term benefits in the amount of 14,930 (year ended December 31, 2017: 13,911).
- Provision for performance bonuses in the amount of 4,084 (year ended December 31, 2017: 5,273).

The amounts disclosed above were recognised as general and administrative expenses in the income statement for the years ended December 31, 2018 and 2017.

The balance of loans issued to key management personnel amounted to 98 as at December 31, 2018 (December 31, 2017: 245).

Transactions with the Parent of the Company

In June 2018, the Group approved dividends in respect of 2017 year, from which 24,089 related to the Parent of the Company.

In June 2017, the Group approved dividends in respect of 2016 year, from which 23,281 related to the Parent of the Company.

In 2018, the Group made a cash contribution to the capital of its subsidiary Completions Development S.a r.l. without issuance of new shares. As a result, the share in the subsidiary's net assets related to the Parent of the Company (the owner of 25% share in Completions Development S.a r.l.) increased by 4,184.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

27) Related Parties Disclosures (continued)

Transactions with Other Related Parties

Other related parties include entities under common control with the Company, associates, joint ventures and other related parties.

The following table provides balances with other related parties:

	December 31, 2018	December 31, 2017
Cash and cash equivalents	39,954	87,463
Loans issued	53,795	59,475
Trade and other receivables	157,354	54,903
Prepayments for acquisition of property, plant and equipment	2,159	2,604
Other prepayments	126	-
Interest-bearing loans and borrowings	46,434	215,243
Trade and other payables	59,649	26,532
Advances received	11	1,209

The Group guaranteed debts of other related parties outstanding as at December 31, 2018 in the amount of 61,943.

Allowance for expected credit losses in respect of receivables and loans from other related parties amounted to 5,390 as at December 31, 2018 (allowance for doubtful debts in accordance with IAS 39 as at December 31, 2017: 1,940).

The Group uses unsecured letters of credit to facilitate settlements with its counterparties, including payments under certain contracts to purchase raw materials from entities under common control with the Company. As at December 31, 2018, for the letters of credits in the total amount of 82,769 the bank paid cash to the related party following its request earlier than the original maturities per purchase contracts (December 31, 2017: 63,368). The original due dates of Group's payables were not changed and the respective amounts were included in trade and other payables.

The following table provides the summary of transactions with other related parties:

	Year ended December 31,		
	2018 2017		
Purchases of raw materials	624,075	560,345	
Purchases of other goods and services	40,354	23,478	
Finance costs	17,873	34,224	
Sales revenue	148,952	51,966	
Other income	10,901	9,905	

28) Contingencies and Commitments

Operating Environment of the Group

Significant part of the Group's principal assets is located in the Russian Federation and USA, therefore its significant operating risks are related to the activities of the Group in these countries.

The Russian economy is recovering gradually, after the economic recession in the past several years. Russia continues to be negatively impacted by sanctions imposed on certain companies and individuals as well as reduced access to international capital.

The U.S. economy is growing following three years of a downturn. The sustained growth of the drilling activity resulted in the recovery of the oil and gas industry.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

28) Contingencies and Commitments (continued)

Operating Environment of the Group (continued)

The future effects of the current economic situation are difficult to predict and current management's expectations and estimates could differ from actual results.

Taxation

Tax legislation is subject to varying interpretations and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and federal authorities. Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits, which will be required to settle these liabilities. Up to the date of authorisation of these consolidated financial statements for issuance, the court proceedings and pre-trial disputes have not been finalised for the claims in the amount of 8,071. Management believes that the Group's position is justified and it is not probable that the ultimate outcome of these matters will result in material losses for the Group. Consequently, the amounts of the claims being contested by the Group were not accrued in the consolidated financial statements for the year ended December 31, 2018.

Contractual Commitments

The Group had contractual commitments for the acquisition of property, plant and equipment from third parties in the amount of 68,937 as at December 31, 2018 (December 31, 2017: 109,269). Contractual commitments were expressed net of VAT.

As at December 31, 2018, the Group had unsecured letters of credit in the amount of 19,300 (December 31, 2017: 29,400) for the acquisition of property, plant and equipment.

The Group leases certain assets under operating lease agreements which expire in various years. Minimum lease payments under non-cancellable operating lease agreements amounted to 12,688 as at December 31, 2018.

Insurance Policies

The Group maintains insurance against losses that may arise in case of property and equipment damage (including insurance against fires and certain other natural disasters), business interruption insurance, insurance for transported goods against theft or damage. The Group also maintains corporate product liability, directors and officers liability insurance policies. Nevertheless, any recoveries under maintained insurance coverage that may be obtained in the future may not offset the lost revenues or increased costs resulting from a disruption of operations.

Legal Claims

During the period, the Group was involved in a number of court proceedings (both as a plaintiff and a defendant) arising in the ordinary course of business. Management believes there are no current legal proceedings or other claims outstanding, which could have a material effect on the results of operations or financial position of the Group.

Guarantees of Debts of Others

The Group guaranteed debts of others outstanding as at December 31, 2018 in the amount of 14 (December 31, 2017: 37). The amount of other related parties' liabilities guaranteed by the Group is disclosed in Note 27.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

29) Equity

i) Share Capital

	December 31, 2018	December 31, 2017
Number of shares		
Authorised		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366
Issued and fully paid		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366

ii) Treasury Shares

	Year ended December 31,			
	2018		2017	
	Number of shares	Cost	Number of shares	Cost
Balance at January 1	53,577	592	53,577	592
Purchase of treasury shares	406,564	354	-	-
Balance at December 31	460,141	946	53,577	592

iii) Reserve Capital

According to the Russian Law, the Company must create a reserve capital in the amount of 5% of the share capital per the Russian statutory accounts by annual appropriations that should be at least 5% of the annual net profit per the statutory financial statements. The reserve capital can be used only for covering losses and for the redemption of the Company's bonds and purchase of its own shares if there are no other sources of financing.

iv) Hedges of Net Investment in Foreign Operations

The Group uses US dollar-denominated borrowings as hedges of net investments in its foreign subsidiaries which functional currency is the US dollar. In the year ended December 31, 2018, the effective portion of losses from spot rate changes in the amount of 115,971 (presented net of tax in the amount of 28,993) was recognised in other comprehensive income/(loss).

v) Dividends Declared by the Company to its Shareholders

On June 21, 2018, the general shareholders' meeting approved dividends in respect of 2017 year in the amount of 2,355,549 thousand Russian roubles (37,027 at the exchange rate at the date of approval) or 2.28 Russian roubles per share (0.04 US dollars per share), from which 122 thousand Russian roubles (2 at the exchange rate at the date of approval) related to the treasury shares in possession of the Group.

On June 8, 2017, the general shareholders' meeting approved dividends in respect of 2016 year in the amount of 2,024,945 thousand Russian roubles (35,784 at the exchange rate at the date of approval) or 1.96 Russian roubles per share (0.03 US dollars per share), from which 105 thousand Russian roubles (2 at the exchange rate at the date of approval) related to the treasury shares in possession of the Group.

vi) Dividends Declared by Subsidiaries of the Group to the Non-controlling Interest Owners

During the years ended December 31, 2018 and 2017, the Group's subsidiaries declared dividends to the non-controlling interest owners in the amounts of 981 and 1,265, respectively.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

29) Equity (continued)

vii) Change of Participation in Subsidiaries within the Group

In 2018, TMK-Artrom S.A., 92.73%-owned subsidiary of the Group acquired 99.99%-stake in TMK-Resita S.A. from the other group company. As a result, the non-controlling interests' share in net assets of TMK Group's Romanian subsidiaries increased by 6,995.

30) Financial Risk Management Objectives and Policies

In the course of its business, the Group is exposed to a number of financial risks: market risk (including interest rate risk and foreign currency risk), liquidity risk and credit risk.

The Group's risks and associated management policies are described below:

Market Risk

The Group is exposed to risks from movements in interest rates and foreign currency exchange rates which affect its assets, liabilities and anticipated future transactions. The objective of market risk management is to manage and control market risk exposures, while optimising the return on the risk.

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group borrows on fixed and variable rate basis. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's borrowings with LIBOR variable interest rate. The Group's exposure to EURIBOR rate fluctuations is not material.

The following table demonstrates the sensitivity to reasonably possible changes in LIBOR rate on the portion of loans and borrowings affected:

	December 31, 2018			December 31, 2017				
	Volatili	ty range	Effect on profit/(loss) before tax		Volatility range		Effect on profit/ before tax	(loss)
LIBOR	- 16 bps	+ 16 bps	129	(129)	-10 bps	+10 bps	86	(86)

Foreign Currency Risk

The Group's exposure to currency risk relates to sales, purchases and borrowings that are denominated in a currency other than functional currencies of the Group's subsidiaries, and the Group's investments in foreign operations. The currencies in which these transactions and balances primarily denominated are US dollar and euro.

The Group's exposure to currency risk determined as the net monetary position in respective currencies was as follows:

	December 31, 2018	December 31, 2017
USD/RUR	(1,104,896)	(1,169,294)
EUR/RUR	(105,414)	(63,276)
USD/EUR	20,029	24,788
USD/RON	(8,172)	(12,612)
EUR/RON	(135,933)	(82,783)
KZT/RUR	10,962	7,455
USD/CAD	3,772	5,155

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Foreign Currency Risk (continued)

The Group uses US dollar-denominated borrowings as hedges of net investments in its foreign subsidiaries which functional currency is the US dollar. The Group doesn't have other formal arrangements to manage currency risk. However, the Group seeks to bring its financial liabilities in foreign currency in line with export net sales, thus mitigating currency risk.

The following table demonstrates the sensitivity of the Group's profit/(loss) before tax and other comprehensive income/(loss) to reasonably possible changes in the respective currencies, with all other variables held constant. The movement in other comprehensive income/(loss) arises from gains or losses on the US dollar-denominated borrowings related to the effective portion of the hedge of net investments in foreign operations. In estimating reasonably possible changes the Group assessed the volatility of foreign exchange rates during the relevant year.

		December 31, 2018					
	Volatility ra	nge	Effect on profit/(tax	loss) before	Effect on other co income/(-	
USD/RUR	-14 %	14 %	44,042	(44,042)	109,096	(109,096)	
EUR/RUR	-14 %	14 %	14,252	(14,252)	-	-	
USD/EUR	-8 %	8 %	(1,520)	1,520	-	-	
USD/RON	-8 %	8 %	664	(664)	-	-	
EUR/RON	-2 %	2 %	2,678	(2,678)	-	-	
KZT/RUR	-10 %	10 %	(1,126)	1,126	-	-	
USD/CAD	-6 %	6 %	(233)	233	-	-	

		December 31, 2017						
	Volatility ra	nge	Effect on profit/(l tax	loss) before	Effect on other co income/(l	-		
USD/RUR	-10 %	10 %	39,331	(39,331)	77,832	(77,832)		
EUR/RUR	-11 %	11 %	7,175	(7,175)	-	-		
USD/EUR	-7 %	7 %	(1,671)	1,671	-	-		
USD/RON	-7 %	7 %	921	(921)	-	-		
EUR/RON	-2 %	2 %	2,012	(2,012)	-	-		
KZT/RUR	-8 %	8 %	(626)	626	-	-		
USD/CAD	-6 %	6 %	(329)	329	-	-		

Liquidity Risk

Liquidity risk is the risk that the Group will not be able to settle its liabilities when they fall due. The Group manages liquidity risk by maintaining an adequate structure of borrowing facilities and cash reserves and matching the maturity profiles of financial assets and liabilities.

The table below summarises the maturity profile of the Group's financial liabilities based on contractual undiscounted payments, including interest payments:

		December 31, 2018			
	Less than 1 year	1 to 5 years	> 5 years	TOTAL	
ing loans and borrowings:					
	889,135	1,938,580	47,790	2,875,505	
	175,144	225,628	9,253	410,025	
bility	13,880	43,613	47,755	105,248	
payables	656,151	-		656,151	
-	86,280	2,644	-	88,924	
	1,820,590	2,210,465	104,798	4,135,853	

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Liquidity Risk (continued)

		December 31, 2017			
	Less than 1 year	1 to 5 years	> 5 years	TOTAL	
Interest-bearing loans and borrowings:					
Principal	576,047	2,455,600	219,720	3,251,367	
Interest	244,330	391,337	66,350	702,017	
Finance lease liability	12,100	33,140	42,886	88,126	
Trade and other payables	735,073	-	-	735,073	
Other liabilities	114,765	5,357	527	120,649	
	1,682,315	2,885,434	329,483	4,897,232	

Credit Risk

Credit risk is the potential exposure of the Group to losses that would be recognised if counterparties failed to perform or failed to pay amounts due. Financial instruments that primarily expose the Group to concentrations of credit risk are trade and other receivables.

The credit risk arising from the Group's normal commercial operations is controlled by each operating unit within Group-approved procedures for evaluating the reliability and solvency of each counterparty, including receivable collection. The monitoring activity of credit risk exposure is performed at the Group level.

The Group's maximum exposure to credit risk for trade and other receivables is presented in the table below:

	December	December 31, 2018		31, 2017
	Gross amount	Impairment	Gross amount	Impairment
Current trade and other receivables - not past due Current trade and other receivables - past due:	751,701	(7,281)	726,796	(5,539)
less than 30 days	88,527	(696)	87,039	(861)
31 to 90 days	26,138	(2,269)	48,234	(576)
> 90 days	47,702	(25,676)	48,349	(32,122)
	914,068	(35,922)	910,418	(39,098)

Movement in the allowance for expected credit losses (allowance for doubtful debts in accordance with IAS 39 as at December 31, 2017) on trade and other receivables was as follows:

	Year ended I	December 31,
	2018	2017
Balance at January 1	39,098	31,653
Utilised during the year	(2,955)	(2,370)
Increase/(decrease) in allowance	5,731	7,852
Currency translation adjustments	(5,952)	1,963
Balance at December 31	35,922	39,098

Capital Management

The Group's objectives when managing capital are to safeguard its ability to continue as a going concern, so that to continue providing returns for shareholders and other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group adjusts the amount of dividends paid to shareholders, issues new shares or sells assets to reduce debt.

The Group is required to comply with certain debt covenants. The Group is in compliance with covenants.

Notes to the Consolidated Financial Statements Year ended December 31, 2018

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Fair Value of Financial Instruments

For cash and cash equivalents, trade and other accounts receivable, loans issued, trade and other payables, other similar financial instruments, the carrying amounts approximate their fair values.

The following table shows financial instruments which carrying values differ from fair values:

	December	r 31, 2018	December 31, 2017		
	Nominal value	Fair value	Nominal value	Fair value	
Financial liabilities					
Fixed rate long-term bank loans	1,223,942	1,173,593	1,752,619	1,764,315	
Variable rate long-term bank loans	52,143	52,697	75,480	73,638	
6.75 per cent loan participation notes	500,000	509,510	500,000	527,935	
Russian bonds	287,892	289,835	347,221	362,377	
7.75 per cent loan participation notes	-	-	231,367	232,202	

For quoted debt instruments (bonds and loan participation notes) the fair values were determined based on quoted market prices. The fair values of unquoted debt instruments were estimated by discounting future cash flows using rates currently available for debt on similar terms, credit risk and remaining maturities.

PAO TMK Consolidated Financial Statements

Year ended December 31, 2017

Consolidated Financial Statements Year ended December 31, 2017

Contents

Inc	dependent auditor's report	3
Co	nsolidated Income Statement	8
Co	onsolidated Statement of Comprehensive Income	9
	nsolidated Statement of Financial Position	
Co	onsolidated Statement of Changes in Equity	
	onsolidated Statement of Cash Flows	
No	tes to the Consolidated Financial Statements	
1)	Corporate Information	
2)	Significant Accounting Policies	
3)	Segment Information	
4)	Cost of Sales	
5)	Selling and Distribution Expenses	
6)	General and Administrative Expenses	
7)	Research and Development Expenses	
8)	Other Operating Income and Expenses	
9)	Income Tax	
10)) Earning per Share	
11)) Disposal of Subsidiaries	
12)) Cash and Cash Equivalents	
13)) Trade and Other Receivables	
14)) Inventories	
15) Prepayments and Input VAT	
16) Property, Plant and Equipment	
17)) Goodwill and Other Intangible Assets	41
18)) Other Non-Current Assets	
19)) Trade and Other Payables	
20)) Other Current Liabilities	
21)) Provisions and Accruals	44
22)) Interest-Bearing Loans and Borrowings	
23)) Finance Lease Liability	
24)) Changes in Liabilities from Financing Activities	
25)) Employee Benefits Liability	
) Interests in Subsidiaries	
) Related Parties Disclosures	
28)) Contingencies and Commitments	49
) Equity	
30)) Financial Risk Management Objectives and Policies	
) Subsequent Events	



Ernst & Young LLC Sadovnicheskaya Nab., 77, bld. 1 Moscow, 115035, Russia Tel: +7 (495) 705 9700 +7 (495) 755 9700 Fax: +7 (495) 755 9701 www.ey.com/ru ООО «Эрнстэнд Янг» Россия, 115035, Москва Садовническая наб., 77, стр. 1 Тел.: +7 (495) 705 9700 +7 (495) 755 9700 Факс: +7 (495) 755 9701 ОКПО: 59002827

Independent auditor's report

To the Shareholders and Board of Directors of PAO TMK

Opinion

We have audited the consolidated financial statements of PAO TMK and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2017, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2017 and its consolidated financial performance and its consolidated cash flows for 2017 in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.



We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter

How our audit addressed the key audit matter

Impairment of non-current assets

We focused on the impairment of non-current assets due to the significance of the carrying value of non-current assets to the consolidated financial statements and the inherent uncertainty involved in with the lowest difference between recoverable forecasting and discounting future cash flows with many of the key underlying assumptions being impacted by economic factors.

Information on non-current assets and impairment tests is disclosed in Notes 16 and 17 to the consolidated financial statements.

We focused on cash-generating units with the largest carrying values, those for which an impairment was recognized in the year and those amount and carrying amount.

Our audit procedures in respect of the impairment tests included the assessment of key management's assumptions, such as sales volumes and prices, production costs and discount rates as the recoverable amounts are the most sensitive to changes in those assumptions.

We identified and analysed changes in assumptions from prior periods and performed a comparison of assumptions with external market data where applicable. We involved our internal valuation specialists to assist us with these procedures.

We performed sensitivity analyses, evaluating whether a reasonably possible change in assumptions could cause the carrying amount to exceed the recoverable amount.

We performed a retrospective assessment of the accuracy of management's past projections by comparing historical forecasts to actual results.

We tested the mathematical integrity of the impairment models.

We evaluated the disclosures related to impairment tests included in the consolidated financial statements.

Valuation of deferred tax assets

The Group operates in different tax jurisdictions (primarily Russia and the USA) with changing tax environment. We considered the valuation of deferred tax assets to be one of the matters of most significance in our audit because the assessment process is complex, includes a certain level of estimation uncertainty and the amounts involved are material to the financial statements.

Information on deferred tax asset is disclosed in Note 9 to the consolidated financial statements.

Our audit procedures included, among others, evaluating management's methodologies and assumptions that substantiate the probability that deferred tax assets recognized in the balance sheet will be recovered through taxable profit in future years. We involved our tax specialists to assist us with these procedures.

We compared management's forecasts of future taxable profit with the Group's budgets and forecasts used for non-current assets impairment tests.



Other information included in the Group's Annual report

Other information consists of the information included in the Annual Report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.



As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is D.M. Zhigulin.

D.M. Zhigulin Partner Ernst & Young LLC

28 February 2018

Details of the audited entity

Name: PAO TMK Registered on 17 April 2001. Record made in the State Register of Legal Entities on 19 September 2002, State Registration Number 1027739217758. Address: Russia 105062, Moscow, Pokrovka Street, 40/2a.

Details of the auditor

Name: Ernst & Young LLC Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203. Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1. Ernst & Young LLC is a member of Self-regulated organization of auditors "Russian Union of auditors" (Association) ("SRO RUA"). Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 11603050648.

7

Consolidated Income Statement Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

		Year ended December 31,		
	NOTES	2017	2016	
Revenue	3	4,393,653	3,337,990	
Cost of sales	4	(3,521,159)	(2,634,358)	
Gross profit		872,494	703,632	
Selling and distribution expenses	5	(260,595)	(220,403)	
Advertising and promotion expenses		(6,881)	(5,745)	
General and administrative expenses	6	(231,233)	(196,040)	
Research and development expenses	7	(11,465)	(10,693)	
Other operating income/(expenses)	8	(33,796)	(4,180)	
Operating profit		328,524	266,571	
Impairment of goodwill	17	(21,979)	(3,271)	
Impairment of property, plant and equipment	16	(1,615)	(3,271)	
Reversal of impairment of property, plant and equipment	16	16,263		
Foreign exchange gain/(loss)	10	27,515	129,927	
Finance costs		(281,022)	(273,499)	
Finance income		12,679	10,907	
Gain/(loss) on derivatives	30	(3,439)	9,195	
Share of profit/(loss) of associates		(9)	(93)	
Other non-operating income/(expenses)		583	29,421	
Profit/(loss) before tax		77,500	169,158	
Income tax benefit/(expense)	9	(47,931)	(3,539)	
Profit/(loss) for the period)	29,569	165,619	
		27,507	105,017	
Attributable to:		25 540	166 (27	
Equity holders of the parent entity Non-controlling interests		35,548	166,627	
non-controlling interests		(5,979) 29,569	(1,008) 165,619	
Earnings/(loss) per share attributable to the equity holders of the			100,017	
parent entity, basic and diluted (in US dollars)	10	0.03	0.17	

Consolidated Statement of Comprehensive Income Year ended December 31, 2017

(All amounts in thousands of US dollars)

		Year ended D	ecember 31,
	NOTES	2017	2016
Profit/(loss) for the period		29,569	165,619
<i>Items that may be reclassified subsequently to profit or loss:</i> Exchange differences on translation to presentation currency ⁽ⁱ⁾		28,431	(1,376)
Foreign currency gain/(loss) on hedged net investment in foreign operations ⁽ⁱⁱ⁾ Income tax ⁽ⁱⁱ⁾	29 (iv) 29 (iv)	17,691 (3,538) 14,153	86,569 (17,314) 69,255
Movement on cash flow hedges ⁽ⁱ⁾ Income tax ⁽ⁱ⁾		- - -	76 (35) 41
Items that may not be reclassified subsequently to profit or loss: Net actuarial gains/(losses) ⁽ⁱ⁾	25	(615)	685
Other comprehensive income/(loss) for the period, net of tax Total comprehensive income/(loss) for the period, net of tax		41,969 71,538	68,605 234,224
Attributable to: Equity holders of the parent entity Non-controlling interests		74,925 (3,387) 71,538	230,026 4,198 234,224

(i) Other comprehensive income/(loss) for the period, net of tax, was attributable to equity holders of the parent entity and to noncontrolling interests as presented in the table below:

	Year ended December 31,		
	2017	2016	
Exchange differences on translation to presentation currency:			
Equity holders of the parent entity	25,824	(6,579)	
Non-controlling interests	2,607	5,203	
	28,431	(1,376)	
Movement on cash flow hedges:			
Equity holders of the parent entity	-	41	
	-	41	
Net actuarial gains/(losses):			
Equity holders of the parent entity	(600)	682	
Non-controlling interests	(15)	3	
	(615)	685	

(ii) The amount of foreign currency gain/(loss) on hedged net investment in foreign operations, net of tax, was attributable to equity holders of the parent entity.

Consolidated Statement of Financial Position as at December 31, 2017

(All amounts in thousands of US dollars)

	NOTES	December 31, 2017		December 31, 2016		
ASSETS						
Current assets						
Cash and cash equivalents	12	491,185		276,613		
Trade and other receivables	13	871,320		688,987		
Inventories	14	1,121,203		768,691		
Prepayments and input VAT	15	125,278		94,190		
Prepaid income taxes		14,139		12,461		
Other financial assets		432	2,623,557	42,392	1,883,334	
Non-current assets						
Investments in associates and joint ventures		482		1,099		
Property, plant and equipment	16	2,428,526		2,297,537		
Goodwill	17	43,377		62,883		
Intangible assets	17	228,755		228,654		
Deferred tax asset	9	171,259		203,382		
Other non-current assets	18	40,815	2,913,214	59,011	2,852,566	
TOTAL ASSETS			5,536,771		4,735,900	
LIABILITIES AND EQUITY						
Current liabilities						
Trade and other payables	19	807,240		585,427		
Advances from customers		142,661		149,556		
Provisions and accruals	21	60,482		37,452		
Interest-bearing loans and borrowings	22	600,957		261,559		
Finance lease liability	23	9,221		6,230		
Income tax payable		2,387		10,452		
Other liabilities	20	114,765	1,737,713	-	1,050,676	
Non-current liabilities						
Interest-bearing loans and borrowings	22	2,663,489		2,595,546		
Finance lease liability	23	61,358		54,494		
Deferred tax liability	9	81,824		89,831		
Provisions and accruals	21	25,454		21,228		
Employee benefits liability	25	26,196		21,579		
Other liabilities		7,498	2,865,819	3,798	2,786,476	
Total liabilities			4,603,532		3,837,152	
Equity	29					
Parent shareholders' equity	2)					
Share capital		342,869		342,869		
Treasury shares		(592)		(592)		
Additional paid-in capital		234,655		234,655		
Reserve capital		17,178		17,178		
Retained earnings		1,237,524		1,237,758		
Foreign currency translation reserve		(959,439)		(999,416)		
Other reserves		10,965	883,160	11,565	844,017	
Non-controlling interests	26		50,079		54,731	
Total equity			933,239		898,748	
TOTAL LIABILITIES AND EQUITY			5,536,771		4,735,900	

Consolidated Statement of Changes in Equity Year ended December 31, 2017

(All amounts in thousands of US dollars)

	Attributable to equity holders of the parent									
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2017	342,869	(592	234,655	17,178	1,237,758	(999,416)	11,565	844,017	54,731	898,748
Profit/(loss) for the period	-	-	· _	-	35,548	-	-	35,548	(5,979)	29,569
Other comprehensive income/(loss) for the period, net of tax	-		. <u>-</u>		-	39,977	(600)	39,377	2,592	41,969
Total comprehensive income/(loss) for the period, net of tax	-	-	· -	-	35,548	39,977	(600)	74,925	(3,387)	71,538
Dividends declared by the Company to its shareholders (Note 29 vi)	-	-		-	(35,782)	-	-	(35,782)	-	(35,782)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners (Note 29 vii)	_		· <u>-</u>	-	-	_	_	_	(1,265)	(1,265)
At December 31, 2017	342,869	(592) 234,655	17,178	1,237,524	(959,439)	10,965	883,160	50,079	933,239

Consolidated Statement of Changes in Equity Year ended December 31, 2017 (continued)

(All amounts in thousands of US dollars)

	Attributable to equity holders of the parent									
	Share capital	Treasury shares	Additional paid-in capital	Reserve capital	Retained earnings	Foreign currency translation reserve	Other reserves	Total	Non- controlling interests	TOTAL
At January 1, 2016	336,448	(592) 257,222	16,390	1,103,479	(1,062,092)	10,842	661,697	52,945	714,642
Profit/(loss) for the period	-	-	-	-	166,627	-	-	166,627	(1,008)	165,619
Other comprehensive income/(loss) for the period, net of tax	_	-	-	-	-	62,676	723	63,399	5,206	68,605
Total comprehensive income/(loss) for the period, net of tax	-	-	-	-	166,627	62,676	723	230,026	4,198	234,224
Issue of share capital (Note 29 i)	6,421	-	(6,421)	-	-	-	-	_	-	_
Purchase of treasury shares (Note 29 ii)	-	(16,212		-	-	-	-	(16,212)	-	(16,212)
Sales of treasury shares (Note 29 ii)	-	16,212		-	-	-	-	(82)	-	(82)
Dividends declared by the Company to its shareholders (Note 29 vi)	-	-	-	-	(31,339)	-	-	(31,339)	-	(31,339)
Dividends declared by subsidiaries of the Group to the non-controlling interest owners (Note 29 vii)	-	-	-	-	-	-	-	-	(431)	(431)
Acquisition of non-controlling interests in subsidiaries (Note 29 v)	-	-	148	-	-	-	-	148	(363)	(215)
Disposal of subsidiaries (Note 11)	-	-	-	-	-	-	-	-	(3,351)	(3,351)
Increase of share capital of subsidiaries	-	-	-	-	(221)	-	-	(221)	1,733	1,512
Increase of reserve capital (Note 29 iii)	-	-	-	788	(788)	-	-	-	-	-
At December 31, 2016	342,869	(592) 234,655	17,178	1,237,758	(999,416)	11,565	844,017	54,731	898,748

Consolidated Statement of Cash Flows Year ended December 31, 2017

(All amounts in thousands of US dollars)

		Year ended D	ecember 31,
	NOTES	2017	2016
Operating activities			
Profit/(loss) before tax		77,500	169,158
Adjustments to reconcile profit/(loss) before tax to operating cash flows:			
Depreciation of property, plant and equipment Amortisation of intangible assets (Gain)/loss on disposal of property, plant and equipment Impairment of goodwill Impairment of property, plant and equipment Reversal of impairment of property, plant and equipment Foreign exchange (gain)/loss Finance costs Finance income Other non-operating (income)/expenses (Gain)/loss on derivatives Share of (profit)/loss of associates Allowance for net realisable value of inventory Allowance for doubtful debts Movement in provisions	17 8 17 16 16 30 14	$\begin{array}{c} 252,524\\ 10,591\\ 21,070\\ 21,979\\ 1,615\\ (16,263)\\ (27,515)\\ 281,022\\ (12,679)\\ (583)\\ 3,439\\ 9\\ (42,144)\\ 5,841\\ 25,612\\ \end{array}$	213,948 27,606 (2,582) 3,271 (129,927) 273,499 (10,907) (29,421) (9,195) 93 18,576 (8,941) 4,416
		25,612	4,410
Operating cash flows before working capital changes		602,018	519,594
Working capital changes:			
Decrease/(increase) in inventories Decrease/(increase) in trade and other receivables Decrease/(increase) in prepayments Increase/(decrease) in trade and other payables Increase/(decrease) in advances from customers		(282,044) (93,154) (22,846) 158,871 (13,432)	78,836 (88,954) 17,535 (10,448) (10,378)
Cash generated from operations		349,413	506,185
Income taxes paid		(37,683)	(30,540)
Net cash flows from operating activities		311,730	475,645
Investing activities		,	,
Purchases of property, plant and equipment and intangible assets Proceeds from sale of property, plant and equipment Disposal of subsidiaries Issuance of loans Proceeds from repayment of loans issued Interest received Other cash movements		(235,609) 4,792 (33,604) 15,346 13,796 500	(175,204) 51,335 84,565 (38,219) 505 7,718 (11,477)
Net cash flows used in investing activities		(234,779)	(80,777)

Consolidated Statement of Cash Flows Year ended December 31, 2017 (continued)

(All amounts in thousands of US dollars)

	Year ended December 31,		
NOTES	2017	2016	
Financing activities			
Purchase of treasury shares Proceeds from borrowings Repayment of borrowings Interest paid Payment of finance lease liabilities Acquisition of non-controlling interests Contributions from non-controlling interest owners Dividends paid by the Company to its shareholders Dividends paid to non-controlling interest shareholders Other cash movements	- 1,275,261 (957,303) (269,580) (9,509) - (34,095) (1,487) 117,329	$(16,212) \\ 844,267 \\ (897,261) \\ (258,378) \\ (7,297) \\ (29,247) \\ 1,512 \\ (32,103) \\ (946) \\ (22,568) \\ (22,568) \\ (16,212) \\ (16,$	
Net cash flows (used in)/from financing activities	120,616	(418,233)	
Net increase/(decrease) in cash and cash equivalents	197,567	(23,365)	
Net foreign exchange difference Cash and cash equivalents at January 1	17,005 276,613	(5,227) 305,205	
Cash and cash equivalents at December 31	491,185	276,613	

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

1) Corporate Information

These consolidated financial statements of PAO TMK and its subsidiaries (the "Group") for the year ended December 31, 2017 were authorised for issue in accordance with a resolution of the General Director on February 28, 2018.

PAO TMK (the "Company"), the parent company of the Group, is a Public Joint-Stock Company. Both registered and principal office of the Company is 40/2a Pokrovka Street, Moscow, the Russian Federation.

The Company's controlling shareholder is TMK Steel Holding Limited (the "Parent"). TMK Steel Holding Limited is ultimately controlled by D.A. Pumpyanskiy.

The Group is one of the world's leading producers of steel pipes for the oil and gas industry, a global company with extensive network of production facilities, sales companies and representative offices.

The principal activities of the Group are the production and sales of a wide range of steel pipes used in the oil and gas sector, chemical and petrochemical industries, energy and machine-building, construction, agriculture and other economic sectors. The Group delivers its products along with an extensive package of services in heat treatment, protective coating, premium connections threading, pipe storage and repairing.

- 2) Significant Accounting Policies
- *i)* Basis of Preparation

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements have been prepared on an accrual basis and under the historical cost convention, except as disclosed in the accounting policies below. All Group's subsidiaries, associates and joint ventures have a December 31 accounting year-end.

ii) Significant Estimates and Assumptions

The preparation of the consolidated financial statements requires management to exercise judgement and to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosures. These estimates and judgements are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from such estimates, and estimates can be revised in the future.

The estimates and assumptions which can cause a significant adjustment to the carrying amount of assets and liabilities are discussed below:

Impairment of Property, Plant and Equipment

The Group assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, the Group estimates the asset's recoverable amount. This requires an estimation of the value in use of the cash-generating unit (CGU) to which the item is allocated.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Significant Estimates and Assumptions (continued)

The value in use calculation is based on discounted cash flow-based methods, which require the Group to estimate the expected future cash flows and to determine the suitable discount rate. These estimates may have a material impact on the recoverable value and the amount of the property, plant and equipment impairment.

Assets that suffered an impairment loss are tested for possible reversal of the impairment at each reporting date if indications exist that impairment losses recognised in prior periods no longer exist or have decreased.

Useful Lives of Items of Property, Plant and Equipment

The Group assesses the remaining useful lives of items of property, plant and equipment at least at each financial year-end. If expectations differ from previous estimates, the changes accounted for as changes in accounting estimates in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Fair Value of Assets and Liabilities Acquired in Business Combinations

The Group recognises separately, at the acquisition date, the identifiable assets, liabilities and contingent liabilities acquired or assumed in the business combination at their fair values, which involves estimates. Such estimates are based on valuation techniques, which require considerable judgment in forecasting future cash flows and developing other assumptions.

Impairment of Goodwill and Intangible Assets with Indefinite Useful Lives

The Group tests at least annually whether goodwill and intangible assets with indefinite useful lives have suffered any impairment. The recoverable amount of cash-generating unit to which goodwill and intangible assets with indefinite useful lives allocated is determined based on the value in use calculations. These calculations require the use of estimates. Revisions to the estimates may significantly affect the recoverable amount of the cash-generating unit.

Employee Benefits Liability

The Group companies provide a number of post-employment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, jubilee payments, etc.). Such benefits are recognised as defined benefit obligations. The Group uses the actuarial valuation method for the present value measurement of defined benefit obligations and related current service cost. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates, rates of employee turnover and others. In the event that further changes in the key assumptions are required, the future amounts of the employment benefit costs may be affected materially.

Allowance for Doubtful Debts

Allowances for doubtful debts represent the Group's estimates of losses that could arise from the failure and inability of customers to make payments when due. These estimates are based on the ageing of customers' balances, specific credit circumstances and the Group's historical doubtful debts experience. Changes in the economy, industry or specific customer conditions may require adjustments to the allowance for doubtful debts recorded in the consolidated financial statements.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ii) Significant Estimates and Assumptions (continued)

Net Realisable Value Allowance

Inventories are stated at the lower of cost and net realisable value. Estimates of the net realisable value are based on the most reliable information available at the time the estimates are made. These estimates take into consideration fluctuations of price or cost directly relating to events occurring subsequent to the end of reporting period to the extent that such events confirm conditions existing at the end of the period.

Taxes

The Group is subject to taxes in different countries all over the world. Taxes and fiscal risks recognised in these consolidated financial statements reflect management's best estimate of the outcome based on the facts known at each reporting date in each individual country. These facts may include, but are not limited to, changes in tax laws and interpretations thereof in the various jurisdictions where the Group operates.

Tax legislation is subject to varying interpretations and changes occur frequently. Furthermore, the interpretation of tax legislation by tax authorities as applied to the transactions and activity of the Group's entities may not coincide with that of management. As a result, tax authorities may challenge transactions and Group's entities may be assessed additional taxes, penalties and interest, which can be significant. The final taxes paid are dependent upon many factors, including negotiations with tax authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from tax audits. Management believes that its interpretation of the relevant legislation is appropriate and that the Group's tax positions will be sustained.

iii) Application of New and Amended IFRSs

The Group applied certain standards and amendments, which became effective for annual periods beginning on January 1, 2017. The nature and the impact of the adoption of new and revised standards are described below:

IAS 7 Statement of Cash Flows (amendments) - Disclosure Initiative

These amendments require the entity to provide additional disclosures about changes in their liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes (such as foreign exchange gains or losses). The amendments had an impact on disclosures, the relevant information is presented in the Note 24 of these consolidated financial statements.

IAS 12 Income Taxes (amendments) – Recognition of Deferred Tax Assets for Unrealised Losses

The amendments provide guidance that clarifies the accounting of deferred tax assets for unrealised losses on debt instruments measured at fair value. The amendments did not have any impact on the Group's financial position or performance.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iv) New Accounting Pronouncements

The following new or amended (revised) IFRSs have been issued but are not yet effective and not applied by the Group. These standards and amendments are those that potentially may have an impact on disclosures, financial position and performance when applied at a future date. The Group intends to adopt these standards when they become effective.

<u>IFRS 2 Share-based Payment (amendments) – Classification and Measurement of Share-based</u> <u>Payment Transactions (effective for financial years beginning on or after January 1, 2018)</u>

The amendments address three main areas: the treatment of vesting and non-vesting conditions, the classification of share-based payment transactions with net settlement feature for withholding tax obligations and the accounting for a modification of a share-based payment transaction that changes its classification from cash-settled to equity settled. The amendments are not expected to have a significant impact on the Group's financial position and performance.

IFRS 9 Financial Instruments (effective for financial years beginning on or after January 1, 2018)

IFRS 9 replaces IAS 39 *Financial Instruments: Recognition and Measurement.* The standard introduces new requirements for classification and measurement of financial assets and financial liabilities, impairment and hedge accounting.

The Group reviewed its financial assets and liabilities and is expecting the following impact from the adoption of the new standard on January 1, 2018.

There will be no impact on the Group's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Group does not have any such liabilities. The derecognition rules have been transferred from IAS 39 *Financial Instruments: Recognition and Measurement* and have not been changed.

According to the new hedge accounting rules, more hedge relationships might be eligible for hedge accounting. The Group believes that its current hedge relationships qualify as continuing hedges upon the adoption of IFRS 9 *Financial Instruments*.

The new impairment model requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses as is the case under *IAS 39 Financial Instruments: Recognition and Measurement.* It applies to financial assets classified at amortised cost, debt instruments measured at FVOCI (fair value through other comprehensive income), contract assets under IFRS 15 *Revenue from Contracts with Customers*, lease receivables, loan commitments and certain financial guarantee contracts (with some practical expedients). Based on the assessments undertaken to date, the Group does not expect a significant impact on the bad debt allowance as a result of the adoption of the new standard.

The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the Group's disclosures about its financial instruments in the consolidated financial statements in the year of the initial application.

The assessment is based on currently available information and may be subject to changes arising from further reasonable and supportable information being made available to the Group in 2018 when the Group will adopt IFRS 9 *Financial Instruments*. The Group intends to adopt the standard using the modified retrospective approach which means that the cumulative impact of the adoption will be recognised in retained earnings as of January 1, 2018 and that comparatives will not be restated.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iv) New Accounting Pronouncements (continued)

IFRS 10 Consolidated Financial Statements, IAS 28 Investments in Associates and Joint Ventures (amendments) – Sale or Contribution of Assets (the effective date is not determined)

These amendments address an inconsistency between the requirements of IFRS 10 and those of IAS 28 dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognised when a transaction involves a business. A partial gain or loss is recognised when a transaction involves assets that do not constitute a business, even if these assets are in a subsidiary. The amendments are not expected to have a significant impact on the Group's financial position or performance.

IFRS 15 Revenue from Contracts with Customers (effective for financial years beginning on or after January 1, 2018)

IFRS 15 *Revenue from Contracts with Customers* replaces all current revenue recognition requirements under IFRS and applies to all revenue arising from contracts with customers and sales of some non-financial assets. The standard outlines the principles an entity must apply to measure and recognise revenue. Under this standard revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to the customer.

Management has assessed the impact of applying the new standard on the Group's consolidated financial statements and expects that the effect will not be material.

The Group intends to adopt the standard using the modified retrospective approach which means that the cumulative impact of the adoption will be recognised in retained earnings as of January 1, 2018 and that comparatives will not be restated.

IFRS 16 Leases (effective for financial years beginning on or after January 1, 2019)

IFRS 16 *Leases* replaces existing IFRS leases requirements and requires lessees to recognise assets and liabilities for most leases. For lessees, the new standard marks a significant change from current requirements under IFRS. Lessees will have a single accounting model for all leases, with certain exemptions. The Group is currently assessing the impact which this standard will have on the financial position and performance.

IAS 40 Investment Property (amendments) – Transfers of Investment Property (effective for financial years beginning on or after January 1, 2018)

The amendments clarify the requirements on transfers into, or out of, investment property specifying that such transfers should only be made when there has been a change in use of the property. The amendments are not expected to have a significant impact on the Group's financial position or performance.

IFRIC 22 Foreign Currency Transactions and Advance Consideration (effective for financial years beginning on or after January 1, 2018)

IFRIC 22 *Foreign Currency Transactions and Advance Consideration* clarifies how to determine the date of the transaction when an entity either pays or receives consideration in advance for foreign currency denominated contracts. The Group does not expect that this interpretation will have a significant impact on the financial position or performance.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

iv) New Accounting Pronouncements (continued)

IFRIC 23 Uncertainty over Income Tax Treatments (effective for financial years beginning on or after January 1, 2019)

IFRIC 23 Uncertainty over Income Tax Treatments clarifies the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is an uncertainty over income tax treatments under IAS 12 Income Taxes. The Group does not expect that this interpretation will have a significant impact on the financial position or performance.

Imrovements to IFRSs

In December 2016 and 2017, the IASB issued *Annual Improvements to IFRSs* with the effective dates on or after January 1, 2018 and January 1, 2019, respectively. The documents set out amendments to International Financial Reporting Standards primarily with a view of removing inconsistencies and clarifying wording. Amendments are generally intended to clarify requirements rather than result in substantive changes to current practice. These improvements will not have a significant impact on the financial position or performance of the Group.

v) Basis of Consolidation

Subsidiaries are those investees, including structured entities, that the Group controls because the Group (i) has power to direct the relevant activities of the investees that significantly affect their returns, (ii) has exposure, or rights, to variable returns from its involvement with the investees, and (iii) has the ability to use its power over the investees to affect the amount of the investor's returns. The existence and effect of substantive rights, including substantive potential voting rights, are considered when assessing whether the Group has power over another entity. For a right to be substantive, the holder must have a practical ability to exercise that right when decisions about the direction of the relevant activities of the investee need to be made. The Group may have power over an investee even when it holds less than the majority of the voting power in an investee. In such a case, the Group assesses the size of its voting rights relative to the size and dispersion of holdings of the other vote holders to determine if it has de-facto power over the investee's activities or apply only in exceptional circumstances, do not prevent the Group from controlling an investee. Subsidiaries are consolidated from the date on which control is transferred to the Group and are deconsolidated from the date on which control ceases.

All intragroup balances, transactions and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transactions provide evidence of an impairment of the asset transferred. Where necessary, accounting policies in subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. The interests of non-controlling shareholders may be initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement basis is made on an acquisition-by-acquisition basis. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

v) Basis of Consolidation (continued)

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. Any difference between the purchase consideration and the carrying amount of non-controlling interest acquired is recorded as a capital transaction directly in equity. The Group recognises the difference between sales consideration and the carrying amount of non-controlling interest sold as a capital transaction in the statement of changes in equity.

When the Group grants put options to non-controlling interest shareholders at the date of acquiring control of a subsidiary the Group considers the terms of transaction to conclude on accounting treatment.

Where the terms of the put option provide the Group with a present ownership interest in the shares subject to the put, the shares are accounted for as acquired. Financial liabilities in respect of put options are recorded at fair value at the time of entering into the options, and are subsequently remeasured to fair value with the change in fair value recognised in the income statement.

When the terms of the put option do not provide a present ownership interest in the shares subject to the put, the Group determined that its accounting policy is to partially recognise non-controlling interests and to account such put options as the following:

- The Group determines the amount recognised for the non-controlling interest, including its share of profits and losses (and other changes in equity) of the subsidiary for the period;
- The Group derecognises the non-controlling interest as if it was acquired at that date;
- The Group records the fair value of financial liability in respect of put options; and
- The Group accounts for the difference between the non-controlling interest derecognised and the fair value of financial liability as a change in the non-controlling interest as an equity transaction.

When the Group loses control over a subsidiary, it:

- Derecognises the assets (including goodwill) and liabilities of the subsidiary;
- Derecognises the carrying amount of any non-controlling interest;
- Derecognises the cumulative translation differences, recorded in equity;
- Recognises the fair value of the consideration received;
- Recognises the fair value of any investment retained;
- Recognises any surplus or deficit in profit or loss;
- Reclassifies the parent's share of components previously recognised in other comprehensive income/loss to profit or loss or retained earnings, as appropriate.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

vi) Foreign Currency Translation

Functional and Presentation Currency

The presentation currency for the purpose of these consolidated financial statements of the Group is the US dollar because the presentation in US dollars is convenient for the major current and potential users of the Group's financial statements.

The functional currency of the Group's entities is the currency of their primary economic environment. The functional currencies of the Group's entities are the Russian rouble, US dollar, Euro, Romanian lei and Canadian dollar.

Transactions and Balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at period end exchange rates are generally recognised in profit or loss. They are deferred in other comprehensive income/loss if they relate to qualifying cash flow hedges and qualifying net investment hedges.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the date of the initial transactions.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Foreign exchange differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss.

Group Companies

The results and financial position of Group companies that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities are translated at the period-end exchange rates;
- Income and expenses are translated at weighted average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions);
- All resulting exchange differences are recognised in other comprehensive income/loss.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

vii) Business Combination and Goodwill

Acquisition of Subsidiaries

Business combinations are accounted for using the acquisition method. The consideration for the acquisition is measured at the aggregate of the fair values of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in profit or loss as incurred. Where applicable, the consideration for the acquisition includes any asset or liability resulting from a contingent consideration arrangement, measured at its acquisition-date fair value. Subsequent changes in such fair values are adjusted against the cost of acquisition where they qualify as measurement period adjustments. All other subsequent changes in the fair value of contingent consideration classified as an asset or liability are accounted for in accordance with relevant IFRS. Where a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to fair value at the acquisition date and the resulting gain or loss, if any, is recognised in profit or loss.

Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised as of that date.

The measurement period is the period from the date of acquisition to the date the Group obtains complete information about facts and circumstances that existed as of the acquisition date - and is subject to a maximum of one year.

Goodwill

Goodwill arising in a business combination is recognised as an asset at the date that control is acquired. Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any noncontrolling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the identifiable assets acquired and the liabilities assumed.

If, after reassessment, the Group's interest in the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. On disposal of a subsidiary, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

viii) Cash and Cash Equivalents

Cash and cash equivalents include cash in hand and at banks, demand deposits and other short-term highly liquid investments with original maturities of three months or less. Cash and cash equivalents are carried at fair value.

ix) Financial Assets

Initial Recognition and Measurement

The Group classifies its financial assets into the following categories: loans and receivables, financial assets at fair value through profit or loss, held-to-maturity investments, available-for-sale financial assets, or as derivatives designated as hedging instruments, as appropriate. The Group determines the classification of its financial assets on initial recognition and, where allowed and appropriate, reassesses this designation at each reporting date.

Financial assets are initially recognised at fair value plus directly attributable transaction costs. However when a financial asset at fair value through profit or loss is recognised, the transaction costs are expensed immediately.

Subsequent Measurement

The subsequent measurement of financial assets depends on their classification as described below:

Loans and Receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments not quoted in an active market. Subsequent to initial measurement, such assets are carried at amortised cost using the effective interest method less any allowance for impairment. Gains and losses are recognised in the income statement when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

An allowance for doubtful debts is established in case of objective evidence that the Group will not be able to collect amounts due. The Group periodically analyses loans and receivables and makes adjustments to the amount of the allowance. The amount of the allowance is the difference between the carrying amount and recoverable amount. The amount of the doubtful debts expense is recognised in the income statement.

Financial Assets at Fair Value through Profit or Loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified in this category unless they are designated as effective hedging instruments.

Held-to-Maturity Investments

Non-derivative financial assets with fixed or determinable payments and fixed maturity are classified as held-to-maturity, when the Group has the positive intention and ability to hold to maturity. Subsequent to initial recognition, held-to-maturity investments are recognised at amortised cost using the effective interest method less any allowance for impairment.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

ix) Financial Assets (continued)

Available-for-Sale Financial Assets

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified in any of the three preceding categories. After initial recognition, available-for-sale financial assets are measured at fair value with unrealised gains or losses being recognised as other comprehensive income/loss until the financial assets are derecognised or determined to be impaired, at which time the cumulative gain or loss is included in the income statement.

Derivatives

Derivatives are financial instruments that change their values in response to changes in the underlying variable, require no or little net initial investment and are settled at a future date. Derivatives are primarily used to manage exposures to foreign exchange risk, interest rate risk and other market risks. Derivatives are subsequently remeasured at fair value on a regular basis and at each reporting date. The method of the resulting gain or loss recognition depends on whether the derivative is designated as a hedging instrument.

Hedge Accounting

For the purpose of hedge accounting, derivatives are designated as instruments hedging the exposure to changes in the fair value of a recognised asset or liability (fair value hedges) and as instruments hedging the exposure to variability in cash flows attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedges). At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group applies hedge accounting and the risk management objective and strategy for undertaking the hedge. The Group assesses effectiveness of the hedges at inception and verifies at regular intervals and at least on a quarterly basis, using prospective and retrospective testing.

Impairment of Financial Assets

The Group assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is deemed to be impaired if, and only if, there is objective evidence of impairment as a result of one or more events that has occurred after the initial recognition of the asset (an incurred "loss event") and that loss event has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include observable data about the following loss events: significant financial difficulties of the debtor, default or delinquency in interest or principal payments, the probability that the debtor will enter bankruptcy or other financial reorganisation.

The amount of the impairment loss is measured as a difference between the asset's carrying amount and it's recoverable amount. The carrying amount of financial assets other than loans and receivables is reduced directly without the use of an allowance account and the amount of loss is recognised in the income statement.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

x) Inventories

Inventories are stated at the lower of cost and net realisable value. The cost of inventories is determined on the weighted average basis and includes all costs in bringing the inventory to its present location and condition. The cost of work in progress and finished goods includes the purchase costs of raw materials and conversion costs such as direct labour and an allocation of fixed and variable production overheads. The purchase costs comprise the purchase price, transport, handling and other costs directly attributable to the acquisition of inventories.

Net realisable value represents the estimated selling price for inventories less estimated costs to completion and selling costs. Where appropriate, an allowance for obsolete and slow-moving inventory is recognised. An allowance for impairment of inventory to their net realisable value and an allowance for obsolete and slow-moving inventory are included in the consolidated income statement as cost of sales.

xi) Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation and impairment losses, if any.

Depreciation is calculated on a straight-line basis. Average depreciation periods, which represent estimated useful economic lives of respective assets, are as follows:

Land	Not depreciated
Buildings	8-100 years
Machinery and equipment	5-30 years
Other	2-15 years

Costs incurred to replace a component of an item of property, plant and equipment that is recognised separately, including major inspection and overhaul expenditure, are capitalised. Subsequent costs are capitalised only when it is probable that future economic benefits associated with the item will flow to the Group and the costs can be measured reliably. All other repair and maintenance costs are recognised in the profit or loss as an expense when incurred.

xii) Intangible Assets (Other than Goodwill)

Intangible assets (other than goodwill) are stated at cost less accumulated amortisation and impairment losses, if any. The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortised over the useful economic life using the straight-line method over the period of 2-20 years. Amortisation period and amortisation method for an intangible asset with a finite life are reviewed at least at each year end. Changes in expected useful life or expected pattern of consumption of future economic benefits embodied in the asset are treated as changes in accounting estimates. Amortisation expense of intangible assets is recognised in the income statement in the expense category consistent with the function of an intangible asset.

Intangible assets with indefinite useful lives are not amortised, they are tested for impairment annually either individually or at the cash-generating unit level.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xii) Intangible Assets (Other than Goodwill) (continued)

Research and Development

Costs incurred on development (relating to design and testing of new or improved products) are recognised as intangible assets only when the Group can demonstrate technical feasibility of completing intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, availability of resources to complete and ability to measure reliably the expenditure during the development. Other development expenditures are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Development costs that have been capitalised are amortised from commencement of commercial production of the product on a straight-line basis over the period of its expected benefit. The carrying value of development costs is reviewed for impairment annually when the asset is not yet in use or more frequently when an indication of impairment arises during the reporting year.

xiii) Impairment of Goodwill and Other Non-Current Assets

Goodwill, intangible assets with indefinite useful life and intangible assets not yet available for use are reviewed for impairment annually or more frequently if events or changes in circumstances indicate that their carrying amount may be impaired. Other non-current assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An assessment is made at each reporting date to determine whether there is an objective evidence that an asset or a group of assets may be impaired. When there is an indication that an asset may be impaired, the recoverable amount is assessed and, when impaired, the asset is written down to its recoverable amount, which is the higher of the fair value less costs to sell and the value in use.

Fair value less costs to sell is the amount obtainable from the sale of an asset in an orderly transaction between market participants, after deducting any direct incremental disposal costs. Value in use is the present value of estimated future cash flows expected to arise from continuing use of an asset and from its disposal at the end of its useful life.

In assessing value in use, estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of time value of money and risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, recoverable amount is determined for the cash-generating unit to which the asset belongs.

Impairment loss is recognised for the difference between estimated recoverable amount and carrying value. Carrying amount of an asset is reduced to its estimated recoverable amount and the amount of loss is included in the income statement for the period.

Impairment loss recognised for non-current assets (other than goodwill) is reversed if there is an indication that impairment loss recognised in prior periods may no longer exist or may be decreased and if subsequent increase in recoverable amount can be related objectively to event occurring after the impairment loss was recognised. Impairment loss is only reversed to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognised. Impairment loss recongnised for goodwill is not reversed in subsequent period.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xiv) Borrowings

Borrowings are initially recognised at fair value less directly attributable transaction costs. In subsequent periods, borrowings are measured at amortised cost using the effective interest method. Any difference between the initial fair value less transaction costs and the redemption amount is recognised within finance costs over the period of the borrowings.

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of cost of respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

xv) Leases

The determination of whether an arrangement is, or contains a lease is based on the substance of the arrangement at the inception date of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

Finance leases, which transfer to the Group substantially all the risks and benefits incidental to ownership of the leased item, are recognised at the commencement of the lease term as assets and liabilities at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged to finance costs in the income statement.

The depreciation policy for depreciable leased assets is consistent with that for depreciable assets which are owned. If there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term or its useful life.

Leases where the lessor retains substantially all the risks and benefits of ownership of the asset are classified as operating leases. Operating lease payments are recognised as an expense in the income statement on a straight-line basis over the lease term.

xvi) Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that outflow of resources will be required to settle an obligation, and a reliable estimate of the amount can be made. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

If the effect of time value of money is material, provisions are determined by discounting expected future cash flows at a pre-tax rate that reflects current market assessments of time value of money and where appropriate, risks specific to the liability. Where discounting is used, increase in provision due to the passage of time is recognised as a finance cost.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xvii) Employee Benefits Liability

Short-Term Employee Benefits

Short-term employee benefits paid by the Group include wages, salaries, social security contributions, paid annual leave and paid sick leave, bonuses and non-monetary benefits (such as medical care). Such employee benefits are accrued in the period in which the associated services are rendered by employees of the Group.

Defined Benefit Obligations

The Group companies provide a number of post-employment and other long-term benefits to their employees (pensions, lump-sum post-employment payments, financial support to pensioners, jubilee payments, etc.).

All post-employment benefit plans are unfunded. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period stipulated in the collective bargaining agreements. The liability recognised in the statement of financial position in respect of post-employment and other long-term employee benefits is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets (if any). The defined benefit obligation is calculated by external consultants using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using yields on high-quality corporate bonds or, in countries where there is no deep market in such bonds, yields on government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related obligation.

Net benefit expense charged to the income statement consists of current service cost, interest expense, past service cost, gains and losses from settlement. Past service costs are recognised in profit or loss on the earlier of: the date of the plan amendment or curtailment, and the date when the Group recognises restructuring-related costs. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are reflected in other comprehensive income/loss in the period in which they arise.

Defined Contribution Plans

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

xviii) Government Grants

Grants from the government are recognised when there is a reasonable assurance that the grant will be received and the Group will comply with all conditions attached to it.

When the grant relates to an expense item, it is recognised as the decrease of respective expenses over the periods when the costs, which the grant is intended to compensate, are incurred.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xviii) Government Grants (continued)

Government grants relating to assets are included in non-current liabilities as deferred government grants and are credited to other income in the income statement on a straight-line basis over the expected lives of the related assets.

xix) Deferred Income Tax

Deferred income taxes are provided for all temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes, except where deferred income tax arises from initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit or loss. Deferred income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income/loss or directly in equity, in which case, it is also recognised in other comprehensive income/loss or directly in equity.

Deferred tax assets are recorgnised only to the extent that it is probable that taxable profit will be available to utilise deductible temporary differences and losses.

Deferred tax assets and liabilities are measured at tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on the tax rates that have been enacted or substantively enacted at the end of the reporting period.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where timing of reversal of temporary differences can be controlled and it is probable that temporary differences will not be reversed in the near future.

xx) Equity

Share Capital

Ordinary shares are classified as equity. External costs directly attributable to the issue of new shares, other than on a business combination, are shown as a deduction from proceeds in equity.

Treasury Shares

Own equity instruments which are acquired by the Group (treasury shares) are deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of treasury shares.

Dividends

Dividends are recognised as a liability and deducted from equity in the period in which they are approved by the shareholders. Retained earnings legally distributable are based on the amounts available for distribution in accordance with the applicable legislation and as reflected in the statutory financial statements of the individual entities of the Group. These amounts may differ significantly from the amounts calculated on the basis of IFRS.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

2) Significant Accounting Policies (continued)

xxi) Revenue Recognition

Revenue is recognised to the extent that it is probable that economic benefits will flow to the Group and the amount of revenue can be measured reliably. Revenues from sales of inventory are recognised when significant risks and rewards of ownership of goods have passed to the buyer. Revenues arising from rendering of services are recognised in the same period when the services are provided.

Revenues are measured at the fair value of the consideration received or receivable. When the fair value of consideration received cannot be measured reliably, revenue is measured at the fair value of goods sold or services provided.

xxii) Earnings per Share

Basic Earnings per Share

Basic earnings/loss per share is calculated by dividing the profit/loss attributable to equity holders of the parent by the weighted average number of ordinary shares outstanding during the reporting period, excluding treasury shares.

Diluted Earnings per Share

Diluted earnings/loss per share adjusts the figures used in the determination of basic earnings/loss per share to take into account:

- The after income tax effect of interest and other costs associated with dilutive potential ordinary shares, and
- The weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all potentially dilutive ordinary shares.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information

Operating segments reflect the Group's management structure and the way financial information is regularly reviewed. The Group has three reportable segments:

- Russia segment represents the results of operations and financial position of plants located in the Russian Federation and the Sultanate of Oman, a finishing facility in Kazakhstan, oilfield service companies and traders located in Russia, Kazakhstan, the United Arab Emirates and Switzerland;
- Americas segment represents the results of operations and financial position of plants and traders located in the United States of America and Canada;
- Europe segment represents the results of operations and financial position of plants located in Romania and traders located in Italy and Germany.

Management monitors the operating results of the segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on Adjusted EBITDA. Adjusted EBITDA is determined as profit/(loss) for the period excluding finance costs and finance income, income tax (benefit)/expense, depreciation and amortisation, foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions (except for provisions for bonuses), (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associates and other non-cash, non-recurring and unusual items. Group financing (including finance costs and finance income) is managed on a group basis and is not allocated to operating segments. Inter-segment revenues are eliminated upon consolidation.

The tables below disclose the information regarding the Group's reportable segments' results. The reconciliation from the operating profit/(loss) to the profit/(loss) before tax is provided in the income statement:

Year ended December 31, 2017	Russia	Americas	Europe	TOTAL
Revenue	3,157,496	994,397	241,760	4,393,653
Cost of sales	(2,502,362)	(824,920)	(193,877)	(3,521,159)
Gross profit/(loss)	655,134	169,477	47,883	872,494
Selling, general and administrative expenses	(391,893)	(80,280)	(38,001)	(510,174)
Other operating income/(expenses)	(33,614)	114	(296)	(33,796)
Operating profit/(loss)	229,627	89,311	9,586	328,524
Add back:				
Depreciation and amortisation	190,938	54,880	17,297	263,115
(Gain)/loss on disposal of property, plant and				
equipment	14,302	6,421	347	21,070
Movements in allowances and provisions	13,135	(39,285)	651	(25,499)
Other expenses	17,229	-	484	17,713
-	235,604	22,016	18,779	276,399
Adjusted EBITDA	465,231	111,327	28,365	604,923

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

3) Segment Information (continued)

Year ended December 31, 2016	Russia	Americas	Europe	TOTAL
Revenue	2,795,829	367,856	174,305	3,337,990
Cost of sales	(2,049,420)	(448,526)	(136,412)	(2,634,358)
Gross profit/(loss)	746,409	(80,670)	37,893	703,632
Selling, general and administrative expenses	(315,672)	(87,735)	(29,474)	(432,881)
Other operating income/(expenses)	(4,651)	993	(522)	(4,180)
Operating profit/(loss)	426,086	(167,412)	7,897	266,571
Add back:				
Depreciation and amortisation	154,401	71,259	15,894	241,554
(Gain)/loss on disposal of property, plant and	,		<i>,</i>	· · · · · · · · · · · · · · · · · · ·
equipment	(3,867)	962	323	(2,582)
Movements in allowances and provisions	(11,596)	23,131	(170)	11,365
Other expenses	12,853	-	396	13,249
-	151,791	95,352	16,443	263,586
Adjusted EBITDA	577,877	(72,060)	24,340	530,157

The following table presents the revenues from external customers for each group of products and services:

Sales to external customers	Seamless pipes	Welded pipes	Other operations	TOTAL
Year ended December 31, 2017	3,074,224	1,086,360	233,069	4,393,653
Year ended December 31, 2016	2,339,701	833,160	165,129	3,337,990

The Group sells products to major oil and gas companies. In the year ended December 31, 2017, revenue from the external customer with the share of more than 10% of the consolidated revenue amounted to 788,151 (year ended December 31, 2016: 631,048). This revenue related to the Russia operating segment.

The following tables present the geographical information. The revenue information is disclosed based on the location of the customer. Non-current assets are disclosed based on the location of the Group's assets and include property, plant and equipment, intangible assets and goodwill.

Year ended December 31, 2017	Russia	Americas	Europe	Middle East & Gulf Region	Cent.Asia & Caspian Region	Asia & Far East	Africa	TOTAL
Revenue	2,668,113	1,158,683	319,774	114,197	89,116	8,450	35,320	4,393,653
Non-current assets	1,725,145	596,470	293,586	77,318	8,139	-	-	2,700,658
Year ended December 31, 2016	Russia	Americas	Europe	Middle East & Gulf Region	Cent.Asia & Caspian Region	Asia & Far East	Africa	TOTAL
Revenue	2,412,853	485,628	248,870	95,819	59,677	24,145	10,998	3,337,990
Non-current assets	1,632,891	602,982	241,359	102,870	8,972	-	-	2,589,074

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

4) Cost of Sales

	Year ended December 31,		
	2017	2016	
Raw materials and consumables	2,380,346	1,522,998	
Staff costs including social security	498,054	386,014	
Energy and utilities	290,810	224,438	
Depreciation and amortisation	246,929	208,924	
Contracted manufacture	77,158	61,664	
Repairs and maintenance	67,917	49,207	
Freight	61,335	32,255	
Professional fees and services	31,428	22,441	
Taxes	26,919	27,815	
Rent	9,676	10,514	
Insurance	3,483	2,903	
Travel	1,540	1,468	
Communications	384	297	
Other	2,888	2,493	
Total production cost	3,698,867	2,553,431	
Change in own finished goods and work in progress	(165,272)	40,955	
Cost of sales of externally purchased goods	29,977	21,162	
Obsolete stock, write-offs/(reversal of allowances)	(42,413)	18,810	
Cost of sales	3,521,159	2,634,358	

5) Selling and Distribution Expenses

	Year ended December 31,		
	2017	2016	
Freight	144,696	117,640	
Staff costs including social security	39,443	36,410	
Professional fees and services	32,873	26,976	
Consumables	15,923	13,774	
Depreciation and amortisation	9,418	21,709	
Bad debt expense	8,148	(5,572)	
Rent	4,362	3,641	
Travel	2,263	2,157	
Utilities and maintenance	1,494	1,558	
Insurance	659	600	
Communications	317	374	
Other	999	1,136	
	260,595	220,403	

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

6) General and Administrative Expenses

	Year ended December 31,		
	2017	2016	
Staff costs including social security	135,895	113,920	
Professional fees and services	42,022	34,086	
Rent	14,588	9,537	
Utilities and maintenance	8,902	7,661	
Depreciation and amortisation	6,233	6,753	
Insurance	5,148	5,815	
Communications	4,780	5,095	
Travel	4,499	3,381	
Transportation	3,545	2,775	
Consumables	2,135	2,159	
Taxes	1,526	2,994	
Other	1,960	1,864	
	231,233	196,040	

7) Research and Development Expenses

	Year ended I	December 31,	
	2017 2016		
Staff costs including social security	5,552	4,679	
Depreciation and amortisation	3,277	3,824	
Other	2,636	2,190	
	11,465	10,693	

8) Other Operating Income and Expenses

	Year ended D	ecember 31,
	2017	2016
Social and social infrastructure maintenance expenses	9,767	7,266
Sponsorship and charitable donations	7,946	5,983
Taxes and penalties	5,037	1,299
(Gain)/loss on disposal of property, plant and equipment	21,070	(2,582)
Other (income)/expenses	(10,024)	(7,786)
· · · ·	33,796	4,180

9) Income Tax

	Year ended D	December 31,
	2017	2016
Current income tax	25,580	35,812
Adjustments in respect of income tax of previous periods	(760)	(1,860)
Deferred tax related to origination and reversal of temporary differences	23,111	(30,413)
	47,931	3,539

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

9) Income Tax (continued)

The income tax is different from that which would be obtained by applying the Russian Federation statutory income tax rate to profit/(loss) before tax. A reconciliation between the theoretical and the actual tax is provided below:

	Year ended December 31,		
	2017	2016	
Profit/(loss) before tax	77,500	169,158	
Theoretical tax at statutory rate in Russia of 20%	15,500	33,832	
Adjustments in respect of income tax of previous periods	(760)	(1,860)	
Effect of items which are not deductible for taxation purposes or not taxable	924	(2,305)	
Effect of different tax rates in countries other than Russia	19,698	(27,193)	
Tax on dividends distributable inside the Group	6,427	-	
Deferred income tax benefit due to changes in tax rates	(2,083)	-	
Deferred tax expenses arising from write-down of deferred tax assets	3,803	140	
Effect of unrecognised tax credits, tax losses and temporary differences of previous			
periods	4,385	587	
Other	37	338	
	47,931	3,539	

In December 2017, the U.S. enacted significant changes to U.S. tax law. The reform is complex and considers a number of changes to the U.S. corporate income tax system by, among other things, a permanent reduction in the corporate income tax rate from 35% to 21% and introduction of transition tax on unremitted earnings. The rate reduction would take effect on January 1, 2018. Transition tax on unremitted earnings is effective for the year ended December 31, 2017. In February 2017, the Omani government introduced certain amendments to the income tax law, in particular, the standard rate of income tax was increased to 15%, from 12%. The Group revised its calculation of income tax, accordingly.

Deferred income tax assets and liabilities, their movements for the year ended December 31, 2017 were as follows:

	2017	Reflected in the income statement	Reflected in other com- prehensive income/(loss)	Disposal of subsidiaries	Currency translation adjustments	2016
Valuation and depreciation of property, plant and						
equipment	(180,573)	35,662	-	-	(7,352)	(208,883)
Valuation and amortisation of intangible assets	(9,519)	(3,373)	-	-	-	(6,146)
Tax losses available for offset	249,890	(21,697)	(3,538)	-	9,171	265,954
Valuation of inventory	6,063	(19,540)	-	-	(104)	25,707
Provisions and accruals	15,856	1,830	-	-	485	13,541
Finance lease obligations	11,121	(527)	-	-	642	11,006
Valuation of accounts receivable	3,607	895	-	-	(207)	2,919
Other	(7,010)	(16,361)	-	-	(102)	9,453
	89,435	(23,111)	(3,538)	-	2,533	113,551
Reflected in the statement of financial position as follows:						
Deferred tax liability	(81,824)	13,573	-	-	(5,566)	(89,831)
Deferred tax asset	171,259	(36,684)	(3,538)	-	8,099	203,382

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

9) Income Tax (continued)

Deferred income tax assets and liabilities, their movements for the year ended December 31, 2016 were as follows:

	2016	Reflected in the income statement	Reflected in other com- prehensive income/(loss)	Disposal of subsidiaries	Currency translation adjustments	2015
Valuation and depreciation of property, plant and						
equipment	(208,883)	7,630	-	5,303	(17,166)	(204,650)
Valuation and amortisation of intangible assets	(6,146)	(120)	-	5,937	(1,013)	(10,950)
Tax losses available for offset	265,954	10,618	(17,314)	(4,464)	31,986	245,128
Valuation of inventory	25,707	4,616	-	282	389	20,420
Provisions and accruals	13,541	(1,950)	-	(139)	1,207	14,423
Finance lease obligations	11,006	2,254	-	-	1,172	7,580
Valuation of accounts receivable	2,919	(3,003)	-	(14)	1,188	4,748
Other	9,453	10,368	(35)	(52)	(62)	(766)
	113,551	30,413	(17,349)	6,853	17,701	75,933
Reflected in the statement of financial position as follows:						
Deferred tax liability	(89,831)	24,931	-	7,111	(12,309)	(109,564)
Deferred tax asset	203,382	5,482	(17,349)	(258)	30,010	185,497

Deferred tax assets were recognised for tax losses carry-forward to the extent that the realisation of the related tax benefit through future taxable profits is probable.

As at December 31, 2017, the Group has not recognised deferred tax liability in respect of 702,716 (December 31, 2016: 731,046) temporary differences associated with investments in subsidiaries as the Group is able to control the timing of the reversal of those temporary differences and does not expect to reverse them in the foreseeable future.

10) Earning per Share

	Year ended E	December 31,
	2017	2016
Profit/(loss) for the period attributable to the equity holders of the parent entity Weighted average number of ordinary shares outstanding	35,548 1,033,081,789	166,627 1,007,036,432
Earnings/(loss) per share attributable to the equity holders of the parent entity, basic and diluted (in US dollars)	0.03	0.17

11) Disposal of Subsidiaries

Metal Scrap Companies

In December 2016, the Group sold 100% ownership interest in TMK CHERMET LLC and its subsidiaries to the entity under common control for a total consideration of 82,165. The disposal allowed the Group to manage its cash and liquidity position. The Group recognised gain in the amount of 37,074 on this transaction.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

11) Disposal of Subsidiaries (continued)

Pipe Services and Precision Manufacturing Business in the U.S.

In September 2016, the Group sold 75% ownership interest in OFS Development S.a r.l., the owner of pipe services and precision manufacturing business in the U.S., for cash consideration in the amount of 2,400. The Group recognised loss in the amount of 7,653 on this transaction. The carrying value of net assets and liabilities disposed amounted to 13,404, the carrying value of non-controlling interests derecognised was 3,351.

12) Cash and Cash Equivalents

Cash and cash equivalents were denominated in the following currencies:

	December 31, 2017	December 31, 2016
Russian rouble	329,513	215,631
US dollar	154,932	45,534
Euro	5,177	10,290
Romanian lei	616	289
Other currencies	947	4,869
	491,185	276,613

The above cash and cash equivalents consisted primarily of cash at banks. As at December 31, 2017, the restricted cash amounted to 13,746 (December 31, 2016: 6,814).

13) Trade and Other Receivables

	December 31, 2017	December 31, 2016
Trade receivables	836,612	665,586
Officers and employees	899	865
Other accounts receivable	72,907	54,189
	910,418	720,640
Allowance for doubtful debts	(39,098)	(31,653)
	871,320	688,987

14) Inventories

	December 31, 2017	December 31, 2016
Finished goods	313,846	208,694
Work in progress	394,165	310,043
Raw materials and supplies	458,034	335,902
	1,166,045	854,639
Allowance for net realisable value of inventory	(44,842)	(85,948)
	1,121,203	768,691

The amount of inventories carried at net realisable value was 125,544 as at December 31, 2017 (December 31, 2016: 159,861).

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

14) Inventories (continued)

The following table summarises the changes in the allowance for net realisable value of inventory:

	Year ended December 31,			
	2017 2016			
Balance at January 1	85,948 63			
Increase/(decrease) in allowance	(42,144) 18			
Currency translation adjustments	1,038 3,4			
Balance at December 31	44,842 85,94			

15) Prepayments and Input VAT

	December 31, 2017	December 31, 2016
Prepayments for VAT, input VAT	79,897	61,212
Prepayments for services, inventories	28,376	20,508
Prepayments for other taxes	9,000	9,047
Prepayments for insurance	2,627	2,749
Other prepayments	5,485	816
	125,385	94,332
Allowance for doubtful debts	(107)	(142)
	125,278	94,190

16) Property, Plant and Equipment

Movement in property, plant and equipment for the year ended December 31, 2017 was as follows:

	Land and buildings	Machinery and equipment	Transport and motor vehicles	Furniture and fixtures	Other	Construc- tion in progress	TOTAL
Cost							
Balance at January 1, 2017	961,277	2,602,772	48,074	59,123	4,568	179,347	3,855,161
Additions	-	-	-	-	-	288,659	288,659
Assets put into operation	18,201	213,477	6,062	9,782	346	(247,868)	-
Disposals	(4,673)	(73,964)	(5,491)	(901)	-	(192)	(85,221)
Reclassifications	372	(415)	1	(49)	-	91	-
Currency translation adjustments	46,923	116,278	3,414	2,305	222	10,586	179,728
Balance at December 31, 2017	1,022,100	2,858,148	52,060	70,260	5,136	230,623	4,238,327
Accumulated depreciation and							
impairment							
Balance at January 1, 2017	(253,851)	(1,232,397)	(23,677)	(46,675)	(1,024)	-	(1,557,624)
Depreciation charge	(26,522)	(221,012)	(3,173)	(5,680)	(193)	-	(256,580)
Disposals	2,477	52,089	3,228	841	-	-	58,635
Impairment	(613)	(1,002)	-	-	-	-	(1,615)
Reversal of impairment	5,280	10,983	-	-	-	-	16,263
Reclassifications	(248)	246	-	2	-	-	-
Currency translation adjustments	(11,973)	(53,564)	(1,608)	(1,707)	(28)	-	(68,880)
Balance at December 31, 2017	(285,450)	(1,444,657)	(25,230)	(53,219)	(1,245)	-	(1,809,801)
Net book value at December 31, 2017	736,650	1,413,491	26,830	17,041	3,891	230,623	2,428,526
Net book value at January 1, 2017	707,426	1,370,375	24,397	12,448	3,544	179,347	2,297,537

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

16) Property, Plant and Equipment (continued)

Movement in property, plant and equipment for the year ended December 31, 2016 was as follows:

	Land and buildings	Machinery and equipment	Transport and motor vehicles	Furniture and fixtures	Other	Construc- tion in progress	TOTAL
Cost							
Balance at January 1, 2016	856,387	2,233,063	52,258	52,204	28,767	140,741	3,363,420
Additions	-	-	-	-	-	209,418	209,418
Assets put into operation	20,439	162,679	3,234	3,434	34	(189,820)	-
Disposals	(37,364)	(42,924)	(7,391)	(908)	(7)	(999)	(89,593)
Disposal of subsidiaries	(18,812)	(24,244)	(5,773)	(1,013)	(1,435)	(1,664)	(52,941)
Reclassifications	23,465	292	(15)	(278)	(23,464)	-	-
Currency translation adjustments	117,162	273,906	5,761	5,684	673	21,671	424,857
Balance at December 31, 2016	961,277	2,602,772	48,074	59,123	4,568	179,347	3,855,161
Accumulated depreciation and							
impairment							
Balance at January 1, 2016	(206,340)	(965,760)	(23,906)	(38,252)	(7,620)	-	(1,241,878)
Depreciation charge	(23,637)	(180,176)	(4,273)	(5,645)	(1,346)	-	(215,077)
Disposals	8,824	32,645	4,597	742	-	-	46,808
Disposal of subsidiaries	1,848	9,081	2,526	725	436	-	14,616
Reclassifications	(7,495)	(215)	6	122	7,582	-	-
Currency translation adjustments	(27,051)	(127,972)	(2,627)	(4,367)	(76)	-	(162,093)
Balance at December 31, 2016	(253,851)	(1,232,397)	(23,677)	(46,675)	(1,024)	-	(1,557,624)
Net book value at December 31, 2016	707,426	1,370,375	24,397	12,448	3,544	179,347	2,297,537
Net book value at January 1, 2016	650,047	1,267,303	28,352	13,952	21,147	140,741	2,121,542

Capitalised Borrowing Costs

The amount of borrowing costs capitalised during the year ended December 31, 2017 was 2,910 (year ended December 31, 2016: 1,621). The capitalisation rate was 8.8% (year ended December 31, 2016: 10.2%).

Leased Assets

The carrying value of the leased assets included in property, plant and equipment was as follows:

	December 31, 2017	December 31, 2016
Machinery and equipment	51,126	40,701
Transport and motor vehicles	5,305	5,692
	56,431	46,393

Impairment of Property and Equipment

As at December 31, 2017, the Group determined that the recoverable amount of the American division cash-generating unit significantly exceeded its carrying value. The increase of its recoverable amount was mostly due to significant improvement in both sales volumes and prices at the American division, resulting from growing drilling activity and higher E&P spending in the U.S. market. As a result, the Group reversed the impairment loss recognised in the year ended December 31, 2015 in the amount of 16,263.

As at December 31, 2017, there were indicators of impairment of certain items in the Russia operating segment. The Group recognised the impairment loss in the amount of 1,615 in respect of that items.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

17) Goodwill and Other Intangible Assets

Movement in intangible assets for the year ended December 31, 2017 was as follows:

	Patents and trademarks	Goodwill	Software	Customer and supplier relationships	Proprietary technology	Other	TOTAL
Cost							
Balance at January 1, 2017	210,522	554,426	12,692	473,668	18,650	7,781	1,277,739
Additions	90	-	7,292	-	729	2,265	10,376
Disposals	(83)	-	(78)) –	-	(364)	(525)
Reclassifications	402	-	193	-	-	(595)	-
Currency translation adjustments	115	3,137	840	-	-	432	4,524
Balance at December 31, 2017	211,046	557,563	20,939	473,668	19,379	9,519	1,292,114
Accumulated amortisation and							
impairment							
Balance at January 1, 2017	(602)	(491,543)	(11,793)	(464,201)	(14,100)	(3,963)	(986,202)
Amortisation charge	(218)	-	(897)	(8,644)	-	(832)	(10,591)
Impairment	-	(21,979)	-	-	-	-	(21,979)
Disposals	8	-	53	-	-	321	382
Reclassifications	(33)	-	-	-	-	33	-
Currency translation adjustments	(43)	(664)	(668)	(1)	-	(216)	(1,592)
Balance at December 31, 2017	(888)	(514,186)	(13,305)	(472,846)	(14,100)	(4,657)	(1,019,982)
Net book value at December 31, 2017	210,158	43,377	7,634	822	5,279	4,862	272,132
Net book value at January 1, 2017	209,920	62,883	899	9,467	4,550	3,818	291,537

Movement in intangible assets for the year ended December 31, 2016 was as follows:

	Patents and trademarks	Goodwill	Software	Customer and supplier relationships	Proprietary technology	Other	TOTAL
Cost							
Balance at January 1, 2016	211,592	569,800	10,496	506,598	16,746	5,837	1,321,069
Additions	152	-	292	-	1,631	1,563	3,638
Disposals	(16)	-	(1)	-	-	(219)	(236)
Disposal of subsidiaries	(1,606)	(27,451)	-	(39,440)	-	(95)	(68,592)
Reclassifications	163	-	-	-	356	(519)	-
Currency translation adjustments	237	12,077	1,905	6,510	(83)	1,214	21,860
Balance at December 31, 2016	210,522	554,426	12,692	473,668	18,650	7,781	1,277,739
Accumulated amortisation and							
<u>impairment</u>							
Balance at January 1, 2016	(392)	(486,611)	(9,746)	(447,228)	(13,312)	(2,770)	(960,059)
Amortisation charge	(148)	-	(153)	(25,686)	(782)	(837)	(27,606)
Impairment	-	(3,271)	-	-	-	-	(3,271)
Disposals	5	-	1	-	-	213	219
Disposal of subsidiaries	-	-	-	9,954	-	41	9,995
Currency translation adjustments	(67)	(1,661)	(1,895)	(1,241)	(6)	(610)	(5,480)
Balance at December 31, 2016	(602)	(491,543)	(11,793)	(464,201)	(14,100)	(3,963)	(986,202)
Net book value at December 31, 2016	209,920	62,883	899	9,467	4,550	3,818	291,537
Net book value at January 1, 2016	211,200	83,189	750	59,370	3,434	3,067	361,010

Patents and trademarks include intangible assets with indefinite useful lives with the carrying value of 208,700 (December 31, 2016: 208,700).

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

17) Goodwill and Other Intangible Assets (continued)

The carrying amounts of goodwill and intangible assets with indefinite useful lives were allocated among cash-generating units as follows:

	December 31, 2017	December 31, 2016
American division	208,700	208,700
Middle East division	-	21,979
Oilfield subdivision	16,745	15,901
European division	5,713	5,026
Other cash-generating units	20,919	19,977
	252.077	271.583

Goodwill and intangible assets with indefinite useful lives were tested for impairment as at December 31, 2017. In performing impairment tests, the Group determined value in use of each of its cash-generating units. The value in use was calculated using cash flow projections based on the operating plans approved by management covering a period of five years with the adjustments to reflect the expected market conditions. Cash flows beyond five year period were extrapolated using zero growth rate.

The pre-tax discount rates used in the calculations are presented in the table below:

	December 31, 2017	December 31, 2016
American division	10.2 %	10.5 %
Middle East division	11.6 %	10.7 %
Oilfield subdivision	12.1 %	13.4 %
European division	11.1 %	12.2 %
Other cash-generating units	11.6 %	13.1 %

Discount rates represent the current market assessment of the risks specific to each CGU, taking into consideration the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and its operating segments and is derived from its weighted average cost of capital (WACC).

The specific assumptions used in impairment tests were as follows:

Middle East Division

- forecast sales prices increase by 14% in 2018, by 7%, 1.5%, 2.5% in 2019, 2020 and 2021, respectively, and remain stable thereafter;
- forecast sales volume increases by 20% in 2018, by 17% and 6.6% in 2019 and 2020, respectively, and remains stable thereafter;
- forecast costs of sale increase by 35% in 2018, by 22% and 10% in 2019 and 2020, respectively, and remain stable thereafter.

As a result of the test, the Group recognised the impairment loss in the amount of 21,979 in respect of goodwill of the Middle East division. As at December 31, 2017, the Group determined that the recoverable amount of the Middle East division was 77,130. It was the most sensitive to the changes in prices and costs. A 5% rise in costs would result in a decrease of the recoverable amount by 69,932 and a decrease in sales prices by 5% would result in a decrease of the recoverable amount by 76,672.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

18) Other Non-Current Assets

	December 31, 2017	December 31, 2016
Available-for-sale financial assets	14,871	14,121
Prepayments for acquisition of property, plant and equipment	12,126	16,470
Restricted cash deposits for fulfillment of guaranties	4,156	12,257
Loans to employees	1,106	1,491
Long-term trade receivables	1,065	2,001
Derivative assets	-	4,490
Other	8,093	8,376
	41,417	59,206
Allowance for doubtful debts	(602)	(195)
	40,815	59,011

19) Trade and Other Payables

	December 31, 2017	December 31, 2016
Trade payables	640,857	432,798
Accounts payable for property, plant and equipment	77,358	48,151
Liabilities for VAT	32,283	45,895
Payroll liabilities	20,351	16,126
Accrued and withheld taxes on payroll	12,196	10,457
Liabilities for property tax	6,399	10,707
Liabilities for acquisition of non-controlling interests in subsidiaries	5,153	5,435
Sales rebate payable	2,688	7,197
Liabilities for other taxes	938	1,002
Dividends payable	68	48
Other payables	8,949	7,611
	807,240	585,427

20) Other Current Liabilities

The Group transferred some of its intercompany debts in exchange for cash under factoring arrangements. For the year ended December 31, 2017, the net cash inflows from these transactions in the amount of 116,224 were reported as part of other cash movements from financing activities. The respective liability in the amount of 114,765 was included in other current liabilities as at December 31, 2017 (Note 24).

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

21) Provisions and Accruals

	December 31, 2017	December 31, 2016
Current		
Provision for bonuses	21,509	10,684
Accrual for long-service bonuses	12,429	8,251
Accrual for unused annual leaves	2,925	2,689
Current portion of employee benefits liability	1,968	2,099
Environmental provision	323	339
Other provisions	21,328	13,390
	60,482	37,452
Non-current		
Accrual for unused annual leaves	14,892	13,625
Environmental provision	6,812	4,253
Provision for bonuses	744	-
Other provisions	3,006	3,350
-	25,454	21,228

Other provisions include provisions for taxes, legal costs and claims not covered by insurance.

22) Interest-Bearing Loans and Borrowings

	December 31, 2017	December 31, 2016
Current		
Bank loans	254,919	202,042
Interest payable	25,198	21,250
Current portion of non-current borrowings	89,761	38,533
Current portion of bearer coupon debt securities	231,367	-
Unamortised debt issue costs	(288)	(266)
	600,957	261,559
Non-current		
Bank loans	1,828,099	1,789,979
Bearer coupon debt securities	847,221	813,798
Unamortised debt issue costs	(11,831)	(8,231)
	2,663,489	2,595,546

Breakdown of the Group's interest-bearing loans and borrowings by currencies and interest rates was as follows:

Currencies	Interest rates	December 31, 2017	December 31, 2016
Russian rouble	Fixed interest rates	1,323,645	1,139,783
	Coupon	351,036	84,566
	Coupon	742,158	744,625
US dollar	Fixed interest rates	687,713	698,387
	Variable interest rates	84,124	125,423
	Fixed interest rates	287	-
Euro	Variable interest rates	75,483	64,321
		3,264,446	2,857,105

Unutilised Borrowing Facilities

As at December 31, 2017, the Group had unutilised borrowing facilities in the amount of 812,278 (December 31, 2016: 723,719).

Pledges

As at December 31, 2017, certain bank borrowings in the total amount of 222,556 were secured by property, equipment, inventory and accounts receivable (December 31, 2016: 143,684).

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

23) Finance Lease Liability

The Group's finance lease obligations primarily related to machinery, equipment and transport with certain leases having renewal and purchase options at the end of the lease term.

Future minimum lease payments were as follows:

	December	r 31, 2017	December 31, 2016		
	Minimum Present value of payments payments		Minimum payments	Present value of payments	
Less than 1 year	12,100	9,221	8,445	6,230	
1 to 5 years	33,140	25,507	23,872	16,834	
> 5 years	42,886	35,851	45,363	37,660	
Total minimum lease payments	88,126	70,579	77,680	60,724	
Less amounts representing finance charges	(17,547)	-	(16,956)	-	
Present value of minimum lease payments	70,579	70,579	60,724	60,724	

24) Changes in Liabilities from Financing Activities

Changes in liabilities arising from financing activities were as follows in the year ended December 31, 2017:

	Interest-bearing loans and borrowings	Finance lease liability	Other liabilities	TOTAL
Balance at January 1, 2017	2,857,105	60,724	-	2,917,829
Foreign exchange (gain)/loss	(31,233)	479	-	(30,754)
Finance costs	274,567	2,578	-	277,145
Acquisition of assets by means of finance lease	-	12,725	-	12,725
Net cash flows (used in)/from financing activities	49,580	(9,509)	116,224	156,295
Other	2,911	-	-	2,911
Currency translation adjustments	111,516	3,582	(1,459)	113,639
Balance at December 31, 2017	3,264,446	70,579	114,765	3,449,790

25) Employee Benefits Liability

The Group operates post-employment and other long-term employee benefit schemes in accordance with the collective bargaining agreements, local regulations and practices. These plans include benefits in the form of lump-sum post-employment payments, pensions, financial support to pensioners, jubilee payments to employees and pensioners, etc. These benefits generally depend on years of service, level of compensation and amount of benefit under the collective bargaining agreement. The Group pays the benefits when they fall due for payment. All employee benefit schemes are unfunded.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

25) Employee Benefits Liability (continued)

The following table summarises changes in the present value of the defined benefit obligation by country:

	Russ	ia	Other cou	Intries	тот	AL
	2017	2016	2017	2016	2017	2016
Balance at January 1	19,252	15,624	4,426	4,559	23,678	20,183
Current service cost	744	586	1,131	888	1,875	1,474
Interest expense	1,711	1,680	79	86	1,790	1,766
Past service cost	974	9	-	-	974	9
Other	51	445	-	(71)	51	374
Net benefit expense/(income) recognised in profit						
or loss	3,480	2,720	1,210	903	4,690	3,623
(Gains)/losses arising from changes in demographic						
assumptions	74	218	(47)	(60)	27	158
(Gains)/losses arising from changes in financial						
assumptions	885	172	117	(31)	1,002	141
Experience (gains)/losses	(468)	(1,255)	54	271	(414)	(984)
Actuarial (gains)/losses recognised in other						
comprehensive (income)/loss	491	(865)	124	180	615	(685)
Benefits paid	(1,643)	(1,456)	(371)	(1,119)	(2,014)	(2,575)
Exchange differences	1,055	3,229	140	(97)	1,195	3,132
Balance at December 31	22,635	19,252	5,529	4,426	28,164	23,678
Short-term	1,759	1,986	209	113	1,968	2,099
Long-term	20,876	17,266	5,320	4,313	26,196	21,579

Net benefit expense/(income) was recognised as cost of sales, general and administrative expenses and selling and distribution expenses in the income statement for the years ended December 31, 2017 and 2016.

The principal actuarial assumptions used in determining the Group's defined benefit obligations are shown below:

	Ru	ssia	Other countries		
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016	
Discount rate	7.7 %	8.6 %	3.8% - 4.4%	3.2% - 4.4%	
Inflation	4.1 %	4.5 %	-	-	
Average long-term rate of compensation increase	4.6 %	5.0 %	3.0 %	2.0% - 4.0%	
	Age-related	Age-related	Age-related	Age-related	
Turnover	statistical	statistical	statistical	statistical	
	distribution	distribution	distribution	distribution	

A quantitative sensitivity analysis for significant assumptions as at December 31, 2017 is provided below:

			Russia		Other countries		
	Volatility range Effect on obligation (decrease)		Effect on obligation increase/ (decrease)		Volatility range		
Discount rate	-1 %	1 %	2,431	(2,083)	380	(322)	
Inflation	-1 %	1 %	(2,083)	2,431	-	-	
Average long-term rate of							
compensation increase	-1 %	1 %	(521)	608	(131)	144	
Turnover	-3%1%	1% - 3%	2,604	(2,257)	136	(123)	

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

26) Interests in Subsidiaries

Principal Subsidiaries

The major subsidiaries included in these consolidated financial statements are presented below:

	Location	Effective owne	rship interest
		December 31, 2017	December 31, 2016
Manufacturing facilities			
"Volzhsky Pipe Plant", Joint stock company	Russia	100.00 %	100.00 %
"Sinarsky Pipe Plant", Public Joint stock company	Russia	97.65 %	97.65 %
"Taganrog Metallurgical Plant", Public Joint stock company	Russia	96.38 %	96.38 %
"Seversky Pipe Plant", Public Joint stock company	Russia	96.55 %	96.55 %
Limited Liability Company TMK-INOX	Russia	97.65 %	97.65 %
"TMK-CPW" Joint Stock Company	Russia	49.31 %	49.24 %
"Orsky Machine Building Plant", Joint stock company	Russia	75.00 %	75.00 %
IPSCO Tubulars Inc.	USA	100.00 %	100.00 %
IPSCO Koppel Tubulars, L.L.C.	USA	100.00 %	100.00 %
IPSCO Tubulars (KY) Inc.	USA	100.00 %	100.00 %
Ultra Premium Oilfield Services, Ltd.	USA	100.00 %	100.00 %
TMK-ARTROM S.A.	Romania	92.73 %	92.73 %
TMK-RESITA S.A.	Romania	100.00 %	100.00 %
LLP "TMK-Kaztrubprom"	Kazakhstan	100.00 %	100.00 %
TMK Gulf International Pipe Industry L.L.C.	Oman	55.47 %	55.47 %
Services for oilfield and gas industries			
Truboplast Pipe Coating Company	Russia	100.00 %	100.00 %
TMK NGS-Nizhnevartovsk	Russia	100.00 %	100.00 %
LLC TMK NGS - Buzuluk	Russia	100.00 %	100.00 %
TMK Completions LTD. and its subsidiaries	Canada, USA	75.00 %	75.00 %
Sales and procurement	-		
"Trade House "TMK" Joint Stock Company	Russia	100.00 %	100.00 %
TMK IPSCO International, L.L.C.	USA	100.00 %	100.00 %
TMK IPSCO Canada, Ltd.	Canada	100.00 %	100.00 %
TMK Europe GmbH	Germany	100.00 %	100.00 %
TMK Italia s.r.l.	Italy	100.00 %	100.00 %
TMK M.E. FZCO	UAE	100.00 %	100.00 %
LLP "TMK-Kazakhstan"	Kazakhstan	100.00 %	100.00 %
TMK Global S.A.	Switzerland	100.00 %	100.00 %
Research and development			
The Russian Research Institute of the Tube & Pipe Industries, Joint			
Stock Company	Russia	97.36 %	97.36 %
TMK R&D	Russia	100.00 %	100.00 %

Non-controlling Interests

The information about non-controlling interests in subsidiaries is presented in the following table:

	December 31, 2017		December 31, 2016	
	Non- controlling interest, %	Non- controlling interest in net assets	Non- controlling interest, %	Non- controlling interest in net assets
"Orsky Machine Building Plant", Joint stock company	25.00 %	11,819	25.00 %	9,861
TMK-ARTROM S.A.	7.27 %	8,909	7.27 %	7,407
Joint Stock Company "Sinarskaya Power Plant"	32.82 %	8,390	32.82 %	8,433
TMK Gulf International Pipe Industry L.L.C.	44.53 %	5,957	44.53 %	12,142
"Sinarsky Pipe Plant", Public Joint stock company	2.35 %	5,851	2.35 %	5,693
"Seversky Pipe Plant", Public Joint stock company	3.45 %	5,744	3.45 %	5,960
"Taganrog Metallurgical Plant", Public Joint stock company	3.62 %	3,832	3.62 %	4,986
Other		(423)		249
		50,079		54,731

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

27) Related Parties Disclosures

Compensation to Key Management Personnel of the Group

Key management personnel include members of the Board of Directors, the Management Board and certain executives of the Group.

The compensation to key management personnel included:

- Wages, salaries, social security contributions and other short-term benefits in the amount of 13,911 (year ended December 31, 2016: 11,829).
- Provision for performance bonuses in the amount of 5,273 (year ended December 31, 2016: 3,797).

The amounts disclosed above were recognised as general and administrative expenses in the income statement for the years ended December 31, 2017 and 2016.

The balance of loans issued to key management personnel amounted to 245 as at December 31, 2017 (December 31, 2016: 233).

Transactions with the Parent of the Company

In June 2017, the Group approved dividends in respect of 2016 year, from which 23,281 related to the Parent of the Company.

In September 2016, the Group approved interim dividends in respect of six months 2016, from which 20,387 related to the Parent of the Company.

In April 2016, the Group increased share capital of the subsidiary OFS Development S.a r.l. The share capital increase was partially financed by the Parent of the Company, an owner of non-controlling interest in OFS Development S.a r.l. Contribution received from the Parent of the Company amounted to 200.

Transactions with Other Related Parties

Other related parties include entities under common control with the Company, associates, joint ventures and other related parties.

The following table provides balances with other related parties:

	December 31, 2017	December 31, 2016
Cash and cash equivalents	87,463	48,558
Loans issued	59,475	39,333
Trade and other receivables	54,903	52,702
Prepayments for acquisition of property, plant and equipment	2,604	2,473
Long-term receivables	-	1,999
Other financial assets	-	42,228
Interest-bearing loans and borrowings	215,243	277,755
Trade and other payables	26,532	35,625
Advances received	1,209	158

Other financial assets represented bank deposits with original maturities of more than three months. Allowance for doubtful debts in respect of receivables from other related parties amounted to 1,940 as at December 31, 2017.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

27) Related Parties Disclosures (continued)

Transactions with Other Related Parties (continued)

The Group uses unsecured letters of credit to facilitate settlements with its counterparties, including payments under certain contracts to purchase raw materials from entities under common control with the Company. As at December 31, 2017, for the letters of credits in the total amount of 63,368 the bank paid cash to the related party following its request earlier than the original maturities per purchase contracts. The original due dates of Group's payables were not changed and the respective amounts were included in trade and other payables.

The following table provides the summary of transactions with other related parties:

	Year ended D	ecember 31,	
	2017 2016		
Sales revenue	51,966	53,621	
Other income	9,905	7,761	
Finance costs	34,224	34,244	
Purchases of raw materials	560,345	1,471	
Purchases of other goods and services	23,478	11,728	

28) Contingencies and Commitments

Operating Environment of the Group

Significant part of the Group's principal assets is located in the Russian Federation and USA, therefore its significant operating risks are related to the activities of the Group in these countries.

The Russian economy is recovering gradually, after the economic recession in the past several years. In spite of the Russia continues to be negatively impacted by sanctions imposed on certain companies and individuals as well as reduced access to international capital and volatile market conditions, assumed stable oil prices and better business sentiment can support investment and consumption.

The U.S. economy is growing following three years of a downturn. The sustained growth of the drilling activity resulted in the recovery of the oil and gas industry allowing the Group to increase its sales volumes and prices in the region in 2017.

The future effects of the current economic situation are difficult to predict and current management's expectations and estimates could differ from actual results.

Taxation

Tax legislation is subject to varying interpretations and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transactions and activity of the Group may be challenged by the relevant regional and federal authorities. Management believes that it has paid or accrued all taxes that are applicable. Where uncertainty exists, the Group has accrued tax liabilities based on management's best estimate of the probable outflow of resources embodying economic benefits, which will be required to settle these liabilities. Up to the date of authorisation of these consolidated financial statements for issuance, the court proceedings and pre-trial disputes have not been finalised for the claims in the amount of 8,643. Management believes that the Group's position is justified and it is not probable that the ultimate outcome of these matters will result in material losses for the Group. Consequently, the amounts of the claims being contested by the Group were not accrued in the consolidated financial statements for the year ended December 31, 2017.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

28) Contingencies and Commitments (continued)

Contractual Commitments

The Group had contractual commitments for the acquisition of property, plant and equipment from third parties in the amount of 109,269 as at December 31, 2017 (December 31, 2016: 122,958). Contractual commitments were expressed net of VAT.

As at December 31, 2017, the Group had unsecured letters of credit in the amount of 29,400 (December 31, 2016: 47,989) for the acquisition of property, plant and equipment.

Insurance Policies

The Group maintains insurance against losses that may arise in case of property and equipment damage (including insurance against fires and certain other natural disasters), business interruption insurance, insurance for transported goods against theft or damage. The Group also maintains corporate product liability, directors and officers liability insurance policies. Nevertheless, any recoveries under maintained insurance coverage that may be obtained in the future may not offset the lost revenues or increased costs resulting from a disruption of operations.

Legal Claims

During the period, the Group was involved in a number of court proceedings (both as a plaintiff and a defendant) arising in the ordinary course of business. Management believes there are no current legal proceedings or other claims outstanding, which could have a material effect on the results of operations or financial position of the Group.

Guarantees of Debts of Others

The Group guaranteed debts of others outstanding as at December 31, 2017 in the amount of 37 (December 31, 2016: 128).

29) Equity

i) Share Capital

	December 31, 2017	December 31, 2016
Number of shares		
Authorised		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366
Issued and fully paid		
Ordinary shares of 10 Russian roubles each	1,033,135,366	1,033,135,366

On August 16, 2016, the share capital of the Company was increased by 41,228,106 shares with par value of 10 Russian roubles each by means of an open subscription at price of 71 Russian roubles per share.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

29) Equity (continued)

ii) Treasury Shares

	Year ended December 31,			
	2017 2016			
	Number of shares	Cost	Number of shares	Cost
Balance at January 1	53,577	592	53,580	592
Purchase of treasury shares	-	-	17,660,796	16,212
Sales of treasury shares	-	-	(17,660,799)	(16,212)
Balance at December 31	53,577	592	53,577	592

iii) Reserve Capital

According to the Russian Law, the Company must create a reserve capital in the amount of 5% of the share capital per the Russian statutory accounts by annual appropriations that should be at least 5% of the annual net profit per the statutory financial statements. The reserve capital can be used only for covering losses and for the redemption of the Company's bonds and purchase of its own shares if there are no other sources of financing.

iv) Hedges of Net Investment in Foreign Operations

The Group uses US dollar-denominated borrowings as hedges of net investments in its foreign subsidiaries. The effectiveness of the hedging relationship was tested using the dollar offset method by comparing the cumulative gains or losses due to changes in US dollar / Russian rouble spot rates on the hedging instrument and on the hedged item. In the year ended December 31, 2017, the effective portion of net gains from spot rate changes in the amount of 17,691, net of income tax of 3,538, was recognised in other comprehensive income/(loss).

v) Acquisition of Non-controlling Interests in Subsidiaries

In the year ended December 31, 2016, the Group purchased additional shares of "Sinarsky Pipe Plant", Public Joint stock company and "Seversky Pipe Plant", Public Joint stock company for cash consideration of 215. The difference between the purchase consideration and the carrying amount of non-controlling interest acquired in the amount of 148 was recorded in additional paid-in capital.

vi) Dividends Declared by the Company to its Shareholders

On June 8, 2017, the general shareholders' meeting approved dividends in respect of 2016 year in the amount of 2,024,945 thousand Russian roubles (35,784 at the exchange rate at the date of approval) or 1.96 Russian roubles per share (0.03 US dollars per share), from which 105 thousand Russian roubles (2 at the exchange rate at the date of approval) related to the treasury shares in possession of the Group.

On September 29, 2016, the general shareholders' meeting approved interim dividends in respect of six months 2016 in the amount of 2,004,283 thousand Russian roubles (31,341 at the exchange rate at the date of approval) or 1.94 Russian roubles per share (0.03 US dollars per share), from which 104 thousand Russian roubles (2 at the exchange rate at the date of approval) related to the treasury shares in possession of the Group.

vii) Dividends Declared by Subsidiaries of the Group to the Non-controlling Interest Owners

During the years ended December 31, 2017 and 2016, the Group's subsidiaries declared dividends to the non-controlling interest owners in the amounts of 1,265 and 431, respectively.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

29) Equity (continued)

viii) Increase of Share Capital of Subsidiaries

In December 2016, the Group increased the share capital of TMK Gulf International Pipe Industry L.L.C. Contribution received from the non-controlling interest shareholders amounted to 1,262.

30) Financial Risk Management Objectives and Policies

In the course of its business, the Group is exposed to a number of financial risks: market risk (including interest rate risk and foreign currency risk), liquidity risk and credit risk.

The Group's risks and associated management policies are described below:

Market Risk

The Group is exposed to risks from movements in interest rates and foreign currency exchange rates which affect its assets, liabilities and anticipated future transactions. The objective of market risk management is to manage and control market risk exposures, while optimising the return on the risk.

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group borrows on fixed and variable rate basis. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's borrowings with variable interest rates.

The following table demonstrates the sensitivity to a reasonably possible change in interest rates on the portion of loans and borrowings affected:

	December 31, 2017			December 31, 2016				
	Volatili	ty range	Effect on profit/(loss) before tax		Volatility range		Effect on profit/(loss) before tax	
LIBOR	-10 bps	+10 bps	86	(86)	-11 bps	+11 bps	138	(138)

Foreign Currency Risk

The Group's exposure to currency risk relates to sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of the Group's subsidiaries, and the Group's net investments in foreign operations. The currencies in which these transactions and balances primarily denominated are US dollar and euro.

The Group's exposure to currency risk determined as the net monetary position in respective currencies was as follows:

	December 31, 2017	December 31, 2016
USD/RUR	(1,169,294)	(1,044,746)
EUR/RUR	(63,276)	(58,011)
USD/EUR	24,788	19,883
USD/RON	(12,612)	(16,417)
EUR/RON	(82,783)	(41,798)
KZT/RUR	7,455	7,144
USD/CAD	5,155	(2,041)

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Foreign Currency Risk (continued)

The Group hedged its net investments in foreign operations against foreign currency risk using borrowings in US dollars made by the Russian companies of the Group. The Group doesn't have other formal arrangements to manage currency risk. However, the Group seeks to bring its financial liabilities in foreign currency in line with export net sales, thus mitigating currency risk.

The following table demonstrates the sensitivity of the Group's profit/(loss) before tax and other comprehensive income/(loss) to reasonably possible changes in the respective currencies, with all other variables held constant. The movement in other comprehensive income/(loss) arises from gains or losses on the US dollar-denominated borrowings related to the effective portion of the hedge of net investments in foreign operations. In estimating reasonably possible changes the Group assessed the volatility of foreign exchange rates during the relevant year.

		December 31, 2017						
	Volatility ra	nge	Effect on profit/(tax	loss) before	Effect on other co income/(l	-		
USD/RUR	-10 %	10 %	39,331	(39,331)	77,832	(77,832)		
EUR/RUR	-11 %	11 %	7,175	(7,175)	-	-		
USD/EUR	-7 %	7 %	(1,671)	1,671	-	-		
USD/RON	-7 %	7 %	921	(921)	-	-		
EUR/RON	-2 %	2 %	2,012	(2,012)	-	-		
KZT/RUR	-8 %	8 %	(626)	626	-	-		
USD/CAD	-6 %	6 %	(329)	329	-	-		

			December 3	1, 2016		
	Volatility ra	nge	Effect on profit/ tax	(loss) before	Effect on other co income/(l	-
USD/RUR	-20 %	20 %	125,036	(125,036)	84,331	(84,331)
EUR/RUR	-21 %	21 %	12,026	(12,026)	-	-
USD/EUR	-8 %	8 %	(1,682)	1,682	-	-
USD/RON	-9 %	9 %	1,487	(1,487)	-	-
EUR/RON	-3 %	3 %	1,057	(1,057)	-	-
KZT/RUR	-14 %	14 %	(998)	998	-	-
USD/CAD	-10 %	10 %	210	(210)	-	-

Liquidity Risk

Liquidity risk is the risk that the Group will not be able to settle its liabilities when they fall due. The Group manages liquidity risk by maintaining an adequate structure of borrowing facilities and cash reserves and matching the maturity profiles of financial assets and liabilities.

The table below summarises the maturity profile of the Group's financial liabilities based on contractual undiscounted payments, including interest payments:

		December 31, 2017			
	Less than 1 year	1 to 5 years	> 5 years	TOTAL	
loans and borrowings:					
	576,047	2,455,600	219,720	3,251,367	
	244,330	391,337	66,350	702,017	
у	12,100	33,140	42,886	88,126	
vables	735,073	-	-	735,073	
	114,765	5,357	527	120,649	
	1,682,315	2,885,434	329,483	4,897,232	

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Liquidity Risk (continued)

		December 31, 2016				
	Less than 1 year	Less than 1 year 1 to 5 years > 5 years				
Interest-bearing loans and borrowings:						
Principal	240,575	2,323,512	280,265	2,844,352		
Interest	249,000	506,771	155,725	911,496		
Finance lease liability	8,445	23,872	45,363	77,680		
Trade and other payables	501,240	-	-	501,240		
Other liabilities	-	2,146	65	2,211		
	999,260	2,856,301	481,418	4,336,979		

Credit Risk

Credit risk is the potential exposure of the Group to losses that would be recognised if counterparties failed to perform or failed to pay amounts due. Financial instruments that primarily expose the Group to concentrations of credit risk are trade and other receivables.

The credit risk arising from the Group's normal commercial operations is controlled by each operating unit within Group-approved procedures for evaluating the reliability and solvency of each counterparty, including receivable collection. The monitoring activity of credit risk exposure is performed at the Group level.

The Group's maximum exposure to credit risk for trade and other receivables is presented in the table below:

	December	December 31, 2017		31, 2016
	Gross amount	Impairment	Gross amount	Impairment
Current trade and other receivables - not past due Current trade and other receivables - past due:	726,796	(5,539)	589,490	(4,382)
less than 30 days	87,039	(861)	42,424	(235)
31 to 90 days	48,234	(576)	26,098	(1,007)
> 90 days	48,349	(32,122)	62,628	(26,029)
	910,418	(39,098)	720,640	(31,653)

Movement in the allowance for impairment of trade and other receivables was as follows:

	Year ended December 31,		
	2017	2016	
Balance at January 1	31,653	35,593	
Utilised during the year	(2,370)	(3,254)	
Increase/(decrease) in allowance	7,852	(5,655)	
Currency translation adjustments	1,963	4,969	
Balance at December 31	39,098	31,653	

Capital Management

The Group's objectives when managing capital are to safeguard its ability to continue as a going concern, so that to continue providing returns for shareholders and other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust the capital structure, the Group adjusts the amount of dividends paid to shareholders, issues new shares or sells assets to reduce debt.

The Group is required to comply with certain debt covenants. The Group is in compliance with these covenants.

Notes to the Consolidated Financial Statements Year ended December 31, 2017

(All amounts in thousands of US dollars, unless specified otherwise)

30) Financial Risk Management Objectives and Policies (continued)

Fair Value of Financial Instruments Carried at Fair Value

The Group's financial instruments measured at fair value represented the net cash-settled forward on own shares in the amount of 4,490 as at December 31, 2016, which was included in other non-current assets. The fair value of the forward was determined using forward pricing model. The significant assumptions were obtained with reference to the contractual provisions and from independent market sources. The fair value of the forward was adjusted to take into account the inherent uncertainty relating to the future cash flows such as liquidity risk, historical volatility and other economic factors. As a result of the inclusion of these unobservable inputs, the forward was classified as level 3 in the fair value hierarchy.

In February 2017, the Group completed the secondary public offering of 138,888,888 ordinary shares of PAO TMK provided by the Parent of the Company under the stock lending agreement. Proceeds from the offering were used to purchase the corresponding number of ordinary shares of PAO TMK from the bank pursuant to the buyback option under the net cash-settled forward. The ordinary shares were returned to the Parent of the Company and the net cash-settled forward on own shares was realised in March 2017. The Group recognised net loss on these transactions, including the effect from the remeasurement of the forward to its fair value at the realisation date, in the amount of 3,439 (year ended December 31, 2016: net gain in the amount of 9,195).

During the reporting period, there were no transfers between level 1 and level 2 fair value measurement hierarchy, and no transfers into and out of level 3 fair value measurement hierarchy.

Fair Value of Financial Instruments not Carried at Fair Value

For financial assets and financial liabilities that are liquid or having a short-term maturity (cash and cash equivalents, short-term accounts receivable, short-term loans) the carrying amounts approximate their fair values.

The following table shows financial instruments which carrying values differ from fair values:

	December 31, 2017		December 31, 2016	
	Nominal value	Fair value	Nominal value	Fair value
Financial liabilities				
Fixed rate long-term bank loans	1,752,619	1,764,315	1,717,250	1,743,442
Variable rate long-term bank loans	75,480	73,638	93,461	95,520
6.75 per cent loan participation notes	500,000	527,935	500,000	518,750
7.75 per cent loan participation notes	231,367	232,202	231,367	239,962
Russian bonds	347,221	362,377	82,431	86,140

For quoted debt instruments (bonds and loan participation notes) the fair values were determined based on quoted market prices. The fair values of unquoted debt instruments were estimated by discounting future cash flows using rates currently available for debt on similar terms, credit risk and remaining maturities.

31) Subsequent Events

In January 2018, the Group fully repaid 7.75 per cent loan participation notes due 2018.

BORROWER

PAO "TMK"

40, Bldg. 2A, Pokrovka Street 105062 Moscow The Russian Federation

ISSUER

TMK CAPITAL S.A. 14, rue Edward Steichen L-2450 Luxembourg

GLOBAL COORDINATORS AND JOINT BOOKRUNNERS

J.P. Morgan Securities plc

Renaissance Securities (Cyprus) Limited Arch. Makariou III 9th floor 2-4 Capital Center 1065 Nicosia Cyprus

25 Bank Street Canary Wharf London E14 5JP United Kingdom

LEAD MANAGERS AND JOINT BOOKRUNNERS

AO "ALFA-BANK" / Alfa Capital Holdings (Cyprus) Limited 27 Kalanchevskaya Street 107078 Moscow Russian Federation

Themistokli Dervi, 5 Elenion Building 2ndfloor 1066 Nicosia, Cyprus

Sova Capital Limited 12 Floor, 88 Wood Street, London EC2V 7RS, United Kingdom **GPB Financial Services Hong Kong Limited** Suites 3712-3714 Two International Finance Centre 8 Finance Street Central Hong Kong

Merrill Lynch International 2 King Edward Street

London EC1A 1HQ United Kingdom

UBS AG London Branch 5 Broadgate London EC2M 2QS United Kingdom VTB Capital plc 14 Cornhill London EC3V 3ND United Kingdom

LEAD MANAGER

Public Joint-Stock Company "Sovcombank" Tekstilchikov avenue, 46, Kostroma, 156000, Russian Federation

LEGAL ADVISERS TO THE BORROWER

As to English and United States law Dentons UK and Middle East LLP One Fleet Place London EC4M 7WS United Kingdom As to Russian law **Dentons Europe AO** Floor 12, Office 107, 7 Lesnaya Street Moscow 125196 Russian Federation

LEGAL ADVISERS TO THE JOINT LEAD MANAGERS AND TRUSTEE

As to English and United States law

Linklaters LLP One Silk Street London EC2Y 8HQ United Kingdom As to Russian law Linklaters CIS Paveletskaya Square 2/2 Moscow 115054 Russian Federation

LEGAL ADVISERS TO THE ISSUER

As to Luxembourg law Arendt & Medernach SA 41A avenue JF Kennedy L-2082 Luxembourg

AUDITORS TO THE BORROWER

Ernst & Young LLC Sadovnicheskaya Nab., 77, bld. 1 Moscow, 115035 Russia

TRUSTEE

PRINCIPAL PAYING AGENT

REGISTRAR AND TRANSFER AGENT

BNY Mellon Corporate Trustee

Services Limited One Canada Square London E14 5AL United Kingdom The Bank of New York Mellon, London Branch One Canada Square London E14 5AL United Kingdom

The Bank of New York Mellon SA/NV, Luxembourg Branch, Vertigo Building – Polaris 2-4 rue Eugène Ruppert L-2453 Luxembourg

LISTING AGENT

Arthur Cox Listing Services Limited Ten Earlsfort Terrace,

Dublin 2, D02 T380 Ireland