ANNUAL REPORT 2018

LEADERSHIP IN INNOVATIONS

APPROVED
BY THE BOARD OF DIRECTORS OF PAO TMK ON APRIL 25, 2019
(MINUTES NO.23 DATED APRIL 29, 2019)

CONTENTS

1.0 TMK PROFILE

TMK IS ONE OF THE WORLD'S LEADING PRODUCERS AND SUPPLIERS OF STEEL PIPE FOR THE OIL AND GAS INDUSTRY. THE COMPANY'S SHARES ARE TRADED ON THE LONDON STOCK EXCHANGE AND MOSCOW EXCHANGE.

over 20
production assets

№1
in Russia and Top 3 in the US market

24%
share of the Russian pipe market

~70%
share of the Russian premium connections market

4 mln tonnes
of pipe sold in 2018, + 5 % y-o-y

$700 mln
EBITDA in 2018, + 16%y-o-y

The Company was founded in 2001 and currently operates over 20 production assets in Russia, the United States, Canada, Romania, and Kazakhstan. TMK's core business is the production and sales of seamless and welded pipe, including large diameter pipe, pipe with premium connections, combined with an extensive range of services in heat treatment, protective coating, premium connections threading, pipe storage, and repair.

TMK consists of four Russian production sites – Volzhsky Pipe Plant, Seversky Pipe Plant, Sinarsky Pipe Plant and Taganrog Metallurgical Works; 11 production facilities in the United States and Canada, owned by TMK IPSCO; TMK-ARTROM and TMK-RESITA in Romania. The Company also owns four oilfield service assets in Russia, incorporated into TMK Oilfield Services division, TMK-Kaztrubprom (Kazakhstan).

TMK's research efforts are spearheaded by the Russian Research Institute for the Tube and Pipe Industries (RosNITI) located in Chelyabinsk, Russia, and an R&D Center located in Houston, USA. These centers focus on new product design and development, experimental and validation testing, and advanced research. To foster innovation and boost its R&D potential, the Company set up an R&D facility in the Skolkovo Innovation Center located in Moscow, Russia.

The Company has created a modern, vertically integrated industrial group manufacturing and supplying high-tech, competitive pipe products through the consolidation of production assets across the globe, scientific and engineering innovations, and a geographically diversified sales network.

TMK's unique production and service capabilities supply a wide range of customers, offering effective solutions to their operational challenges.

In 2018, TMK's pipe sales totalled 4 million tonnes. TMK supplies products to customers in over 80 countries.

2.0 LETTER TO SHAREHOLDERS

Dear Shareholders,

2018 was a successful year for TMK. The Company demonstrated a robust performance and achieved further business growth, having reinforced our position as a leader in the global OCTG market, a leading supplier in the US market, and the dominant manufacturer of tubular products for the Russian oil and gas industry.

Dmitry Pumpyanskiy
Chairman of PAO TMK's Board of Directors

Alexander Shiryaev
CEO of PAO TMK

2.0 LETTER TO SHAREHOLDERS

The extension of the production cut agreement by OPEC and non-OPEC countries last year had a positive effect on major oil and gas regions around the world, helping to improve the market environment and partially stabilize hydrocarbon prices. Oil and gas companies worldwide continued to increase their drilling activity and upstream budgets, with the largest growth recorded in North America. Activity in the global market followed North America's lead and supported demand for tubular products in Russia as well as in our other significant export markets such as the CIS, Europe, Middle East, and Asia Pacific.

At the same time, there were a number of major global challenges in 2018, including a lack of accelerated global growth, an unprecedented surge in protectionist sentiment and heightened trade tensions between certain countries. Despite these challenges, TMK increased its sales of tubular products by 5% year-on-year to 4 million tonnes. Sales of OCTG pipe, TMK's core product, were up 10% year-on-year, while sales of premium threaded connections increased by 33% year-on-year, reflecting growing demand for our unique premium product line, as hydrocarbon production projects across the globe became increasingly complex.

All of these factors helped significantly strengthen TMK's financial position in 2018. Revenue and adjusted EBITDA increased by 16% year-on-year, facilitated by a stronger performance across all TMK divisions. TMK continued to deleverage, with the net debt-to-EBITDA ratio at less than 3.5x at the end of the year.

The stable demand for tubular products in TMK's home markets supports our unparalleled competitive advantage on a global scale. We continued to improve our customer relations by expanding our range of high-tech products and services as well as building further strategic partnerships with oil and gas majors aimed at jointly developing innovative technologies and services.

In 2018, TMK launched its new Strategy to 2027. One of its key elements is to reinforce TMK's leadership in our key segments – seamless OCTG and premium connections. To date, the Strategy has yielded positive results. We have been the world's largest pipe manufacturer for 10 consecutive years, with TMK's share of the global OCTG market increasing from 12% in 2017 to 13% at the end of 2018. TMK remains the dominant manufacturer of tubular products for the Russian oil and gas industry: at the end of the reporting year, our share in the seamless OCTG segment amounted to 63%.

TMK ran a number of projects during the reporting year aimed at improving product quality and increasing the share of value-added products in the product mix. A new heat treatment facility for seamless pipe was launched at TMK-ARTROM, Romania, and an external coating facility was built in the USA. In Russia, construction continued on both our R&D facility in Skolkovo and the heat treatment facility at Seversky Pipe Plant.

Last year, TMK took major steps towards digital transformation. We are convinced that in order to ensure effective solutions to changing customer needs, we must remain at the forefront of innovation, in oil and gas technology. We believe that business transformation encompasses more than simply implementing individual projects based on digital technology. Primarily, our business transformation involves creating a continuous chain of improvements to existing processes across all aspects of our business, from customer and supplier relations, to adopting innovative production management approaches, as well as standardizing and digitizing company-wide processes based on a new level of employee engagement.

We have already made definitive steps toward this goal. In 2018, we developed and approved our comprehensive digital transformation program, established a transformation committee, and set up a project management office. We are implementing multiple projects dealing directly with production processes and other activities. New approaches and ideas are actively integrated into our existing business structure in a consistent and focused manner.

An important element of our Strategy is TMK's contribution to maintaining an environmental balance across its footprint and our commitment to improving working conditions and enhancing occupational safety. TMK's efforts during the year, as in previous years, were focused on improving the environmental performance of production processes, reducing our consumption of water resources, and minimizing landfill volumes. With more than 20 projects implemented, our total environmental expenditure in 2018 amounted to $40 million, up 5% year-on-year.

As for occupational health and safety, comprehensive efforts taken in 2018 across the Company's plants drove a major reduction in occupational injury rates; no fatalities or mass accidents were recorded.

Looking ahead, TMK remains confident while improving its operating and financial performance, and is ready to respond flexibly to external challenges by adapting its Strategy to the changing market environment.

3.0 KEY HIGHLIGHTS 2018

January

On January 29, 2018, TMK fully redeemed its Eurobonds maturing in January 2018. The nominal value of the redeemed Eurobond was $231 million.

TMK reached an agreement with Rosneft to supply 8,000 tonnes of high-tech Cr13 (13% chromium) steel tubing with TMK UP PF gas-tight premium connections.

February

TMK commissioned a new integrated heat treatment line for seamless pipes at TMK-ARTROM, in Romania. The facility's treatment capacity is 165 ktpa of pipe.

TMK successfully completed testing the of its unique proprietary TMK UP KATRAN premium connection, the only connection that can be used in all Russian offshore projects at any depths and in the most challenging climatic conditions.

On February 28, 2018, Moody's Investors Service (Moody's) changed its outlook on TMK's credit ratings to "stable" from "negative", and affirmed the Company's corporate rating at B1.

March

TMK and the ENERGOPROM Group signed a contract for the supply of graphite electrodes for electric arc furnaces for the period of 2018–2022. The contract has allowed TMK to cover approximately 40% of its annual needs for graphite electrodes.

April

On April 28, 2018, at the World Day for Safety and Health at Work, TMK summarized the results of activities held to mark the Steel Safety Day, and submitted them to the World Steel Association. The initiative aims to identify and mitigate risks associated with key workplace hazards across all the Company's production sites.

June

PAO TMK's General Meeting of Shareholders approved a final dividend for the 2017 financial year of RUB 2.28 per ordinary share.

3.0 KEY HIGHLIGHTS 2018

July *TMK signed a number of agreements with leading international and Russian companies that specialize in digitizing business processes and rolling out digital solutions to the production floor. A trilateral agreement was signed with SAP and Ural Federal University, as well as an agreement with KPMG international consulting company, a memorandum with the German PSI Metals GmbH, and an agreement with Russia's ER-Telecom.*

August *TMK signed a five-year long-term agreement with JSC New Forwarding Company (part of Globaltrans Group). The New Forwarding Company will provide rail transportation of cargo to and from the Volzhsky Pipe Plant, Sinarsky Pipe Plant, Seversky Pipe Plant, as well as the Company's service subsidiaries.*

September *Under "the future thing" contract, TMK shipped to PJSC Gazprom a batch of corrosion-resistant casing pipes of 13Cr steel with TMK UP PF threaded connections for the Kirinsky block deposits.*

October *TMK and PJSC Gazprom signed a technology roadmap agreement for the production of pipes with integrated recording, processing and switching components.*

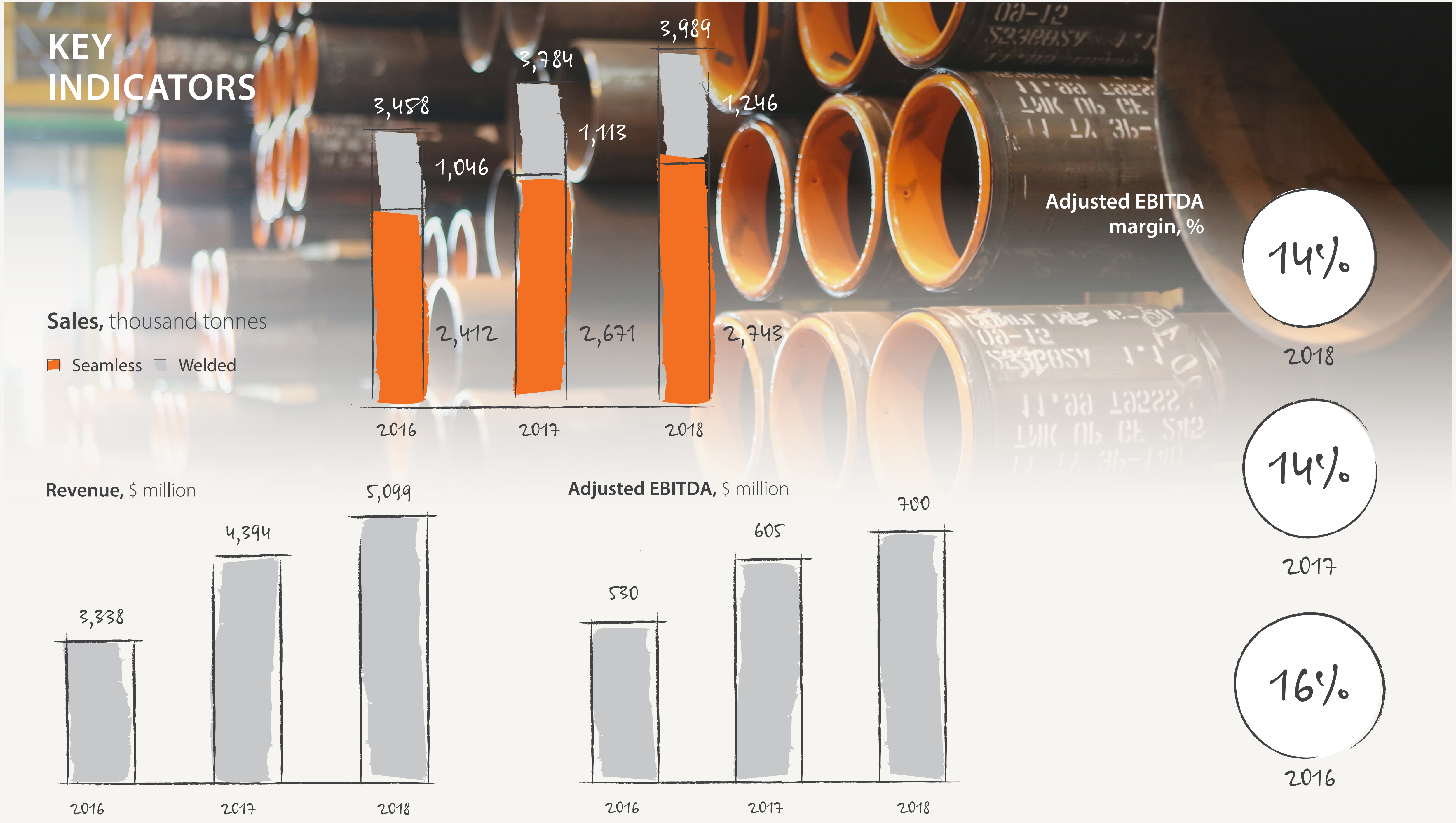
November *TMK opened its new external coating facility at TMK IPSCO. The 250 thousand tonnes of annual coating capacity for pipes is available in Fusion Bond Epoxy (FBE), Abrasion Resistant Overcoat (ARO) and other speciality coatings.*

TMK shipped its first batch of casing pipe with TMK UP PF threaded connections to Sakhalin Energy Investment Company Ltd. (Sakhalin Energy). With the involvement of TMK supervisors, the pipe column was successfully launched from the Molikpak platform at the Piltun-Astokhskoye field in the Sea of Okhotsk.

March 2019 *Russian Prime Minister Dmitry Medvedev awarded TMK executives with the 2018 Russian Government Prize in Science and Technology for developing and implementing a range of high-performance technologies for manufacturing next-generation, import-substituting seamless steel pipes to develop hard-to-recover hydrocarbon reserves.*

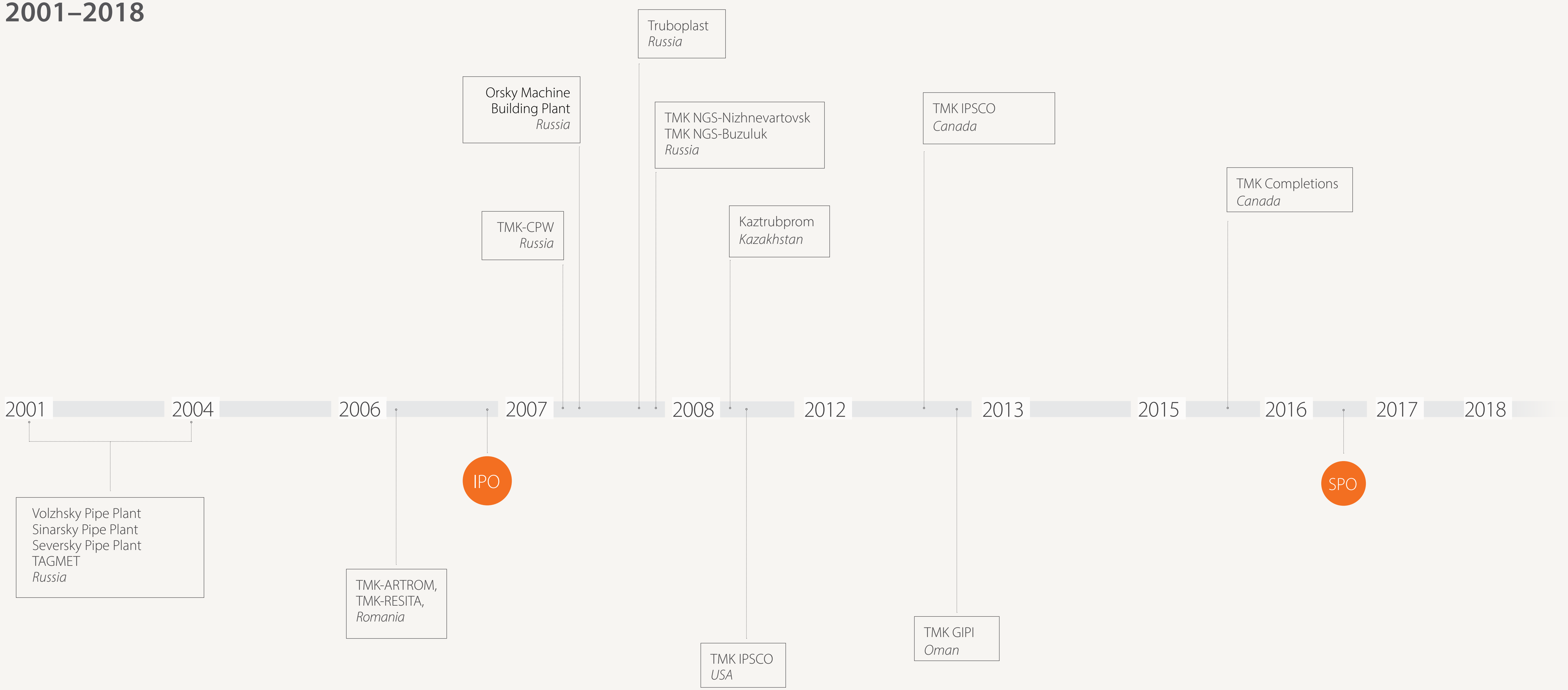
TMK signed a Stock Purchase Agreement with Tenaris, the manufacturer of seamless and welded pipe, for the sale of 100% of the shares of IPSCO Tubulars Inc. for an aggregate price of $US 1,209 million. The completion of the transaction is subject to the fulfillment of the conditions precedent in accordance with the Stock Purchase Agreement including, inter alia, the obtaining of all necessary permissions and approvals.

4.0 COMPANY OVERVIEW



4.1 BUSINESS DEVELOPMENT

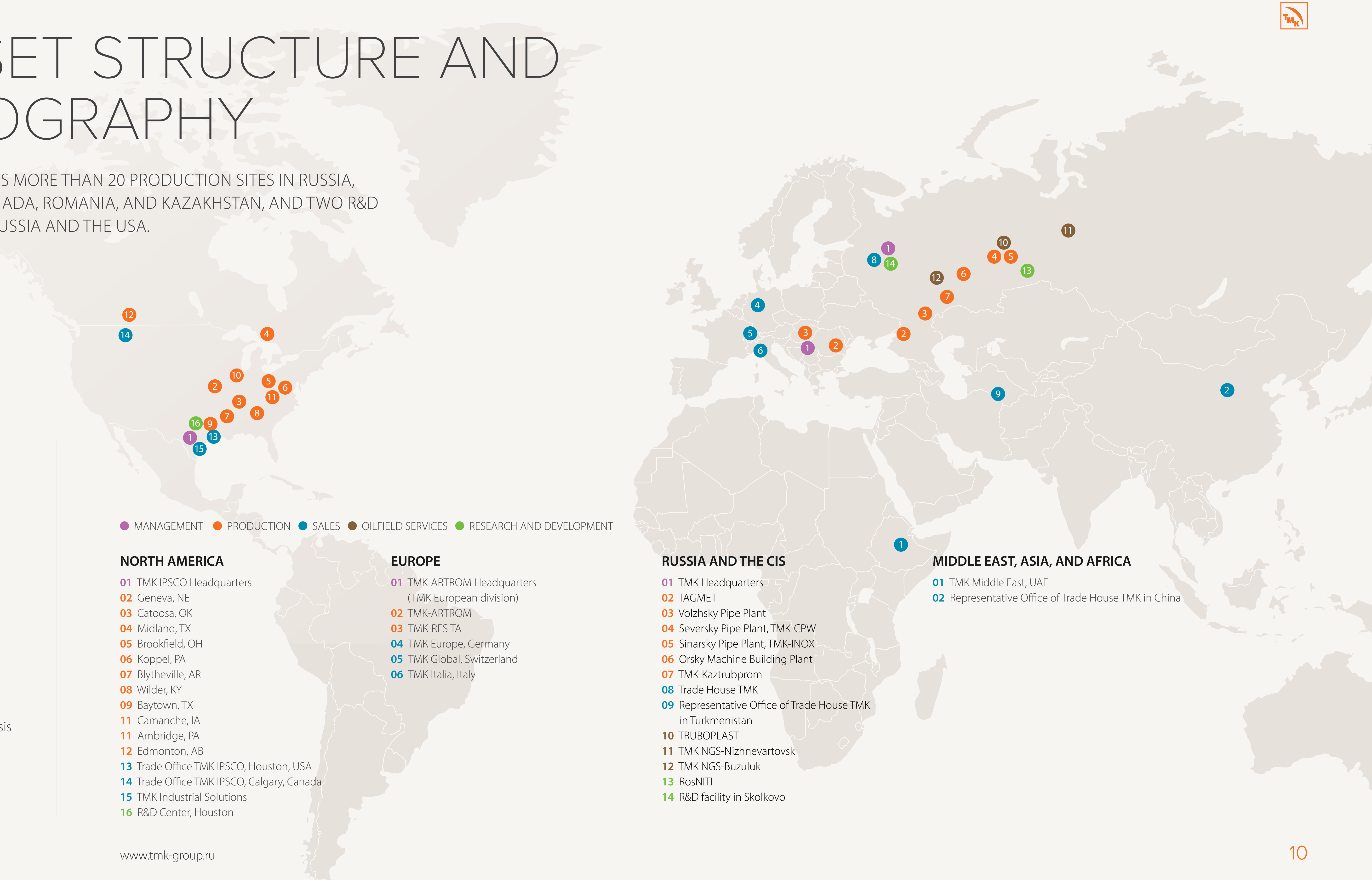
TMK's growth history, 2001–2018



Note: TMK's growth history is presented without taking into account the disposal of certain assets and a decrease in ownership.

4.2 ASSET STRUCTURE AND GEOGRAPHY

TMK OPERATES MORE THAN 20 PRODUCTION SITES IN RUSSIA, THE USA, CANADA, ROMANIA, AND KAZAKHSTAN, AND TWO R&D CENTERS IN RUSSIA AND THE USA.



MANAGEMENT · PRODUCTION · SALES · OILFIELD SERVICES · RESEARCH AND DEVELOPMENT

NORTH AMERICA

01 TMK IPSCO Headquarters
02 Geneva, NE
03 Catoosa, OK
04 Midland, TX
05 Brookfield, OH
06 Koppel, PA
07 Blytheville, AR
08 Wilder, KY
09 Baytown, TX
11 Camanche, IA
11 Ambridge, PA
12 Edmonton, AB
13 Trade Office TMK IPSCO, Houston, USA
14 Trade Office TMK IPSCO, Calgary, Canada
15 TMK Industrial Solutions
16 R&D Center, Houston

EUROPE

01 TMK-ARTROM Headquarters (TMK European division)
02 TMK-ARTROM
03 TMK-RESITA
04 TMK Europe, Germany
05 TMK Global, Switzerland
06 TMK Italia, Italy

RUSSIA AND THE CIS

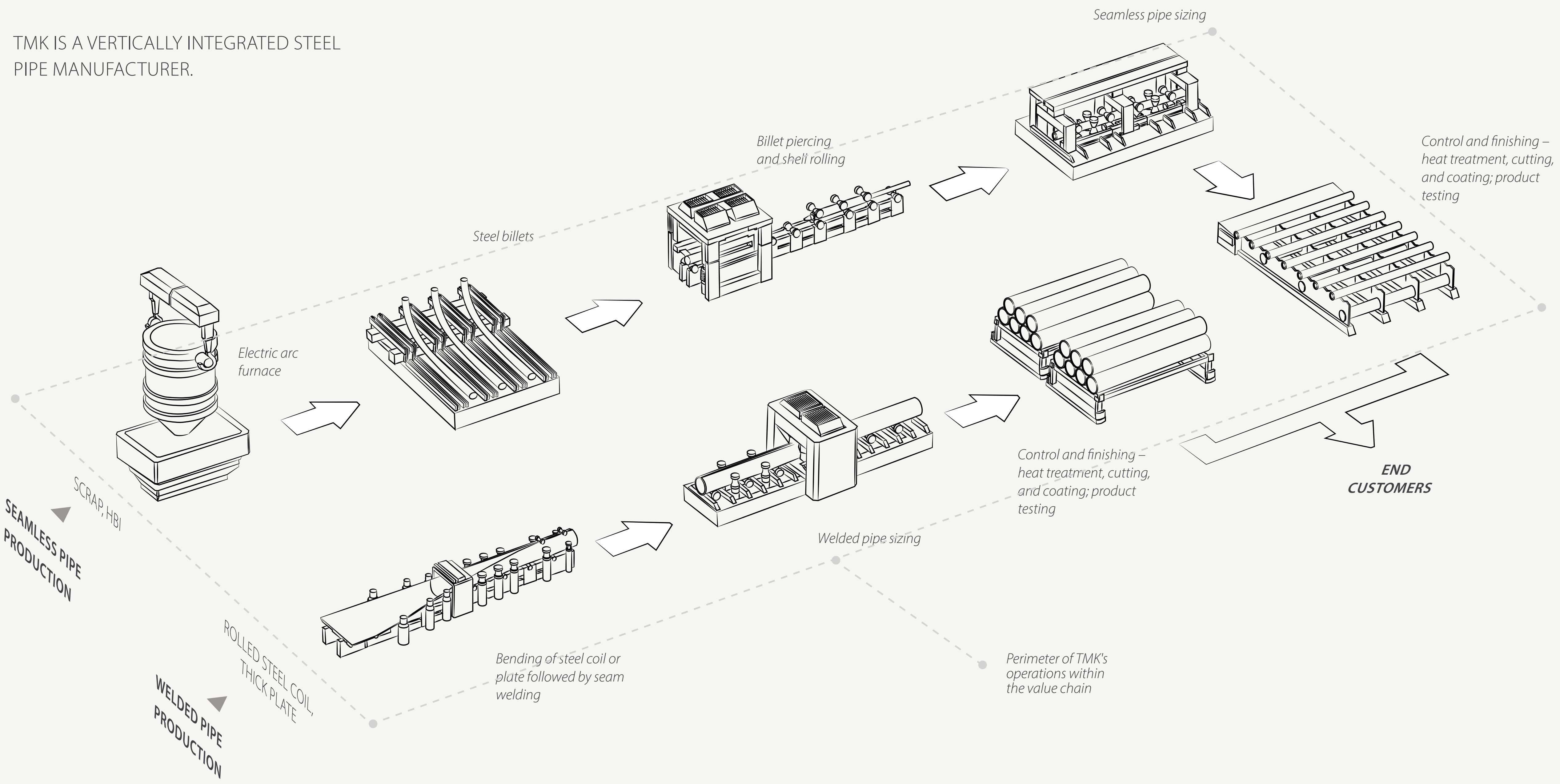
01 TMK Headquarters
02 TAGMET
03 Volzhsky Pipe Plant
04 Seversky Pipe Plant, TMK-CPW
05 Sinarsky Pipe Plant, TMK-INOX
06 Orsky Machine Building Plant
07 TMK-Kaztrubprom
08 Trade House TMK
09 Representative Office of Trade House TMK in Turkmenistan
10 TRUBOPLAST
11 TMK NGS-Nizhnevartovsk
12 TMK NGS-Buzuluk
13 RosNITI
14 R&D facility in Skolkovo

MIDDLE EAST, ASIA, AND AFRICA

01 TMK Middle East, UAE
02 Representative Office of Trade House TMK in China

4.3 VALUE CHAIN

TMK IS A VERTICALLY INTEGRATED STEEL PIPE MANUFACTURER.



VALUE CHAIN

TMK is self-sufficient in steel billets. Three of the Company's four Russian pipe plants have their own steelmaking facilities and manufacture steel billets for seamless pipe; Sinarsky Pipe Plant however does not have a steelmaking capacity. The plant instead benefits from close proximity to Seversky Pipe Plant, which fully covers its steel billet needs. We also have a steel billet production capacity in the USA and Europe: the Koppel plant in Pennsylvania (USA), and TMK-RESITA (Romania). Almost all steel billets produced by these plants are consumed by the Ambridge plant (USA) and TMK-ARTROM (Romania) respectively, both located in close proximity to the steelmaking facilities.

With its own steel billet production capacity and supply arrangements in place, TMK is less reliant on third-party suppliers, and is better positioned to control the costs of finished products and ensure the quality of steel used to manufacture its tubular products.

TMK purchases scrap and HBI for steelmaking facilities in Russia from TMK CHERMET and Metalloinvest. TMK purchases most scrap on the spot market, while for HBI it was signed an annually renewing contract with Metalloinvest in 2016, with formula-based pricing and monthly price reviews. The contract enables TMK to diversify its feedstock sources and reduce the risks associated with the scrap market volatility.

Currently, TMK has the following mid-term contracts for the supply of semi-finished products used in welded pipe production: steel plate – MMK, Severstal, Salzgitter, Metalloinvest, Metinvest Eurasia, and Nippon Steel; hot rolled coil – Mechel, MMK, Metinvest Eurasia, NLMK, Severstal, and ArcelorMittal-Temirtau. In 2018, some supplier contracts were based on formula pricing that factored in the costs of base materials, production costs, inflation rate, and fluctuations in the rouble exchange rate. The price could be reviewed on a monthly or quarterly basis subject to the specific contract terms.

4.4 STRATEGY AND PRINCIPAL ACTIVITIES

In September 2017, TMK's Board of Directors approved the Company's new Strategy to 2027.

Strategic objectives

1. To solidify TMK's position as a leading supplier to the global OCTG market, the dominant supplier to the Russian oil and gas market and one of the leading OCTG producer in the USA
2. To improve business efficiency and to consolidate position in the Top 2 global leaders by financial performance in the global OCTG market
3. To develop a service offering of comprehensive design solutions for customers using cutting-edge digital technologies
4. To enhance safety levels for our employees
5. To improve environmental protection at all of TMK's production facilities across all of the regions in which the Company operates
6. To reduce leverage
7. To maximise the operating cash flow and optimise the assets portfolio

Strategic priorities

Strategic priorities	Key 2018 highlights
Enhancing leadership in key segments and entering new product niches	• No. 1 globally by total shipments of tubular products • 67% share in premium connections segment in Russia • 63% share in seamless OCTG segment in Russia • 46% share of high-tech products in the Russian division's sales revenue • + 43% year-on-year growth in revenue from premium connections sales across the Group
Optimizing vertical integration to reduce costs and developing product and service ranges	• Growing sales of steel billets • Strategic partnership in wheel steel production segment • Commissioning of a new heat treatment line for seamless pipes at TMK-ARTROM • Commissioning of a new external coating facility at TMK IPSCO • Developing conceptual engineering services (15% of premium connection shipments at the Russian division included engineering analysis of projects)
Enhancing the sales platform and leveraging TMK's global scale	• Supplying products to over 80 countries • Developing a sales network in key markets • Increasing volumes of pipe shipped to the American division in terms of interplant cooperation (+ 13% year-on-year)
Focus on innovation and digitalization	• The comprehensive digital transformation program has been developed and approved and is currently under implementation • A transformation committee has been established, chaired by the CEO • TMK eTrade was launched, a tubular goods online shop project to develop an e-commerce platform (recognized as the best e-commerce project in Russia in 2018) • Launching an e-commerce procurement platform
Enhancing operational excellence	• Continuing to implement a number of decisions to increase technology reliability • Continuing to adopt lean production culture and implement a continuous improvement system • Consolidated efficiency program developed
Strengthening financial performance and investment appeal	• In 2018, adjusted EBITDA margin stayed flat year-on-year at 14% • Net debt / adjusted EBITDA ratio reduced from 4.44x as at the end of 2017 to 3.48x as at the end of 2018

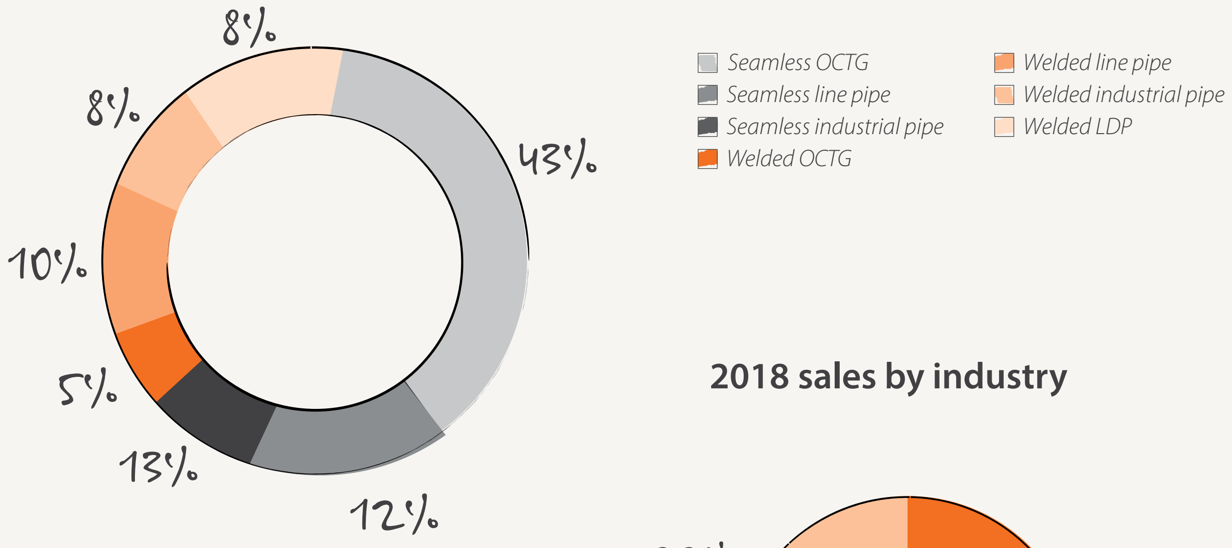
4.5 TMK'S MARKET POSITION

Our geographically diversified assets and sales help us mitigate risks and uncertainties while leveraging the opportunities offered by each market.

Industry experts estimate that in 2018, global steel pipe production was 172 million tonnes, up 1% year-on-year. The key drivers behind the increase include a 3.7% year-on-year rise in global economic growth and a considerable increase in investment activity within the energy sector (particularly in the NAFTA region) due to hydrocarbon price recovery.

According to the current medium-term outlook for the global pipe market, the market growth rate is expected to remain flat in 2019 compared to the prior year. The energy sector is expected to see moderately higher investments and growth in drilling activity, which will lead to a recovery in demand for oil country tubular goods (OCTG). Subject to sustained levels and further growth of global hydrocarbon prices and drilling activity, and implementation of planned pipeline projects, the global steel pipe market has potential to grow by 1% to 2% year-on-year in 2019.

2018 product portfolio



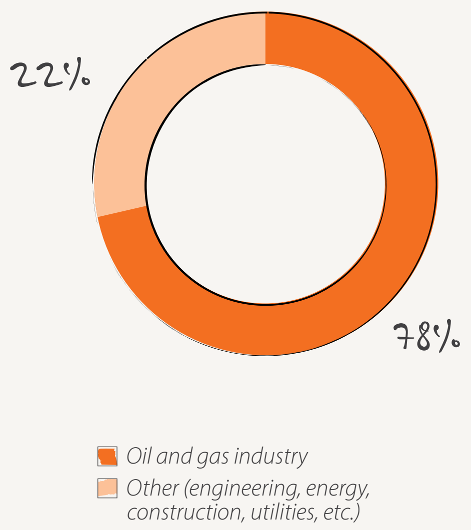
4 million tonnes

steel pipe sales in 2018 (+ 5% y-o-y)

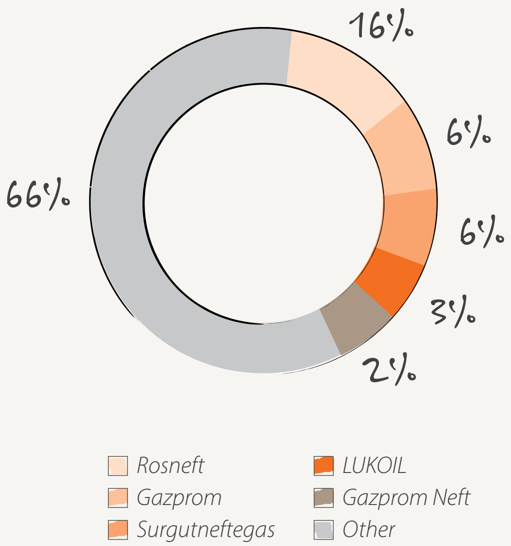
TMK Group's steel pipe sales in 2018 were 4 million tonnes, up 5% year-on-year and driven mostly by a recovery in the North American pipe market. TMK retains its leading position among the global steel pipe producers in terms of pipe sales.

In 2018, about 78% of TMK's tubular products were sold to consumers in the oil and gas industry.

2018 sales by industry



2018 sales by customer



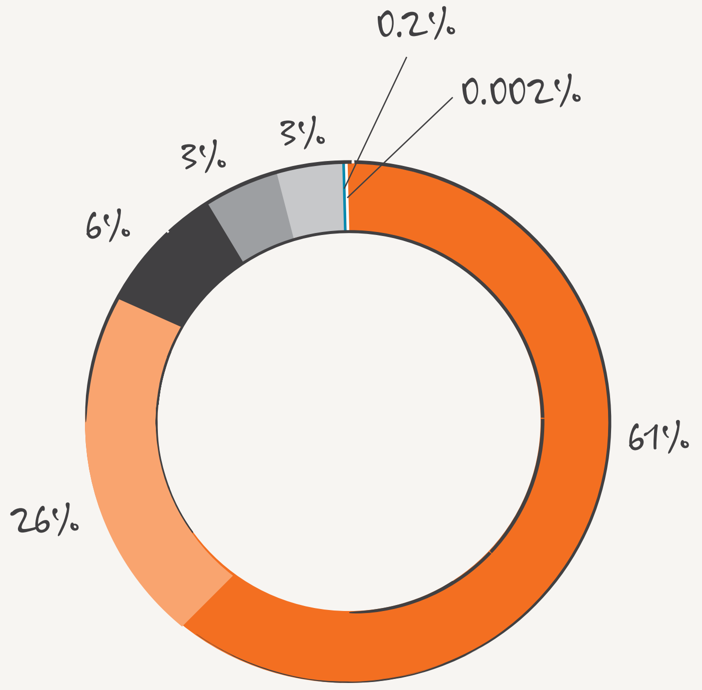
4.5 TMK'S MARKET POSITION

>80 countries across the world

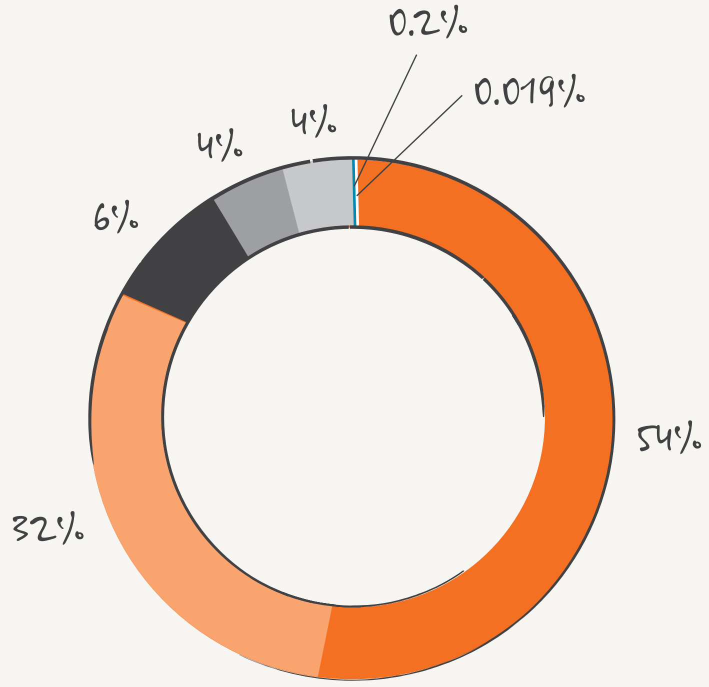
TMK supplies its products to customers in over 80 countries across the world, taking advantage of our geographically diversified network of dealers and formal representative offices around the globe.

In 2018, the Russian market accounted for 54% of our total revenue, the Americas for 32%, and the European market for 6%. CIS countries, the Middle East, and Central and South East Asia accounted for 8% of our total revenue. In 2018, the share of the American market in our total revenue increased year-on-year, due to growth in drilling activity as oil and gas companies increased their exploration and production budgets amid a more favorable price environment. Our geographically diversified assets and sales help TMK mitigate risks and uncertainties while leveraging the opportunities offered by each market.

TMK's 2017 sales geography, by % of revenue



TMK's 2018 sales geography, by % of revenue



Russia
Americas
Europe
Middle East and North Africa
CIS countries
East Asia, Southeast Asia, and the Far East
Sub-Saharan Africa

4.6 RUSSIAN PIPE MARKET

24%

our total share of the Russian pipe market

№ 1

in Russia

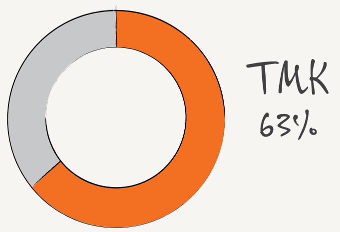
The Russian pipe market grew by 2% year-on-year in 2018, driven by higher consumption of OCTG (+ 3% year-on-year) and large diameter pipe (+ 29% year-on-year).

TMK maintained its leadership in the domestic pipe industry in 2018. Our total share of the Russian pipe market for 2018 was 24%, with a 63% market share in the OCTG segment, 59% in the seamless line pipe segment, and 67% in premium connections.

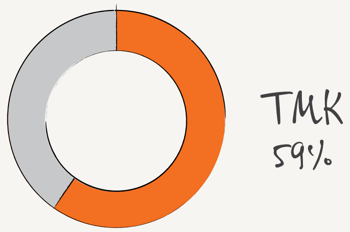
TMK's share of the Russian pipe market in 2018,

by product type, %

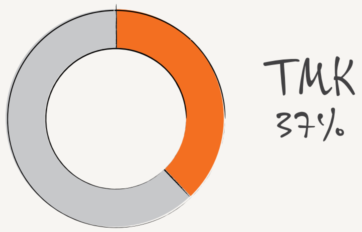
Seamless pipe



OCTG
Oil country tubular goods including drill, casing, and tubing pipes

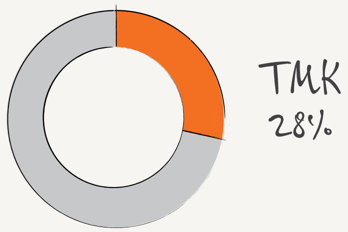


Seamless line pipe
Pipes for short-distance transportation of crude oil, petroleum products, and natural gas

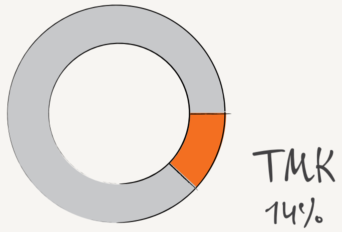


Seamless industrial pipe
Pipes used in such industries as car manufacturing, engineering, or energy

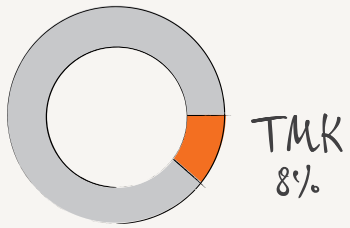
Welded pipe



Line pipe
Pipes for short-distance transportation of crude oil, petroleum products, and natural gas

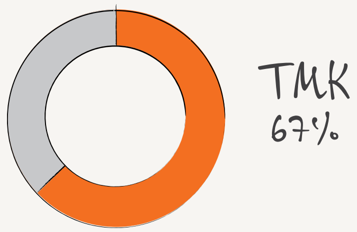


Large diameter pipe
Pipes used in construction of trunk pipelines for gas, oil, and petroleum product transportation

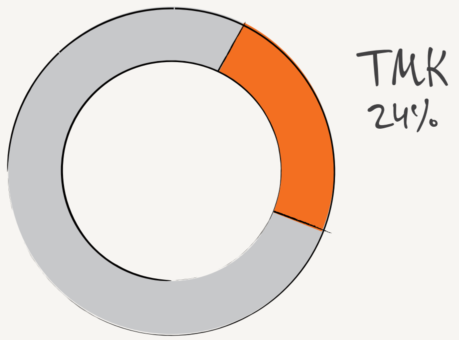


Welded industrial pipe
Pipes for multiple applications across various industries, including utilities and agriculture

Premium products



Premium connections (TMK UP)
High-margin proprietary products for connecting OCTG in offshore drilling, low temperature, high pressure, and other difficult conditions



No. 1 pipe producer in Russia

Source: TMK estimate

Large Diameter Pipe

The Russian large diameter pipe (LDP) market grew by 29% year-on-year in 2018, driven by higher LDP consumption by Gazprom and Transneft. In 2018, Gazprom purchased LDP for the Gryazovets–Slavyanskaya CS pipeline section intended to feed gas into Nord Stream 2 and for repair and maintenance needs, while LDP shipments began for the Sakhalin–Khabarovsk–Vladivostok gas transmission system expansion project.

TMK's share of LDP supply to the Russian market totaled 14% for 2018. In 2018, TMK supplied longitudinal welded pipes for Gazprom's aforementioned large-scale infrastructure projects and was one of the major suppliers of pipe products for repair and maintenance needs of subsidiaries of Gazprom and Transneft.

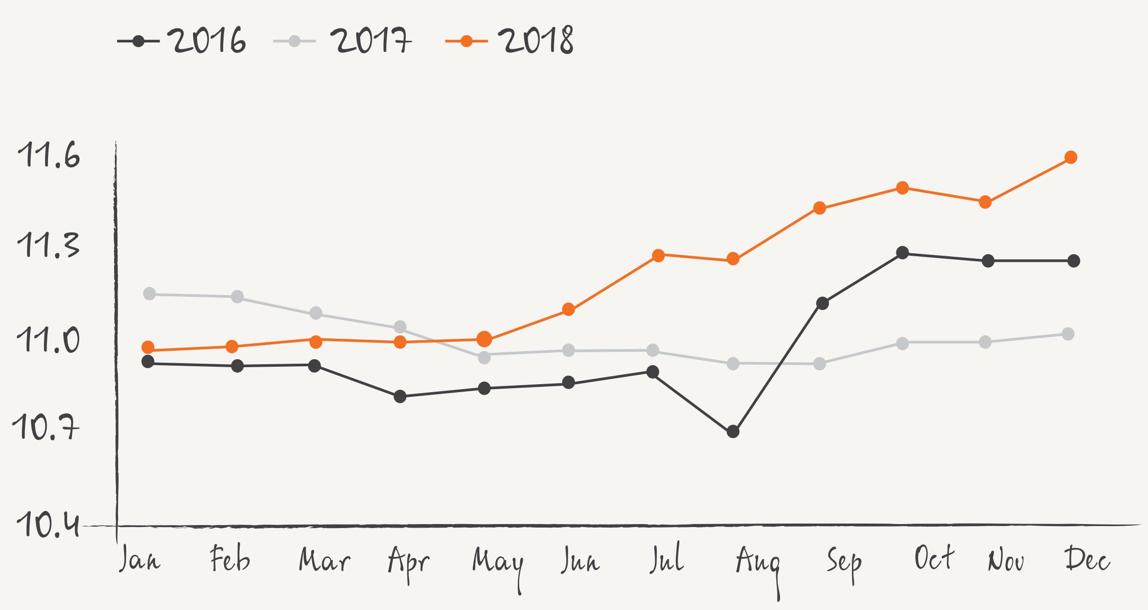
In October 2018, TMK and PJSC Gazprom signed a technology roadmap to launch the production of pipes with integrated recording, processing, and switching components.

Oil Country Tubular Goods and Premium Products

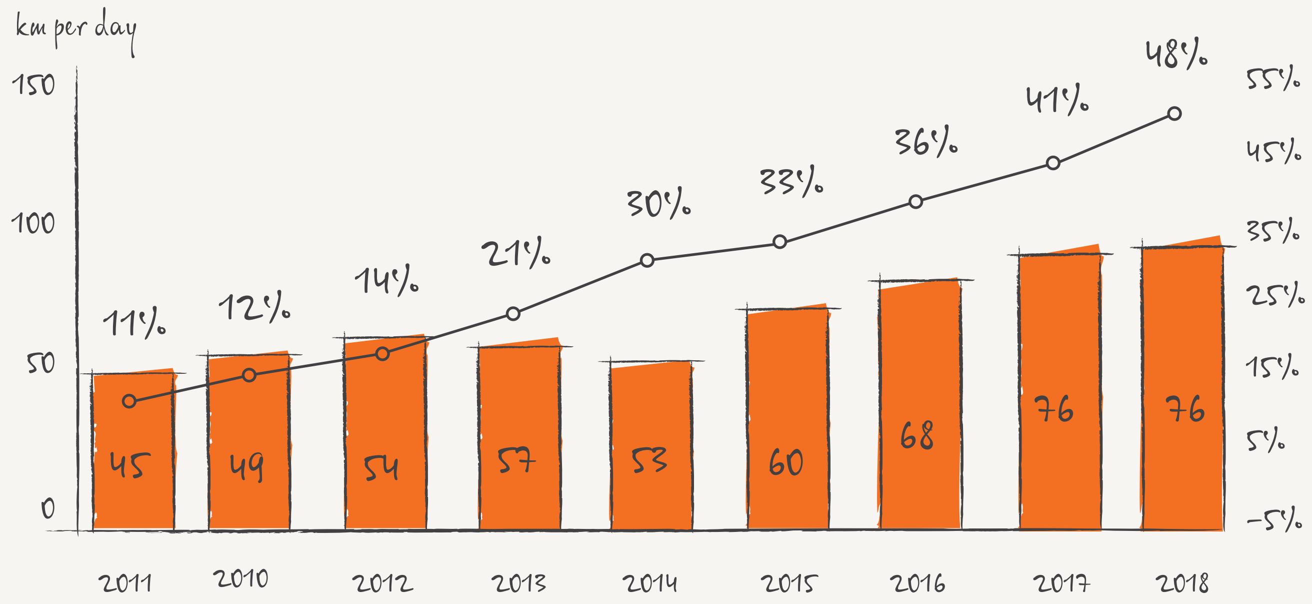
In 2018, Russia increased its oil production by 1.6% year-on-year to 556 million tonnes. According to a forecast by Russia's Ministry of Economic Development, domestic oil production will continue to grow through 2021. TMK expects a further increase in production drilling and well startups, driving OCTG consumption upward.

As the existing fields in Western Siberia gradually deplete, conventional oil and gas production methods are no longer sufficient for reaching performance and hydrocarbon production targets. To maintain the current hydrocarbon output levels, Russian companies are tapping into reserves via horizontal drilling, which requires more pipe. As a result, the share of high-tech horizontal drilling in Russia jumped from 11% in 2010 to 48% in 2018.

Russian crude output, *million barrels per day*



Share of horizontal drilling in Russia's total production drilling, *%*



Source: CDU TEK data, TMK estimate

Between 2010 and 2018, drilling volumes in Russia showed a steady growth of 7% per year on average.

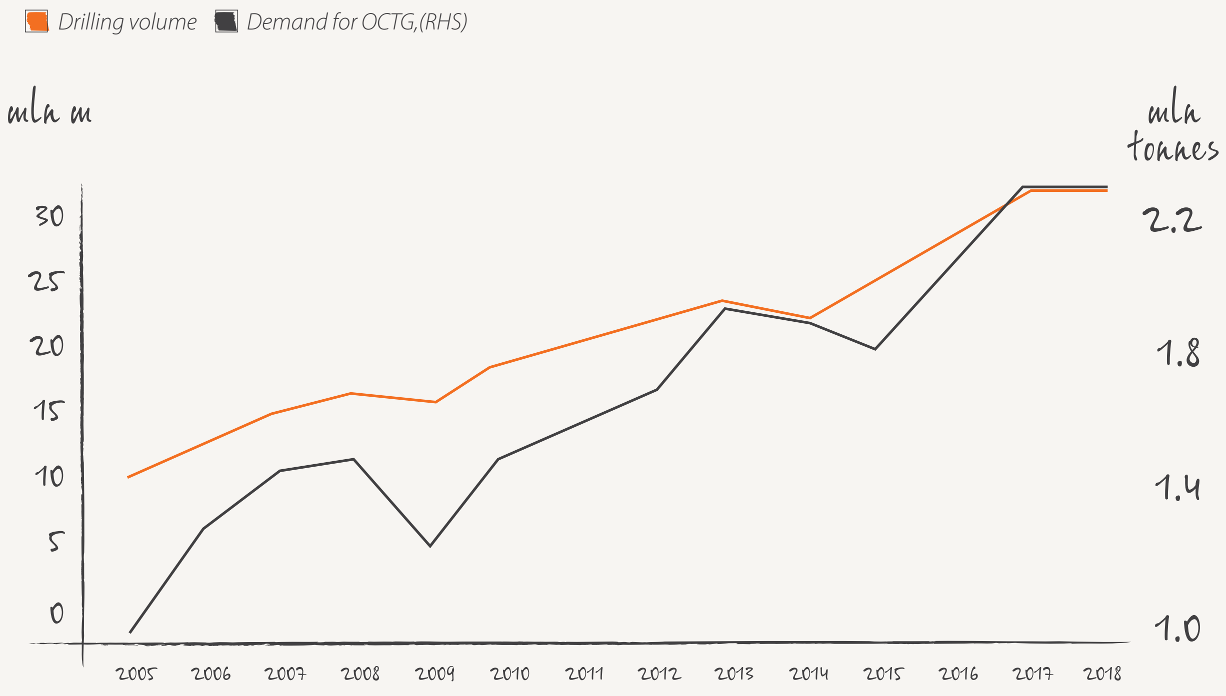
In 2018, both the OCTG market and drilling volumes in Russia remained flat year-on-year. Rosneft was the most active player in the drilling market, accounting for 42% of the total drilling volume as it did in the preceding year.

TMK has been the dominant player in the Russian seamless OCTG market for many years. TMK's share of the Russian seamless OCTG market was 63% in 2018.

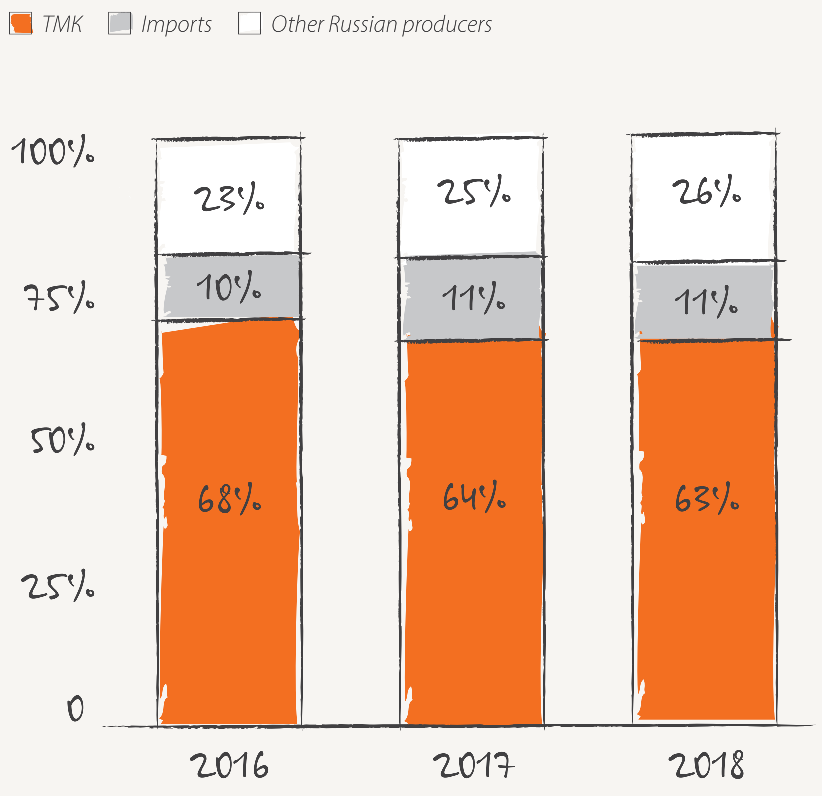
63%

TMK's share of the Russian seamless OCTG market

Demand for OCTG in Russia, *million tonnes* vs. drilling volumes, *million meters*



TMK's share of the seamless OCTG market



Source: CDU TEK data, TMK estimate

4.6 RUSSIAN PIPE MARKET

TMK consistently works to supply top-quality, high-tech, and reliable premium tubular products to oil and gas companies and to meet our consumers' specific needs, helping them produce hydrocarbons in challenging climatic and geological conditions, including offshore and Far North locations.

TMK won tenders in 2018 to supply Rosneft subsidiaries with 6,900 tonnes of high-tech 13Cr (13% chromium) steel tubing pipe with TMK UP PF gas-tight premium connections. The shipments began in 2018 and will be completed in 2019 as per the delivery schedule.

Since 2018, TMK has been providing premium solutions for Rosneft's offshore projects. In 2018, TMK won a tender to provide the casing supplies for most of Rosneft's offshore projects: the Novaya 2 project (Sea of Azov; operator: PJSC Oil Company Priazovneft, a joint venture between Rosneft and LUKOIL), the Vostochno-Pribrezhniy License Block project (Sea of Okhotsk), and the Odoptu-More field project (Sea of Okhotsk).

In September 2018, TMK shipped a batch of corrosion-resistant casing pipe of 13Cr steel with TMK UP PF threaded connections to construct production wells at the Yuzhno-Kirinskoye field operated by Gazprom. TMK's specialists supervised the sinking of the casing into the wells. The casing pipe was designed and manufactured specifically for Gazprom's projects as per a long-term "future thing" agreement entered into by the parties in October 2015. TMK also signed a tubular product qualification and process validation agreement in 2018, which will see shipments of premium tubular product for well construction at Gazprom's Kovyktinskoye field begin in 2019.

In 2018, TMK won Russia's largest tender for the supply of corrosion-resistant TMK-C chromium-nickel alloy casing pipe with TMK UP PF threaded connections to LUKOIL-Komi, securing TMK's dominant position among pipe suppliers in this market segment. TMK is Russia's only manufacturer and supplier of corrosion-resistant chromium-nickel alloy pipes.

In July 2018, TMK shipped the first batch of 244.48-mm L80 grade casing pipes with TMK UP PF threaded connections to Sakhalin Energy. In November 2018, the pipe column was successfully launched from the Molikpaq platform at the Piltun-Astokhskoye field in the Sea of Okhotsk with the involvement of TMK specialists. The order was part of a long-term renewable contract for the supply of premium oil country tubular goods signed between TMK and Sakhalin Energy in October 2017 and effective through 2022.

In 2018, TMK commenced industrial-scale manufacturing and supply of premium grade 340, 273 and 245-mm casing pipe with GreenWell lubricant-free coating for production drilling at the V. Filanovsky field, operated by LUKOIL in the northern Caspian Sea. The first 273-mm pipe column with GreenWell lubricant-free coating and TMK UP PF ET threaded connections has been successfully lowered. The shipments will continue through 2019 and 2020.

4.6 RUSSIAN PIPE MARKET

Public recognition

- For the fifth year running, TMK was recognized as the best supplier of industrial products and services for offshore oil and gas developments in the Tubular Goods category, beating its Russian and foreign rivals. The 2018 results were announced and the award ceremony was held as part of the 13th Offshore Oil and Gas Contracts (Neftegazshelf 2018) annual conference.
- The ranking has been compiled since 2013 to facilitate import substitution in offshore oil and gas developments and to improve the market's information support, transparency and openness. Companies are rated through an annual survey of oil and gas companies focused on offshore development projects.

TMK works with Russian oil and gas majors under R&D cooperation programs, including import substitution programs.

The Gazprom – TMK R&D cooperation program is aimed at meeting Gazprom's future demand for tubular products. The program covers cooperation between Gazprom and TMK in welded large diameter pipe, seamless line pipe, casing, tubing, and drill pipe, best practice sharing, and joint research. Under the cooperation agreement, TMK will launch 34 new high-tech tubular products by the end of 2020.

In 2018, TMK and Gazprom signed a roadmap for the production of pipes with next-generation integrated recording, processing, and switching components. TMK will develop innovative large diameter pipes for Gazprom, with highly sensitive sensors embedded under the pipe coating to monitor pressure, temperature, pipe stress, and deformation in real time. The pipes will also be fitted with smart RFID tags for reliable identification within the pipeline throughout their entire service life. The operator will be able to integrate sensors into a single system that monitors the condition of individual gas pipeline sections. The new pipe products are expected to be used in areas of high seismic activity, active tectonic faults and unstable soils, and at points of intersection of gas pipelines with transportation lines. It is expected that the innovative pipe will improve the reliability and safety of gas pipelines, allow more accurate assessments of their technical condition, and optimize troubleshooting, maintenance, and repair costs.

In 2018, TMK signed a Cooperation Memorandum for offshore projects with Rosneft and updated its 2018–2020 program of pipe import substitution in offshore projects.

Industrial Pipe

In Russia, the consumption of both seamless and welded industrial pipe shrank in 2018 by 12% and 1% year-on-year, respectively. The decrease was driven by lower demand for pipe products from end consumers in the construction and engineering industries. Although TMK mainly focuses on OCTG production, we continuously develop new products used in the construction and utilities sectors, as well as in the engineering and nuclear industries.

TMK's most significant shipments of seamless industrial pipe in 2018 included shipments to the construction site of ZapSibNeftekhim, a petrochemical complex project currently operated by SIBUR in Tobolsk, shipments of specialty pipe products to Gazprom Neft for the Omsk Oil Refinery revamp project, and shipments to the construction site of Yamal LNG's natural gas liquefaction plant.

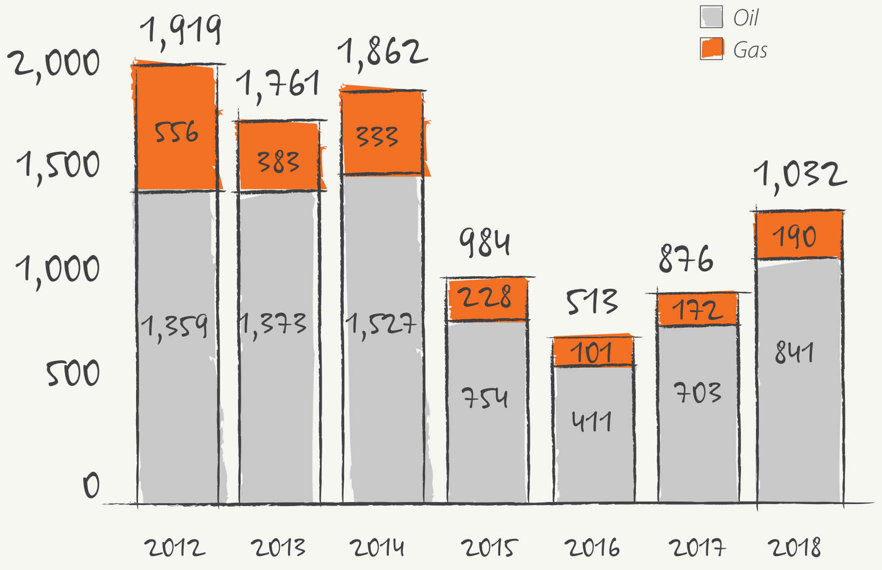
TMK continues selling pipes to customers in the automotive industry, power engineering, aircraft manufacturing, and nuclear sectors. In 2018, Taganrog Metallurgical Works (TAGMET) received an IATF 16949:2016 certificate of conformity for its quality management system. This enables the plant to sell round carbon and alloy steel billets to international vehicle component manufacturers, thus diversifying TMK's sales.

4.7 NORTH AMERICAN PIPE MARKET

According to Baker Hughes, the average rig count in the United States increased by 18% to 1,032 rigs in 2018, up from 876 rigs in 2017.

Ongoing recovery in hydrocarbon prices in North America led to a 25% increase in oil and gas companies' drilling and completion spending year-on-year according to Spears, resulting in increased drilling activity and higher volumes of welded and seamless OCTG consumption.

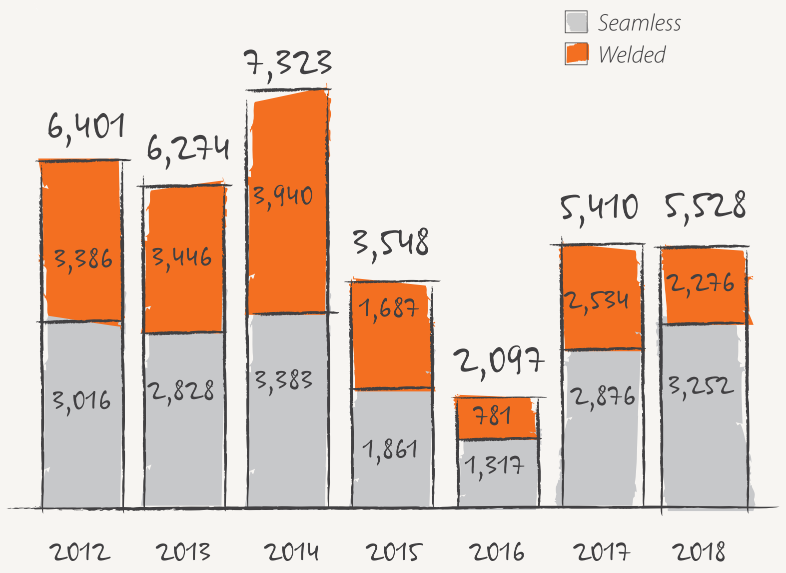
U.S. gas and oil rigs, *units*



Source: Baker Hughes

Shipments of welded and seamless OCTG pipe in the United States in 2018 increased 2% above the level of 2017. Shipments of welded OCTG pipe decreased by 11% year-on-year, which was partially offset by an increase in shipments of seamless OCTG pipe by 10% y-o-y. The primary reason for lower shipments of welded pipes was the introduction of duties and quotas on imports of steel products in the United States, which limited supplies from South Korea, a leading supplier of welded OCTG to the United States. OCTG inventories grew during 1H 2018 (due to an inflow of imports in anticipation of the adoption of Section 232) followed by a steady decline through the end of the year. Relative OCTG inventories ended 2018 at 3.8 months of stock compared to 4.6 months at the end of 2017 based on unadjusted figures from the Preston Pipe and Tube Report.

U.S. OCTG shipments, *thousand tonnes*

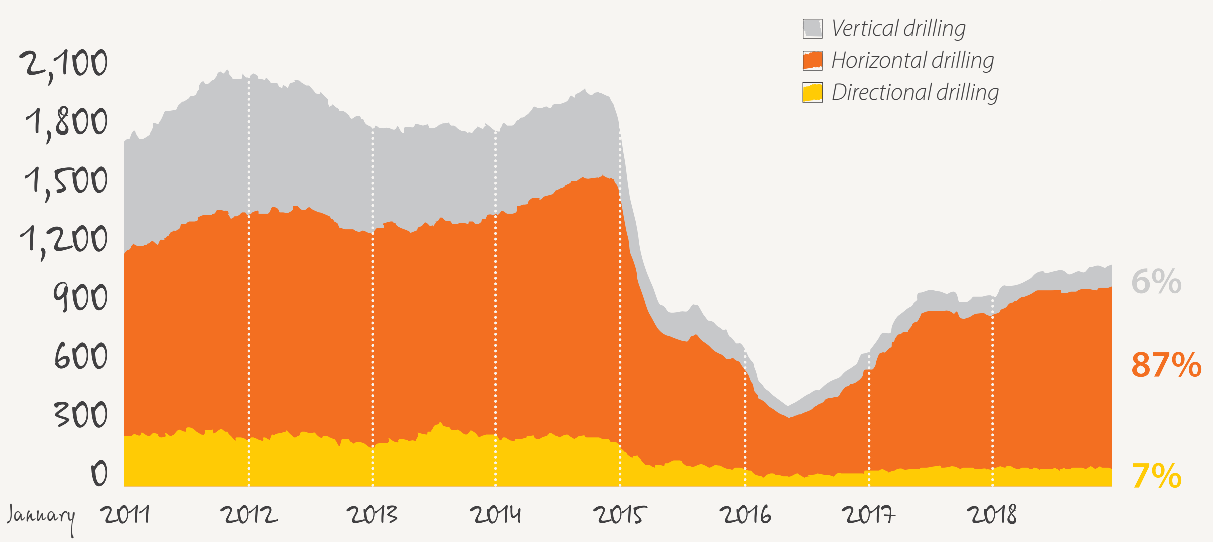


Source: Preston Pipe & Tube Report

4.7 NORTH AMERICAN PIPE MARKET

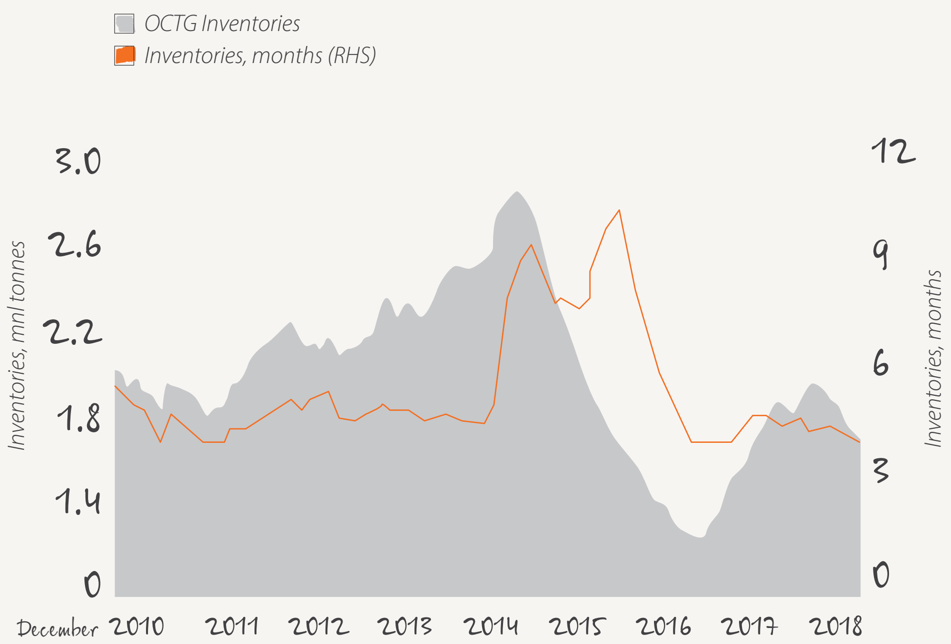
The total rig count in horizontal and directional drilling reached 94% in 2018, up from 92% in 2017. Horizontal and directional drilling is characterized by a higher level of pipe consumption.

U.S. rigs by drilling method



Source: Baker Hughes

U.S. OCTG inventories, *million tonnes*

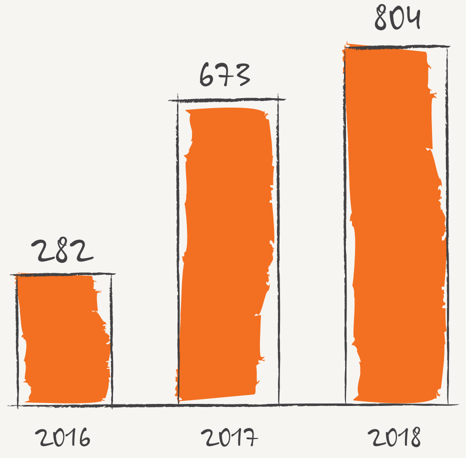


As a result of higher rig count and increased demand for OCTG, as well as the restriction of steel products import into the United States, prices on the American pipe market improved significantly in 2018. Average composite OCTG seamless and welded pipe prices increased 15% and 17% year-on-year respectively.

The American division benefited from the ongoing recovery in the North American market and demonstrated significant improvement of operational and financial performance. In 2018, the Company strengthened its competitive position in the North American market through a launch of its new coating facility at Wilder facility. The 250 thousand tonnes of annual coating capacity for pipes up to 609.6 mm in diameter is available in Fusion Bond Epoxy (FBE), Abrasion Resistant Overcoat (ARO) and Specialty Coating. Coating protects line pipe against corrosion, mechanical damage, and weathering. The facility is certified for compliance with industry standards, including the most demanding (in North America) Canadian national specification CSA Z245.20, NACE SPO394 and AWWA C213 specifications, as well as the standards of specific end users. The new facility has the latest equipment to control the materials used and ensure high quality products.

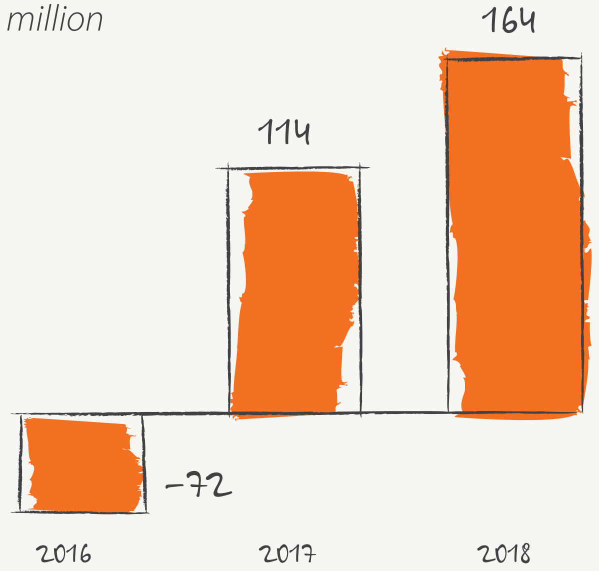
4.7 NORTH AMERICAN PIPE MARKET

Sales at the American division, *thousand tonnes*



Source: TMK

American division's EBITDA, *$ million*



Source: TMK

In 2018, sales of tubular products at the American division increased 19% year-on-year to 804 thousand tonnes, while OCTG sales grew by 20% year-on-year to 580 thousand tonnes. Full-year EBITDA increased by 44% year-on-year to $164 million in 2018.

TMK IPSCO's product offering includes 29 types of threaded connections for OCTG, some of which are market leaders, and a number of connections meeting or exceeding API standards. TMK IPSCO also manufactures line pipe for transporting crude oil and natural gas from fields to processing facilities and refineries, as well as standard, mechanical, and industrial pipe for agriculture, construction, and automotive industry. TMK IPSCO also successfully develops a number of proprietary steel grades for OCTG, as well as various corrosion-resistant grades for OCTG and line pipes.

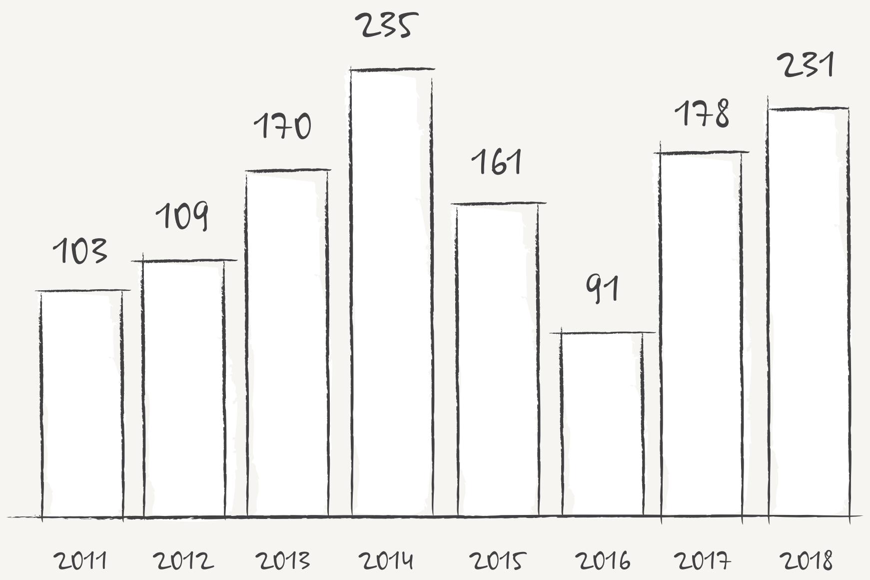
In 2018, increasing complexity of drilling and higher share of horizontal and vertical drilling in the U.S., which require more advanced technology solutions, resulted in the increased sales of seamless OCTG with TMK UP premium threaded connections. Premium connection sales increased by 30% year-on-year to 231 thousand tonnes.

During 2018, TMK IPSCO successfully launched its new TORQ® premium connections series. The TORQ series of premium connections are used in challenging environments including extended-reach laterals, high pressure, and high temperature. In 2018, TMK IPSCO released three new premium TORQ® connections: TORQ TMK UP SFW, TORQ TMK UP ULTRA QXW and TORQ TMK UP DQW.

+44% y-o-y

Full-year EBITDA in 2018.

Premium connection sales at the American division, *thousand tonnes*



Source: TMK

For the period from January 01, 2017 to December 31, 2018, we served more than 200 end users, with our largest end user accounting for approximately 7% of revenue during this period.

EUROPEAN PIPE MARKET

In 2018, the European steel pipe market slightly decreased year-on-year due to a lower demand from pipeline construction companies, which was partially offset by increased upstream CAPEX and recovering demand from engineering and construction industries.

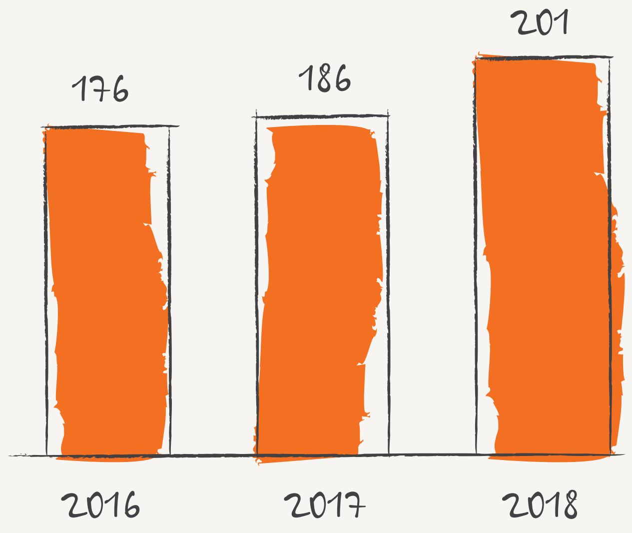
The introduction of preliminary protective measures against the import of steel and aluminum products from July 19, 2018 to February 01, 2019 led to improvement in the pricing environment. At the same time, higher selling prices allowed European manufacturers to offset increased prices of raw materials (scrap) and graphite electrodes.
In 2018, the Company retained its stable position in the European seamless industrial pipe market with a 16.1% share. Total pipe sales at the European division in FY 2018 amounted to 201 thousand tonnes, being up 8% year-on-year. EBITDA was up 81% year-on-year to $51 million.

+81% y-o-y

EBITDA in 2018.

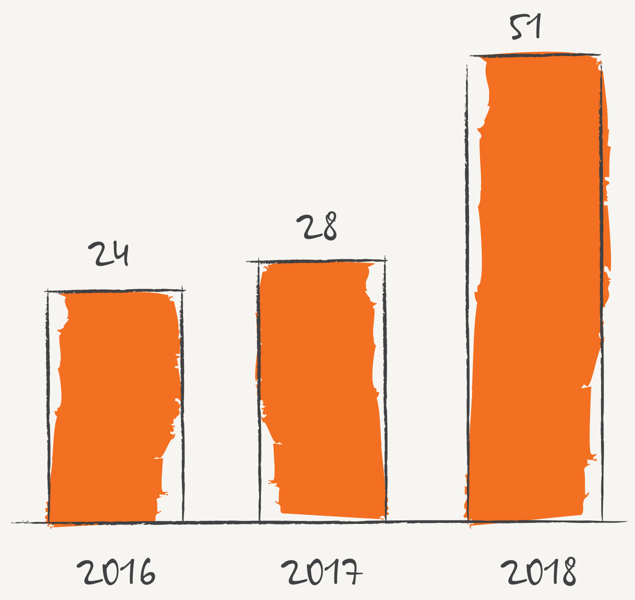
In February 2018, a new integrated heat treatment line for seamless pipes was commissioned at TMK-ARTROM. Its capacity stood at 165 thousand tonnes of pipe per annum. The facility enables a full range of heat-treatment services, such as tempering and quenching, normalization, soft annealing and hot straightening. The high-tech equipment enables precise control of the heat treatment process and monitoring of individual pipe treatment parameters. As a result, the new facility will provide heat treatment for 60–273 mm pipes with 5–60 mm pipe walls, enabling more efficient and cost-effective production of popular premium products. The heat treatment facility significantly reduces natural gas consumption and environmental impact, as well as reduces nitrogen oxides and carbon dioxide emissions.

Pipe sales by European division, *thousand tonnes*



Source: TMK

European division's EBITDA, *$ million*



Source: TMK

4.8 EUROPEAN PIPE MARKET

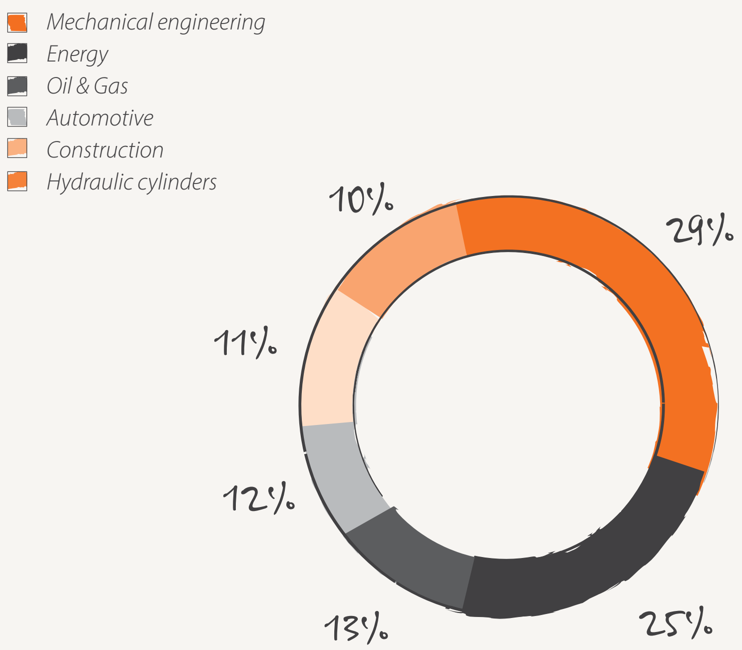
Geographical diversification of consumers and a wide product range allow the European division to mitigate risks. The European division sells its products to almost 400 regular customers across 37 countries, focusing its efforts on the European market and on the countries of North America and Latin America. The share of the largest customer in the division's revenue in 2018 accounted for less than 8%, and the share of the 10 largest customers – for less than 25%.

The marketing activity of TMK's European division was focused on activities enabling to adapt quickly to changing market conditions and offer most optimal solutions to our customers. In 2018, TMK-ARTROM continued its marketing activity to promote TMK products to big oil and gas companies which developed projects in East Europe, such as ExxonMobil, SerbiaGas, NIS Gazprom, but also to customers from automotive and energy sectors.

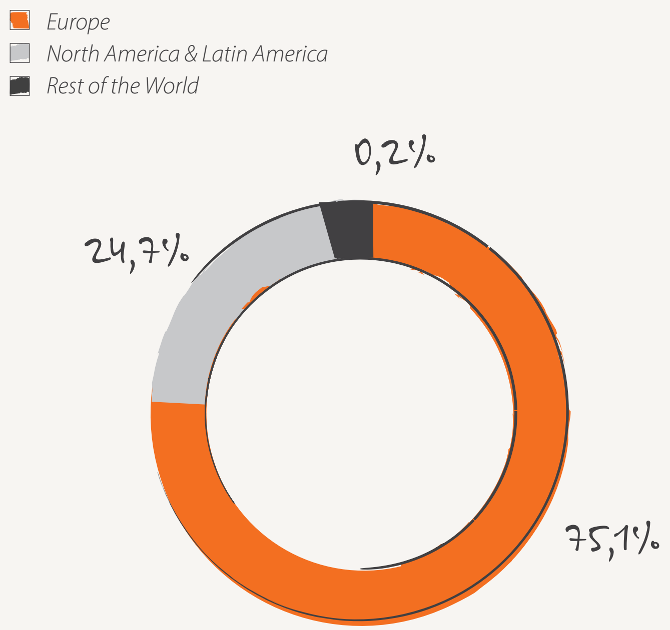
In the reporting year, TMK-ARTROM continued to develop cooperation with leading European automakers and maintained the Renault-Nissan category B qualification. We continued to realize the second project with Renault for the new model Dacia Duster.

In 2018, the European division's corporate quality management system seccessfully passed a recertification audit for ISO 9001:2015; ISO 14001:2015 and ISO 45001:2018 requirements (the new revision of the OHSAS 18001 specification). The audit was conducted by the British company Lloyd's Register.

Product mix in 2018
(sales in tonnes)



Sales by region in 2018
(in money terms)



4.9 MIDDLE EAST PIPE MARKET

In a highly competitive market, TMK's main objective throughout 2018 was to retain its market presence in strategic regions, widen the scope of its supplier qualifications with state-owned and private companies, and ensure timely and flawless deliveries of products and related services under the existing contracts.

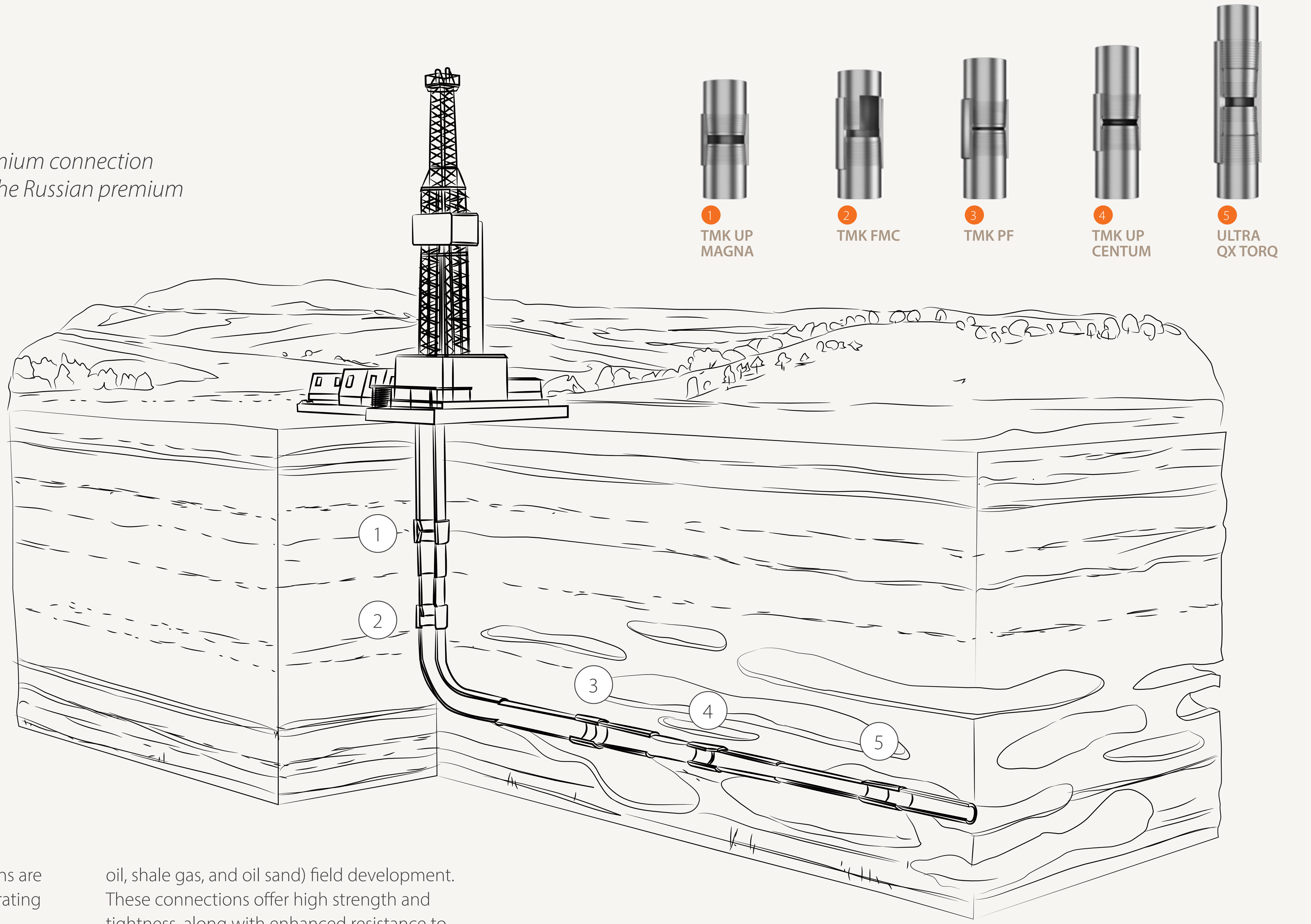
The oil price recovery had a positive impact on OCTG consumption given the low production costs in most Middle Eastern countries. As many Middle Eastern countries benefit from their low-cost leadership position in oil production on the global market, local producers can achieve positive margins even in a record low oil price environment.

Despite the challenging environment and stiff price competition, TMK continued to expand its footprint in the Middle East and North African markets. We received and completed major orders to supply welded casing and line pipes with TMK GIPI coating to PDO's project, and focused on winning service contracts for pipe coating.

In 2018, the Company shipped pipe products manufactured by the Russian division plants, completing a major order to supply seamless line pipe to Saudi Aramco, winning the first order from Agiba Petroleum Co. (an ENI JV) to supply casing and tubing pipe, and sinking the first casing pipe with TMK UP PF connections in Egypt, for Petroshahd (a Kuwait Energy JV), with the involvement of TMK specialists. We also continued shipments of line pipe for India's Oil and Natural Gas Corporation (ONGC) offshore projects, completed a supplier qualification process and the first order to supply vacuum insulated tubing pipe to Oil India Ltd.'s pilot project on the Baghewala oil field in India and successfully lowered pipes into the first well in November, with the involvement of TMK specialists.

4.10 PREMIUM CONNECTIONS AND OILFIELD SERVICES

TMK is one the world's largest premium connection manufacturers and the leader in the Russian premium connections market.



- Onshore and offshore fields
- High H2S and CO2 concentrations
- High temperatures
- Arctic environment
- Horizontal and directional drilling
- Casing drilling
- Steam-Assisted Gravity Drainage (SAGD)
- GreenWell lubricant-free connections

Pipes with premium threaded connections are designed for use in oil and gas wells operating in challenging climatic and geological conditions, including offshore, deep-water and Far North locations, horizontal and directional wells, and hard-to-reach hydrocarbon (shale oil, shale gas, and oil sand) field development. These connections offer high strength and tightness, along with enhanced resistance to high torsional, bending, and tensile stresses.

TMK UP EVOLUTION

2003 **ULTRA SF** Cal IV

2003 **ULTRA FJ** Cal IV

2003 **ULTRA FX** Cal II

2004 **TMK 1**

2005 **TMK FMC** Cal II

2005 **TMK CS**

2005 **TMK TTL 01**

2005 **TMK GF**

2007 **TMK PF** Cal IV

2008 **ULTRA CX**

2008 **TMK FMT** Cal II

2008 **ULTRA PF ET** Cal IV

2009 **ULTRA QX** Cal IV

2010 **TMK TDS**

2011 **ULTRA DQX** Cal II

2011 **TMK CWB**

2012 **TMK PF** Cal IV

2013 **ULTRA SFII** Cal IV

2013 **ULTRA DQXHT** Cal II

2013 **TMK BPN**

2013 **TMK UP MAGNA**

2016 **ULTRA GX** TWCCEP

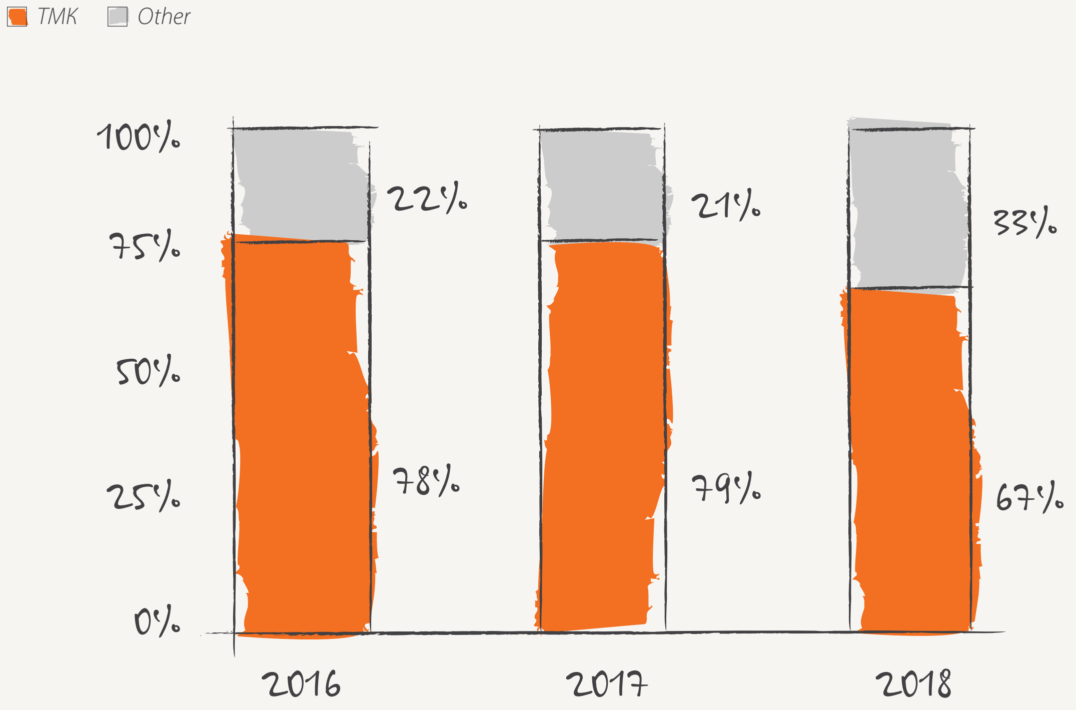
2016 **ULTRA QX TORQ**

2017 **TMK UP CENTUM** Cal IV

+33% y-o-y

Sales of premium connections produced at the Russian and American divisions

TMK's share in the Russian premium pipe market



Source: TMK estimate

Sales of premium connections produced at the Russian and American divisions were up 33% year-on-year and reached 414 thousand tonnes in 2018.

In the reporting year, TMK maintained its leadership in the Russian market for tubular products with premium threaded connections, with a 67% market share.

The Russian division's sales of premium connections, including estimates of field concept engineering projects, were up by over 20% year-on-year. These concept engineering services sales accounted for 15% of the total premium connections sales.

Backed by many years of experience in premium product shipments, we are always ready to offer our customers unique engineering capabilities and highly effective pipe solutions delivered to all expectations.

In 2018, TMK continued to develop and launch new premium connections. In February 2018, we successfully completed testing of the unique proprietary TMK UP KATRAN premium connection as part of the Gazprom Scientific and Research Institute of Natural Gases and Gas Technologies (Gazprom VNIIGAZ) program. TMK UP KATRAN HD is a unique, quick-assembly high-torque connection that has been developed entirely by TMK and is the first 100% Russian product of its kind – previously this type of connections could only be purchased abroad. KATRAN is the only connection that can be used in all Russian offshore projects at any depths and in the most challenging climatic conditions.

In the reporting year, we expanded our customer base and received new orders for tubular products with TMK UP CENTUM premium threaded connections. The connection is certified to ISO 13679 CAL IV, the strictest international industry standard for premium threaded connections, and demonstrates 100% tension and compression efficiency.

In 2018, TMK shipped its first batch of casing pipe with TMK UP PF threaded connections to Sakhalin Energy. The pipe column was successfully launched from Molikpaq platform at Piltun-Astokhskoye field in the Sea of Okhotsk with the involvement of TMK supervisors. In the reporting year, the Company obtained qualification from Shell qualification for its TMK UP PF connection.

In 2018, TMK IPSCO successfully launched TORQ®, a new proprietary connection series. TORQ premium connections are designed for use in challenging conditions, including highly

PREMIUM CONNECTIONS AND OILFIELD SERVICES

deviated well drilling, high pressures, and high temperatures. The new connections have been specifically developed and manufactured for applications involving high torque, which can see twice the limits of torsional stresses endured compared with conventional connections. The new connections are available in a wide range of sizes and have been tested for compliance with industry specifications applicable to shale and offshore drilling.
In the reporting year, TMK IPSCO launched three new TORQ® premium connections: TORQ TMK UP SFW, TORQ TMK UP ULTRA QXW, and TORQ TMK UP DQW.

One of TMK's business priorities is to deliver premium OCTG complete with related oilfield services. Our oilfield services include drill, tubing and casing pipe repairs, heat treatment, protective coating, manufacturing a vast range of pipe string components and downhole equipment, as well as pipe threading, pipe and pump rod maintenance service and repairs.

The Russian oilfield services division is headed by TMK Oilfield Services (Yekaterinburg). The division includes: Orsky Machine Building Plant (Orsk), Truboplast (Yekaterinburg), TMK NGS-Buzuluk (Volga Federal District), and TMK NGS-Nizhnevartovsk (Khanty-Mansi Autonomous Area). The latter two facilities are located at the heart of oil and gas regions and provide well construction, repair and completion services to both large- and mid-size oil and gas companies and oilfield service providers.

In 2018, Orsky Machine Building Plant, TMK NGS-Buzuluk, and TMK NGS-Nizhnevartovsk, assisted by other Russian division plants, manufactured and shipped approximately 92 thousand tonnes of casing and tubing (up 12% year-on-year), including products with TMK UP threaded connections (up 14% year-on-year).

In 2018, TMK NGS-Buzuluk completed over 160 orders to provide engineering support for running over 240 casing and tubing strings in fields located in Russia, the CIS, and other countries. In 2018, we started providing engineering support for TMK pipe products in well construction at new Sakhalin Island offshore fields: Yuzhno-Kirinskoye (LLC Gazprom Flot), and Piltun-Astokhskoye field (Sakhalin Energy).

4.11 R&D INITIATIVES AND RESEARCH AND TECHNOLOGICAL COOPERATION

New technologies and innovative products are the key competitive drivers in the global pipe market.

TMK's research centers, the Russian Research Institute for the Tube and Pipe Industries (RosNITI) located in Chelyabinsk (Russia) and TMK's Houston-based R&D center (US), are engaged in extensive research, liaising with specialized R&D organizations and universities, and coordinating activities under research and technological cooperation programs between TMK and its major customers. Together with TMK's plants of the Russian, European, American and Middle East divisions, our R&D centers explore production technologies, upgrade equipment, and identify innovative business opportunities, while assisting in ramping up new production capacity.

In 2018, as a result of findings from major metals companies and the readiness assessment of our key manufacturing processes, we added a digital technology deployment unit to our R&D cluster. TMK's specific plans include developing new approaches to manufacturing threaded connections and delivering oilfield engineering services, as well as improving welding technology.

Our R&D centers focus on:

- Boosting the economic efficiency of pipe and billet manufacturing
- Improving pipe technologies to enhance the product's operational properties, quality and exterior, cut costs, improve working conditions, and mitigate environmental impact
- Ramping up new production capacity at TMK plants
- Creating new technologies to manufacture new products
- Deploying digital technologies
- Improving the regulatory framework and technical documentation, developing national and corporate standards (the Company's local standards) for pipe, billets, and flat-rolled products.

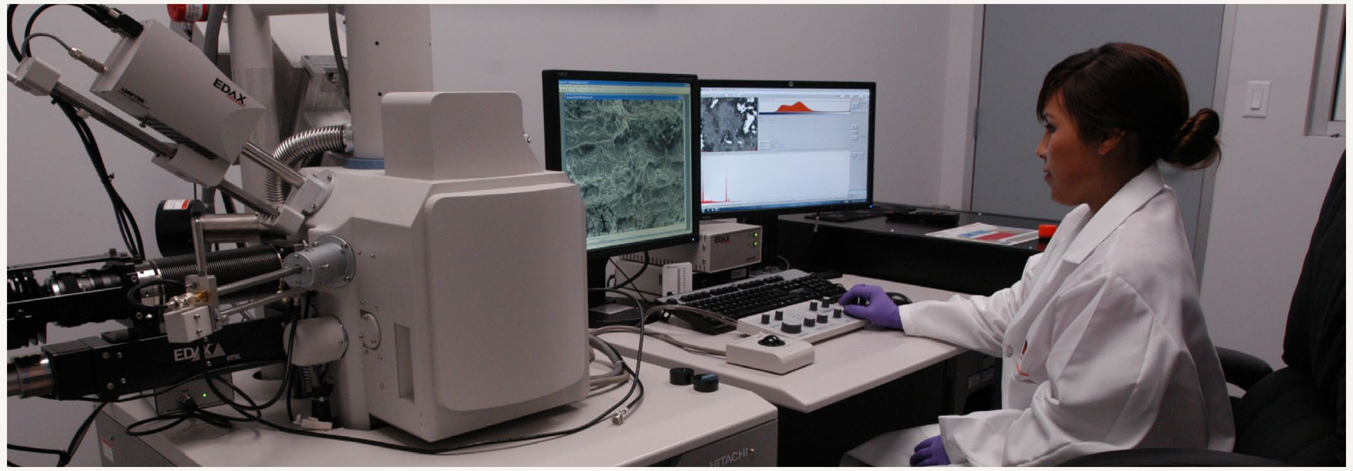
4.11 R&D INITIATIVES AND RESEARCH AND TECHNOLOGICAL COOPERATION

TMK's R&D centers have the necessary capabilities to provide field concept engineering services:

- Cooperating with design bureaus on well design calculations,
- Developing software solutions for well design calculations,
- Determining the optimal version of casing strings and tubing,
- Training technical sales managers and customers' staff,
- Designing a neural network to determine appropriate connections,
- Providing technical marketing services for OCTG products.

In 2018, we developed, tested, and deployed a considerable number of innovative technologies and solutions:

- We developed a number of corporate product-related standards and control methods based on the latest available technologies, and contributed to the development of national and supranational standards,
- We developed and successfully tested new equipment to feed and spray lubricating and deoxidizing compounds on a pipe's external surface; we also developed and ran a complete test program for new process solutions to apply lubricating compounds over threaded connections and apply glass lubricants,
- We developed a number of digital technology enabled solutions, including a digital twin of an FQM mill, and a new neural network model-based method of setting the operating parameters of a piercing mill,
- We launched the production of pipes that are extra resistant to local deformation and designed for subsea pipelines,
- We launched the production of corrosion-resistant high-strength tubing and couplings made of complex alloy steel grades,
- We were the first in the Russian pipe industry to launch the production of long pipes with electrochemical surface treatment; the pipes are made of a new, patented corrosion-resistant steel and designed for nuclear engineering applications,
- At TAGMET, we deployed individual and group rate-setting tools driven by computational analysis.



TMK's Houston-based R&D center (US)

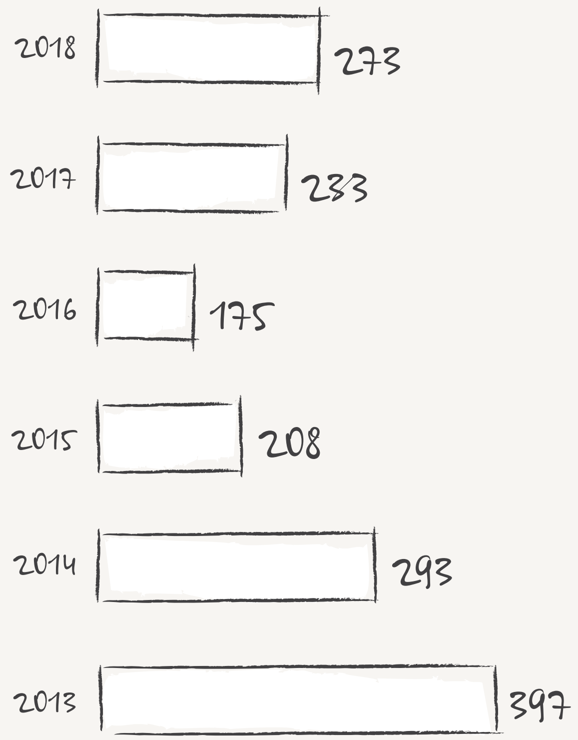
In 2018, we completed the main construction and installation works for the building of TMK's R&D facility in Skolkovo, expected to become the Company's third and largest R&D center. The corporate R&D facility in Skolkovo will use unique research and testing equipment to develop comprehensive material, design, and connection solutions for the increasingly complicated hydrocarbon production conditions.

In 2018, the first bench for full-size tests of new pipe threaded connections was assembled in Skolkovo, enabling the Company to significantly expand its range of connections to include connections up to 762 mm in diameter, and perform integrated performance tests under high temperatures, pressures, axial drag and bending stresses. The building of TMK's R&D facility in Skolkovo is expected to be commissioned by mid-2019.

4.12 CAPITAL EXPENDITURES

In 2018, TMK's CAPEX amounted to $273 million (+ 17% year-on-year) mainly due to an unplanned and opportunistic real estate acquisition. The Company's target CAPEX in the medium term is expected to be below $200 million.

Investment in production facilities, *$ million*



Key focus areas of TMK's Strategic Investment Program in 2018:

TMK focuses on projects that allow us to increase production of high value-added products and improve product quality.

Volzhsky Pipe Plant

- Installation of an automated pipe gauging system for large diameter pipes was completed, and a final washing system was installed
- A mandrel machine and conservation coating equipment were commissioned

Seversky Pipe Plant

- As part of a comprehensive upgrade of the pipe-rolling unit, the heat treatment facility's metal structures and foundations were reinforced, wall envelopes were installed, and foundations were prepared to install equipment in the heat treatment and water treatment facilities
- A pipe end calibration unit and pipe threading machines were put into operation, and crane equipment was replaced
- A pipe degreasing unit at production line No. 6 was commissioned

TAGMET

- Work was completed at the phosphating and GreenWell pipe end coating lines; pipe threading machines were installed and put into pilot operation
- A non-destructive testing unit was upgraded by installing a new ultrasonic pipe testing system that helps identify defects of less than 12.5 mm, which increased the unit's capacity

Sinarsky Pipe Plant

- A coupling threading machine, coupling blank cutting equipment, and thermal diffusion galvanising equipment for couplings were commissioned
- A non-destructive pipe testing line and grinding equipment were commissioned

TMK-IPSCO

- External epoxy and abrasion resistant coating equipment for line pipes was commissioned, which enabled us to launch a new type of product in the market
- A non-destructive testing unit was commissioned at the Ambridge plant

TMK-ARTROM:

- A new heat treatment facility with an annual design capacity of 165 thousand tonnes was completed and commissioned

In 2018, TMK completed the bulk of construction and installation operations at its R&D facility in Skolkovo.

The environmental initiatives implemented by TMK Group's facilities as part of our investment strategy helped reduce gross pollutant emissions by 1%, wastewater discharges by 2%, and discharge of pollutants into water bodies by 11% year-on-year.

4.13 LIQUIDITY MANAGEMENT

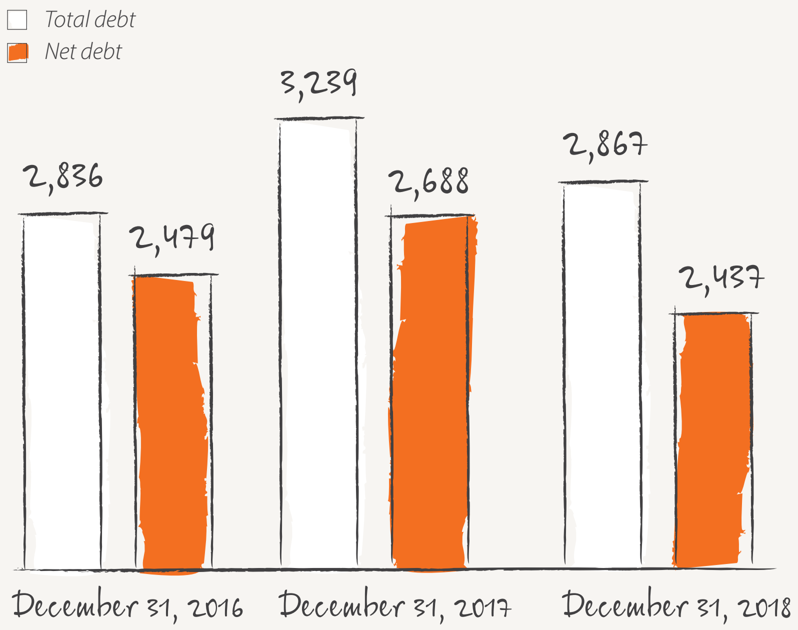
Improving liquidity profile remains one of our priorities, and we continue to carry out measures to maintain sufficient liquidity and improve loan portfolio structure.

Our total debt decreased from $3,239 million as at December 31, 2017 to $2,867 million as at December 31, 2018. Net debt decreased by $251 million, to $2,437 million.

The share of our short-term debt as at the end of 2018 was 31% compared to 18% as at December 31, 2017.

On January 29, 2018, TMK fully redeemed its Eurobond issue which matured in January 2018 (ISIN: XS0585211591). The nominal value of the redeemed Eurobond was $231 million. The $500-million Eurobonds with a coupon rate of 7.75% and a 7-year maturity were issued by TMK Capital SA on January 27, 2011 to finance a loan to PAO TMK. Part of the issue in the amount of $269 million was repurchased earlier under tender offers and canceled.

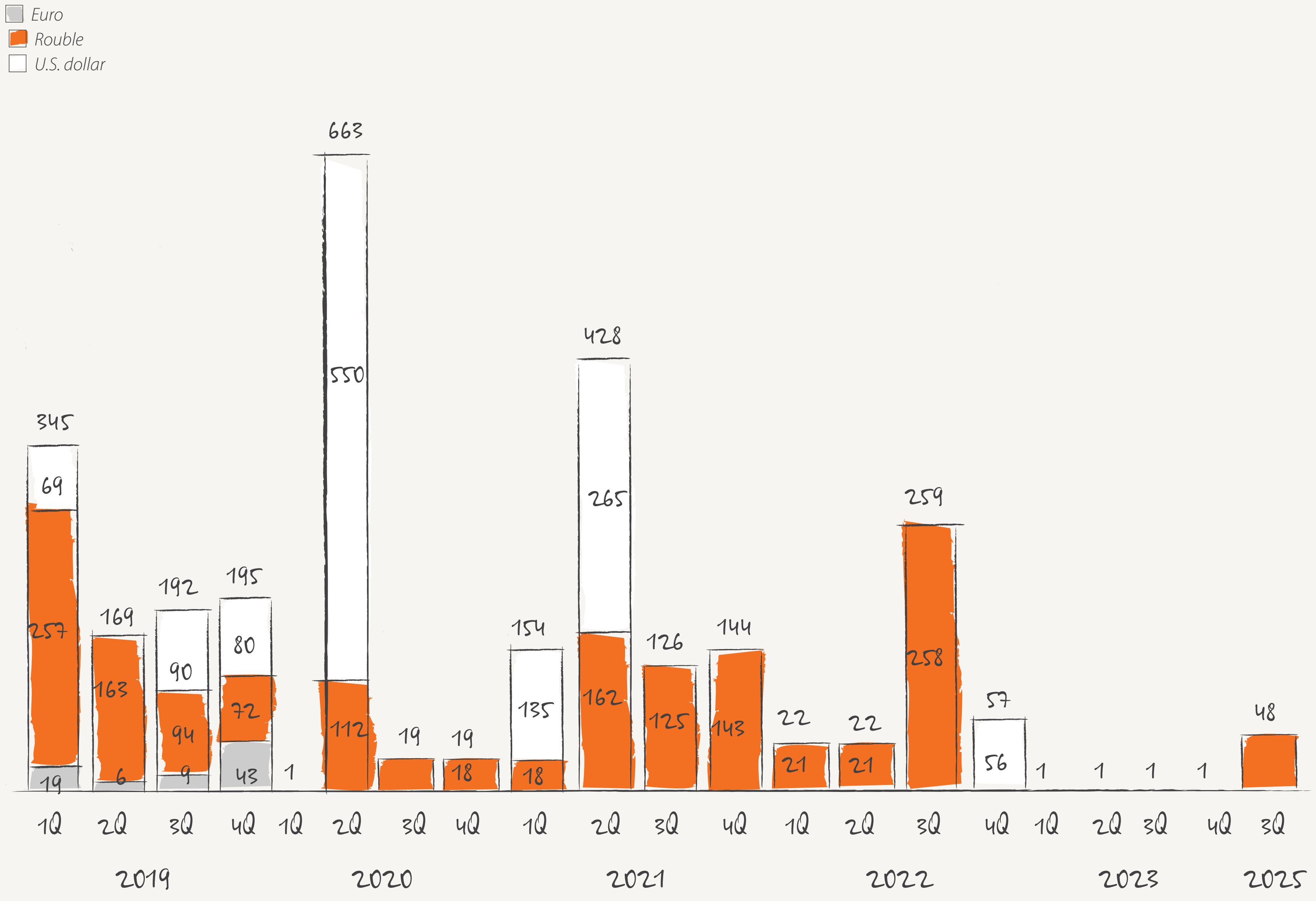
Total debt and net debt, *$ million*



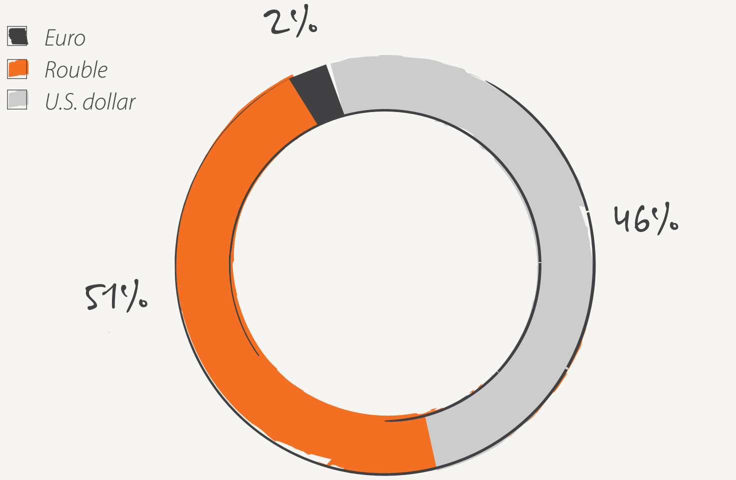
During the reporting year, TMK Group improved its liquidity profile, including by extending maturity dates, mitigating the foreign exchange risk, and decreasing debt financing costs. As at the end of 2018, the rouble-denominated portion of our debt represented 53%, the U.S. dollar-denominated portion – 43%, and the euro-denominated portion – 3% of our total debt. As at December 31, 2018, our weighted average nominal interest rate was 7.29%, i.e. an 87 bps decrease year-on-year.

On February 28, 2018, Moody's Investors Service (Moody's) changed the outlook on TMK's credit rating from "negative" to "stable" and affirmed the Company's B1 corporate family rating. Moody's based this revision on the much stronger financial and operating performance by TMK's American division, along with the sustainable performance of the Russian division in a volatile oil price environment. The updated outlook also includes expectations that TMK will be able to deleverage and maintain adequate liquidity.

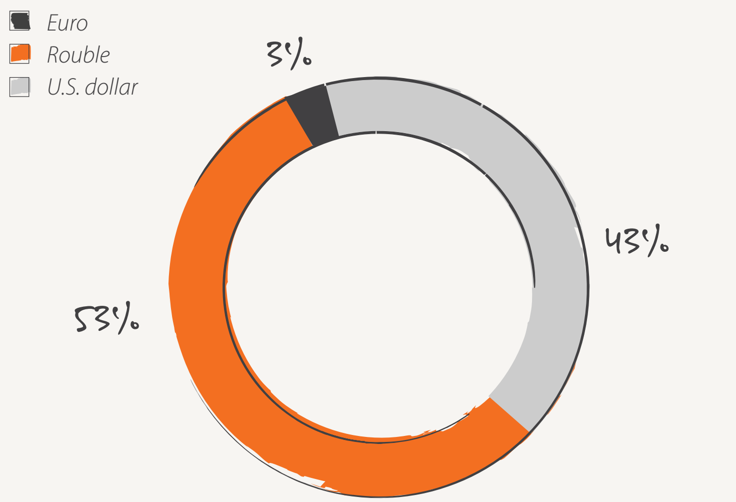
Debt repayment schedule as at December 31, 2018,
$ million



Debt by currency as at December 31, 2017, %



Debt by currency as at December 31, 2018, %



5.0 SHAREHOLDER INFORMATION

PAO TMK SECURITIES ARE LISTED ON RUSSIAN AND INTERNATIONAL STOCK EXCHANGES.

As at December 31, 2018, 34.8971% of PAO TMK shares were free float, with approximately 45% of them traded as GDRs on the London Stock Exchange.

SHARE CAPITAL STRUCTURE

As at December 31, 2018, the share capital of PAO TMK was comprised of 1,033,135,366 fully paid-up ordinary shares, each with a nominal value of RUB 10. PAO TMK has not issued any preferred shares, either outstanding or authorized. Authorized capital totals RUB 10,331,353,660.

In September 2018, TMK's Board of Directors approved a program to repurchase the Company's shares including depositary receipts (GDRs) representing such shares in the open market (the "Buyback Program") for an aggregate amount of up to $30 million. The Buyback Program started in October 2018 and is to be carried out in 2019.

The maximum number of shares and depositary receipts to be repurchased under the Buyback Program will not exceed 29,270,000 ordinary shares, or 7,317,500 GDRs. The precise number of shares and/or GDRs will depend on the share price performance and market conditions for the duration of the Buyback Program.

The share purchases on behalf of the Company under the Buyback Program will be made by a professional broker – VTB Capital Broker – on regulated stock exchanges in accordance with applicable laws and regulations. The repurchased shares and GDRs will be held on TMK Group's balance sheet. The decision with regards to the repurchased securities will be made before the completion of the Buyback Program.

PAO TMK shareholdings as at December 31, 2018

	%
TMK Steel Holdings (including affiliates)*	65,0584
PAO TMK's subsidiaries	0,0445
Free float	34,8971
Total:	**100,00**

** The main beneficiary is Dmitry Pumpyanskiy.*

	REG.S	144A
CUSIP:	87260R201	87260R102
SEDOL:	B1FY0V4	B1G3K21
ISIN:	US87260R2013	US87260R1023

As at December 31, 2018, 34.8971% of PAO TMK shares were free float, with approximately 45% of them traded as GDRs on the London Stock Exchange. PAO TMK's Board of Directors and Management Board jointly held a total of 379,957 shares, or 0.03678% of the Company's authorized capital.

PAO TMK securities are listed on Russian and international stock exchanges.
Shares are listed on the Moscow Exchange under the TRMK ticker (Bloomberg: TRMK:RM / Reuters: TRMK.MM) and are included into the A1 quotation list of the Moscow Exchange.

GDRs are listed on the London Stock Exchange under the TMKS ticker (Bloomberg: TMKS:LI / Reuters: TRMKq.L) in the Main market in the International Order Book, each GDR representing four ordinary shares of PAO TMK. The Bank of New York Mellon Corporation (BNY Mellon) acts as the depository bank.

TMK's dividend policy is governed by the principles of balanced capitalization growth and higher dividends, based on the net profit for a relevant period and factoring in the Company's operational needs and investment requirements.

PAO TMK's Board of Directors generally recommends the General Meeting of Shareholders to pay dividends on the outstanding shares in amounts equal to at least 25% of the Company's IFRS consolidated net profit.

Key priorities of TMK's dividend policy include increasing the Company's capitalization and investment appeal, wealth creation and balancing the interests of all shareholders. The dividend policy is set out in the Dividend Policy Regulations *(www.tmk-group.ru/media_ru/files/51/Polozhenie_o_dividendnoy_politike_2018.pdf)* which seek to build a transparent and effective mechanism for determining the amount of dividends and the dividend payout procedure, and outlining the Board of Directors' strategy in preparing recommendations on dividends payable on shares, and the terms and procedure for dividend payouts.

Dividends accrued and paid out by the Company from 2012 to 2018

Dividend period	Total dividends, RUB million	Dividend per share, RUB	Announcement date	Payment date set by the General Meeting
6M 2012	1,406.38	1.5	02/11/2012	28/12/2012
2012	787.57	0.84	25/06/2013	23/08/2013
Total dividends accrued in 2012: RUB 2,193.95 million				
6M 2013	975.09	1.04	11/11.2013	10/01/2014
2013	731.32	0.78	19/06/2014	10/08/2014
Total dividends accrued in 2013: RUB 1,706.41 million				
6M 2014	393.79	0.397	25/12/2014	15/02/2015
6M 2015	2,400.41	2.42	12/10/2015	29/11/2015
6M 2016	2,004.283	1.94	29/09/2016	14/11/2016
2016	2,024.945	1.96	08/06/2017	26/07/2017
Total dividends accrued in 2016: RUB 4,029,228 million				
2017	2,355.549	2.28	21/06/2018	06/08/2018

PAO TMK makes every effort to ensure that shareholders can exercise their rights as set out in the Company's Articles of Association:

- Holds annual General Meetings of Shareholders and complies with the respective Russian Corporate Governance Code Recommendations (see paragraphs 1.1.1–1.1.5 of the Appendix to this Report); starting from 2019 the Company plans to provide shareholders with remote access to General Meetings through teleconference
- Holds extraordinary General Meetings of Shareholders, if so resolved by shareholder(s) owning at least 10 percent of shares or the Board of Directors, or if requested by the Revision Committee or auditor
- Ensures that shareholders owning at least two percent of shares can put forward proposals as regards the agenda for the Annual General Meeting, propose nominees to, and candidates for, the Board of Directors, the Revision Commission, and the Counting Commission, as well as convene meetings of the Board of Directors
- Adopted the Dividend Policy (updated in 2018) *www.tmk-group.ru/Documents, http://www.e-disclosure.ru/portal/files.*aspx?id=274&type=1) and builds a strong dividend track-record (see the Shareholder Information section of this Annual Report)
- Complies with all recommendations on material corporate actions which safeguard the rights of shareholders and ensure equal treatment of shareholders (execution by the Company of major transactions or other actions that could lead to material changes in the rights of shareholders or damage their interests)
- Prepares and discloses financial (accounting) statements of the Company and selects an internationally recognized auditor to review the statements
- Ensures timely disclosure of material facts relating to the Company's operations, internal regulations, charter documents and guidance
- Maintains an ongoing dialogue with minority shareholders by updating its website page at *http://www.tmk-group.ru/ir ;* page on its website; publishes financial reports, press-releases, and presentations; holds Capital Markets Days, conference calls, answers individual queries, etc.
- Regularly updates shareholder details jointly with the registrar
- The registrar's website offers the Shareholder's Personal Account service whereby persons on the shareholder register, including clients of nominee holders, can obtain materials for Annual General Meetings, vote online, as well as view personal account balance, shareholder details, dividends accrued, and taxes withheld

5.4 TRANSPARENCY

TMK's information policy is based on the principle of improving transparency and maintaining continuous interaction with shareholders and investors.

In 2018, TMK's Regulations on the Information Policy were fully aligned with the Russian Corporate Governance Code *(www.tmk-group.ru/media_ru/files/51/Polozhenie_ob_informacionnoy_politike_2018.pdf).* TMK is committed to full compliance with disclosure regulations and listing rules, and going beyong the examples set by leading international companies, consistently implementing best practices in information disclosure, and improving our information distribution channels and methods.

Since TMK's securities are listed on the Moscow Exchange and the London Stock Exchange, information is disclosed in Russian and in English at *www.e-disclosure.ru/portal/company.aspx?id=274* , *www.tmk-group.ru* , *www.tmk-group.com* , *www.londonstockexchange.com/exchange/prices-and-markets/stocks/summary/company-summary/US87260R2013USUSDIOBE.html.*

- *Uniform information policy, internal rules and regulations*
- *Strict compliance with all regulatory and stock exchange requirements*
- *Simultaneous disclosures in Russian and in English*
- *Quarterly publications of IFRS consolidated financial statements and RAS statements*
- *Quarterly press releases containing performance reviews and forecasts*
- *Quarterly financial and operating perfomance presentations*
- *Quarterly calls for investors and analysts to discuss the Company's results and outlooks*
- *Capital Markets Days*
- *Participation in investment and industry conferences*
- *Site visits to TMK's facilities for investors and analyst*
- *Section for investors on TMK's website*
- *Feedback*

In addition to mandatory disclosures, TMK publishes on its website quarterly IFRS consolidated financial statements *(www.tmk-group.com/Financial_results , www.tmk-group.ru/Financial_results)* and press releases describing its operating and financial performance, presentations, and organizes conference calls with the Company's senior executives for investors, analysts, and media to improve stakeholder awareness.

In line with the international best practices, TMK holds Capital Markets Days where the Company's top managers report on TMK's results, report on strategy implementation and discuss the Company's prospects. Live audio webcasts and recordings of the Capital Markets Days are available on the Company's website. The website's investor section at www.tmk-group.ru/ir features an IR calendar, materials used for events, presentations for investors and analysts, press releases on events that may influence an investment decision, information on the Company's share capital and outstanding debt securities, dividend policy, dividend history, etc.

In addition, TMK arranges site visits to the Company's facilities for investors and analysts, to give them first hand experience of TMK's production process and products.

The Company has rules in place coordinating information disclosure by its business units and entities. We have units dedicated to monitoring compliance with these rules, insider laws and regulations, and the development and implementation of a uniform information policy.

6.0 CORPORATE GOVERNANCE REPORT

COMPLYING WITH MODERN BEST PRACTICES IN CORPORATE GOVERNANCE IS INDISPENSABLE TO PROGRESSING IN THE RAPIDLY CHANGING WORLD OF DIGITAL TECHNOLOGY.

PAO TMK maintains its position among the Top 20 Russian companies with the best corporate governance disclosures

At the end of 2018, PAO TMK was in full compliance with all corporate governance rules of the Moscow Exchange, with its ordinary shares remaining on the A1 quotation list.

6.1 THE STATEMENT OF PAO TMK'S BOARD OF DIRECTORS

Dmitry Pumpyanskiy
Chairman of PAO TMK's Board of Directors

Complying with modern best practices in corporate governance is indispensable to progressing in the rapidly changing world of digital technology. For this purpose, TMK's Board of Directors makes consistent and systemic efforts to improve our corporate governance practices by incorporating provisions of the Corporate Governance Code recommended by the Bank of Russia (Russian Corporate Governance Code) as well as recommendations of recognized rating agencies, non-governmental organizations, and educational institutions focused on corporate governance matters.

In 2018, we updated our Code of Ethics, combining in one place all of TMK's ethical business practices which had previously been regulated under several different regulations and policies. In February 2019, TMK Group's Code of Ethics *(www.tmk-group.ru/media_ru/files/51/Kodeks_Etiki.pdf)* was approved by the Board of Directors and came into effect. The Code is a crucial tool for building TMK Group's overall corporate culture and core values, and is aimed at preventing risks of misconduct. Guided by these principles and values, we expect our employees to make the right decisions guided when engaging with our shareholders, business partners, and colleagues as well as performing their duties honestly and in good faith. This will help secure our leadership in the market and enhance our reputation and the quality of our business.

In 2018, in order to deliver on all of our shareholder commitments, enhance the shareholder experience, incorporate the recommendations of the Russian Corporate Governance Code, and comply with applicable laws, the Company revised and adopted the new versions of PAO TMK's Articles of Association, Regulations on the General Meeting of Shareholders, Regulations on the Board of Directors, Regulations on the Dividend Policy, and Regulations on the Information Policy *(http://www.tmk-group.com/Documents)*.

The new version of the Articles of Association sets out the decision-making procedure for each matter referred to the Board of Directors: by simple majority or qualified majority of three quarters of votes from Board members participating in the voting (clause 15.2 of the Articles of Association). The Articles of Association also establish that during General Meetings, shareholders can vote remotely online or by telephone. Our dividend policy contains a clear set of criteria and circumstances under which the Company can cancel dividend payouts.

6.1 THE STATEMENT OF PAO TMK'S BOARD OF DIRECTORS

The Board worked in close cooperation with TMK's management, mainly through a more in-depth review of certain matters by the Board Committees, and provided advice on strategic lines of business and corporate management. The Board also reveiwed reports on the Group's and its divisions' financial and operating performances, internal audit results, the HSE performance of the Company's facilities, and other matters.

We focused on the digital transformation of the Company's business based on digital technologies. In 2018, we developed and approved a comprehensive transformation programme, set up a transformation committee and formed a project office. A number of projects relating to production processes and other non-production activities are already being implemented.

We adopted a Long-Term Top Management Incentive Program in early 2018 to expand our range of incentives for key managers to reward improved performance. We reviewed performance against the individual KPIs for managers covered by the 2017 short-term incentive program and made decisions on bonus payments.

At the end of 2018, PAO TMK was in full compliance with all corporate governance rules of the Moscow Exchange, with its ordinary shares remaining on the A1 quotation list.

TMK's corporate governance framework is based on the Russian Corporate Governance Code, guided by internal regulations available at *www.e-disclosure.ru/portal/files.aspx?id=274&type=1* and *www.tmk-group.com/Documents,* and outlined in TMK's Corporate Governance Code at *www.tmk-group.com/media_en/files/51/corp_gov_code_en.pdf.*

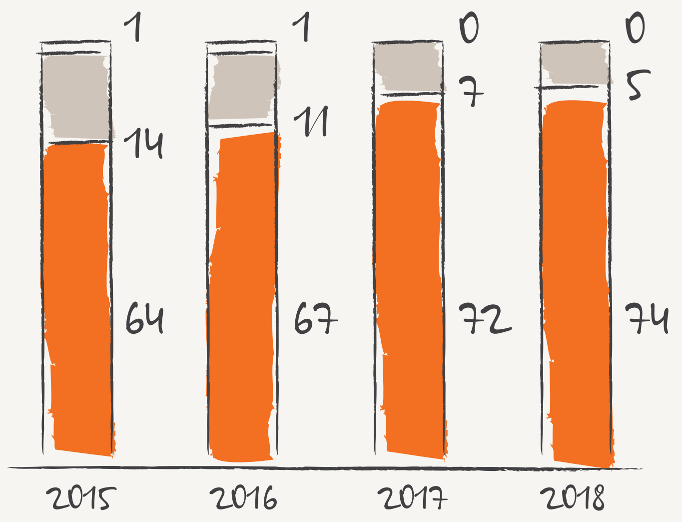
The Company carries out annual performance assessments of the Board of Directors, its Committees, and individual Directors. TMK's Board of Directors ran a self-assessment of its performance in the 2017-2018 corporate year, as guided by the Nomination and Remuneration Committee. The Board's 2018-2019 corporate year performance was assessed by an independent external organization. The results were reviewed at an in-person Board meeting on April 25, 2019.

This Annual Report summarizes the most significant elements of PAO TMK's corporate governance model and practices, including the Corporate Governance Code Compliance Report included in this Annual Report. TMK's compliance with the Russian Corporate Governance Code was assessed as recommended by the Bank of Russia (Letter of the Bank of Russia No. IN-06-52/8 dated February 17, 2016).

When assessing compliance, the Board applied a substance-over-form approach and considers the Company to be in full compliance with the vast majority (93.7%) of the Russian Corporate Governance Code recommendations and in partial compliance with 100% of the recommendations. The Board of Directors notes the Company's progress in incorporating the Russian Corporate Governance Code recommendations and intends to maintain its focus on this progress for the benefit of all stakeholders.

6.1 THE STATEMENT OF PAO TMK'S BOARD OF DIRECTORS

Russian Corporate Governance Code incorporation progress at PAO TMK



Full compliance
Partial compliance
No compliance

Our public experience has shown that the Company's access to capital is directly linked to our willingness to be sincere and transparent with the market about the specifics of our business, our performance results and future plans, material corporate events, and our risks, problems, and the measures we take to prevent or resolve them.

PAO TMK maintains its position among the Top 20 Russian companies with the best corporate governance disclosures (according to the National Corporate Governance Index annual survey run by the Russian National Association of Corporate Directors and supported by the Moscow Exchange and the Russian Union of Industrialists and Entrepreneurs *https://corpshark.ru/wp-content/uploads/2018/12/National-CG-Index-2018-TopCompetence.pdf).*

Our 2019 Priorities:

- *Introduce electronic voting to General Meetings held in person through electronic ballots, including via a mobile application*
- *Continue enhancing our corporate governance practice through adopting advanced corporate governance standards*

Incorporating the Russian Corporate Governance Code Recommendations in 2018

- The Board adopted a new version of the Articles of Association allowing for shareholders to attend General Meetings remotely using telecommunications technologies
- The Company developed a clear set of metrics and circumstances under which dividends would not be distributed, and added them to the new version of the Dividend Policy
- The Board of Directors drafted and adopted a Long-Term Top Management Incentive Program
- TMK's Information Policy was updated in line with the Code recommendations, ensuring effective information communications between the Company and its shareholders, investors, and other stakeholders
- The Company's Code of Ethics was also updated to reflect modern corporate governance standards. TMK Group's new Code of Ethics came into effect after the reporting date, bringing together several internal documents on regulatory compliance

TMK Profile
Letter to Shareholders
Key Highlights
Company Overview
Shareholder Information
Corporate Governance Report
Stakeholder Relations
Sustainable Development
Corporate Governance Code Compliance Report
Management Discussion and Analysis
List of Transactions Made by PAO TMK in 2018
Glossary and Contacts

6.2 PAO TMK'S CORPORATE GOVERNANCE FRAMEWORK

According to the National Corporate Governance Index annual survey, **TMK ranked among the Top 20 Russian companies with the best corporate governance disclosures** *in 2018.*

The Articles of Association stipulate that the General Meeting of Shareholders is PAO TMK's supreme governing body, with key management roles delegated by shareholders to the Board of Directors. In order to ensure the Company's day-to-day management, the Board of Directors elects the CEO and approves candidates for the Management Board as advised by the CEO. The Board of Directors also proposes candidates for executive bodies, as well as nominees to the boards of directors of controlled entities.

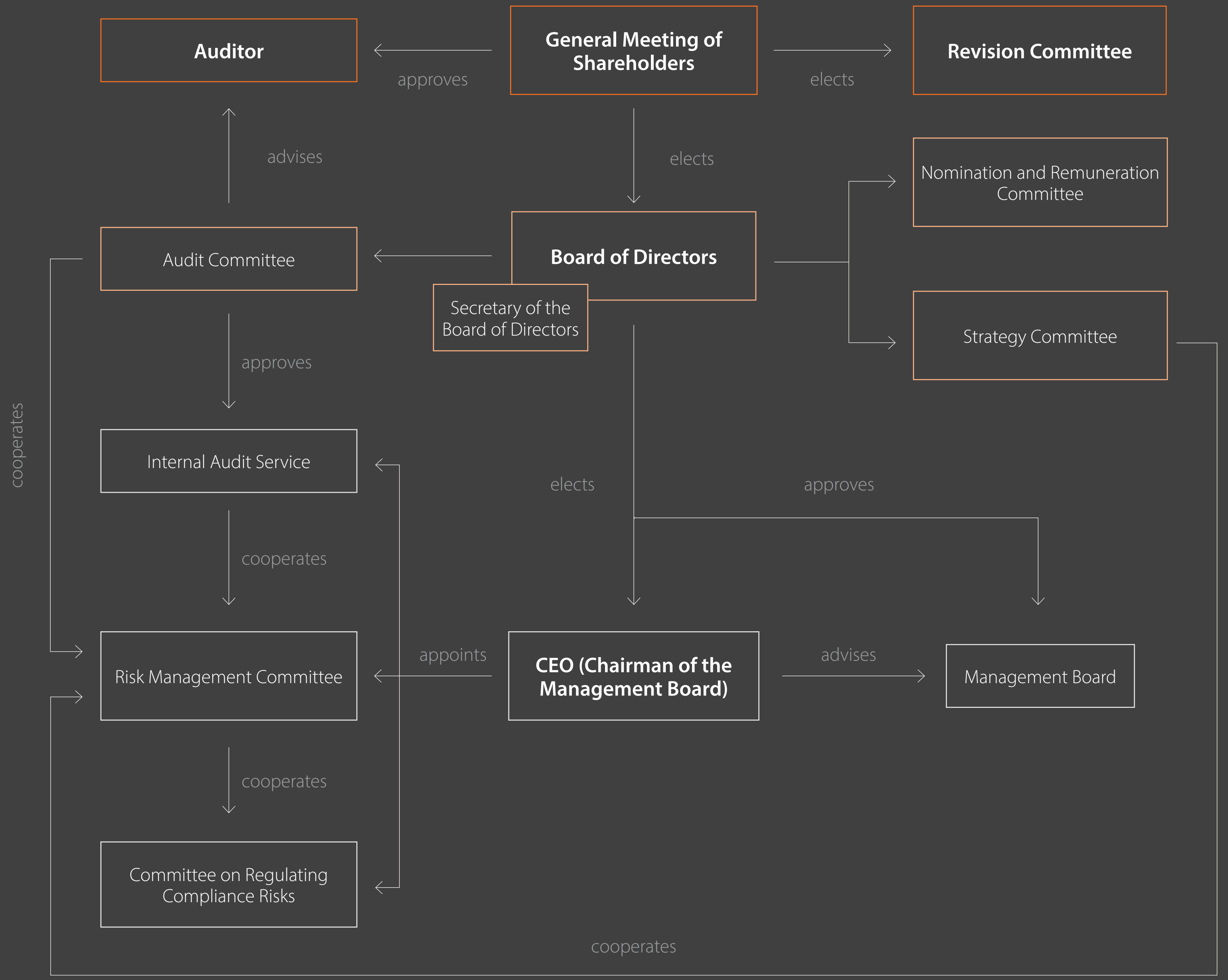
The Board establishes committees whose resolutions are of an advisory nature.

To ensure efficient control over the Company's financial and business operations, as well as compliance with Russian laws and regulations, the General Meeting of Shareholders elects the Revision Committee and approves the Company's auditor.

General Meeting of Shareholders

The powers of PAO TMK's General Meeting of Shareholders, as well as all procedures for convening and holding the meeting, are set out in the Regulations on the General Meeting of Shareholders *(www.tmk-group.ru/media_ru/files/51/TMK_Polozhenie_ob_OSA_2018.pdf)*. A new version of the Regulations aligned with recent changes in the Federal Law On Joint Stock Companies and supplemented with provisions on the use of information and communication technology at general meetings of shareholders was adopted in 2018.

PAO TMK's corporate governance framework



In 2018, the Annual General Meeting of Shareholders was held, along with one extraordinary meeting. The agenda of the meetings included, inter alia: approval of the revised Articles of Association, approval of the revised regulations on the General Meeting of Shareholders and the Board of Directors, distribution of profits for 2017, election of the Board of Directors and the Revision Committee, auditor approval, and approval of interested party transactions.

Over the past six consecutive years, Directors of PAO TMK have been consistently been recognized among the best professionals in corporate governance by the Director of the Year National Awards.

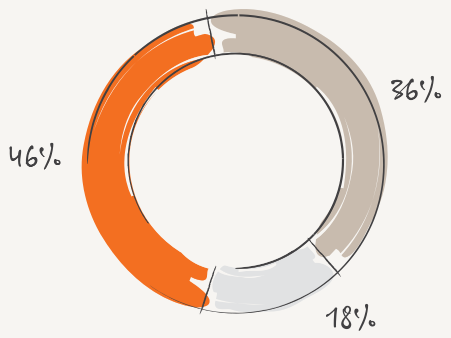
COMPOSITION OF THE BOARD OF DIRECTORS

Independent Directors

Due to TMK's primary listing on the Moscow Exchange, the composition of its Board of Directors is subject to strict requirements, in particular regarding an adequate number of independent directors (at least three). Thre role of the Independent Directors is to ensure decisions made by the Board of Directors and are made objectively and enhance the credibility of the Board of Directors among shareholders. **Independent Directors account for about a half of TMK's Board members (five out of eleven).** The independence of a director is assessed by the Nomination and Remuneration Committee when the list of nominees to the Board of Directors is being drawn up, and is approved by the Moscow Exchange on a quarterly basis.

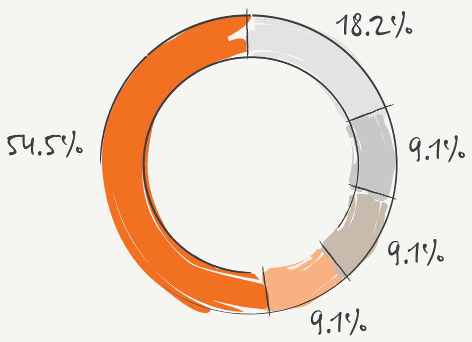
The Board of Directors may recognize a Director as independent even if the Director has signs of affiliation with the issuer. Alexander Shokhin, who has been on the Board of Directors for over ten years, is recognized as independent because he has an established reputation in the investment community, and the independence of his position does not raise any doubt. This decision is disclosed on our website at *www.tmk-group.com/bod/Shohin_Aleksandr_Nikolaevich.*

Board composition and independence



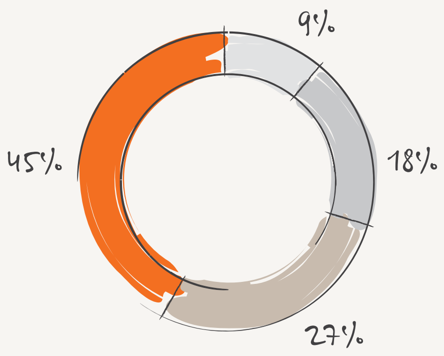
- *Independent directors (5 directors)*
- *Non-executive directors (4 directors)*
- *Executive directors (2 directors)*

Board composition by educational back-ground



- *Economics (6 directors)*
- *Economics + Engineering (2 directors)*
- *Engineering (1 directors)*
- *Econimics+Management (1 director)*
- *Management (1 director)*

Age balance of the Board



- *30–40 years (1 director)*
- *41–50 years (2 directors)*
- *51–60 years (3 directors)*
- *61–70 years (5 directors)*

Professional Competence, Communication Skills, and Acknowledgement

Effective strategic management of TMK Group, one of the world's leading producers of tubular products, requires a close-knit, highly professional team of directors committed to ethical principles of business conduct.

Members of the Board of Directors of PAO TMK are individuals capable of making independent judgements; they are distinguished for their impeccable business and personal reputation and possess all the required skills: more than half of the eleven directors have higher academic degrees, including two doctors of sciences. Nine directors received an economic education, two of them have also a technical education, and one director also has a management education; one director has a management education, and one – technical.

Six directors have received government awards – orders of the Russian Federation

6.3 BOARD OF DIRECTORS

Over the past six consecutive years, members of TMK's Board of Directors have been consistently recognized among the best professionals in corporate governance by ***the Director of the Year National Awards*** *held annually by the Independent Directors Association, Russian Union of Industrialists and Entrepreneurs, and PwC, jointly with the Moscow Exchange and Sberbank.*

Members of TMK's Board of Directors ***Peter O'Brien*** *and* ***Alexander Shokhin*** *were ranked among the* ***Top 50 Independent Directors.***
Dmitry Pumpyanskiy*, Chairman of TMK's Board of Directors, was included in the Top 25 ranking of Board of Directors Chairmen:* *www.nand.ru/professional-information/ratings/rating-2018/#2*.

Directors' Liability Insurance

Starting from 2006, TMK has insured the liability of its directors and officers. Liability insurance covers the insured persons against any possible damage caused by unintentional errors (or omissions) in the course of managing the Company. The terms and conditions of insurance contracts, including risk coverage, comply with the international best practice in insurance against similar risks.

CHANGES IN THE COMPOSITION OF THE BOARD OF DIRECTORS IN 2018

BY RESOLUTION OF THE GENERAL MEETING OF SHAREHOLDERS DATED JUNE 21, 2018, YAROSLAV KUZMINOV WAS ELECTED TO THE BOARD OF DIRECTORS AS AN INDEPENDENT DIRECTOR. INDEPENDENT DIRECTOR MIKHAIL ALEKSEEV LEFT THE BOARD OF DIRECTORS.

THE NUMBER OF MEMBERS OF THE BOARD OF DIRECTORS IS SPECIFIED IN PAO TMK'S ARTICLES OF ASSOCIATION AND EQUALS ELEVEN DIRECTORS, I.E. THE OPTIMAL NUMBER FOR PUBLIC COMPANIES.

AS AT 31 DECEMBER 2018, FOLLOWING THE ANNUAL GENERAL MEETING OF SHAREHOLDERS HELD ON JUNE 21, 2018, PAO TMK'S BOARD OF DIRECTORS WAS COMPOSED AS FOLLOWS:

Dmitry Pumpyanskiy

Chairman of the Board of Directors, Non-Executive Director

Born in 1964. Graduated from Kirov Urals Polytechnic Institute in 1986. Ph.D. in Technical Sciences, Doctor of Economics. Beneficial owner of TMK. Member of the Board of Directors since 2004, Chairman of the Board of Directors since 2005. Mr. Pumpyanskiy was awarded a second class Medal of the Order for Merit to the Fatherland, a fourth class Order for Merit to the Fatherland, and the Order of Honor, is a Russian Government prize winner in Science and Technology, received the title of Honored Metallurgist, and was declared the winner of the 6th Director of the Year National Award in the Chairman of the Board: Contribution to the Development of Corporate Governance category in 2011. At present, he is extensively involved in public activities aimed at promoting the Russian metals industry. Fields of interest: metals industry economics, and physics of metals. Author of four monographs and over 70 scientific papers.

Principal employment: President of JSC Sinara Group

Stake in the authorized capital of PAO TMK: 0.0063%

Relevant experience in the last five years

Period	Organization	Position
2018 – present	Non-Profit Association of Legal Entities Russian-American Council for Business Cooperation	Deputy Chairman of the Board of Trustees, member of the Board of Trustees
2018 – present	Russian Union of Industrialists and Entrepreneurs	Chairman of the Committee on Technical Regulation, Standardization, and Compliance Assessment
2017 – present	St. Catherine's Charitable Foundation	Foundation Board member
2016 – present	Chamber of Commerce and Industry of the Russian Federation	Board member
2015 – 2016	Russian Steel Association	President
2015 – present	Demidov Public Scientific Foundation (Yekaterinburg)	Member of the Board of Trustees
2013 – present	JSC Sinara – Transport Machines (STM)	Member of the Board of Directors
2013 – present	Non-Profit Organization Foundation for Development of the Center for Elaboration and Commercialization of New Technologies	Board member
2013 – present	ISTOKI Endowment Fund	Member of the Board of Trustees

continued →

start

2013–2013	Rosagroleasing Joint Stock Company	Member of the Board of Directors
2013–2013	Russian Agricultural Bank	Chairman of the Supervisory Board
2013–2016	Chamber of Commerce and Industry of the Russian Federation	Member of the Management Board
2013 – present	Federation of Ski-Jumping and Nordic Combined of Russia	Chairman of the Board of Trustees
2013 – present	The Russian Olympians Foundation	Foundation Board member, member of the Council of Trustees
2013 – present	Ural Federal University named after the first President of Russia B.N. Yeltsin	Chairman of the Supervisory Board
2013–2013	Ural Federal University named after the first President of Russia B.N. Yeltsin	Member of the Supervisory Board
2013 – present	Sverdlovsk Regional Union of Industrialists and Entrepreneurs (Regional Association of Employers)	President
2013 – present	Russian Union of Industrialists and Entrepreneurs (Non-governmental organization)	Member of the Bureau, member of the Management Board
2013 – present	Russian Union of Industrialists and Entrepreneurs (All-Russian association of employers)	Member of the Bureau, member of the Management Board
2013 – present	Joint-Stock Commercial Bank of Support to Commerce and Business	Member of the Board of Directors
2013 – present	PAO TMK	Chairman of the Board of Directors
2013 – present	World Steel Association	Board member
2013 – present	JSC Sinara Group	President, Chairman of the Board of Directors
2013 – present	Russian Steel Association (formerly, Non-Profit Partnership Russian Steel)	Member of the Supervisory Board

Andrey Kaplunov

Executive Director. Has been with PAO TMK since 2001, member of the Board of Directors since 2005

Born in 1960. Graduated from Moscow Finance Institute in 1982 and later completed a postgraduate degree program there. Ph.D. in Economics. Commended by the Ministry of Industry and Trade of the Russian Federation.

Principal employment: First Deputy CEO of PAO TMK

Stake in the authorized capital of PAO TMK: 0.0067%

Relevant experience in the last five years

Period	Organization	Position
2015 – present	Orsky Machine Building Plant, Joint stock company	Chairman of the Board of Directors
2013 – present	Sinara Mini-Football Club (Sverdlovsk Regional Sports Non-Governmental Fund)	Member of the Board of Trustees
2013 – present	Joint Stock Company Interregional private BIG Pension Fund	Member of the Board of Directors
2013 – present	PAO TMK	Member of the Board of Directors, First Deputy CEO, member of the Management Board
2013 – present	AO Trade House TMK	Chairman of the Board of Directors
2013 – present	Seversky Pipe Plant, Public Joint stock company	Chairman of the Board of Directors
2013 – present	Volzhsky Pipe Plant, Joint stock company	Chairman of the Board of Directors
2013 – present	Taganrog Metallurgical Plant, Public Joint stock company	Chairman of the Board of Directors
2013 – present	Sinarsky Pipe Plant, Public Joint stock company	Chairman of the Board of Directors
2013 – present	Joint-Stock Commercial Bank of Support to Commerce and Business	Member of the Board of Directors
2013 – present	JSC Sinara Group	Member of the Board of Directors

Holds no shares
in PAO TMK

Sergey Kravchenko

Independent Director, *member of the Nomination and Remuneration Committee, member of the Strategy Committee, member of the Board of Directors since 2016*

Born in 1960. Graduated from Moscow Auto-Mechanical Institute in 1982. Doctor of Engineering, Professor. Decorated with the Order of Friendship.

Principal employment: President of Boeing Russia/CIS

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PAO TMK	Chairman of the Nomination and Remuneration Committee
2016 – present	PAO TMK	Member of the Board of Directors, member of the Strategy Committee
2013 – present	The Boeing Company	President of Boeing Russia/CIS, Vice President of Boeing International

Yaroslav Kuzminov

***Independent Director,** member of the Nomination and Remuneration Committee, member of the Board of Directors since 2018*

Born in 1957. Graduated from Lomonosov Moscow State University in 1979. Ph.D. in Economics, Associate Professor. Mr. Kuzminov was awarded a third class Order for Merit to the Fatherland, a fourth class Order for Merit to the Fatherland, and the Order of Honor.

Principal employment: National Research University Higher School of Economics

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PAO TMK	Member of the Board of Directors, member of the Nomination and Remuneration Committee
2017 – present	Autonomous Non-Profit Organization National Agency for Qualification Development	Member of the Supervisory Board
2017 – present	JSC Publishing House Prosveshcheniye	Member of the Board of Directors
2017 – present	Association of Global Universities	Chairman of the Board
2015 – present	All-Russia People's Front	Co-Chairman of the Moscow Regional Office
2015 – present	Association of federal universities, national research universities, Lomonosov Moscow State University, and Saint Petersburg State University	Association member
2014 – present	Autonomous Non-Profit Organization Center for Expert Assessment of the Issues of the World Trade Organization	Member of the Supervisory Board
2014 – present	Association of the Leading Universities in Economics and Management	Chairman of the Board

continued →

start

2014 – present	Presidential Library named after B.N. Yeltsyn	Member of the Academic Council
2013 – present	Federal State Autonomous Educational Institution For Higher Professional Education National Research University Higher School Of Economics	Rector
2013 – present	Center for Strategic Research	Board member
2013 – present	Russian Union of Rectors	Member of the Union
2013 – present	Russian Engineering Union (All-Russia Industry Association of Employers)	Member of the Management Board
2013 – present	Non-Profit Partnership Russian International Affairs Council	Member of the Partnership
2013 – present	National Accreditation Council of Business and Management Education	Member of the Rector Supervisory Board under the Presidium
2013 – present	Federal State Autonomous Educational Institution for Higher Professional Education Ural Federal University named after the first President of Russia B.N. Yeltsin	Member of the Supervisory Board
2013 – present	Margarita Rudomino All-Russia State Library for Foreign Literature	Member of the International Board of Trustees

Peter O'Brien

Independent Director

Chairman of the Audit Committee, member of the Board of Directors since 2012. Born in 1969. Graduated from Duke University (USA) in 1991 and obtained an MBA from Columbia University Business School in 2000. Took a course in AMP (Advanced Management Program) at Harvard Business School in 2011. In 2008, Mr. O'Brien won the National Award of the Independent Directors Association in the Contribution to the Improvement of Corporate Transparency special category, and in 2017, he won the National Award of the Independent Directors Association as the best Chairman of the Audit Committee of the Board of Directors (Russia).

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PJSC SIBUR Holding	Member of the Board of Directors
2017 – present	Regalwood Global Energy (USA)	Member of the Board of Directors
2017– 018	Sberbank CIB USA (New York)	Member of the Board of Directors
2016–2018	PJSC TransContainer	Member of the Board of Directors
2015–2018	PJSC T Plus	Member of the Board of Directors, Chairman of the Audit Committee
2013 – present	PAO TMK	Member of the Board of Directors, Chairman of the Audit Committee
2013 – present	TransFin-M PC	Chairman of the Board of Directors
2013–2015	IG Seismic Services (IGSS)	Independent director, Chairman of the Audit Committee
2013–2013	OJSC RusRailLeasing	Chairman of the Board of Directors
2013–2013	HRT Participacoes	Member of the Board of Directors, Chairman of the Audit Committee
2013–2016	CJSC European Pension Fund	Member of the Fund's Board of Trustees

Sergey Papin

Non-Executive Director, member of the Board of Directors since 2005, member of the Nomination and Remuneration Committee

Born in 1955. Gruduated from Donetsk Polytechnic Institute in 1977. In 1985 - Higher Economic Courses under the USSR State Planning Committee, in 1990 - Moscow Higher Party School, in 2005 – International Moscow Financial and Banking School (company value management and business valuation). Mr Papin was awarded a Badge of Honor and Order of Friendship, Gratitude from the President of the Russian Federation for labor achievements and many years of dedicated work, a Commemorative medal and diploma «XXII Olympic Winter Games, XI Paralympic Winter Games 2014 in Sochi «, Certificate of Merit of the Ministry of Industry and Energy of the Russian Federation, Certificate of Merit of the Russian Union of Industrialists and Entrepreneurs.

Principal employment: Vice President of JSC Sinara Group

Stake in the authorized capital of PAO TMK: 0.0044%

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PAO TMK	Member of the Board of Directors, member of the Nomination and Remuneration Committee
2018 – present	JSC Burgas Resort	Chairman of the Board of Directors
2017–2018	PAO TMK	Member of the Strategy Committee
2014–2016	JSC Kalugaputmash (formerly, OJSC Kalugaputmash)	Member of the Board of Directors
2013–2017	PAO TMK	Member of the the Nomination and Remuneration Committee
2013 – present	LLC Ural Locomotives	Member of the Board of Directors
2013 – present	Russian Union of Industrialists and Entrepreneurs (Non-governmental organization)	Member of the Management Board
2013 – present	Russian Union of Industrialists and Entrepreneurs (All-Russian association of employers)	Member of the Management Board
2013 – present	JSC Burgas Resort	Member of the Board of Directors
2013–2017	JSC Arkhyz – Sinara (formerly, OJSC Arkhyz – Sinara)	Member of the Board of Directors
2013–2017	JSC Sinara – Transport Machines (STM)	Member of the Board of Directors
2013 – present	JSC Sinara – Transport Machines (STM)	Member of the Board of Directors
2013 – present	JSC Sinara Group	Member of the Board of Directors
2013 – present	PAO TMK	Member of the Board of Directors

Alexander Pumpyanskiy

Non-Executive Director, member of the Audit Committee and the Strategy Committee. Member of the Board of Directors since 2017

Born in 1987. Graduated from the University of Geneva with a degree in Business Management in 2008, and obtained a Master's degree in Economics at the University of Geneva in 2015.

Principal employment: Managing Director of Lera Capital SA

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2018 – present	OFSI Holding LLC	Member of the Board of Directors
2018 – present	Domus Flavia Investments AG	Administrator
2018 – present	IPSCO Tubulars Inc.	Member of the Board of Directors
2018 – present	Sinara Capital Management SA	Managing Director
2017 – present	PAO TMK	Member of the Board of Directors, member of the Audit Committee, member of the Nomination and Remuneration Committee
2017 – present	Banks' Association RUSSIA	Board member
2017 – present	OFS International LLC	Member of the Board of Directors
2017 – present	Oak Town Real Estate SA	Chairman of the Board of Directors, Administrator
2016 – present	Joint-Stock Commercial Bank of Support to Commerce and Business	Chairman of the Board of Directors
2016 – present	TMK STEEL HOLDING LIMITED	Member of the Board of Directors
2016 – present	Lera Capital SA	Managing Director, Investment Portfolio Manager
2014–2016	Joint-Stock Commercial Bank of Support to Commerce and Business	Deputy Chairman of the Board of Directors
2014 – present	JSC Sinara Group	Member of the Board of Directors
2013 – present	Segilo AG	Member of the Board of Directors
2013–2016	Sinara Capital Management	Investment Analyst
2013–2014	Open Joint-Stock Commercial Bank of Support to Commerce and Business	Member of the Board of Directors

Robert Mark Foresman

Independent Director, *member of the Audit Committee, member of the Board of Directors since 2012*

Born in 1968. Graduated from Bucknell University (USA) in 1990 and Harvard University Graduate School of Arts and Sciences in 1993. Obtained a certificate from Moscow Power Engineering Institute in 1989.

Principal employment: Vice Chairman of UBS Investment Bank

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PAO TMK	Member of the Board of Directors, member of the Audit Committee
2016 – present	UBS Investment Bank	Vice Chairman
2017 – present	OOO UBS Bank	Chairman of the Board of Directors
2014–2016	Barclays Plc	Head of Barclays in Russia
2013–2018	PAO TMK	Member of the Board of Directors, member of the Nomination and Remuneration Committee
2013–2013	OOO Barclays Capital	President
2013–2013	LLC Investment Company of Vnesheconombank (VEB Capital)	Member of the Supervisory Board

Anatoly Chubais

Non-Executive Director, member of the Strategy Committee, member of the Board of Directors since 2015

Born in 1955. Graduated from the Palmiro Togliatti Leningrad Institute of Engineering and Economics in 1977 and the School of Advanced Training of Moscow Power Engineering Institute in 2002. Ph.D. in Economics. Decorated with a third class and fourth class Order for Merit to the Fatherland, a Medal for Merit to the Chechen Republic, and a first class Medal for Special Contribution to the Development of Kuznetsk Basin. Three times commended by the President of Russia (in 1995, 1997, and 1998).

Principal employment: Chairman of the Management Board of LLC RUSNANO Management Company

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2018 – present	Non-Profit Association of Legal Entities Russian-American Council for Business Cooperation	Member of the Board of Trustees
2015 – present	PAO TMK	Member of the Board of Directors, member of the Strategy Committee
2015 – present	Innovation and R&D Directors Club	Member of the Supervisory Board
2015 – present	National Association of Manufacturers of Building Materials, Products, and Structures	Member of the Supervisory Board
2014 – present	LLC RUSNANO Management Company	Member of the Management Board, member of the Board of Directors
2013 – present	LLC RUSNANO Management Company	Chairman of the Management Board
2013 – present	Hospice Charity Fund Vera	Member of the Board of Trustees
2013 – present	Tri Alpha Energy, Inc.	Member of the Board of Directors
2013 – present	Far Eastern Federal University	Member of the Supervisory Board
2013 – present	International Advisory Board of the Higher School of Management, Saint Petersburg State University	Member of the Advisory Board
2013 – present	Southern Federal University	Member of the Advisory Board
2013 – present	Advanced Research Foundation	Member of the Advisory Board
2013 – present	Non-Profit Partnership Russian Nanoindustry Association	Member of the Advisory Board
2013 – present	Stupeni Charitable Foundation	Founder

continued

start

2013 – present	Non-Profit Organization RUSNANO School League	Chairman of the Board of Trustees
2013–2015	Global Board of Advisers at the Council on Foreign Relations	Board member
2013 – present	Limited Liability Company RusnanoMedInvest	Member of the Board of Directors, Chairman of the Board of Directors
2013–2018	Presidential Council for Economic Modernization and Innovative Development of the Russian Federation	Council member
2013 – present	Limited Liability Company NovaMedica	Member of the Board of Directors, Chairman of the Board of Directors
2013 – present	Coordination Board of the MICEXRTS Innovation and Investment Market	Chairman of the Board
2013 – present	Polytechnic Museum	Deputy Chairman of the Board of Trustees
2013 – present	Autonomous Non-Profit Organization ELearning for Nanoindustry (eNano)	Member of the Supervisory Board
2013–2018	National Council on Corporate Governance	Board member
2013–2015	Stichting Joule Global Foundation	Member of the Board of Directors
2013–2015	Joule Global Holdings B.V.	Member of the Board of Directors

continued

start

2013 – present	Joint Stock Company RUSNANO (formerly, Open Joint Stock Company RUSNANO)	Member of the Board of Directors
2013–2014	Open Joint Stock Company RUSNANO	Chairman of the Management Board, member of the Management Board
2013–2017	CJSC Sarov Technopark	Member of the Board of Directors
2013 – present	Moscow Institute of Physics and Technology (State University)	Head of the Inter-Faculty Basic Department of Technology Entrepreneurship
2013 – present	Non-Profit Organization Foundation for Development of the Center for Elaboration and Commercialization of New Technologies	Board member
2013 – present	Yegor Gaidar Foundaiton	Chairman of the Board of Trustees
2013 – present	Infrastructure and Educational Program Foundation	Member of the Supervisory Board, Chairman of the Management Board, member of the Management Board
2013–2015	Rusnano Capital AG	Chairman of the Board of Directors
2013 – present	Boris Yeltsin Presidential Center Foundation	Member of the Board of Trustees
2013 – present	Moscow Theater School of the Modern Play	Chairman of the Board of Trustees
2013 – present	Russian Union of Industrialists and Entrepreneurs (Non-governmental organization)	Member of the Bureau, member of the Management Board, Chairman of the Committee on Innovative Entrepreneurship
2013 – present	Russian Union of Industrialists and Entrepreneurs (All-Russian association of employers)	Member of the Bureau, member of the Management Board, Chairman of the Committee on Innovative Entrepreneurship
2013 – present	Round Table of Russian and European Industrialists	Co-Chairman

Alexander Shiryaev

Executive Director, member of the Strategy Committee. Has been with PAO TMK since 2003, member of the Board of Directors since 2005

Born in 1952. Graduated from the Sverdlovsk Institute of National Economy in 1991. Mr. Shiryaev was awarded by the Sverdlovsk Region with a second and third class Badge of Merit, received the title of Honored Metallurgist, and is a Russian Government prize winner in Science and Technology (2018).

Principal employment: CEO of PAO TMK

Stake in the authorized capital of PAO TMK: 0.015%

Relevant experience in the last five years

Period	Organization	Position
2017 – present	PAO TMK	Member of the Strategy Committee
2016 – present	DOO VIZAVI	CEO
2013 – present	Orsky Machine Building Plant, Joint stock company	Member of the Board of Directors
2014–2015	Orsky Machine Building Plant, Joint stock company	Chairman of the Board of Directors
2013 – present	AO Trade House TMK	Member of the Board of Directors
2013 – present	Seversky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2013–2015	OAO TMK	Member of the Strategy Committee
2013 – present	PAO TMK	Member of the Board of Directors, Chairman of the Management Board, CEO
2013 – present	Volzhsky Pipe Plant, Joint stock company	Member of the Board of Directors
2013 – present	Taganrog Metallurgical Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	Sinarsky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	JSC Sinara Group	Member of the Board of Directors

Alexander Shokhin

Independent Director, *Chairman of the Strategy Committee, member of the Board of Directors since 2008*

Born in 1951. Graduated from Lomonosov Moscow State University in 1974. Doctor of Economics, Professor. Mr. Shokhin was awarded a third and fourth class Orders for Merit to the Fatherland, an Order of Alexander Nevsky, Order of Honor, and a number of public and government awards, including a second class Order of Holy Prince Daniel of Moscow and a medal in commemoration of the 850th Anniversary of Moscow. In 2008, won the National Award of the Independent Directors Associations in the Independent Director category.

Principal employment: President of the Russian Union of Industrialists and Entrepreneurs

Holds no shares in PAO TMK

Relevant experience in the last five years

Period	Organization	Position
2016 – present	Autonomous Non-Profit Organization Agency for Technological Development	Member of the Supervisory Board
2016 – present	Chamber of Commerce and Industry of the Russian Federation	Board member
2013 – present	PAO Mechel	Deputy Chairman of the Board of Directors
2015 – present	JSC RSMB Corporation	Member of the Board of Directors
2014–2016	JSC United Transport and Logistics Company	Member of the Board of Directors
2013 – present	OOO Merrill Lynch Securities	Advisor
2013–2014	OJSC Alrosa	OJSC Alrosa
2013 – present	PAO TMK	Member of the Board of Directors, Chairman of the Strategy Committee
2013 – present	Eurasia Drilling Company Limited	Member of the Board of Directors

continued

start

2013–2014	JSC RZD	Member of the Board of Directors
2013–2013	OJSC Baltika Breweries	Member of the Board of Directors
2013–2013	TNK BP Limited	Member of the Board of Directors
2013–2014	OJSC Fortum	Member of the Board of Directors
2013–2013	OJSC LUKOIL	Member of the Board of Directors
2013 – present	Agency for Strategic Initiatives	Member of the Supervisory Board
2013 – present	Russian Union of Industrialists and Entrepreneurs (Non-governmental organization)	President, member of the Bureau, member of the Management Board
2013 – present	Russian Union of Industrialists and Entrepreneurs (All-Russian association of employers)	President, member of the Bureau, member of the Management Board
2013 – present	National Research University Higher School of Economics	President
2013 – present	Non-Profit Association of Legal Entities Russian-American Council for Business Cooperation	Chairman of the Board of Trustees
2013 – present	Non-Profit Partnership National Council on Corporate Governance	Member of the Partnership, member of the Presidium
2013 – present	German-Russian Chamber of Commerce	Board member

Maxim Kurbatov

Secretary of the Board of Directors (Corporate Secretary)

Born in 1967. Graduated from Kirov Urals Polytechnic Institute, the Academy of National Economy under the Government of the Russian Federation, and Moscow State Law Academy. Has been with PAO TMK since 2002. Headed the CEO's Executive Office and the Corporate Governance function.

Principal employment: has been the Secretary of the Board of Directors since 2005

As at December, 31 2018, the members of the Board of Directors held no interest in controlled entities.

In 2018, the members of the Board of Directors did not enter into any transactions to acquire, or dispose of, PAO TMK shares.

PERFORMANCE OF THE BOARD OF DIRECTORS IN 2018

Meetings of the Board of Directors are held in accordance with an approved plan; agendas of the meetings are disclosed in advance to all stakeholders as corporate action notices. Members of the Board of Directors have all they need to adequately prepare for the meetings, including materials that are distributed beforehand.

In 2018, the Board of Directors held 24 meetings, including eight meetings in person.

Directors' attendance at meetings of the Board of Directors and relevant Board Committees in 2018

	Board of Directors	Audit Committee	Nomination and Remuneration Committee	Strategy Committee
	(24 meetings)	(8 meetings)	(5 meetings)	(5 meetings)
Dmitry Pumpyanskiy (Chairman)	24			
Mikhail Alekseev	9 (9)	2 (4)	2 (2)	
Andrey Kaplunov	24			
Sergey Kravchenko	24		3 (3)	3
Yaroslav Kuzminov	14 (15)		3 (3)	
Peter O'Brien	24	8		
Sergey Papin	24		3 (3)	1 (2)
Robert Mark Foresman	24		4 (4)	
Alexander Pumpyanskiy	24	8	2 (2)	3 (3)
Anatoly Chubais	22			
Alexander Shiryaev	24			5
Alexander Shokhin	24			5

Bracketed figures denote the number of meetings held during the period when a Director served on the Board of Directors and on the relevant Board Committee.

THE MOST IMPORTANT MATTERS DISCUSSED AT THE MEETINGS OF PAO TMK'S BOARD OF DIRECTORS INCLUDED:

- Target structure of the TMK Group for 2019
- Consolidated budget for 2019
- Management reports and consolidated financial statements
- Performance of the Board of Directors' Committees
- Results of the performance evaluation of the Board of Directors and its Committees in 2017-2018 corporate year
- Remuneration of the Company's managers for 2017, key performance indicators and remuneration arrangements for 2018
- Approval of TMK's Long-Term Top Management Incentive Program
- Recommendations to the General Meeting of Shareholders on the final dividend for 2017
- Selection of the Company's auditor
- Election of the Chairman of the Board of Directors, members of the Board of Directors' Committees; approval of the Company's governing bodies
- Schedule of activities for the Company's Board of Directors
- Implementation of the Board of Directors' resolutions
- Submission for consideration of the General Meeting of shareholders of new versions of the Company's Articles of Association, the Regulations on the General Meeting of Shareholders, and the Regulations on the Board of Directors
- Approval of new versions of the information policy and the
- dividend policy
- Performance of the Internal Audit Service in 2018
- HSE situation at TMK Group's facilities
- Performance of the Company's American division in 2017, 1H 2018 and 1Q 2018, as well as guidance for 4Q 2018 and 1Q 2019
- Performance of the Company's European division in 9M 2018
- TMK's participation in I'm a Professional, an association of student competition organizers
- Approval of the Buyback Program for 2018–2019 to repurchase PAO TMK shares and GDRs

REMUNERATION OF THE BOARD OF DIRECTORS

In accordance with the legislation of the Russian Federation, the General Meeting of Shareholders may resolve to pay members of the Board of Directors remuneration reflecting the time and effort commitment of Directors to the preparation of, and participation in, meetings of the Board of Directors and its Committees.

The Board of Directors' remuneration scheme evolves in line with the latest best practices in corporate governance and is now fully compliant with the Russian Corporate Governance Code (see paragraphs 4.1 and 4.2 of Appendix to this Report):

- The Policy on Remuneration and Compensation of the Board of Directors of PAO TMK describes the Company's approaches to remuneration and regulates all types of payments and compensation due to members of the Board of Directors
- The Board of Directors, supported by the Nomination and Remuneration Committee, monitors compliance with the Policy
- The levels of remuneration are adequate to attract directors with required qualifications and responsibility
- Annual remuneration is a fixed payment linked to the performance of main duties and additional responsibilities as a director (who is not an executive of the Company) inherent to the roles of Chairman of the Board of Directors, Chairman of the Board of Directors' Committee, and member of the Board of Directors' Committee
- The amount of remuneration and reimbursable expenses is subject to preliminary approval by the Board of Directors and is based on recommendations made by the Nomination and Remuneration Committee

Remunerations and reimbursements for members of the Board of Directors of PAO TMK, $ million

	2016	2017	2018
Remuneration for service on the Board of Directors and its Committees	2.26	2.52	2.35
Reimbursement of expenses	0.14	0.22	0.22
Other remuneration	0	0	0
Total	2.4	2.74	2.57

6.4 COMMITTEES OF THE BOARD OF DIRECTORS

The Board of Directors has three standing committees: the Audit Committee, the Nomination and Remuneration Committee, and the Strategy Committee. The committees have been formed in compliance with PAO TMK's Corporate Governance Code, which specifically requires that the Audit Committee and the Nomination and Remuneration Committee include independent directors only, or, where it is not reasonably possible, comprise independent directors and non-executive directors only. The Board of Directors also seeks to strike the optimal balance of Directors' roles, ensure the necessary professional excellence, experience, and age balance of the Committee membership, as well as regular re-election and continuity of their functions.

By resolution of the Board of Directors dated June 22, 2018, the Nomination and Remuneration Committee was fully re-elected, and a new independent director was elected to the Audit Committee. Each of the two Committees includes a non-executive director – Sergey Papin (63, Nomination and Remuneration Committee) who has extensive professional experience and knowledge of TMK's business profile, and Alexander Pumpyanskiy (31, Audit Committee) who is highly qualified and has received modern education enabling him to apply best practices in his work. Therefore, the actual structure of the Audit Committee and the Nomination and Remuneration Committee consists of two independent directors and one non-executive director, that contributes to the Committees' efficient performance.

Changes to the membership of the Board of Directors' Committees in 2018 (following the Annual General Meeting of Shareholders)

Committee members newly elected on June 21, 2018	Committee composition as at December 31, 2018	Stepped down on June 21, 2018
Robert Mark Foresman	**Audit Committee** Peter O'Brien *Chairman, Independent Director* Robert Mark Foresman *Independent Director* Alexander Pumpyanskiy *Non-Executive Director*	Mikhail Alekseev
Sergey Kravchenko Yaroslav Kuzminov Sergey Papin	**Nomination and Remuneration Committee** Sergey Kravchenko *Chairman, Independent Director* Yaroslav Kuzminov *Independent Director* Sergey Papin *Non-Executive Director*	Mikhail Alekseev Alexander Pumpyanskiy Robert Mark Foresman
Alexander Pumpyanskiy	**Strategy Committee** Alexander Shokhin *Independent Director* Sergey Kravchenko *Independent Director* Anatoly Chubais *Non-Executive Director* Alexander Pumpyanskiy *Non-Executive Director* Alexander Shiryaev *Executive Director*	Sergey Papin

AUDIT COMMITTEE

Performance Report of the Audit Committee of PAO TMK'S Board of Directors

Peter O'Brien
Chairman of the Audit Committee

This report details the performance of the Audit Committee of PAO TMK's Board of Directors (the Committee) in 2018 and between January 01, 2019 and March 31, 2019.

Key Roles:

- Review completeness, accuracy and reliability of consolidated financial and standalone accounting statements of PAO TMK
- Assess external auditors for independence, objectivity, and absence of conflicts of interest; oversee external audits and audit quality
- Monitor the risk management and internal control system for reliability and effectiveness
- Safeguard the independence and objectivity of internal audits, monitor and assess the internal audit function's performance
- Monitor the effectiveness of the corporate-wide whistleblowing system (including failures to comply with the anti-corruption and insider laws)

- The full list of the Committee roles is set out in the Regulations on the Audit Committee of PAO TMK *(http://www.tmk-group.ru/media_ru/files/51/pol_kom_aud2016.pdf)*.

Competencies

Each Committee member has knowledge and experience required to perform their duties. All Committee members comply with the Russian Corporate Governance Code recommendations for the reporting review and assessment competencies.

Assessment

The Committee's performance was assessed by an external advisor as part of independent assessment of the Board of Directors' performance. The advisor noted that the Chairman of the Committee possessed all required qualifications relating to accounting and financial statements, the Company's financial and business performance monitoring, and internal and external audit. The advisor also noted that the Committee's objectives set out in the Regulations on the Committee comply with best practices in corporate governance. The advisor recommended to increase the Committee membership taking into account the number, diversity, and complexity of its tasks.

Meetings

The Audit Committee held eight meetings in 2018 and three meetings between January 01, 2019 and March 31, 2019. Members of the Committee also had several meetings with the head of the Internal Audit Service, and the leader of the external audit team, held without participation of the Company's executives.

Key Activities

In 2018 and between January 01, 2019 and March 31, 2019, the Committee addressed the following key issues:

- Review of the Company's accounting (financial) statements for completeness, accuracy, and reliability
- Review of the plans and reports of the Internal Audit Service, performance assessment of the internal audit function
- Cooperation with the Revision Committee
- Review of the audit plan and scope, review of the terms of audit services
- Performance assessment of TMK's risk management and internal control systems, and the internal audit function
- Monitoring of the Company's anti-corruption efforts in 2018

The Committee heard reports of the heads of the Revision Committee, Internal Audit Service, Risk Management Committee, and the CEO's Committee on Regulating Compliance Risks, as well as the Chief Accountant's report. **The Audit Committee gave a positive assessment of the current internal control and risk management system.**

The Committee reviewed the following key matters regarding the preparation and audit of PAO TMK's consolidated and separate accounting (financial) statements:

- Preparation of the audit plan for consolidated financial statements of TMK Group under the International Financial Reporting Standards (IFRS)
- Status and results of an audit of consolidated financial statements of TMK Group prepared under IFRS, and PAO TMK's accounting (financial) statements prepared under the Russian Accounting Standards (RAS)
- External auditor's recommendations on PAO TMK's accounting (financial) statements based on the results of the annual audit; assessment of the Company's existing controls for the preparation of accounting (financial) statements
- Performance assessment of the external auditor and the quality of audit services

Based on the results of its oversight of the external audit exercise, the Audit Committee concluded that the audit had been carried out to professional standards.

The Audit Committee reviewed PAO TMK's accounting statements for 2018 prepared under RAS and the consolidated IFRS financial statements of PAO TMK for 2018, and recommended that the Board of Directors approve them.

NOMINATION AND REMUNERATION COMMITTEE

Sergey Kravchenko
Chairmen of the Nomination and Remuneration Committee

- In accordance with the Regulations on the Committee (*https://www.tmk-group.ru/media_ru/files/51/2016_09_15_Polozhenie_o_Komitete_po_naznacheniyam_i_voznagrazhdeniyam_SD_PAO_TMK.pdf*), its goal is to enhance the efficiency of the Board of Directors' decision-making on remuneration, and HR policy development and implementation; ensure the competent composition and efficiency of the Board of Directors; and enhance the corporate governance framework through previewing the above mentioned matters.

I. COMMITTEE'S KEY PRIORITIES IN 2018:

- Management appointments and succession planning
- Implementation of corporate governance best practices
- Personnel engagement assessment
- HR support of the Company's digital transformation
- Organization of activities and further development of TMK2U Corporate University
- Introduction of new incentive schemes and programs
- Granular formalized external assessment of the Board of Directors and its Committees in terms of their overall efficiency and Directors' personal contribution to the activities of the Board of Directors and its Committees
- Preparation of recommendations to the Board of Directors on the improvement of the procedures of the Board of Directors and its Committees

In 2018, the Committee helped attract the best talent to management positions across the Company and create necessary incentives for their performance. The Committee members were provided with regular briefings on the planned changes in the management structure and proposed appointments to key positions.

II. COMMITTEE'S MEETINGS

In 2018, the Committee held five meetings. The meetings were regularly attended by the Company's top executives and top managers, which facilitated efficient communication and resulted in more balanced and constructive recommendations.

THE COMMITTEE PRESENTED TO THE BOARD OF DIRECTORS RECOMMENDATIONS ON THE FOLLOWING KEY MATTERS:

- Composition of PAO TMK's governing bodies and the Committees of the Board of Directors
- Directors' independent status
- Remuneration of the Company's managers for 2017, key performance indicators and remuneration arrangements for 2018
- HR support of the Company's digital transformation, changes in the organizational structure and management composition due to the implementation of digital transformation projects
- Key headcount and payroll indicators for the budget, and their monitoring
- Monitoring the organizational and HR structure in TMK Group's divisions
- Role of HR in ensuring health and safety across TMK Group's facilities
- Financial incentive scheme implemented in TMK IPSCO, including the long-term incentive program and its potential IPO-related amendments
- Update of the Company's internal regulations, including the Code of Ethics
- Activities of PAO TMK's Corporate University
- Personnel engagement assessment and its results
- Performance assessment of the Board of Directors in the reporting corporate year

The Committee regularly held meetings with newly appointed top managers and with the talent pool for top management positions. These meetings were dedicated to the discussion of professional development, career planning, responsibility areas, objectives, key risks associated with the business line the manager heads, the specifics of relations with diverse personnel categories, corporate culture development, etc. The Committee's resolutions noted that the meetings had been efficient and positive, and underlined the need to further develop this practice through engaging managers from the talent pool in the meetings of the Nomination and Remuneration Committee.
The Committee put a strong focus on TMK2U Corporate University. The Committee requested and received information on assessment best practices, in-person and distance education for the Company's personnel, engagement with PAO TMK's plants and third party partners, development of corporate professional standards, and organization of professional excellence contests and competitions, as well as other events.
The Committee did not commission services from third party organizations during 2018, no costs associated with such services or with technical support for the Committee's activities were incurred.

The Committee's performance was assessed as part of the independent assessment of the Board of Directors' performance. The Committee members were considered to possess the required skills in HR management, including qualification assessment, personal and professional growth, and employee performance and motivation. The continuity of the Committee's decisions and recommendations were also noted, as well as personnel development activities, in particular those targeting young professionals.

Future activities of the Committee:

- Digital transformation of the Company
- Best practices in personnel motivation
- Further improvement of the corporate governance framework

STRATEGY COMMITTEE

Alexander Shokhin
Chairmen of the Strategy Committee

In the course of an independent assessment by a consultant, it was noted, that given the scale of TMK's business, the creation and activities of the Strategic Committee are essential for the Company. The Strategic Committee is composed only of members of the Board of Directors. The Committee's directors have competences in the field of strategic management, in the field of information and innovative technologies, as well as international business experience.

The Committee is governed by the Regulations on the Strategy Committee of PAO TMK *(http://www.tmk-group.Documents)*
The Committee's roles include making recommendations to the Board of Directors on the Company's business priorities and growth strategy.

In 2018, the Committee held five meetings and reviewed and made recommendations to the Board of Directors on the following key matters:

- Key indicators for TMK Group's 2019 budget
- TMK Group's target structure for 2019
- Large diameter pipe sales organization and sales plans
- TMK Group's management reports
- Recommendations on dividend distribution in line with the Company's dividend policy
- Performance of TMK's European and American divisions

6.5 PERFORMANCE ASSESSMENT OF THE BOARD OF DIRECTORS

We have been performing assessments of our corporate governance framework and the Board of Directors' performance since 2006. It is an important tool to determine the Board of Directors' efficiency and develop approaches to its performance improvement.

Regular performance assessment of the Board of Directors, its Committees, and members of the Board of Directors demonstrates TMK's commitment to best practices in corporate governance. In line with the Russian Corporate Governance Code, an external assessment of the Board of Directors' performance by an external advisor is carried out every three years.

In the 2018/2019 corporate year, the Board of Directors' performance was assessed by an independent external advisor (the Advisor).

The following data collection and analysis tools were used for the assessment:

- Analysis of internal documents regulating the performance of TMK and its Board of Directors, and publicly available information on the activities of TMK and its Board of Directors
- Questionnaire-based surveys of the Chairman and members of the Board of Directors
- Analysis of director details
- Analysis of the information on the Board of Directors' resolutions
- Benchmark of specific aspects of the Board of Directors' performance against corporate governance practices in peer companies

Based on the analysis of information received from the members of the Board of Directors, the Board of Directors' resolutions in the reporting period, the key aspects of annual financial performance including in 2018, as well as the disclosed information, the Advisor considered the performance of PAO TMK's Board of Directors efficient and compliant with the vast majority of the Russian Corporate Governance Code recommendations.

During the independent assessment, the Advisor emphasized the following aspects:

- The Board of Directors' efficiency in key matters such as planning and monitoring TMK's performance, corporate governance including investor communications, and personnel development
- Sufficiency of directors' skills and a strong succession pipeline ensuring awareness and engagement in corporate governance
- Engagement and interest of independent directors who made proposals aimed at improving the Board of Directors' performance
- High level of organization of the Board of Directors' and the Corporate Secretary's activities such as planning meetings, reviewing the majority of matters and the most important matters at meetings held in person, previewing key matters at relevant Committee meetings prior to passing respective resolutions at the Board of Directors' meetings
- Professional excellence of the Chairman of the Board of Directors, including regular monitoring of the implementation of the Board of Directors' resolutions
- Overall high level of corporate governance at TMK

PAO TMK's day-to-day operations are managed by the CEO and the Management Board. The CEO also acts as the Chairman of the Management Board.

Composition of the Management Board

On June 21, 2018, the Company's Management Board comprising eight members was elected by the Board of Directors. In August 2018, the Board of Directors approved the reduction in the number of the Management Board members to seven after Alexander Klachkov stepped down from the Management Board.

As at December 31, 2018, the Management Board comprised the following members:

Alexander Shiryaev

Chief Executive Officer of PAO TMK, Chairman of the Management Board.

0,015%
Stake in the authorized capital of PAO TMK

See the Board of Directors section for biographical details.

Andrey Kaplunov

First Deputy CEO of PAO TMK.

0,0067%
Stake in the authorized capital of PAO TMK

See the Board of Directors section for biographical details.

Andrey Zimin

Deputy CEO for Legal Issues of PAO TMK

Born in 1980. Graduated from the Moscow State Institute of International Relations in 2003. Has been with TMK since 2004.

Stake in the authorized capital of PAO TMK: 0.000072%.

Relevant experience in the last five years

Period	Organization	Position
2018 – present	Completions Development S.a r.l.	Director
2018 – present	Powerstream Holdings Limited	Member of the Board of Directors
2016 – present	PAO TMK	Member of the Management Board
2016 – present	OFS Development SARL	Member of the Board of Directors
2015 – present	Completions Research AG	Member of the Board of Directors
2013 – present	TMK Bonds SA	Member of the Board of Directors
2014 – present	COURSE MANAGEMENT CORP	Member of the Board of Directors
2014 – present	TMK Gulf International Pipe Industry LLC.	Member of the Board of Directors
2013 – present	TMK Holdings SARL	Member of the Board of Directors
2013 – present	Capitoline Holdings Limited	Member of the Board of Directors
2013 – present	PAO TMK	Deputy CEO for Legal Issues
2013–2014	TMK Africa Tubulars	Member of the Board of Directors
2013 – present	Sinarsky Pipe Plant, Public Joint stock company	Member of the Board of Directors

next

start

2013 – present	AO Trade House TMK	Member of the Board of Directors
2013 – present	Seversky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	Volzhsky Pipe Plant, Joint stock company	Member of the Board of Directors
2013 – present	Taganrog Metallurgical Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	Orsky Machine Building Plant, Joint stock company	Member of the Board of Directors
2013 – present	AO TMK-CPW	Member of the Board of Directors
2013 – present	SC TMK-ARTROM	Member of the Board of Directors
2013 – present	SC TMK-Resita SA	Member of the Board of Directors
2013 – present	TMK Global AG	Member of the Board of Directors
2013 – present	TMK Middle East	Chairman of the Board of Directors, member of the Board of Directors
2013–2014	TMK North America Inc.	Member of the Board of Directors
2013 – present	Rockarrow Investment Limited	Member of the Board of Directors
2013 – present	IPSCO Tubulars Inc.	Member of the Board of Directors
2013–2014	JSC Volgograd River Port	Member of the Board of Directors

Vladimir Oborsky

CEO of AO Trade House TMK

Born in 1961. Graduated from Frunze Kiev Higher Combined-Arms Command Academy in 1982 and Frunze Military Academy in 1994, obtained an MBA from International University in Moscow in 2009. Ph.D. in Economics. Decorated with a Medal for Battle Merit and an Order of Military Merit, awarded a Certificate of Merit from the Ministry of Industry and Trade of the Russian Federation.

Stake in the authorized capital of PAO TMK: 0.00075%.

Relevant experience in the last five years

Period	Organization	Position
2017 – present	Pipe Producers Association	Member of the Coordination Board
2013 – present	AO Trade House TMK	CEO
2013–2016	AO Trade House TMK	Member of the Board of Directors
2013 – present	AO TMK-CPW	Member of the Board of Directors
2015 – present	PAO TMK, part-time	Executive Director, First Deputy CEO
2013–2015	OAO TMK, part-time	Deputy CEO for Sales
2013 – present	PAO TMK	Deputy CEO for Sales

Tigran Petrosyan

Deputy CEO for Economy and Finance of PAO TMK

Born in 1968. Graduated from Yerevan State University in 1993. Awarded a Certificate of Merit from the Ministry of Industry, Science, and Technologies of the Russian Federation.

Stake in the authorized capital of PAO TMK: 0.0016%.

Relevant experience in the last five years

Period	Organization	Position
2013 – present	Orsky Machine Building Plant, Joint stock company	Member of the Board of Directors
2013 – present	AO Trade House TMK	Member of the Board of Directors
2013 – present	PAO TMK	Deputy CEO for Economy and Finance, member of the Management Board
2013 – present	AO Trade House TMK, part-time	Deputy CEO for Economy and Finance
2013 – present	Seversky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	Volzhsky Pipe Plant, Joint stock company	Member of the Board of Directors
2013 – present	Taganrog Metallurgical Plant, Public Joint stock company	Member of the Board of Directors
2013 – present	Sinarsky Pipe Plant, Public Joint stock company	Member of the Board of Directors

Vyacheslav Popkov

First Deputy CEO – Chief Engineer (Industrial Engineering Unit) of PAO TMK

Born in 1965. Graduated from Kirov Urals Polytechnic Institute in 1992 and Financial University under the Government of the Russian Federation in 2011. Received an MBA from Ural State Technical University named after the first President of Russia B.N. Yeltsin in 2009. Decorated with a second class Medal of the Order for Merit to the Fatherland, awarded Certificates of Merit from the Ministry of Industry and Trade of the Russian Federation and the Ministry of Industry and Science of the Sverdlovsk Region, an Honorary Diploma of the Sverdlovsk Region Government; an Honored Metallurgist and Honorary TMK Employee.

Stake in the authorized capital of PAO TMK: 0.0015%.

Relevant experience in the last five years

Period	Organization	Position
2018 – present	PAO TMK	First Deputy CEO – Chief Engineer (Industrial Engineering Unit), member of the Management Board
2017–2018	PAO TMK	First Deputy CEO (Industrial Engineering Unit), member of the Management Board
2017–2017	PAO TMK	Deputy CEO for Operations
2017 – present	Seversky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2017 – present	Taganrog Metallurgical Plant, Public Joint sctock company	Member of the Board of Directors
2017 – present	Volzhsky Pipe Plant, Joint stock company	Member of the Board of Directors
2017 – present	Orsky Machine Building Plant, Joint stock company	Member of the Board of Directors
2016–2017	LLC TMK-INOX	CEO
2013 – present	Sinarsky Pipe Plant, Public Joint stock company	Member of the Board of Directors
2013–2017	PAO TMK	Managing Director of Sinarsky Pipe Plant, Public Joint stock company
2013–2013	OJSC Sinarsky Pipe Plant	CFO

Vladimir Shmatovich

Deputy CEO for Strategy and Business Development of PAO TMK

Born in 1964. Graduated from Moscow Finance Institute in 1989 and received an MBA from the University of Notre Dame (USA) in 1993. Awarded a Certificate of Merit from the Ministry of Industry and Trade of the Russian Federation and a Tsiolkovsky Medal, received the titles of OJSC Udmurtneft's Honored Oil Specialist and Honorary TMK Employee.

Holds no shares in PAO TMK.

Relevant experience in the last five years

Period	Organization	Position
2018 – present	IPSCO Tubulars Inc.	Member of the Board of Directors
2014–2018	Completions Development S.a r.l.	Director
2014–2016	TMK Completions Ltd.	Director
2013–2014	Open Joint-Stock Commercial Bank of Support to Commerce and Business	Member of the Board of Directors
2013–2016	OFS Development SARL	Member of the Board of Directors
2013 – present	TMK Gulf International Pipe Industry LLC	Chairman of the Board of Directors
2013 – present	Lhoist – TMK B.V.	Member of the Board of Directors
2013 – present	PAO TMK	Deputy CEO for Strategy and Business Development, member of the Management Board

As at December 31, 2018, the members of the Management Board held no interest in controlled entities.

In 2018, the members of the Management Board did not enter into any transactions to acquire, or dispose of, PAO TMK shares.

Remuneration of Members of the Management Board and other Key Executives

The Company's Policy on Remuneration of Key Executives of PAO TMK is focused on motivating employees to deliver on tasks and action plans, as well as ensuring the Company's financial stability and the continuity of its business and development.

Remuneration of key executives is linked to the Company's results and the personal contribution of each executive to the achievement of such results. TMK applies both short-term and long-term incentives.

For each reporting year, the Company approves a list of officers eligible for its financial incentive scheme/program as follows:

- Members of the Company's executive bodies are approved by the Board of Directors based on a proposal by the CEO and the Nomination and Remuneration Committee
- Other key executives are approved by the CEO based on proposals by Deputy CEOs for different business lines, Managing Directors of plants, and heads of TMK Group's divisions and sections

Breakdown of remuneration payable to the CEO, the members of the Management Board, and key executives of PAO TMK:

- **The fixed part** (official salary) determined in accordance with the employment contract, payable on a monthly basis, and reflecting the position and relevant responsibilities
- **The variable part** including a bonus based on performance in the reporting period and, in certain cases, a bonus for effective implementation of targeted programs, projects, and certain tasks, or for other achievements

Basic remuneration and a set of KPIs are individually determined for each manager included in a **short-term incentive program.** Each KPI has a certain weight assigned to it. Based on the full-year results, the weights of quantifiable KPIs are adjusted subject to the actual performance against such KPIs, measured on the approved scale.

Remuneration is accrued upon review by the Board of Directors of the Company's performance in the past year. To summarize its annual performance, TMK uses the reporting data submitted by financial services, including EBITDA, operating cash flow, product shipments, sales revenue, etc.

In addition to these performance indicators, managers' performance can also be assessed based on the achievement of individual targets, including performance against expense budgets, project management, or management of subordinate units. All these data may be decomposed by top managers' responsibility areas into divisions, sections, individual assets, or business lines.

For key executives, bonus KPIs include business targets approved as part of the Company's plans and budget for the reporting period.

On February 22, 2018, PAO TMK's Board of Directors reviewed the remuneration of the Company's managers for 2017, key performance indicators, and remuneration arrangements for 2018, and made respective decisions.

Since 2018, TMK **has in place a long-term incentive program** aimed at increasing the managers' interest in the Company's capitalization growth through granting a right to receive additional motivating remuneration for the achievement of TMK's strategic goals, and based on the changes in its share price against the reference group comprising major international and Russian companies. In line with the program terms, no remuneration was accrued under the program in 2018. The information on the remuneration of managers covered by the Policy is disclosed in accordance with the corporate practices, applicable laws, regulators' requirements, the listing rules of stock exchanges, and the recommendations of the Corporate Governance Code.

Remuneration of PAO TMK's CEO and Management Board, $ million

	2016	2017	2018
Salary	3,36	5,58	4,18
Bonuses	1,38	1,79	2,13
Other remuneration	0	0	0
Total	4,74	7,37	6,31

RISK MANAGEMENT, INTERNAL CONTROL, AND AUDIT

RISK MANAGEMENT, INTERNAL CONTROL, AND INTERNAL AUDIT SYSTEMS IN PLACE AT TMK ARE **FORMALIZED AND BASED ON GENERALLY ACCEPTED INTERNATIONAL STANDARDS.**

The aim is to provide the Company's management with an objective view of:

- the Company's current state and prospects
- risk exposure
- reliability of all types of reporting
- compliance with laws and internal regulations

Control procedures are integrated into the business processes of TMK Group's business units and entities and are **carried out on a continuous basis** by management bodies at **all levels** and by employees while performing their duties and tasks.

The Board of Directors has determined the principles of, and approaches to, its risk management, internal controls, and internal audit incorporated into TMK's approved corporate policies and internal documents *(www.tmk-group.com/Documents).*

The Audit Committee monitors the fair presentation of financial statements, reliability and effectiveness of risk management and internal controls, safeguards the independence and objectivity of TMK's internal audit, carries out performance assessments of the internal audit, and monitors the effectiveness of the management information system used to report irregularities in the Company (including failures to comply with the anti-corruption policy and insider laws).

The meetings of the Audit Committee and the Board of Directors held on December 19, 2018 and on December 20, 2018, respectively, gave a positive assessment of the performance of TMK's risk management, internal controls, and internal audit in the reporting year.

Risk Management

Risk management at TMK is a process designed to identify, assess, manage, and control potential risk events or situations to provide reasonable assurance that the Company's goals and objectives will be achieved.

TMK's risk management framework is based on the Company's **Risk Management Policy.** The CEO, via the Risk Management Committee, is in charge of the day-to-day risk management. The Committee designs and implements a methodological framework, and performs risk analysis which includes risk identification, assessment of the potential damage that the risk may cause if realized, and the probability or frequency of such events. The Committee also sets relevant measures to mitigate risks and minimize their probability or frequency and its Chairman regularly reports to the Audit Committee on risk occurrence.

A dedicated unit coordinates risk management processes and cooperation between the Company's business units by:

- consolidating information on TMK's risk exposure, analyzing the impact of key risks on the cash flow, and compiling a corporate risk register, risk map, and risk management report to be discussed by the Risk Management Committee
- coordinating the development of action plans to reduce potential losses from the occurrence of key risks; monitoring the risk mitigation activities and analyzing their outcomes on a quarterly basis; the monitoring process also drives changes in TMK's risk map
- ensuring cooperation between TMK's units, preparing recommendations for risk management tools and methods.

These tasks are fully in line with the Russian Corporate Governance Code.

For details on key risk factors inherent in the Company's business see the Management Discussion and Analysis (MD&A) section of this Annual Report.

Internal Control

TMK's internal controls are a system of control bodies and procedures aimed at covering the risks impeding the Company's business growth.

TMK's Board of Directors and executive management strive to incorporate internal control elements into every stage of the Company's management processes, as required by the Internal Control – Integrated Framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (**COSO**): TMK fosters a control environment, maintains a risk assessment system, and implements control procedures.

In line with **the Regulations on Internal Control,** which was approved by the Board of Directors *(www.tmk-group.com/ Documents)* , the Company has a system that ensures the use of controls at every management level based on the **principles of centralization, delegation, and division of responsibilities.**

TMK Group's integrated risk management and control system follows the three lines of defense model, which engages employees with different backgrounds in risk management process and divides the management assurance process into three levels. The first line of defense is control, exercised by management as part of operational tasks. The second line is represented by dedicated control units. The third line of defense involves internal audits assuring the effectiveness of the first and second lines of defense.

Three Lines of Defense model at TMK Group

Internal Audit

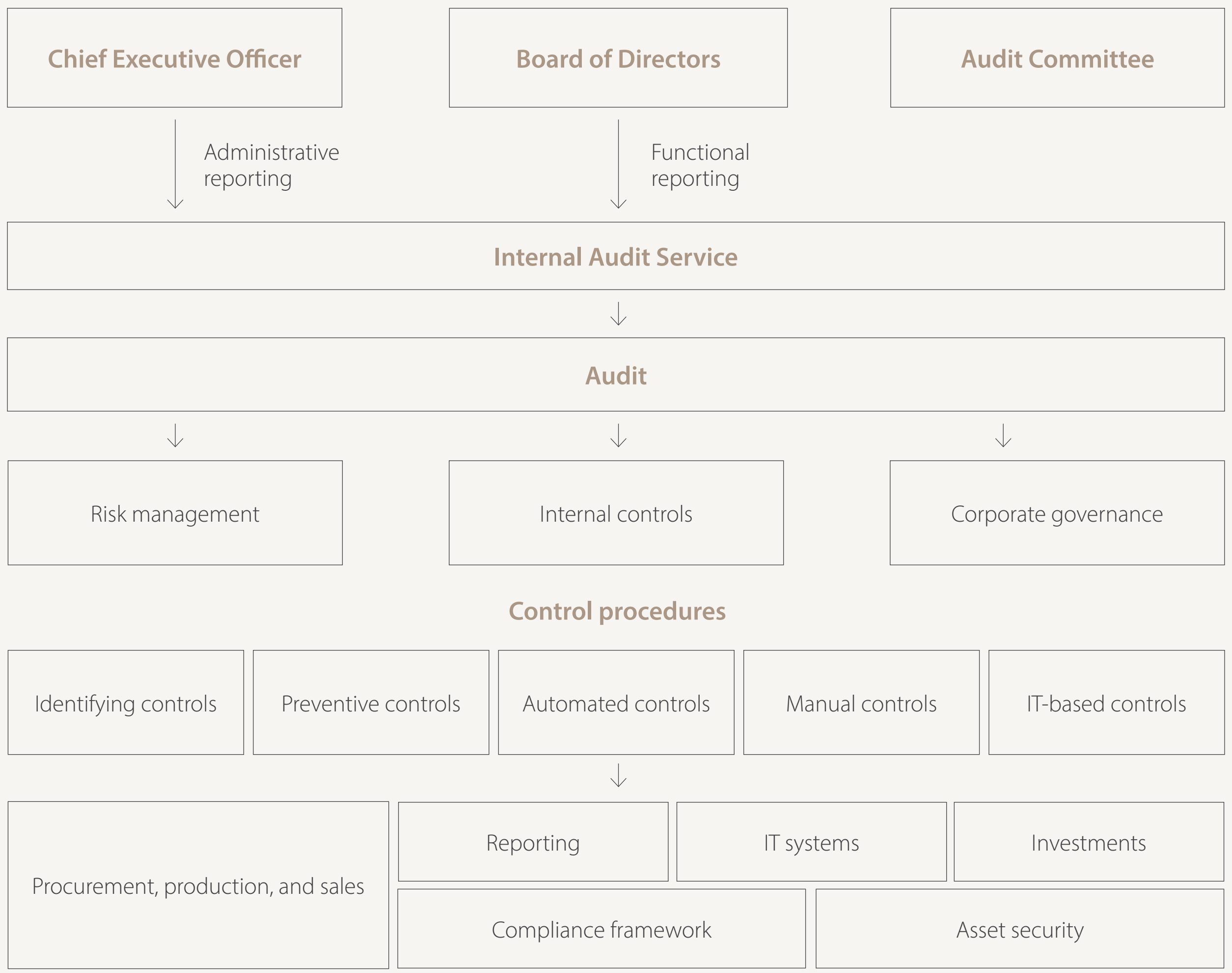
Audits of business processes carried by the IAS at the Company’s entities and business units in 2018 to check compliance with the legislation and internal regulations, as well as assess the reliability of information provided in accounting and reporting documents showed that the Company’s internal controls are generally able to provide confidence of the Company’s management in achieving its business goals.

The reliability and effectiveness of TMK’s internal controls, risk management, and corporate governance are assessed by **the Internal Audit Service (IAS).**

The goals and objectives of the IAS are specified in **the Internal Audit Policy of TMK Group and the Regulations on the Internal Audit Service of PAO TMK** approved by the Board of Directors *(www.tmk-group.com/Documents).*

The IAS is an independent business unit reporting directly to PAO TMK’s CEO (administratively) and to the Board of Directors via the Audit Committee (functionally), which ensures its independence and objectivity.

PAO TMK’S INTERNAL AUDIT



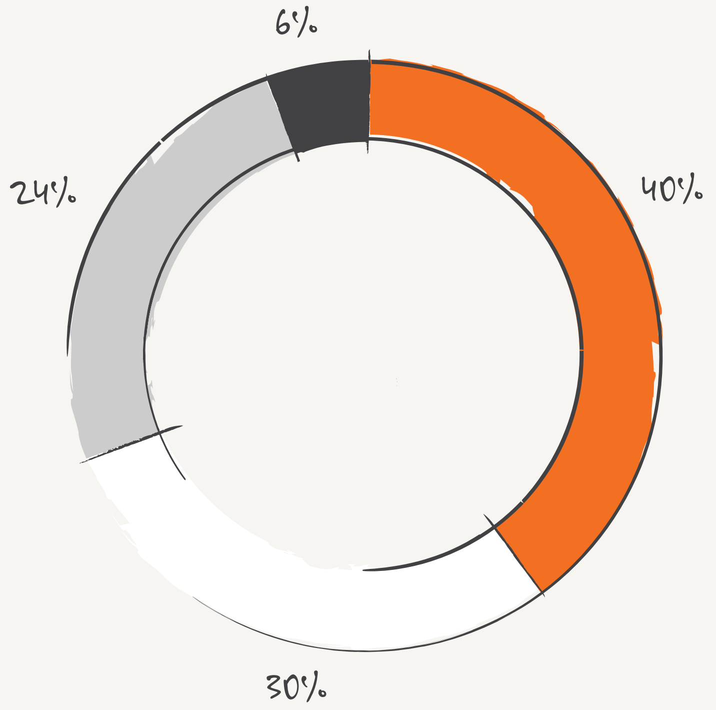
The IAS has regional units across TMK's geographical regions (TMK divisions), which use **a single planning and reporting system.** The IAS's regional coverage ensures a prompt response to any changes in business processes and operations at entities. TMK's top management puts a strong focus on **internal auditors' independence,** including the absence of conflicts of interest and the division of responsibilities. Heads of IAS units do not participate in managing functional areas of the Company's business that require management's decision-making on audited entities.

Internal auditors are guided by uniform corporate standards when planning their activities, audit procedures and reporting, internal audit follow-ups, quality control, and performance assessment, which are set out in **the Guidelines on Internal Audit at TMK Group** (TMK's Order No. 408 dated November 30, 2015).

In 2018, the IAS carried out an internal audit in line with the **annual risk-focused audit plan** approved by the Board of Directors and the CEO. The aim was to perform a comprehensive, step-by-step audit of the key business processes: steelmaking, pipe rolling, and tube welding facilities, repairs, construction, and service, supply and sales functions, and IT.

The goal of these audits is to ensure, through using an objective approach, that risk management and controls are efficient and as effective as possible.

Corrective actions and improvements at TMK's business units upon compliance with the IAS's recommendations in 2017–2018



The following actions were developed and carried out:

- *Improved monitoring of production facilities' performance indicators and enhanced materials consumption planning*
- *Improved control over risks associated with construction and installation at production sites, and maintenance and repairs of capital equipment*
- *Improved control over risks associated with accounting for, storage and sale of, finished goods, including by using electronic data processing*
- *Improved sales and purchasing, including tender committees' activities aimed at selecting suppliers of goods and services*

TMK's management promptly responds to gaps and bottlenecks in risk controls identified by the internal audit, through introduction of the required changes, allowing to improve corporate governance process and quality.

The IAS monitors the implementation by business units of planned actions and recommendations on the elimination of gaps, **oversees the compliance by the Company's governing bodies, officers, and employees with insider information laws,** and reports to the Audit Committee on a regular basis and the Board of Directors at the end of each year.

A report on IAS's work in 2018 was reviewed at meetings of the Audit Committee and PAO TMK's Board of Directors on December 20, 2018. The report contained information on significant risks and gaps identified in internal controls, as well as examples of positive changes in the performance of TMK's business units and entities upon compliance with the recommendations produced by the IAS, and results of risk management, internal control, and corporate governance assessments.

Internal Audit Quality Assessment

In line with **TMK Group's Internal Audit Quality Assessment and Improvement Program** (approved by TMK's Order No. 408 dated November 30, 2015), **the IAS conducts self-assessment on an annual basis.** The results of the 2018 self-assessment confirm that the IAS's performance is on the whole **compliant with the International Standards for the Professional Practice of Internal Auditing and the Code of Ethics of the Institute of Internal Auditors.** No circumstances were identified that could impact the scope of the audits or the contents of internal audit reports, or prevent the auditors from being objective when carrying out their duties.

Mid-term goals of Internal Audit:

- Identify the potential for improving the operational efficiency of TMK Group's business processes
- Improve controls and minimize risks
- Engage the management of the audited entity in an active dialogue on ways to improve business processes

The IAS's Audit Plan for 2019 was reviewed at a meeting of the Audit Committee, and approved by the Board of Directors and by PAO TMK's CEO.

The Audit Committee adopted a resolution (minutes dated November 13, 2018) to perform independent external diagnostics and assessment of the IAS in 2019 with the involvement of an internationally recognized audit and consulting firm.

Internal Control over Financial Reporting

TMK's management is responsible for implementing and maintaining adequate internal control over the Company's financial reporting to ensure:

- compliance of the accounting policy with national and international accounting standards (RAS and IFRS)
- completeness and accuracy of accounting records, prompt identification of errors
- reliability of financial statements
- conformity of financial statements with the law as well as national and international accounting standards (RAS and IFRS)
- timely preparation of financial statements.

TMK's internal control over financial reporting includes control procedures for both standalone and consolidated financial statements. Centralized development of RAS and IFRS accounting policies provides for uniform accounting for, and recording of, similar transactions.

All employees engaged in the preparation of standalone and consolidated financial statements of TMK Group entities have an academic degree in accounting or finance and regularly enhance their qualifications. PAO TMK's Chief Accountant and head of the department engaged in the preparation of IFRS consolidated financial statements are members of the Association of Chartered Certified Accountants (ACCA). The preparation of TMK Group's consolidated financial statements involves regular exchange and thorough centralized verification of the financial information provided by subsidiaries.

The preparation of consolidated financial statements has been automated **in line with the latest international standards,** significantly enhancing its efficiency, in particular, by accelerating the preparation of consolidated statements, optimizing the allocation of roles, increasing flexibility in preparing consolidated financial statements in two currencies, minimizing technical errors, and implementing formalized data match controls.

Revision Committee

PAO TMK's Revision Committee continuously monitors the Company's financial and business performance and compliance with the applicable Russian laws on financial and business activities, as well as with decisions of governing bodies. The Revision Committee's activities are regulated by the Articles of Association and PAO TMK's Regulations on the Revision Committee *(http://www.tmk-group.ru/Documents)*.

The Revision Committee comprises three members who are elected at the Annual General Meeting of Shareholders for a period until the next Annual General Meeting of Shareholders.

COMPOSITION OF THE REVISION COMMITTEE IN THE CORPORATE YEAR 2018/2019*

Mikhail Khodorovsky
(Chairman)
CEO of JSC Sinara Group

Alexander Valeyev
Deputy CEO for Corporate Compliance Risks of PAO TMK

Sergey Sidnev
Chief Accountant of JSC Sinara Group

** Elected by resolution of PAO TMK's Annual General Meeting of Shareholders on June 21, 2018 (minutes w/n dated June 25, 2018).*

The Revision Committee confirmed the reliability of data provided in PAO TMK's annual accounting (financial) RAS statements and Annual Report 2018, as well as information contained in the Report on PAO TMK's Interested Party Transactions in 2018.
In 2018, the Revision Committee held four meetings.

External Auditor

The Company engages an external auditor on an annual basis to independently assess the reliability of the accounting (financial) statements prepared in accordance with RAS and IFRS. The external auditor verifies and confirms that the Company's financial statements are in line with the applicable accounting rules and national and international financial reporting standards (RAS and IFRS), and expresses its opinion on the reliability of the financial statements following their audit.

The Audit Committee reviews the completeness, accuracy, and reliability of TMK's accounting (financial) statements, assesses the external auditors for independence, objectivity, and absence of conflicts of interest, oversees the external audit, evaluates its quality, and reviews the external auditor's opinion.

An external auditor to conduct an independent audit of the Company's RAS statements is proposed by the Board of Directors and approved by PAO TMK's General Meeting of Shareholders.

In selecting an external auditor to audit TMK Group's IFRS consolidated financial statements and assessing its performance, the Company adheres to the Policy on Selection of TMK Group's External Auditor approved by the Board of Directors (www.tmk-group.com/Documents).

The following procedures are in place to ensure the auditor's independence and objectivity:

- The Company holds a tender to select an auditor pursuant to the terms and conditions approved by the Board of Directors based on the Audit Committee's proposal. The Audit Committee also organizes the tender and summarizes its results
- The Audit Committee is entitled to request an early tender following the assessment of the auditor's performance and its compliance with the independence requirement
- The auditor is selected from among internationally recognized independent auditors, and is approved by the Board of Directors

To mitigate the risk of long-term relationship compromising the external auditor's independence and objectivity, members of audit teams and the lead partner responsible for the audit are subject to rotation.

PAO TMK approved Ernst & Young, a member of the Self-Regulatory Organization of Auditors, Russian Union of Auditors (Association) (RUA), as the external independent auditor of its 2018 and interim consolidated and standalone financial statements.

In 2018, the auditor's remuneration for auditing the annual financial statements and conducting interim reviews (including audits of standalone statements of individual TMK entities) was $3.17 million, and $0.06 million for non-audit services.

Throughout 2018 and up to now, TMK Group has employed efficient internal controls which reasonably guarantee the reliability of the Company's consolidated and standalone financial statements and their compliance with the national and international standards (RAS and IFRS).

Managing Potential Conflicts of Interest

The Company seeks to maintain the balance between the interests of shareholders and the management who are committed to a high level of trust and ethical business practices and standards. The Company's corporate ownership is transparent, the rights and obligations of shareholders as well as regulations on their power of disposition are set out clearly in the Articles of Association and the Company's internal documents, all relevant information being publicly available. The Company is committed to equal treatment of shareholders and protects their voting rights as set out in its internal documents.

TMK prevents shareholder conflicts of interests mainly through:

- adhering to the order of, and procedure for, passing resolutions on most material matters
- compliance with the voting procedure for interested party transactions
- ensuring absolute transparency and openness when preparing and holding Meetings of Shareholders, and prompt information disclosures on the resolutions passed by the Board of Directors
- disclosing related-party transactions
- engaging external auditors from the Big Four accounting firms
- deploying dilution of value prevention tools. The process of selecting vendors of goods, works, and services is organized in accordance with the Company's approved standards regulating open competitive procurement procedures.

Preventing Conflicts of Interest Involving Members of the Board of Directors

Acting reasonably and in good faith, directors pass resolutions on a fully informed basis, with no conflict of interest, subject to equal treatment of the Company's shareholders, and assuming normal risk levels.

The Company has tools which manage conflicts of interest, providing reasonable assurance that if a Director finds himself/herself in a situation where he/she has a conflict of interest, this is resolved at an early stage and the Company's interests are not affected.

In accordance with the Regulations on the Board of Directors, members of the Board of Directors must refrain from actions that will or may result in a conflict between their interests and those of the Company, and should such a conflict arise, they will promptly disclose to the Company any relevant information: notify the Board of Directors of TMK securities owned by them and transactions with such securities, disclose their equity interests in controlled entities, contemplated transactions in which such members of the Board of Directors could be deemed interested (with the existing interest and its grounds to be promptly disclosed); notify the Board of Directors of their intention to serve on the governing bodies of other entities (apart from the entities controlled by the Company) and of being elected (appointed) to such bodies.

Resolving Conflicts of Interest within Executive Bodies

The Company puts a strong focus on preventing and minimizing the effects of potential conflicts of interest among members of its executive bodies. The Company developed and approved **the Regulations on the Conflict of Interest** (TMK's Order No. 385 dated December 31, 2014) to identify, regulate, and prevent conflicts of interest for TMK's employees including members of executive bodies. The key objective of these Regulations is to limit the influence of personal interests of employees on their functions and business decisions and to maintain and comply with high corporate governance standards in terms of openness, transparency, and predictability.

No conflicts of interest were identified either with members of the Board of Directors or with members of the Management Board of PAO TMK in 2018.

Managing Potential Conflicts of Interest Involving Employees

One of the key drivers preventing corruption offences is the timely identification of conflicts of interest involving TMK's employees.

A new version of the Company's Code of Ethics has an entire section devoted to this issue titled "Conflicts of Interest".

The Company's practices used to manage conflicts of interest are based on the following principles:

- Mandatory disclosure of information on any existing or potential conflict of interest
- Individual examination and assessment of reputational risks faced by the Company each time a conflict of interest is identified, and its management
- Confidentiality for disclosure of information on conflicts of interest and for their management
- Maintaining balance between the Company's and its employees' interests when managing conflicts of interest
- Protecting employees from adverse consequences due to a reported conflict of interest that has been promptly disclosed by the employee and managed (prevented) by the Company

Anti-Corruption and Fraud Policies and Procedures

TMK is committed to high ethical standards as well as business openness and transparency and drives initiatives to create an environment of zero tolerance for any form of corruption in accordance with the Transparency International's Business Principles for Countering Bribery.

In 2018, in line with the latest trends in global compliance practices and based on our own experience, a new version of TMK's Code of Ethics was developed, which came into force in February 2019.

TMK Group's Code of Ethics *(www.tmk-group.com/media_en/files/386/Code_of_Ethics_TMK_Group1.pdf)* **specifies the following areas of regulatory compliance:**

1.4. Conflict of interest
2.3. Abiding by the law
3.2. Fighting corruption
3.3. Fighting money-laundering
3.4. Business gifts and business hospitality policy
3.5. Company charity policy

The Company has a clearly structured and independent compliance framework which ensures compliance with legal and ethical standards.

Compliance framework at TMK

- Compliance with laws and meeting the highest standards
- Policies and procedures
- Corporate-wide plan
- Membership in the International Compliance Association (ICA)
- Compliance with the Anti-Corruption Charter of Russian Business
- Control by the Board of Directors
- Deputy CEO for Corporate Compliance Risks
- CEO's Committee on Regulating Compliance Risks and its regional subcommittees
- Compliance Risk Department
- Hotline
- Reviews of TMK's counterparties and transaction monitoring
- Distribution of visual guidance materials, education and training of employees and counterparties

The system integrates preventive measures, detection of, and sanctions for, violations and is based on vertical and horizontal interactions. This process is coordinated by the CEO's Committee on Regulating Compliance Risks and its 18 regional subcommittees which work unanimously across all TMK Group's divisions and plants, and are guided by TMK's internal regulations specifying its compliance risk and anti-corruption principles, standards, and policies: *www.tmk-group.com/compliance.*

TMK compliance documents:

- Code of Ethics
- Corporate Governance Code
- Ethics Policy for Business Trips of TMK Group Employees
- Regulations on the TMK Charity Policy (Endowments, Donations)
- Regulations on the Conflict of Interest
- Policy on Comprehensive Psychological and Physiological Testing
- Guidelines for Mitigating Antitrust Risks
- Reminder concerning the use of the hotline

TMK counters and prevents corruption when engaging with partners and counterparties through monitoring transactions within counterparties' ownership chain for conflicts of interest, and through introducing anti-corruption clauses and other mandatory conditions in their contracts. TMK holds special events for business partners at the annual METAL-EXPO exhibitions in Moscow so that they can familiarize themselves with the anti-corruption laws and relevant internal regulations.

In 2018, in line with our anti-corruption program, the Company adopted the Policy on Comprehensive Psychological and Physiological Testing of PAO TMK (Minutes No. 7 dated September 27, 2018 of the meeting of the Committee on Regulating Compliance Risks). In 2018, as part of initiatives to identify any cases of conflict of interest, fraud, or embezzlement, and for other purposes, the psychological and physiological condition of 77 employees was tested using a polygraph. The results were reported to the Company's management.

The Committee on Regulating Compliance Risks arranged for regular workshops to be run across all of TMK's business units. The Committee annually develops training plans and educational materials on relevant topics. In 2018, 51 trainings took place involving 1,187 of the Group's managers. To train our managers, TMK2U Corporate University developed a remote course on Compliance Risk Management which is available on the corporate web portal.

Using its corporate communication system, TMK educates its employees and distributes information about the communication channels of the Committee on Regulating Compliance Risks, which comprise flyers available across all production shops and plant headquarters, and TMK corporate media.

To enable public control, TMK operates a hotline information system (telephone lines and email 8072@tmk-group.com) which can be used by the Company's employees, investors, clients, and other stakeholders to report any known abuse or violations. Overall, in 2018, TMK's hotline received 868 calls (up 37% year-on-year) and 709 emails (down 4% year-on-year). The Company investigated all reports to the hotline without exception and conducted meetings with any whistleblowers. To address the confirmed cases, we held surveys, meetings, discussions with employees, etc., the responsible managers took the necessary personnel and management decisions.

TMK ensures protection for whistleblowers – they may submit information either anonymously or not. To ensure the whistleblowers' anonymity, all information (submitted either by telephone, by email, or by letter) is directed to a dedicated group of three authorized members of the Committee on Regulating Compliance Risks, who have signed a non-disclosure agreement.

TMK Group's 2018 anti-corruption report was discussed at the meeting of the Audit Committee of the Board of Directors (minutes dated December 19, 2018) and received a positive assessment.

The Compliance Risk Department, a dedicated anti-corruption and compliance risk management unit has been established pursuant to Article 13.3 of the Federal Law On Counteracting Corruption and is now actively operating within TMK. In particular, the Department reviews all TMK's counterparties for sanctions risks using the X-COMPLIANCE program.

PAO TMK is a corporate member of the International Compliance Association (ICA) and won the ICA Compliance 2015 award in the Compliance Leadership category. We are also among the members of the Russian Union of Industrialists and Entrepreneurs who have signed the Anti-Corruption Charter of Russian Business, which reflects TMK's commitment to promoting the best practices of business ethics and corporate governance, and encouraging fair competition in Russia. TMK regularly participates in the All-Russian Interactive Anti-Corruption Campaign launched by the Chamber of Commerce and Industry of the Russian Federation.

Information Security

Development of new approaches based on up-to-date digital and IT solutions – and their acceptance as standard manufacturing and management practices – make businesses adopt a markedly different approach to information security (IS), and cybersecurity (CS) in particular.

As part of its information security efforts, the Company:

- identifies categories of information subject to protection and critically important systems subject to special protection
- builds models of information security threats faced by the Company
- implements organizational, administrative, and technical measures to ensure information security as part of its Information Security Management System
- adopts internal IS regulations and ensures compliance with them by all employees.

The Information Security Policy of TMK Group Russian Entities underpins a medium-term program to improve security of TMK's IT infrastructure, including compliance with the requirements set out in Federal Law No. 187–FZ.

TMK Group's Information Security Management System (ISMS) relies on:

- establishment of a single management center and regional units
- development of baseline (general) requirements to information security
- reasonable and adequate protection, reserved only for essential information
- uniform requirements on how to manage information security breaches, and unified reporting
- distribution of rights and responsibilities across ISMS roles
- utilization of dedicated data movement tracking software, ensuring its integrity and security.

All of TMK Group information is grouped as follows:

- Public information which may be freely published and shared
- Internal business information which may not be freely shared with third parties
- Restricted information (trade secrets, personal data, insider information, information subject to banking secrecy, medical confidentiality, etc.)

Information security organization and compliance are the responsibility of PAO TMK's Economic Security Service and of Economic Security Departments at the TMK regional entities, with technical support provided by PAO TMK's Information Technology Department. The most important technical tasks related to protecting TMK Group's entities from cyberattacks are actioned and coordinated by PAO TMK's IT Infrastructure Protection Department, as well as by local cybersecurity units and desks at the entities.

TMK Group deploys a corporate malware (anti-virus) protection system to manage identified information security risks through employing state-of-the-art protection software against targeted attacks and relevant threats (the software is on the Unified Registry of Russian Computer Programs and Databases), and implementing a set of measures to secure process control systems against external and internal threats.

The Company monitors news on information security incidents globally. When such an incident is reported, TMK Group sends out information to its business units specifying requirements to strengthen security and prevent corruption, as well as on ways to minimize negative impact.

The Company took the following key IS and CS actions in 2018:

- Audited IT systems and IT security tools and techniques used by TMK's entities, drawn up lists of critical information infrastructures (CIIs) and provided them to the Federal Service for Technical and Export Control (FSTEC) of Russia
- Analyzed security systems that are used to protect TMK's IT infrastructure; developed uniform approaches to managing security vulnerabilities by performing regular infrastructure scans; set up or updated network firewalls to protect process networks at shops; created a security and control platform for mobile devices; updated anti-virus systems, etc.
- Deployed Check Point's SandBlast, a system for behavioral analysis of files (sandboxing) to protect incoming external mail and internet traffic (zero-day protection) to provide preventive protection from new viruses
- Checked IT infrastructure at TMK IPSCO for traces of compromise, prepared and carried out recommendations to improve security
- Deployed Microsoft Azure, a cloud-based tool for protecting both local and cloud IT infrastructure
- Held second and third corporate forums on cybersecurity which were attended by the Company's partners

TMK's CS improvement plans for 2019 and the medium term:

- Adopt a Strategy to Ensure and Improve Cybersecurity at TMK Group
- Implement a security information and event management (SIEM) system to automate security event detection from different web resources and protect the IT infrastructure of the Russian division's key plants.
- Set up **TMK's Cybersecurity Situation Room** and organize its interaction with the State system for detection, prevention and consequence management of cyberattacks on Web Resources in the Russian Federation (GosSOPKA), to comply with Federal Law No. 187–FZ.
- Categorize the main CIIs at the Russian division's entities to ensure compliance with Federal Law No. 187–FZ, and design a security subsystem for CIIs

7.0 STAKEHOLDER RELATIONS

THE COMPANY RELIES ON ITS ONGOING STAKEHOLDER ENGAGEMENT.

This Annual Report is a key communication tool simultaneously addressing all groups of our stakeholders. When preparing this Annual Report, we put the strongest focus on addressing their concerns in the reporting year and also followed expert recommendations to improve its quality.

STAKEHOLDER RELATIONS

The Company relies on its ongoing stakeholder engagement. TMK identifies stakeholders as parties which may be significantly affected by the Company's operations, and parties which may affect its ability to successfully implement a strategy and achieve its goals.

TMK's leadership in the domestic and global pipe industry, geographically diversified assets and sales, and the public status of our business (TMK securities are traded on the London Stock Exchange and Moscow Exchange) require us to account for various categories of consumers and partners, the investment community, government bodies, local communities in the Company's regions of operation, as well as for the Company's employees. Understanding the expectations of stakeholders and taking measures aimed at meeting them are important components of the Company's business efficiency and sustainability. We believe that a long-term partnership is possible when based on mutual benefit and commitment to ethical principles of doing business which are formalized in our Code of Ethics: *www.tmk-group.com/media_en/files/386/Code_of_Ethics_TMK_Group1.pdf.*

- Legality
- Orientation on the client
- Efficiency
- Safety and security
- Respect
- Openness

This Annual Report is a key communication tool simultaneously addressing all groups of our stakeholders. When preparing this Annual Report, we put the strongest focus on addressing their concerns in the reporting year and also followed expert recommendations to improve its quality.

Stakeholder relations and information addressing their concerns are presented in relevant sections of this Annual Report (see the charts below). In this Report, we specifically highlighted investor relations (see the Shareholder information section), relations with employees, trade unions, and educational institutions (see Human Resources and Social Policy, and Occupational Safety sections), as well as with local households and urban communities in the cities in which the Company operates – see Sponsorship and Charity, and Environmental Management sections.

STAKEHOLDER RELATIONS: COMMUNICATION AND FEEDBACK CHANNELS

Consumers	Suppliers	Employees Trade unions	Shareholders Lenders
• Focus on mid-term and long-term partnership • Delivering on all contractual obligations. A technical sales function to harmonize our offers and consumers' interests • **A CRM system aimed at:** *- more efficient consumer relations of sales departments* *-quicker response to consumers needs, higher speed of request processing and commercial offer preparation* *- higher consumer satisfaction considering their comments and preferences for order fulfillment* *- providing a feedback channel.* • A quality management system compliant with ISO 9001:2008 and API Spec Q1 • Quality Policy • Product range expansion • Capacity upgrade program • TMK eTrade, a tubular goods online shop at *https://e-commerce.tmk-group.com/#tmk-sale/front/index* • The Products section of the website at *www.tmk-group.com/products* • A dedicated website to showcase TMK's premium threaded connections at *www.tmkup.com/en* • Workshops for consumers on the proper use of TMK's tubular products for various sectors • Membership in international and Russian industry associations and organizations • Participation in exhibitions and industry conferences • Anti-Corruption Policy, anti-corruption hotline	• Focus on mid-term and long-term partnership • Delivering on all contractual obligations • Uniform principles of supplier relations based on healthy competition among manufacturers, suppliers, and contractors • An e-commerce platform for procurement of TMK's Russian division at *https://zakupki.tmk-group.com/#tmk/front/index* • Anti-Corruption Policy, anti-corruption hotline	• HR Strategy, Code of Ethics • Employee relations based on the principles of social partnership • Creating a favorable and safe working environment and improving living standards of employees • Providing competitive salaries in the regions in which TMK plants operate • KPI-based remuneration • Unified (Single) Remuneration System • Social benefits and guarantees • Providing opportunities to unlock talent and potential for performance-driven employees • Abiding by the terms and conditions of collective bargaining agreements in place at the Group plants • Trade union meetings, and other meetings to discuss and sign collective bargaining agreements • Personnel training and development provided by TMK2U Corporate University • An industry-specific independent qualification assessment center at the National Agency for Qualification Development • Building up an internal talent pipeline • Employee relations using corporate media (the YourTube magazine, plant newspapers, and corporate TV), social media, and the corporate portal • Employee engagement survey	• Compliance with corporate governance best practices • Equal access to information about the Company • Protection of shareholder rights set out in the Company's Articles of Association • The Investors section of the corporate website at *www.tmk-group.com*, *www.tmk-group.ru* • Corporate webpages on Interfax and LSE information disclosure websites at *www.e-disclosure.ru*, *www.londonstockexchange.com* • Information Policy • Disclosure of operational and financial results on a quarterly basis • General Meetings of Shareholders • Publication of Annual Report • Annual Capital Markets Days • Participation in investment conferences • Site visits to TMK plants

Federal and regional authorities	Businesses and non-governmental organizations	Regional households Local communities	Media
• Abiding by the applicable laws • Keeping track of changes in the applicable laws and enforcement practices, legislative initiatives, and preparation of proposals on improving the legal framework • Engagement in making and implementing decisions by industry associations and organizations • Engagement in the work of advisory bodies and targeted expert teams • Partnership with regional authorities to solve social and economic issues • Compliance with the laws on environmental protection, holding events to promote environmental protection and mitigate environmental footprint	• Membership and engagement in Russian and international industry and non-governmental organizations • Participation in forums, conferences, exhibitions, and workshops relevant to the Company's businesses	• Engagement in the social and economic development of regions • Cooperation with non-profit organizations and the expert community in the regions of operation • Sponsorship and philanthropy • Holding events to promote environmental protection and mitigate environmental footprint	• Arranging for interviews of Russian and international mass media with the Company's top management • Communicating operational and financial results, and TMK's day-to-day operations • Regular mass media communication (including answering requests) • Media tours of TMK plants • Posting the latest news on social media

8.0 SUSTAINABLE DEVELOPMENT

8.1 HUMAN RESOURCES AND SOCIAL POLICY

We seek to ensure that each of the Company's workplaces is filled with skilled, motivated, and loyal staff well-positioned to meet the new challenges facing the Company in the digital age.

Our HR management efforts in 2018 were guided by the objectives declared in TMK's new HR Strategy adopted in 2017:

- Development of incentive systems aimed to align the interests of shareholders, management, and employees
- Building trust in modern digital technology, and embedding it into the Company's existing HR processes
- Development of an effective talent identification and development system built around TMK's Corporate University
- Further transformation of regional teams into a single corporate community

Over the 17 years of its operation, TMK has built a highly professional team of managers, specialists and workers across over 20 plants in Russia, the USA, Canada, Romania, and Kazakhstan, as well in two R&D centers in Russia and the USA, by adopting cutting-edge HR practices and solutions.

To ensure full compliance with international laws and generally accepted principles, we have drafted a new version of TMK Group's Code of Ethics which incorporates best practices in business conduct, corporate governance, and employee relations. The Code covers such areas as respect for human rights, equality, human dignity, safety, and anti-corruption.

The updated TMK's Code of Ethics was approved by the Board of Directors in February 2019 and disclosed at: *www.e-disclosure.ru/portal/files.aspx?id=274&type=1* ; *www.tmk-group.com/Documents*

TMK'S HR STRATEGY IN 2018

Our comprehensive approach to building a robust management framework focused on getting organizations in sync with business processes and production plans allows us to right-size our workforce across TMK while boosting labor productivity and employee performance.

Headcount

38 465

Corporate Development and Headcount Management

The headcount increase:

- in the European division was due to the implementation of 2018 investment projects including the startup of new equipment to manufacture products for automotive industry, and also a result of our efforts to minimize the risks associated with overtime work
- in the American division was due to compliance with local legal requirements, expansion of the production program on the back of higher demand, and commissioning of new production complex with new coating facility (coating plant) in Wilder, Kentucky.

TMK's average headcount in 2016–2018

	2016	2017	2018
Total average headcount	39,750	38,934	38,465
Change in total headcount, % y-o-y, total:	– 5.2%	– 2.1%	– 1.2%
Including:			
Russian division	– 3.4%	– 3.7%	– 2.9%
European division	0.5%	2.1%	8.5%
American division	– 45.9%	44.5%	26.1%

We introduced an internal competition system to fill job vacancies as part of job rotation *within the Group's Russian division in 2018, which enabled us speed up staffing across the Russian division plants by almost 20%.*

Employee Incentives and Compensation

The Company's employee incentive system is aimed to align the interests of shareholders, management, and employees of TMK Group's plants.

In 2018, we extensively used incentives for certain categories of employees responsible for the most important and sensitive tasks related to the current stage of the Company's development:

- A special incentive scheme was developed in 2018 for key operational employees operating and maintaining pipe rolling mills at TMK's Russian plants, now covering about 200 employees. A similar program is in place at the European division's Romanian plants
- Financial incentives were developed and introduced for PAO TMK's sales force to boost sales of large diameter pipe and small and medium diameter welded pipes
- The existing incentive scheme for the Company's key employees was extended in 2018 to members of our working groups focused on cost reduction and procurement performance as well as teams within our opex reduction project

The rollout of advanced incentives and unification of the compensation system across the Russian division plants continued in 2018, as a result the Unified (Single) Remuneration System launched at TMK Oilfield Services and TMK-INOX. Thus, **the Unified Remuneration System covered 82% of TMK's employees across the Russian division's plants as at the end of 2018.**

We perform regular monitoring of the industrial and regional labor markets and overall make sure that our salaries remain competitive while making cost-of-living adjustments to salaries, provided for in the local legislation, collective bargaining agreements, and industry agreements, based on financial performance of the Company's divisions. These principles and inflation indicators in the countries in which the Group operates inform our decisions on pay increases across all Group divisions.

Average pay at TMK in 2016–2018

	2016	2017	2018
Change in pay, % y-o-y (rouble)	96%	112%	118%
Change in pay, % y-o-y (U.S. dollar)	88%	128%	112%

Overall, the average pay across TMK's plants increased by 18% year-on-year in rouble terms, or by 12% in U.S. dollars.

The average pay across TMK in 2018 was significantly affected by fluctuations in the Russian rouble exchange rate. Therefore, the Russian division posted a 9% pay increase in rouble terms and a 4% growth in U.S. dollars.

Employee Development and Training

In 2018, TMK invested about $3 million in corporate training and career enhancement programs.

Innovation and digitalization are a key focus of TMK's new Strategy to 2027 to improve product quality and cut costs. For this reason, TMK's HR Strategy encourages employees to continuously pursue professional growth by developing their overall professional and personal competencies.

TMK2U Corporate University, for which 2018 was the first year of operation, is the key element of the Company's employee development and training system.

As an analytical, methodological, and consulting center for employee development and training, TMK2U Corporate University became an interface between the Company's different divisions and plants as we bring them together into a single shared information space while harmonizing procedures for employee development, training, and assessment. Such system enables career lifts within the Company and helps build up a talent pool.

A special emphasis in TMK's employee development and technology training plans is put on the opportunities offered by TMK's R&D facility we are launching at the Skolkovo Innovation Center where also TMK2U Corporate University will be located.

TMK2U Corporate University headquarters

Skolkovo, Moscow, Russia

PROGRAM FOCUS

UniTech — Development of competencies related to key production and technical functions

UniCom — Development of commercial units' competencies

UniPro — Building advanced expertise and advanced professional skills

UniUp — Building corporate and personal competencies, and basic professional skills

UniEx — Building management competencies and business education courses, including courses exclusive to the top management

TMK2U Corporate University's 2018 highlights:

- Over 20 thousand employees of the Russian, American, and European divisions underwent training within 100 educational programs developed by over 120 in-house experts, business coaches, and top managers of the Company
- TMK was the first company in the metals and mining industry to establish and certify an industry-specific independent qualification assessment center at the National Agency for Qualification Development
- We developed over 2,000 corporate professional standards that serve as a basis for building staff recruitment, performance assessment, and training processes of the Russian division
- At our American division (TMK IPSCO), we implemented a program to prepare TMK Group's managers for rotation across key business lines such as technology, production, sales, HR, marketing
- We piloted TMK Corporate University's L&D_SOTA online platform enabling the University to automate key staff education and performance assessment processes, and provide employees across the Russian, American, and European divisions with access to distance learning programs, and give employees more freedom to take courses and webinars when best suits them
- About 200 internal secondments were arranged for our employees to facilitate experience sharing, foster cooperation between business units, and boost personnel motivation
- Corporate social surveys are actively developed. For the first time, TMK has carried out a major employee engagement survey across the Russian division plants based on an international methodology. The survey results will inform our employee engagement programs across TMK
- Over 770 employees from across TMK's divisions participated in our annual Horizons International Corporate Forum in 2018. A Horizons mobile app was launched to create a single shared information space. It has since gained wide popularity with TMK's employees

Promoting Blue Collar Jobs

TMK is actively involved with the international movement to promote blue-collar trades.

- In 2018, we held our first corporate competition based on WorldSkills methodology. The six winners went on to represent TMK at the 5th WorldSkills Hi-Tech National Competition, competing in five skills – Mechatronics, Industrial Control, Electrical Installations, Chemical Analysis Service, and Welding.
- The Company successfully participated as an expert in a major, new-format I'm a Professional educational contest held for university students majoring in sciences and humanities.
- An important highlight of 2018 was the inauguration of TMK2U Corporate University's new training grounds at Seversky Pipe Plant.
- A similar contest was also held for students at Don State Technical University (the Rostov Region).
- As part of a cooperation program between PAO TMK and Ural Federal University named after the first President of Russia Boris Yeltsin, a contest was organized for the University's students in industry-related degree programs to bring the best students to TMK's annual Youth Scientific and Technical Conference.
- PJSC Seversky Pipe Plant and PJSC Sinarsky Pipe Plant together with the Ministry of Education of the Sverdlovsk Region continued the career advising program for college students in the cities in which the companies operate. PJSC TAGMET signed a Cooperation Agreement with the Taganrog Technical College of Metallurgy and Engineering in 2018.

Social Partnership

We see our commitment to social partnership as key to sustainable development in the current market landscape.

TMK's plants maintain close mutually beneficial relations with trade unions based on collective bargaining agreements, which enables optimal decisions to enhance social security of employees across TMK's divisions.

Our representatives were actively engaged in negotiating with the Russian Mining and Metallurgical Trade Union (GMPR) and the Russian Metallurgists Association (RASMET) on the Russian Metals and Mining Industry's Branch Tariff Agreement for 2017–2019.

The Company signed a new collective bargaining agreement with the United Steelworkers (USW) at Koppel and Ambridge plants (the American division) in 2018. The agreement runs until May 2022.

In 2018, TMK IPSCO yet again actively participated in the Steel Safety Day sponsored by the World Steel Association (worldsteel). TMK IPSCO is an active member of Steel Manufacturer's Association, with the Company's top managers sitting on the organization's Board of Directors and Board committees.

We focus on raising employees' awareness of the Company's operations, growth areas, performance indicators, new R&D projects, and employee benefits. Meetings with TMK's management are held on a regular basis across all our divisions and entities.

Promoting Employee Health

Seeking to build upon our successful corporate recreation and health programs for the Company's employees and their families, we continued to introduce new programs in 2018.

We are committed to maintaining a balance between employees' physical, emotional, and financial well-being, and to promoting conscious employee attitudes towards their health. Activities carried out in this area in 2018:

- Comprehensive preventive measures were taken within our Voluntary Health Insurance program across all pipe plants within the Russian division
- TMK IPSCO (American division) introduced a three-tiered health plan: biometric screening – medical consultations – discounts on health insurance premiums. Over 730 employees and their family members participated in the program in 2018
- The range of corporate health resorts was expanded to include Hotel Romantik in Arkhyz, Russia. Over 5,000 TMK's employees and their family members spent their vacations and received health resort treatment at partner resorts and recreational facilities – Burgas (Sochi, Russia), Westend (the Czech Republic), and Hotel Romantik (Arkhyz, Russia)
- More than 2,500 children of the Company's employees spent their summer holidays at kids resorts
- We continued our corporate tradition of organizing open sports events bringing together employees from most TMK's entities

Pension Program

The corporate pension program is part of the Company's benefit package, aimed at improving quality of life for retired employees and motivating employees to stay with the Company and improve their performance.

REWARDS, HONORARY TITLES, AND RECOGNITION

- **For developing and implementing a range of high-performance technologies** for manufacturing next-generation import-substituting seamless steel pipes to develop hard-to-recover hydrocarbon reserves, the following TMK's executives were awarded the 2018 **Russian Government Prize in Science and Technology:**

Alexander Shiryaev,
Chief Executive Officer of PAO TMK

Sergey Chikalov,
Deputy Chief Executive Officer of PAO TMK

Sergey Chetverikov,
Managing Director of JSC Volzhsky Pipe Plant

Igor Pyshmintsev,
Director General of OAO Russian Research Institute for the Tube and Pipe Industries (RosNITI)

Sergey Rekin,
Chief Executive Officer of OOO TMK-Premium Service.

- PJSC Seversky Pipe Plant was awarded the 2018 Russian Government prize for achieving outstanding product quality and implementing highly effective methods in quality management.
- In 2018, six TMK's employees were awarded the Distinguished Metallurgist title by the Government; 72 employees received industry awards, and over 300 employees were recognized with various corporate awards and certificates of merit.
- TMK also conferred Badges for Business Cooperation with TMK and Certificates for Business Cooperation with TMK to representatives of TMK's partners in recognition of their contribution to promoting long-term and mutually beneficial relationships with the Company.

8.2 OCCUPATIONAL SAFETY

Our comprehensive measures to ensure occupational safety and prevent injuries have led to a significant reduction in work-related injury rates both across TMK and in the Russian and European divisions in particular. No emergencies with fatal or mass accidents were recorded in 2018.

During the year, we paid special attention to ensuring a safe working environment for TMK's employees, guided by our corporate-wide Occupational Health and Industrial Safety Policy adopted in 2015. TMK takes systemic, consistent efforts to mitigate risks, reduce injury rates, and spread safe manufacturing practices.

TMK's industrial safety performance was discussed during meetings of technical leaders of our plants, at the Company's managing directors meetings during February and August 2018, at the Annual Management Meeting on June 08, 2018, and at the Board meeting on October 18, 2018.

TMK GROUP'S OCCUPATIONAL HEALTH AND INDUSTRIAL SAFETY FRAMEWORK

8.2 OCCUPATIONAL SAFETY

Pursuant to the management's decision and with its active involvement, all TMK entities participated in Steel Safety Day 2018 held by World Steel Association, which allowed us to identify and mitigate safety risks associated with key workplace hazards (83% of our production facilities were audited).

TMK's participation in Steel Safety Day 2018

Participants	2016	2017	2018
TMK employees	36,346	35,343	35,518
Including safety auditors, %	16	32	81
Contractor employees	3,059	6,770	6,924

On April 28, 2018, the World Day for Safety and Health at Work, TMK summarized the results of activities held to mark the Steel Safety Day 2018, and submitted them to the World Steel Association. Activity plans for workplace safety risk mitigation are in place and monitored on a monthly basis across the Company. All activities planned for 2018 had been completed as at December 31, 2017. Preparations for the Steel Safety Day 2019 are currently underway.

TMK also participated in Russia Health and Safety Week and BIOT (Safety and Labor Protection) exhibition.

TMK spent $10.52 million in 2018 on measures to ensure a safe working environment ($9.2 million in 2017). The following new practices were adopted:

- Development in cooperation with TMK's plants and adoption of guidelines on micro-injury recording, reduction in hand injuries, ensuring safety during stacking pipe in racks, and mandatory eye protection practices in production environment
- Identification and sharing of corporate best practices across the Group, such as:
  - lists of tools in use (TMK-IPSCO practice)
  - collective responsibility for occupational health compliance (PJSC Sinarsky Pipe Plant practice)
  - procedures for public commission investigations of accidents (JSC Volzhsky Pipe Plant practice)
- Introduction of Occupational Risk Assessment and Safety Consciousness training courses for employees of the Group entities

Our comprehensive measures to ensure occupational safety and prevent injuries have led to a significant reduction in work-related injury rates both across TMK and in the Russian and European divisions in particular. No emergencies with fatal or mass accidents were recorded in 2018.

INJURY RATES BY TMK GROUP DIVISION:

Across TMK Group

Indicator	2017	2018
Accidents	54	48
including fatalities	2	0
Frequency rate	1.52	1.37
Severity rate	59.8	33.0

Russian division

Indicator	2017	2018
Accidents	30	20
Including fatalities	0	0
Frequency rate	0.96	0.63
Severity rate	71.8	48.0

European division

Indicator	2017	2018
Accidents	7	3
Including fatalities	2	0
Frequency rate	3.39	1.33
Severity rate	83.0	79.7

American division

Indicator	2017	2018
Accidents	17	25
Including fatalities	0	0
Frequency rate	9.1	12.74
Severity rate	5.3	12.68

8.2 OCCUPATIONAL SAFETY

The best occupational safety practices were studied to further improve working conditions and implement advanced technology solutions, with a number of meetings held with R&D, consulting, manufacturing, and IT companies.

Based on the results of these meetings, the following initiatives are being explored for near-term implementation:

- Comprehensive injury rate reduction solutions
- Electronic pre-shift medical checkup system
- Employee occupational health and safety knowledge testing
- Integrated risk-based approach
- Safety Consciousness system
- Digitalization of occupational safety
- Eye protection solutions

TMK representatives actively participate in RSPP's expert group on improving industrial safety legislation.

Public recognition

PJSC TAGMET was awarded a Silver Medal **for Implementation of the Safe Workplace System** in the Health and Safety 2017 **best occupational health and safety innovation** competition at Russia Health and Safety Week, held annually by Russia's Ministry of Labor and Social Protection in Sochi *(www.aetalon.ru/ub).*

JSC Volzhsky Pipe Plant

- ranked **first** on the municipal level and fourth regionally in the ranking of Top Manufacturing Companies in Occupational Health (national Russian Success and Safety 2017 contest *www.aetalon.ru/ub*
- **third** in the Best Occupational Health Leader category
- **fourth and seventh** in the Best Expert (national Russian Mastership and Safety 2017 contest *www.aetalon.ru/mb).*

PJSC Sinarsky Pipe Plant and PJSC Seversky Pipe Plant

also received recognition letters from the Governor of the Sverdlovsk Region dated July 25, 2018, for winning the industrial standards and occupational health and safety contest held in the Sverdlovsk Region (in 2017).

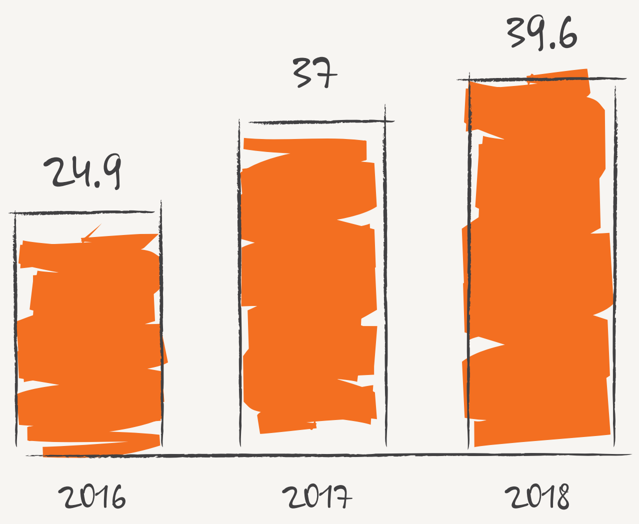
8.3 ENVIRONMENTAL MANAGEMENT

As a leader of the global pipe industry, TMK sees ensuring environmental safety while maintaining fast production growth and driving stronger economic performance as a strategic priority.

- TMK's environmental expenditures increased in 2018 by 5% year-on-year.
- External environmental training and awareness programs completed by 817 TMK's employees and managers across all levels.
- 11 of the Company's plants confirmed their compliance with ISO 14001:2015.
- Percentage of water recycled and reused by TMK's Russian plants reached 95.32%.
- Total pollutant emissions decreased by 1% year-on-year.
- A total of 26 investment initiatives undertaken, aimed at fulfilling the requirements of national legislation, ensuring environmental safety and a favorable environment
- Despite an increase in output, overall water consumption levels remained flat year-on-year

- We recognize our social responsibility for protecting the environment across our footprint.
- Environmental targets are an integral part of TMK Group's Development Strategy.
- In our operations, we are guided by international environmental protection initiatives and treaties, and comply with local environmental standards and regulations.

TMK's total environmental expenditures, $ million



Our environmental management practices are guided by **PAO TMK's Environmental Policy** *(www.tmk-group.ru/media_ru/texts/814/EKOPOLITIKA_TMK_s_Koncepciey_realizacii.pdf)*, which is in line with the Fundamentals of Government Policy in Sustainable Development in the Russian Federation Through 2030, as well as the Environmental Security Strategy of the Russian Federation Until 2025 and is based on effectiveness and efficiency of environmental activities, environmental and social responsibility, and transparency.

In 2018, we focused on improving the environmental performance of production processes, reducing water consumption, controlling air pollution, and minimizing the amount of landfilled waste while allocating necessary resources to these activities.

Financing environmental initiatives helps TMK's plants to comply with the local environmental protection and safety laws, standards, and regulations.

We increased funding for environmental activities by 5% in 2018, spending a total of $39.6 million.

8.3 ENVIRONMENTAL MANAGEMENT

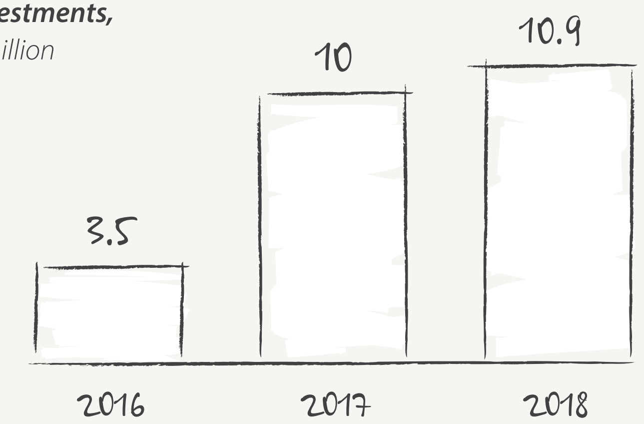
We make sure that our green investment in fixed assets is steadily rising: it increased by 8% year-on-year to $11 million.

Environmental Management System

PAO TMK's Environmental Policy and the individual environmental policies adopted by TMK Group's plants outline the Company's commitments to reducing and preventing environmental impact from its operations in the Company's host regions.

TMK's plants make consistent efforts to ensure continuous improvement of our environmental performance and manage environmental risks. 11 of the Company's plants have implemented an ISO 14001:2015 compliant environmental management system – **they successfully passed audits and confirmed their compliance during 2018.**

TMK's environmental investments,
$ million



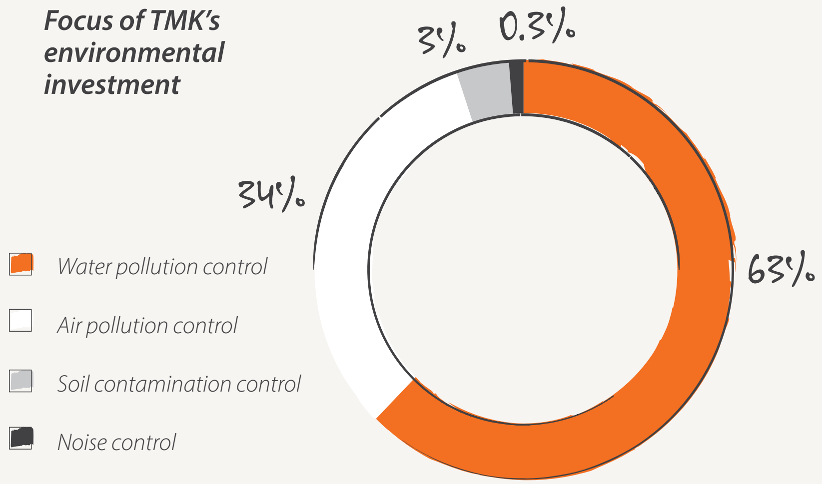
Environmental Investments

Environmental projects are an essential component of the Company's development programs, including our current Strategic Investment Program.

Our environmental investment focused on water and air pollution control (63% and 34%, respectively).

During 2018, TMK implemented 26 capex projects to ensure compliance with local laws, environmental safety, and a healthy environment.

Focus of TMK's environmental investment



Key Capex Projects and their Results

Russian division:

- Seversky Pipe Plant:
- completed upgrade of aeration tank No. 3 and reduced impact on the Severushka River
- continued building water reuse treatment facilities for a heat treatment facility, which will help reuse up to 20 million cubicmeters of treated water
- installed aspiration equipment at the crushing and screening plant

TAGMET:

TAGMET launched dust control and gas cleaning units at the ferro-alloy and lumps preparation facility of its EAF shop

Sinarsky Pipe Plant:

The combined heat and power (CHP) plant at Sinarsky Pipe Plant completed technical upgrades of its boiler facility including a redesign of exhaust pipe No. 4 to comply with the environmental legislation

American division:

- Koppel plant upgraded its EAF shop gas cleaners, improving the overall performance of its gas cleaning systems
- Ambridge is upgrading its water disposal system
- Catoosa implemented noise control measures to comply with local laws

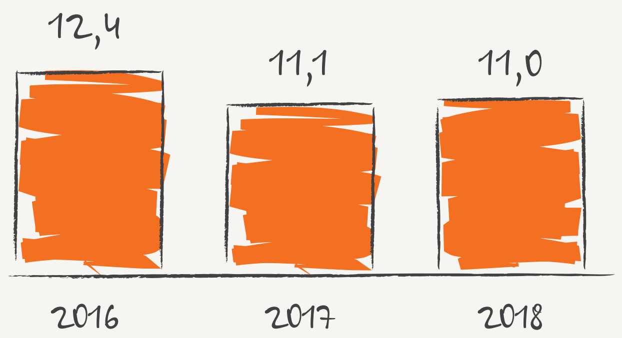
Emissions Control

TMK's facilities comply with the legislation covering air emissions inventory, regulation, and control, as well as operations in adverse weather conditions. Our emissions control activities ensure compliance with the prescribed air emissions limits.

Key initiatives to reduce air emissions implemented by TMK's facilities

- Improving the performance of gas cleaning units
- Air emissions control in adverse weather conditions
- Containing, redirecting, and cleaning dust and gas flows

Total pollutant emissions by TMK, *thousand tonnes*



-1% y-o-y

These efforts helped reduce the Company's overall gross pollutant emissions

TMK's air pollution control expenditures totaled $2.1 million in 2018. The money was used to implement a range of organizational and technical initiatives, improve treatment technologies, and carry out routine maintenance and overhauls of treatment facilities. These efforts helped **reduce** the Company's overall gross pollutant emissions to 11 thousand tonnes in 2018 (down 1% year-on-year).

We make efforts to ensure a comfortable environment for people living in areas adjacent to sanitary protection zones around our plants. To that end, we install high-performance gas cleaning equipment and implement noise control measures (in 2018, at the Russian division's Volzhsky Pipe Plant, Seversky Pipe Plant, TAGMET and TMK-INOX, and at the American division's Camanche and Catoosa).

Water Management

As stated in TMK's Environmental Policy, the Company's water management strategy focuses on reducing water consumption and mitigating negative impact on water bodies. **A recycling water supply system is essential for any of TMK's new, upgraded or renovated facilities**. In 2018, percentage of water recycled and reused by TMK's Russian plants reached 95.32%.

Key initiatives to mitigate negative impact on water bodies implemented by TMK facilities

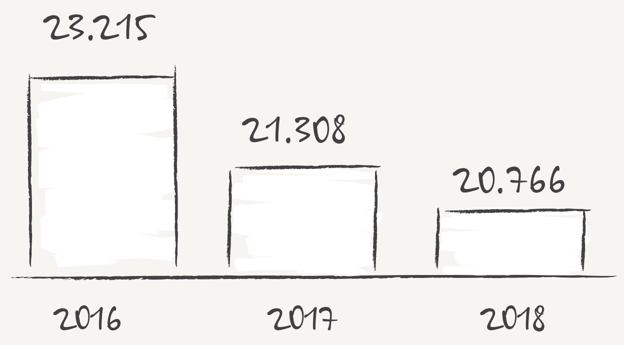
- Building and upgrading treatment facilities
- Organizational measures to prevent spills, leaks, and unsustainable use of water
- Enhancing water recycling and reuse systems

Subject to permits, TMK's facilities abstract water from surface and underground sources to supply water for production, general and drinking, and process use, and public needs.

TMK spent $17.8 million on sustainable water use and water pollution control in 2018. 2018 progress vs. 2017:

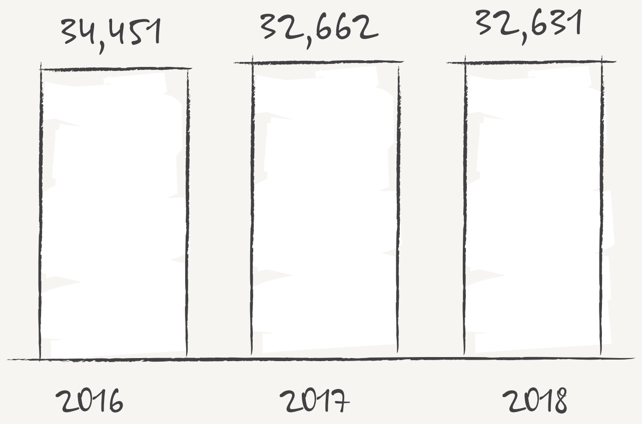
- Despite an increase in output, overall water consumption levels remained flat year-on-year
- Water intake from surface water bodies decreased by 3%
- Wastewater decreased by 2%, and wastewater discharge to natural water bodies was reduced by 10%
- Discharge of pollutants into water bodies decreased by 11%

TMK's water intake from surface water bodies, *thousand cubic meters*

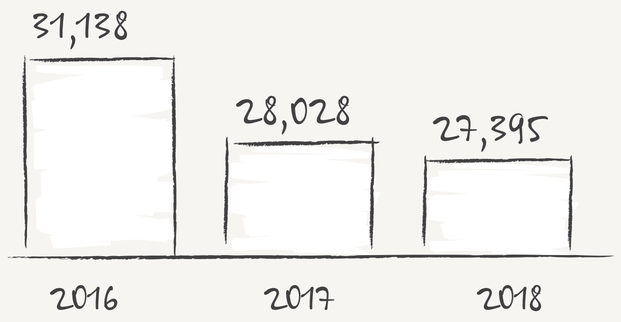


Success of our sustainable water use efforts is demonstrated by positive changes in TMK Group's water consumption.

TMK's overall water consumption, *thousand cubic meters*



TMK's total wastewater, *thousand cubic meters*



Key water management initiatives and results across TMK's facilities:

Russian division

- *Seversky Pipe Plant*
- *cleaned waste water pits at Pipe Rolling Shop No. 1 and Pipe Rolling Shop No. 3, which helped reduce oil sediment content in the discharge water*
- *started cleaning the water recycling system for untreated process water at Pipe Rolling Shop No. 2*

Sinarsky Pipe Plant

Sinarsky Pipe Plant cleaned the intake screens at the Isetsky water intake

Seversky Pipe Plant

Seversky Pipe Plant completed cleaning bottom deposits in the biological treatment system for industrial wastewater, storm water, and sewage

TAGMET

TAGMET replaced pipelines of its water recycling system, thus reducing seawater consumption by eliminating losses

Orsky Machine Building Plant

Orsky Machine Building Plant repaired pumping equipment, and cleaned waste water wells, pipelines and the plant's waste water discharge system

American division

Blytheville

The Blytheville facility upgraded its water supply system and started enhancing its water disposal system

Baytown

The Baytown facility upgraded its filtration system at the quenching unit

Waste Management

TMK's waste management system aims to:

- reduce waste generation
- reuse waste
- minimize waste landfill.

Our production and consumption waste management is in line with approved industrial guidelines and standards in place at TMK's facilities, which set up a recycling system and practice waste sorting. Volzhsky Pipe Plant and Seversky Pipe Plant developed and rolled out specialized industrial waste management software solutions. Our waste disposal and temporary storage sites are subject to industrial environmental monitoring.

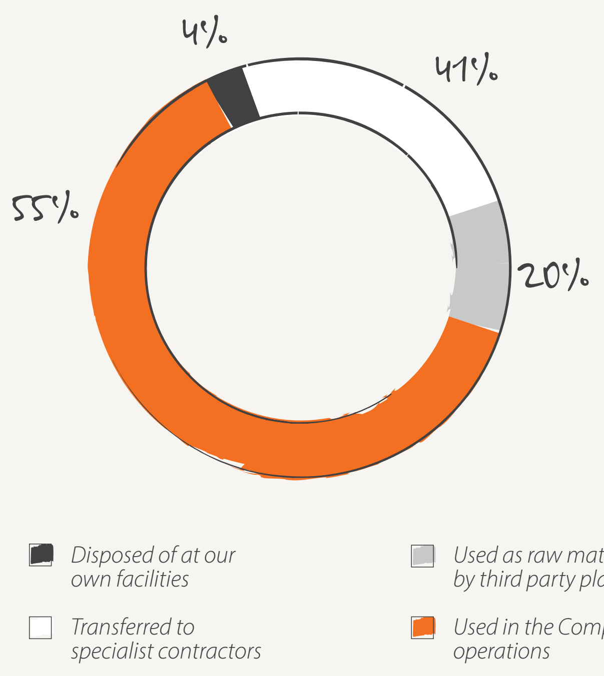
In 2018, we spent $4.8 million to minimize the impacts of our waste on the environment, including about $1 million on land protection (land reclamation, etc.).

Total waste generation from TMK's operations increased in 2018 to 684 thousand tonnes due to production growth at the Russian and American divisions.

TMK decommissioned and transferred for disposal a total of 452 units of PCB-containing electrical equipment in 2018, including 4 transformers and 448 condensers.

The following figures for 2018 clearly illustrate our waste management performance: *4% of total waste generation was disposed of at our own designated facilities, 55% was reused internally,* ***and*** *41% was transferred to specialist contractors, of which 20% was reused as raw materials by other industries.*

Waste usage



TMK contributes to the Government efforts to fulfil Russia's obligations under the Stockholm Convention on Persistent Organic Pollutants ratified by the Russian Federation. The Company developed a Program for Disposal of PCB-Containing Equipment (equipment containing polychlorinated biphenyls).

Key waste management initiatives and results across TMK's facilities:

Sinarsky Pipe Plant :

- *reclaimed basins 2 and 3 of its sludge collector (biological stage) to recover 8.66 hectares of disturbed land*
- *upgraded a mill scale deoiling centrifuge at the recovery unit of its treatment facilities for industrial wastewater*

Volzhsky Pipe Plant

Volzhsky Pipe Plant planted 214 trees on the landfill operation area

Blythevillle

The American division's Blytheville facility implemented a range of spill prevention measures to prevent any negative impact on soils

Environmental and Industrial Monitoring

Our plants are continuously monitoring the areas around their production facilities for environmental impact, leveraging a high-performance industrial environmental monitoring system. All plants of the Russian division have in place certified chemical laboratories equipped with all necessary state-of-the-art equipment.

ENVIRONMENTAL EDUCATION

A total of 817 employees and managers across all levels completed external environmental training and awareness programs in 2018.

In addition, TMK's Corporate University TMK2U launched Ecology for Non-Specialists, a new training program developed in-house. The program covers the basics of environmental legislation and explores the environmental aspects of TMK Group's operations. Additionally, the Company offers a range of up-to-date distance learning programs.

The Company's plants include environmental safety matters in their **briefings for contractors** working at TMK's production facilities. Our plants are implementing educational initiatives to improve environmental awareness among school and university students; 219 students attended such lectures in 2018.

8.4 SPONSORSHIP AND PHILANTHROPY

Through sponsorship and philanthropy, TMK seeks to create positive social change in the regions hosting our plants. Within the Russian Federation, these are the Volgograd, Orenburg, Sverdlovsk, and Rostov regions.

TMK runs its charity projects in the Sverdlovsk Region via a professional operator – the Sinara Charity Foundation, and in the Volgograd, Orenburg, and Rostov regions, directly via the Company's plants.

We mainly focus on supporting the activities of non-profit organizations in health, education, culture, and sports on a project-by-project basis through grant-based activities and developing our corporate citizenship initiatives.

Initiatives supported by TMK and the Sinara Charity Foundation in the Urals Region in 2018:

- Financial support provided to 80 non-profit organizations, 19 of which were through various grant competitions. The 22nd Sinara Charity Foundation grant competition and the 3rd Man of Labor Open Media Content Festival dedicated to the new industrial economy were held
- The next stage of Tochka Opory (Foothold), a corporate career advising project, launched in the Volgograd, Rostov, and Sverdlovsk regions in cooperation with the Presidential Grants Foundation. More than 1,000 events were held under the project, benefiting 4,000 high-school students from 85 schools. A total of 46 classrooms in winning schools have been equipped for industry-related programs over the five years since the project's establishment. Almost 90 teachers were trained in the Theory of Inventive Problem Solving (TRIZ) method and received certificates to teach students using innovative methods
- Rehabilitation and medical equipment for children with special needs was purchased for 13 preschools in the Sverdlovsk Region as part of the Rostochek program for supporting preschools
- The second Chudo Yarmarka charity fair was held in collaboration with the Yeltsin Center, all proceeds from which were allocated to building a pediatric rehabilitation gym for children with ASD and cerebral palsy
- A dedicated Publishing Project was run by the Sinara Charity Foundation and the Ural branch of the National Center for

Contemporary Arts (part of ROSIZO) to nurture the artistic environment in the region. The works of four young artists were publicly exhibited for the first time in the form of creatively designed brochures. The project was inspired by the Cahiers d'Artistes collection, published for 30 years to date by the Swiss Arts Council Pro Helvetia

- Seversky Pipe Plant held the traditional Nashi Deti (Our Children) regional arts festival for children with special needs
- In cooperation with the Donors Forum and with the support of Sinara Group and the city administration, the Objective Charity photo exhibition was organized in Yekaterinburg, showcasing the day-to-day activities of non-profit organizations and socially active businesses. The exhibition featured 34 photo stories: winners of the Objective Charity federal competition and the charitable activities of TMK and Sinara Group plants
- Yekaterinburg hosted the participants of the 9th International Puppet Theater Festival, Petrushka the Great, and the 4th International Classical Dance Competition, The Nutcracker Invites
- Yekaterinburg's Nutcracker Ballet Theater toured in two cities where TMK operates, Kamensk-Uralsky and Polevskoy, bringing unique entertainment to more than 1,200 adults and children

We are continuing to develop our ***Corporate Citizenship project****, which encourages TMK plant employees to donate blood and plasma to children with serious blood diseases, collect childcare products for orphaned babies, and provide New Year's gifts to children deprived of parental care and living in orphanages or social shelters.*

The first educational program, Corporate Philanthropy and Volunteering as Employee Engagement Tools, was held in 2018 ***in cooperation with TMK2U Corporate University.*** *Within the program, 25 volunteer leaders from TMK and Sinara Group plants were taught how to prepare and present projects with potential for corporate-wide use.*

In 2018, TMK's volunteers:

- organized celebrations for children deprived of parental care on the Children's Protection Day and New Year's Eve
- participated in the #GivingTuesday international initiative – the Leave Your Mark on Nature! corporate charity event was held at TMK's Russian plants
- took part in the Bezhim S Dobrom (Run for a Good Cause) charity runs and a bicycle race to raise funds for the Daily Charity project helping children with cancer.

THIS CORPORATE GOVERNANCE CODE COMPLIANCE REPORT WAS DISCUSSED BY THE BOARD OF DIRECTORS OF PUBLIC JOINT STOCK COMPANY TRUBNAYA METALLURGICHESKAYA KOMPANIYA (PAO TMK) AT THE MEETING DATED 25 April 2019, Minutes of Meeting No. 23 of 29 April 2019.

Our Russian plants run charitable programs and campaigns, are involved in volunteering initiatives, and consistently provide aid to both veteran organizations and children's and healthcare institutions.

- As with every year, TAGMET participated in the nation-wide Pod Flagom Dobra (In the Name of Kindness) charitable campaign to raise funds for seriously ill children, supported the 1855 Defense of Taganrog historical military festival, and helped local orphanages and sponsored schools hold celebrations, raise funds, and make renovations.
- Volzhsky Pipe Plant helps educational institutions equip research labs and provides scholarships to promising students. In 2018, the plant covered the cost of developing the design documents for building a new secondary school. The plant's Council of Young Pipe Manufacturers traditionally provides aid to the Volzhsky Baby House, the Nadezhda Center for Rehabilitation of Children and Adolescents with Disabilities, the Cheremushka Childcare Center for Visually Impaired Children, and to WW2 veterans.
- Sinarsky Pipe Plant places a special emphasis on the physical development of young people through organizing municipal and regional competitions and financing children's sports clubs and the local ballroom dancing team. The plant also supports popular song and Cossack song companies, organizes concerts and theater performances for both employees' children and children from orphanages.
- The plant provides multilateral support to Kamensk-Uralsky residents: over RUB 2 million was allocated to urban greening projects and developing city parks, during which more than 200 tonnes of waste was collected and removed during environmental cleanup days and sponsorship aid was provided to 12 educational institutions during the back-to-school season.
- Seversky Pipe Plant focuses on developing educational programs in its home town, and collaborates with local authorities and educational institutions on career advising initiatives. To celebrate the 300th anniversary of Polevskoy, urban development initiatives worth almost RUB 40 million were carried out.
- Orsky Machine Building Plant supported a track and field competition and a charity football game with residents of the Children's Orphanage state educational institution. The plant employees traditionally donated gifts to disadvantaged families with first-graders via the Oktyabrsky District Administration in Orsk. Major efforts are undertaken each year to support the veterans' association and people with special needs. As part of our career advising initiatives, we supported the participation of technical college students in the regional vocational skills competition WorldSkills – Young Professionals 2018.
- TMK's American division ran its annual campaign collecting toys and school supplies for children in disadvantaged families in Texas, took part in both the Relay For Life fundraiser cancer walk and the creation of food banks for the poor and disadvantaged, and provided financial support to the Museum of Fine Arts in Houston.

8.4 SPONSORSHIP AND PHILANTHROPY




- TMK's European division continued its involvement with local non-profit charitable organizations and supported cultural, sporting, and educational initiatives. Assistance was provided to talented students and students from low-income families wishing to receive a high-tech education

To promote sports, TMK provides financial support to the Russian Ski-Jumping and Nordic Combined Federation, the Russian Olympians Foundation, the Futsal Association of Russia, and a number of professional sports clubs in the regions where TMK operates, including:

- Ural Football Club of the Russian Premier League (Yekaterinburg)
- Sinara Mini-Football Club, a two-times Russian champion (Yekaterinburg)
- Dinamo-Sinara Women's Handball Club, a twelve-times Russian champion (Volgograd)
- TMK-TAGMET Tennis Club (Taganrog)
- TMK-TAGMET Sports Club (Taganrog).

Recognition

- Seversky Pipe Plant was ranked third in the Best Program Promoting Education in the Ural Federal District category of the Corporate Philanthropy Leaders contest.

We also support amateur teams representing TMK's entities in various sports competitions, including in children's, youth, and adult sports.

8.5 ENERGY CONSUMPTION AND EFFICIENCY

Energy consumption by PAO TMK and its subsidiaries in 2018

Type of energy source	Unit of measurement	Consumption by volume	Consumption by value (thousand $)
Natural gas	thousand cu m	784,506	60,236
Electricity	thousand kWh	3,702,672	182,312
Heat	Gcal	1,061,855	18,062
Gasoline	tonnes	19,783	537
Diesel fuel	tonnes	58,417	6,601
Fuel oil	tonnes	2	0
Total			267,748

TMK's plants implemented a number of initiatives in 2018 to reduce energy consumption and improve energy efficiency, resulting in a lower specific consumption of key energy resources and cost savings of $2 million. Overall, the Company invested about $1.3 million in energy efficiency.

Selected key initiatives to improve energy consumption and efficiency:

Volzhsky Pipe Plant:

- *Water demineralization system was upgraded, phasing out the use of chemicals for demineralization and shutting down the facility that posed chemical risks. Project costs amounted to $0.2 million. The expected payback period of the project is 19 months;*
- *Natural gas savings for its air chamber were achieved by adjusting its gas burner operation schedule to reflect the ambient temperature*

Seversky Pipe Plant:

Nitrogen gas compressors for low-pressure nitrogen were installed at Power Shop 2

Taganrog Mettalurgical Plant:

Power consumption was lowered by reducing the uptime of the main motors in the EAF's gas cleaning system by 6.5 hours during preventive maintenance

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

THIS CORPORATE GOVERNANCE CODE COMPLIANCE REPORT WAS DISCUSSED BY THE BOARD OF DIRECTORS OF PUBLIC JOINT STOCK COMPANY TRUBNAYA METALLURGICHESKAYA KOMPANIYA (PAO TMK) AT THE MEETING DATED APRIL 25 2019, MINUTES NO.23 DATED APRIL 29, 2019.

THE BOARD OF DIRECTORS CERTIFIES THAT ALL DATA IN THIS REPORT CONTAIN FULL AND RELIABLE INFORMATION ON COMPLIANCE BY THE COMPANY WITH THE PRINCIPLES AND RECOMMENDATIONS OF THE CORPORATE GOVERNANCE CODE FOR 2018.

THE STATEMENT OF PAO TMK'S BOARD OF DIRECTORS ON COMPLIANCE WITH THE CORPORATE GOVERNANCE PRINCIPLES SET OUT IN THE CORPORATE GOVERNANCE CODE IS PROVIDED ON PAGE 44 OF THIS ANNUAL REPORT.

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
1.1	**The company ensures equal and fair treatment of all shareholders in exercising their corporate governance right.**			
1.1.1	The company ensures the most favorable conditions for its shareholders to participate in the general meeting, develop informed positions on agenda items of the general meeting, coordinate their actions, and voice their opinions on items considered.	1. The company's internal document approved by the general meeting of shareholders governing the procedures to hold general meetings of shareholders is publicly available. 2. The company provides accessible means of communication with the company, such as a hotline, e-mail, or online forum, to enable shareholders to express their opinions and send questions on the agenda in preparation for the general meeting. The company performed the above actions in advance of each general meeting held in the reporting period.	● Full Partial None	
1.1.2	The procedure for giving notice of, and providing relevant materials for, the general meeting enables shareholders to properly prepare for attending the general meeting.	1. The notice of an upcoming general shareholders meeting is posted (published) online at least 30 days prior to the date of the general meeting. 2. The notice of an upcoming meeting specifies the meeting venue and documents required for admission. 3. Shareholders were given access to the information on who proposed the agenda items and who nominated candidates to the company's board of directors and the revision committee.	● Full Partial None	

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
1.1.3	In preparing for, and holding of, the general meeting, shareholders were able to receive clear and timely information about, and all materials related to, the meeting, put questions to the company's executive bodies and board of directors, and communicate with each other.	1. In the reporting period, shareholders were given an opportunity to put questions to members of executive bodies and members of the board of directors in advance of, and during, the annual general meeting. 2. The position of the board of directors (including dissenting opinions entered in the minutes) on each item on the agenda of general meetings held in the reporting period was included in the materials for the general meeting of shareholders. 3. The company gave duly authorized shareholders access to the list of persons entitled to participate in the general meeting, as from the date when such list was received by the company, in all instances of general meetings held in the reporting period.	● Full Partial None	
1.1.4	There were no unjustified difficulties preventing shareholders from exercising their right to request that a general meeting be convened, to propose nominees to the company's governing bodies, and to make proposals for the agenda of the general meeting.	1. In the reporting period, shareholders had an opportunity to make proposals for the agenda of the annual general meeting for at least 60 days after the end of the respective calendar year. 2. In the reporting period, the company did not reject any proposals for the agenda or nominees to the company's governing bodies due to misprints or other insignificant flaws in the shareholder's proposal.	● Full Partial None	
1.1.5	Each shareholder was able to freely exercise their voting right in the simplest and most convenient way.	An internal document (internal policy) contains provisions stipulating that any person attending a general meeting may, before the end of this meeting, request a copy of the ballot filled out by them and certified by the counting commission.	● Full Partial None	
1.1.6	The procedure for holding a general meeting set by the company provides equal opportunities for all persons attending the meeting to voice their opinions and ask questions.	1. During general meetings of shareholders held in the reporting period in the form of a meeting (joint presence of shareholders), sufficient time was allocated for reports on, and discussion of, the agenda items. 2. Nominees to the company's governing and control bodies were available to answer shareholders' questions at the meeting at which their nominations were put to vote. 3. When passing resolutions on the preparation and holding of general meetings of shareholders, the board of directors considered using telecommunication means for remote access of shareholders to general meetings in the reporting period.	● Full Partial None	Additional clarifications on paragraph 3. In 2018, the Board of Directors considered the use of telecommunication means for remote access of shareholders to the general meeting. PAO TMK's Articles of Association were amended accordingly. Based on historical data on attendance and activity levels of minority shareholders, as well as the need for additional funding, it was resolved not to use telecommunication means for remote access of shareholders to the Annual General Meeting on June 21, 2018. Since the Extraordinary General Meeting of Shareholders was convened by absentee voting of members of the Board of Directors, the use of telecommunication means for remote access of shareholders to the meeting was not discussed again. The Company is planning to use telecommunication means for remote access of shareholders to the Annual General Meeting in 2019.

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
1.2	**Shareholders are given equal and fair opportunities to share profits of the company in the form of dividends.**			
1.2.1	The company has designed and put in place a transparent and clear mechanism to determine the dividend amount and payout procedure.	1. The company has drafted and disclosed a dividend policy approved by the board of directors. 2. If the company's dividend policy uses reporting figures to determine the dividend amount, then relevant provisions of the dividend policy take into account the consolidated financial statements.	● Full Partial None	
1.2.2	The company does not resolve to pay out dividends if such payout, while formally compliant with law, is economically unjustified and may lead to a false representation of the company's performance.	The company's dividend policy contains clear indications of financial/economic circumstances under which the company shall not pay out dividends.	● Full Partial None	The revised Dividend Policy was approved in 2018 and is available on the Company's website at https://www.tmk-group.com/Documents.
1.2.3	The company does not allow for dividend rights of its existing shareholders to be impaired.	In the reporting period, the company did not take any actions that would lead to the impairment of the dividend rights of its existing shareholders.	● Full Partial None	
1.2.4	The company makes every effort to prevent its shareholders from using means to profit (gain) from the company other than dividends and liquidation value.	To prevent shareholders from using means to profit (gain) from the company other than dividends and liquidation value, the company's internal documents provide for controls to timely identify and approve deals with affiliates (associates) of the company's substantial shareholders (persons entitled to use votes attached to voting shares) where the law does not formally recognize such deals as interested party transactions.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
1.3	**The corporate governance framework and practices ensure equal conditions for all shareholders owning the same type (class) of shares, including minority and non-resident shareholders, and their equal treatment by the company.**			
1.3.1	The company has created conditions for fair treatment of each shareholder by the company's governing and control bodies, including conditions that rule out abuse by major shareholders against minority shareholders.	In the reporting period, procedures for management of potential conflicts of interest among substantial shareholders were efficient, while the board of directors paid due attention to conflicts, if any, between shareholders.	● Full Partial None	
1.3.2	The company does not take any actions that lead or may lead to artificial redistribution of corporate control.	No quasi-treasury shares were issued or used to vote in the reporting period.	● Full Partial None	
1.4	**Shareholders are provided with reliable and efficient means of recording their rights to shares and are able to freely dispose of their shares without any hindrance.**			
1.4.1	Shareholders are provided with reliable and efficient means of recording their rights to shares and are able to freely dispose of their shares without any hindrance.	The company's registrar maintains the securities register in an efficient and reliable way that meets the needs of the company and its shareholders.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.1	**The board of directors provides strategic management of the company, determines key principles of, and approaches to, organizing a corporate risk management and internal control system, monitors the activities of the company's executive bodies, and performs other key functions.**			
2.1.1	The board of directors is responsible for appointing and dismissing executive bodies, including for improper performance of their duties. The board of directors also ensures that the company's executive bodies act in accordance with the company's approved development strategy and core lines of business.	1. The board of directors has the authority stipulated in the articles of association to appoint and remove members of executive bodies and to set out the terms and conditions of their contracts. 2. The board of directors reviewed the report(s) by the sole executive body or members of the collegial executive body on the implementation of the company's strategy.	● Full Partial None	
2.1.2	The board of directors sets key long-term targets for the company, assesses and approves its key performance indicators and key business goals, as well as the strategy and business plans for the company's core lines of business.	At its meetings in the reporting period, the board of directors reviewed strategy implementation and updates, approval of the company's financial and business plan (budget), and the implementation criteria and performance (including interim criteria and performance) of the company's strategy and business plans.	● Full Partial None	
2.1.3	The board of directors determines the principles of, and approaches to, organizing a risk management and internal control system in the company.	1. The board of directors determined the principles of, and approaches to, organizing a risk management and internal control system in the company. 2. The board of directors assessed the risk management and internal control system in the company during the reporting period.	● Full Partial None	
2.1.4	The board of directors determines the company's policy on remuneration due to, and/or reimbursement (compensation) of costs incurred by, members of the board of directors, executive bodies, and other key executives of the company.	1. The company developed and put in place a remuneration and reimbursement (compensation) policy (policies), approved by the board of directors, for its directors, executive bodies, and other key executives. 2. At its meetings in the reporting period, the board of directors discussed matters related to such policy (policies).	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.1.5	The board of directors plays a key role in preventing, identifying, and resolving internal conflicts between the company's bodies, share-holders, and employees.	1. The board of directors plays a key role in preventing, identifying, and resolving internal conflicts. 2. The company set up mechanisms to identify transactions leading to a conflict of interest and to resolve such conflicts.	● Full Partial None	
2.1.6	The board of directors plays a key role in en-suring that the company is transparent, timely and fully discloses its information, and provides its shareholders with unhindered access to the company's documents.	1. The board of directors approved the company's regulations on the infor-mation policy. 2. The company designated persons responsible for implementing the information policy.	● Full Partial None	
2.1.7	The board of directors controls the company's corporate governance practices and plays a key role in its significant corporate events.	In the reporting period, the board of directors reviewed the company's corporate governance practices.	● Full Partial None	
2.2	**The board of directors is accountable to the company's shareholders.**			
2.2.1	Performance of the board of directors is disclosed and made available to the shareholders.	1. The company's annual report for the reporting period includes the information on individual attendance at board of directors and committee meetings. 2. The annual report discloses key performance assessment results of the board of directors in the reporting period.	● Full Partial None	
2.2.2	The chairman of the board of directors is available to communicate with the company's shareholders.	The company has in place a transparent procedure enabling shareholders to forward questions and express their positions on such questions to the chairman of the board of directors.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.3	**The board of directors manages the company in an efficient and professional manner and is capable of making fair and independent judgements and adopting resolutions in the best interests of the company and its shareholders.**			
2.3.1	Only persons of impeccable business and personal reputation who have the knowledge, expertise, and experience required to make decisions within the authority of the board of directors and essential to performing its functions in an efficient way are elected to the board of directors.	1. The procedure for assessing the board of directors' performance established in the company includes, inter alia, assessment of professional qualifications of directors. 2. In the reporting period, the board of directors (or its nomination committee) assessed nominees to the board of directors for required experience, business reputation, absence of conflicts of interest, etc.	● Full Partial None	
2.3.2	The company's directors are elected via a transparent procedure that enables shareholders to obtain information on nominees sufficient to judge on their personal and professional qualities.	Whenever the agenda of the general meeting of shareholders included election of the board of directors, the company provided to shareholders the biographical details of all nominees to the board of directors, the results of their assessment carried out by the board of directors (or its nomination committee), and the information on whether the nominee meets the independence criteria set forth in Recommendations 102–107 of the Code, as well as the nominees' written consent to be elected to the board of directors.	● Full Partial None	
2.3.3	The board of directors is balanced, including in terms of directors' qualifications, experience, expertise, and business skills, and has the trust of shareholders.	As part of assessment of the board of directors' performance run in the reporting period, the board of directors reviewed its requirements to professional qualifications, experience, and business skills.	● Full Partial None	
2.3.4	The company has a sufficient number of directors to organize the board of directors' activities in the most efficient way, including ability to set up committees of the board of directors and enable the company's substantial minority shareholders to elect a nominee to the board of directors for whom they vote.	As part of assessment of the board of directors' performance run in the reporting period, the board of directors considered whether the number of directors met the company's needs and shareholders' interests.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.4	**The board of directors includes a sufficient number of independent directors.**			
2.4.1	An independent director is a person who is sufficiently professional, experienced, and independent to develop his/her own position, and capable of making unbiased judgements in good faith, free of influence by the company's executive bodies, individual groups of shareholders, or other stakeholders. It should be noted that a nominee (elected director) who is related to the company, its substantial shareholder, substantial counterparty, or competitor, or is related to the government, may not be considered as independent under normal circumstances.	In the reporting period, all independent directors met all independence criteria set out in Recommendations 102–107 of the Code or were deemed independent by resolution of the board of directors.	● Full Partial None	
2.4.2	The compliance of candidates to the board of directors with the criteria for independence is assessed, and a regular review of compliance of independent members of the board of directors with such criteria is performed. In such assessment, substance should prevail over form.	1. In the reporting period, the board of directors (or its nomination committee) made a judgement on the independence of each nominee to the board of directors and provided its opinion to shareholders. 2. In the reporting period, the board of directors (or its nomination committee) reviewed, at least once, the independence of incumbent directors listed by the company as independent directors in its annual report. 3. The company has in place procedures defining the actions to be taken by directors if they cease to be independent, including the obligation to timely notify the board of directors thereof.	● Full Partial None	
2.4.3	Independent directors make up at least one third of the elected directors.	Independent directors make up at least one third of directors.	● Full Partial None	
2.4.4	Independent directors play a key role in preventing internal conflicts in the company and in ensuring that the company performs significant corporate actions.	Independent directors (who do not have a conflict of interest) carry out a preliminary assessment of material corporate actions implying a potential conflict of interest, and submit the results to the board of directors.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.5	**The chairman of the board of directors ensures that the board of directors discharges its duties in the most efficient way.**			
2.5.1	The board of directors is chaired by an independent director, or a senior independent director is chosen from among the elected independent directors to coordinate the activities of independent directors and enable the interaction with the chairman of the board of directors.	1. The board of directors is chaired by an independent director, or a senior independent director is chosen from among the independent directors. 2. The role, rights, and duties of the chairman of the board of directors (and, if applicable, of the senior independent director) are duly set out in the company's internal documents.	Full ● Partial None	1. The Chairman of PAO TMK's Board of Directors is a non-executive director. The Company believes that this inconsistency with the Code's recommendations is favorable for the Company since its Chairman is also the Company's ultimate beneficiary. According to interviews with directors conducted as part of the assessment of the Board of Directors' performance by the external auditor, most directors believed that election of a senior independent director would not enhance the actual performance of the Board of Directors. The Company is aware that election of a senior independent director is good international practice; however, international practice is largely based on a diffused ownership model, which is not typical of TMK. The Board of Directors considers the existing governance framework to be efficient; the members of the Board of Directors actively participate in meetings discussing all agenda items. Potential risks arising from non-compliance with this Code recommendation are mitigated through the practice of electing to the Board of Directors a sufficient number of independent directors (five directors out of eleven) with an impeccable reputation in the investment and business community. When considering its composition in the reporting year, the Board of Directors assumed that there was no need to elect a senior independent director since independent directors are included in the Board of Directors and each independent director is free to express his/her opinion and vote on agenda items. The need to elect a senior independent director will be considered by the Board of Directors in 2019. 2. Full compliance.
2.5.2	The chairman of the board of directors maintains a constructive environment at meetings, enables free discussion of agenda items, and supervises the execution of resolutions passed by the board of directors.	Performance of the chairman of the board of directors was assessed as part of assessment of the board of directors' performance in the reporting period.	● Full Partial None	
2.5.3	The chairman of the board of directors takes all steps necessary for the timely provision to directors of information required to pass resolutions on agenda items.	The company's internal documents set out the duty of the chairman of the board of directors to take all steps necessary for the timely provision to directors of materials regarding items on the agenda of a board meeting.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.6	**Directors act reasonably and in good faith in the best interests of the company and its shareholders, on a fully informed basis and with due care and diligence.**			
2.6.1	Directors pass resolutions based on all information available, without conflict of interest, subject to equal treatment of the company's shareholders, and assuming normal business risks.	1. The company's internal documents provide that a director should notify the board of directors of any existing conflict of interest as to any item on the agenda of the meeting of the board of directors or its committee, prior to the discussion of the relevant agenda item. 2. The company's internal documents provide that a director should abstain from voting on any item in connection with which he/she has a conflict of interest. 3. The company has in place a procedure enabling the board of directors to get professional advice on matters within its remit at the expense of the company.	● Full Partial None	
2.6.2	The rights and duties of directors are clearly stated and incorporated in the company's internal documents.	The company adopted and published an internal document that clearly defines the rights and duties of directors.	● Full Partial None	
2.6.3	Directors have sufficient time to perform their duties.	1. Individual attendance at board and committee meetings, as well as time devoted to preparation for attending meetings, was recorded as part of the procedure for assessing the board of directors in the reporting period. 2. In accordance with the company's internal documents, directors should notify the board of directors of their intentions to be elected to governing bodies of other entities (apart from the entities controlled by, or affiliated to, the company), and of their election to such bodies.	● Full Partial None	
2.6.4	All directors have equal access to the company's documents and information. Newly elected directors are furnished with sufficient information about the company and the board of directors' performance as soon as possible.	1. In accordance with the company's internal documents, directors are entitled to access documents and make queries regarding the company and its controlled entities, while executive bodies of the company should furnish all relevant information and documents. 2. The company has in place a formalized induction program for newly elected directors.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.7	**Meetings of the board of directors, preparation for such meetings, and participation of directors ensure efficient performance by the board of directors.**			
2.7.1	Meetings of the board of directors are held as needed, taking into account the scale of operations and goals of the company at a particular time.	The board of directors held at least six meetings in the reporting year.	● Full Partial None	
2.7.2	The company's internal regulations formalize a procedure for arranging and holding meeting of the board of directors, enabling members of the board of directors to properly prepare for such meetings.	The company has an approved internal document that describes the procedure for arranging and holding meetings of the board of directors and sets out, in particular, that the notice of the meeting is to be given, as a rule, at least five days prior to such meeting.	● Full Partial None	
2.7.3	The format of the meeting of the board of directors is determined taking into account the importance of its agenda items. The most important matters are dealt with at meetings of the board of directors held in person.	The company's articles of association or internal document provide for the most important matters (as per the list set out in Recommendation 168 of the Code) to be passed at in-person meetings of the board of directors.	● Full Partial None	
2.7.4	Resolutions on most important matters relating to the company's operations are passed at a meeting of the board of directors by a qualified majority or by a majority of all elected directors.	The company's articles of association provide for resolutions on the most important matters set out in Recommendation 170 of the Code to be passed at a meeting of the board of directors by a qualified majority of at least three quarters or by a majority of all elected directors.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.8	**The board of directors sets up committees to preview the most important matters related to the company's operations.**			
2.8.1	To preview matters related to controlling the company's financial and business activities, an audit committee was set up, comprised of independent directors.	1. The board of directors set up an audit committee comprised solely of independent directors. 2. The company's internal documents set out the tasks of the audit committee, including those listed in Recommendation 172 of the Code. 3. At least one member of the audit committee represented by an independent director has experience and knowledge of preparing, analyzing, assessing, and auditing accounting (financial) statements. 4. In the reporting period, meetings of the audit committee were held at least once a quarter.	Full ● Partial None	1. Along with independent directors, the Audit Committee includes one non-executive director. The Chairman of the Audit Committee is an independent director. The Board of Directors discussed exclusive Committee membership of independent directors and acknowledged the Company's practice to be justified since it strikes the optimal balance of directors' roles and ensures sufficient time to perform their duties, as well as provides for the membership of directors whose qualifications and experience allow to make professional judgements on industry trends and the Company's operations. **All Committee members comply with the Russian Corporate Governance Code recommendations for the reporting review and assessment competencies.** The Board of Directors also pays attention to regular re-election of Committees, the age balance of their members, and ensuring continuity of their functions. In 2019, the Board of Directors will get back to considering the need to change the procedure for determining the membership of the Audit Committee. 2–4. Full compliance.
2.8.2	To preview matters related to adopting an efficient and transparent remuneration scheme, a remuneration committee was set up, comprised of independent directors and headed by an independent director who is not the chairman of the board of directors.	1. The board of directors set up a remuneration committee comprised solely of independent directors. 2. The remuneration committee is headed by an independent director who is not the chairman of the board of directors. 3. The company's internal documents set out the tasks of the remuneration committee, including those listed in Recommendation 180 of the Code.	Full ● Partial None	1. The Nomination and Remuneration Committee combines the functions of a remuneration committee and a nomination (HR, appointments) committee. The Chairman of the Committee is an independent director. Along with independent directors, the Committee includes one non-executive director. The reasons for such inconsistency with the Code recommendation set out in paragraph 2.8.2, subparagraph 1, are stated in the note to paragraph 2.8.1. In 2019, the Board of Directors will get back to considering the need to change the procedure for determining the membership of the Nomination and Remuneration Committee. 2–3. Full compliance.
2.8.3	To preview matters related to talent management (succession planning), professional composition and efficiency of the board of directors, a nomination (appointments, HR) committee was set up, predominantly comprised of independent directors.	1. The board of directors set up a nomination committee (or its tasks listed in Recommendation 186 of the Code are fulfilled by another committee) predominantly comprised of independent directors. 2. The company's internal documents set out the tasks of the nomination committee (or the tasks of the committee with combined functions), including those listed in Recommendation 186 of the Code.	● Full Partial None	

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
2.8.4	Taking into account the company's scope of business and level of risks, the company's board of directors made sure that the composition of its committees is in line with the company's business goals. Additional committees were either set up or not deemed necessary (strategy committee, corporate governance committee, ethics committee, risk management committee, budget committee, health, safety, and environmental committee, etc.).	In the reporting period, the board of directors considered whether the composition of its committees was in line with the board's tasks and the company's business goals. Additional committees were either set up or not deemed necessary.	● Full Partial None	
2.8.5	Committees shall be composed so as to enable comprehensive discussions of matters under preview, taking into account the diversity of opinions.	1. Committees of the board of directors are headed by independent directors. 2. The company's internal documents (policies) include provisions stipulating that persons who are not members of the audit committee, the nomination committee, and the remuneration committee may attend committee meetings only by invitation of the chairman of the respective committee.	● Full Partial None	
2.8.6	Committee chairmen inform the board of directors and its chairman on the work of their committees on a regular basis.	In the reporting period, committee chairmen reported to the board of directors on the work of committees on a regular basis.	● Full Partial None	
2.9	**The board of directors ensures performance assessment of the board of directors, its committees, and members of the board of directors.**			
2.9.1	The board of directors' performance assessment is aimed at determining the efficiency of the board of directors, its committees and members, consistency of their work with the company's growth requirements, as well as at bolstering the work of the board of directors and identifying areas for improvement.	1. Self-assessment or external assessment of the board of directors' performance carried out in the reporting period included performance assessment of committees, individual directors, and the board of directors in general. 2. Results of self-assessment or external assessment of the board of directors' performance carried out in the reporting period were reviewed at the in-person meeting of the board of directors.	● Full Partial None	
2.9.2	Performance of the board of directors, its committees and members is assessed regularly at least once a year. An external advisor is engaged at least once in three years to conduct an independent assessment of the board of directors' performance.	The company engaged an external advisor to conduct an independent assessment of the board of directors' performance at least once over the last three reporting periods.	● Full Partial None	

CORPORATE GOVERNANCE CODE COMPLIANCE REPORT

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
3.1	**The company's corporate secretary ensures efficient ongoing interaction with shareholders, coordinates the company's efforts to protect shareholder rights and interests, and supports efficient performance of the board of directors.**			
3.1.1	The corporate secretary has the expertise, experience, and qualifications sufficient to perform his/her duties, as well as an impeccable reputation and the trust of shareholders.	1. The company adopted and published an internal document – regulations on the corporate secretary. 2. The biographical data of the corporate secretary are published on the corporate website and in the company's annual report with the same level of detail as for members of the board of directors and the company's executives.	● Full Partial None	
3.1.2	The corporate secretary is sufficiently independent of the company's executive bodies and has the powers and resources required to perform his/her tasks.	The board of directors approves the appointment, dismissal, and additional remuneration of the corporate secretary.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
4.1	**Remuneration payable by the company is sufficient to attract, motivate, and retain people with competencies and qualifications required by the company. Remuneration payable to directors, executive bodies, and other key executives of the company is in compliance with the approved remuneration policy of the company.**			
4.1.1	The amount of remuneration paid by the company to directors, executive bodies, and other key executives creates sufficient incentives for them to work efficiently while enabling the company to engage and retain competent and qualified specialists. At the same time, the company avoids unnecessarily high remuneration, as well as unjustifiably large gaps between remunerations of the above persons and the company's employees.	The company has in place an internal document (internal documents) – the policy (policies) on remuneration of members of the board of directors, executive bodies, and other key executives, which clearly defines the approaches to remuneration of the above persons.	● Full Partial None	
4.1.2	The company's remuneration policy is devised by the remuneration committee and approved by the board of directors. The board of directors, assisted by the remuneration committee, ensures control over the introduction and implementation of the company's remuneration policy, revising and amending it as required.	During the reporting period, the remuneration committee considered the remuneration policy (policies) and its (their) introduction practices to provide relevant recommendations to the board of directors as required.	● Full Partial None	
4.1.3	The company's remuneration policy includes transparent mechanisms for determining the amount of remuneration due to directors, executive bodies and other key executives of the company, and regulates all types of expenses, benefits, and privileges provided to such persons.	The company's remuneration policy (policies) includes (include) transparent mechanisms for determining the amount of remuneration due to directors, executive bodies, and other key executives of the company, and regulates (regulate) all types of expenses, benefits, and privileges provided to such persons.	● Full Partial None	
4.1.4	The company defines a policy on reimbursement (compensation) of expenses detailing a list of reimbursable expenses and specifying service levels that directors, executive bodies, and other key executives of the company may claim. Such policy can make part of the company's remuneration policy.	The remuneration policy (policies) or other internal documents of the company defines (define) the rules for reimbursement of expenses incurred by directors, executive bodies, and other key executives of the company.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
4.2	**Remuneration system for directors ensures alignment of financial interests of directors with long-term financial interests of shareholders.**			
4.2.1	The company pays fixed annual remuneration to its directors. The company does not pay remuneration for attending particular meetings of the board of directors or its committees. The company does not apply any form of short-term motivation or additional financial incentive for its directors.	Fixed annual remuneration was the only form of monetary remuneration payable to directors for their service on the board of directors during the reporting period.	● Full Partial None	
4.2.2	Long-term ownership of the company shares helps align the financial interests of directors with long-term interests of shareholders to the utmost. At the same time, the company does not link the right to dispose of shares to performance targets, and directors do not participate in stock option plans.	If the company's internal document(s) – the remuneration policy (policies) stipulates (stipulate) provision of the company shares to members of the board of directors, clear rules for share ownership by board members shall be defined and disclosed, aimed at stimulating long-term ownership of such shares.	● Full Partial None	
4.2.3	The company does not provide for any extra payments or compensations in the event of early termination of powers of members of the board of directors resulting from the change of control or any other reasons whatsoever.	The company does not provide for any extra payments or compensations in the event of early termination of powers of members of the board of directors resulting from the change of control or any other reasons whatsoever.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
4.3	**The company considers its performance and the personal contribution of each executive to the achievement of such performance when determining the amount of a fee payable to members of executive bodies and other key executives of the company.**			
4.3.1	Remuneration due to members of executive bodies and other key executives of the company is determined in a manner providing for reasonable and justified ratio of the fixed and variable parts of remuneration, depending on the company's performance and the employee's personal contribution.	1. In the reporting period, annual performance targets approved by the board of directors were used to determine the amount of the variable part of remuneration due to members of executive bodies and other key executives of the company. 2. During the latest assessment of the remuneration system for members of executive bodies and other key executives of the company, the board of directors (remuneration committee) made sure that the company applies efficient ratio of the fixed and variable parts of remuneration. 3. The company has in place a procedure that guarantees return to the company of bonus payments illegally received by members of executive bodies and other key executives of the company.	● Full Partial None	
4.3.2	The company has in place a long-term incentive program for members of executive bodies and other key executives of the company with the use of company shares (options and other derivative instruments where company shares are the underlying asset).	1. The company has in place a long-term incentive program for members of executive bodies and other key executives of the company with the use of company shares (financial instruments based on company shares). 2. The long-term incentive program for members of executive bodies and other key executives of the company implies that the right to dispose of shares and other financial instruments used in this program takes effect at least three years after such shares or other financial instruments are granted. The right to dispose of such shares or other financial instruments is linked to the company's performance targets.	● Full Partial None	In 2018, the Board of Directors approved the Long-Term Top Management Incentive Program.
4.3.3	The compensation (golden parachute) payable by the company in case of early termination of powers of members of executive bodies or key executives at the company's initiative, provided that there have been no actions in bad faith on their part, does not exceed the double amount of the fixed part of their annual remuneration.	In the reporting period, the compensation (golden parachute) payable by the company in case of early termination of powers of executive bodies or key executives at the company's initiative, provided that there have been no actions in bad faith on their part, did not exceed the double amount of the fixed part of their annual remuneration.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
5.1	**The company has in place an effective risk management and internal control system providing reasonable assurance in the achievement of the company's goals.**			
5.1.1	The company's board of directors determined the principles of, and approaches to, organizing a risk management and internal control system in the company.	Functions of different governing bodies and business units of the company related to risk management and internal control are clearly defined in the company's internal documents / relevant policy approved by the board of directors.	● Full Partial None	
5.1.2	The company's executive bodies ensure establishment and continuous operation of an efficient risk management and internal control system in the company.	The company's executive bodies ensured the distribution of functions and powers related to risk management and internal control between the heads (managers) of business units and departments accountable to them.	● Full Partial None	
5.1.3	The company's risk management and internal control system ensures an objective, fair, and clear view of the current state and future prospects of the company, the integrity and transparency of the company's reporting, as well as reasonable and acceptable risk exposure.	1. The company has in place an approved anti-corruption policy. 2. The company arranged for an accessible means of notifying the board of directors or the board's audit committee about violations of the law, the company's internal procedures and code of ethics.	● Full Partial None	
5.1.4	The company's board of directors takes necessary measures to make sure that the company's risk management and internal control system is consistent with the principles of, and approaches to, its setup determined by the board of directors, and that the system is functioning efficiently.	In the reporting period, the board of directors or the board's audit committee assessed the performance of the company's risk management and internal control system. The information on the key results of this assessment is included in the company's annual report.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
5.2	**The company performs internal audit for regular independent assessment of the reliability and performance of the risk management and internal control system and the corporate governance practices.**			
5.2.1	The company set up a separate business unit or engaged an independent external organization to carry out internal audits. Functional and administrative reporting lines of the internal audit department are delineated. The internal audit unit functionally reports to the board of directors.	To perform internal audits, the company set up a separate business unit – the internal audit division, functionally reporting to the board of directors or to the audit committee, or engaged an independent external organization with the same line of reporting.	● Full Partial None	
5.2.2	The internal audit division assesses the performance of the internal control, risk management, and corporate governance systems. The company applies generally accepted standards of internal audit.	1. In the reporting period, the performance of the internal control and risk management system was assessed as part of the internal audit procedure. 2. The company applies generally accepted approaches to internal audit and risk management.	● Full Partial None	
6.1	**The company and its business are transparent for its shareholders, investors, and other stakeholders.**			
6.1.1	The company has developed and implemented an information policy ensuring efficient exchange of information by the company, its shareholders, investors, and other stakeholders.	1. The company's board of directors approved an information policy developed in accordance with the Code recommendations. 2. The board of directors (or one of its committees) considered the matters related to the company's compliance with its information policy at least once in the reporting period.	● Full Partial None	The revised Information Policy of the Company was approved in 2018 and is fully in line with the Code recommendations.
6.1.2	The company discloses information on its corporate governance system and practices, including detailed information on compliance with the principles and recommendations of the Code.	1. The company discloses information on its corporate governance system and general principles of corporate governance applied in the company, in particular, on the corporate website. 2. The company discloses information on the composition of its executive bodies and board of directors, independence of the directors, and their membership in the board of directors' committees (as defined by the Code). 3. If the company has a controlling person, the company publishes a memorandum of the controlling person setting out this person's plans for the company's corporate governance.	Full ● Partial None	1–2. Full compliance. 3. The information on the ultimate beneficiary, the Company's controlling person, is disclosed on the corporate website in quarterly issuer reports and in this Annual Report. The Company's controlling person is simultaneously the Chairman of the Board of Directors; his plans for the most significant aspects of the Company's corporate governance are reflected in the internal documents and in other information (including material facts on decisions made by governing bodies) disclosed on the Company's website. The Company plans to consult with the controlling person on the necessity of publishing a memorandum of the controlling person in 2019.

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
6.2	**The company makes timely disclosures of complete, updated, and reliable information to allow shareholders and investors to make informed decisions.**			
6.2.1	The company discloses information based on the principles of regularity, consistency and promptness, as well as availability, reliability, completeness, and comparability of disclosed data.	1. The company's information policy sets out the approaches to, and criteria for, identifying information that can have a material impact on the company's evaluation and the price of its securities, as well as procedures ensuring timely disclosure of such information. 2. If company securities are traded on foreign organized markets, the company ensured concerted and equivalent disclosure of material information in the Russian Federation and in the said markets in the reporting year. 3. If foreign shareholders hold a material portion of company shares, the relevant information was disclosed both in the Russian language and one of the most widely used foreign languages in the reporting period.	● Full Partial None	
6.2.2	The company avoids a formalistic approach to information disclosure and discloses material information on its operations, even if disclosure of such information is not required by law.	1. In the reporting period, the company disclosed annual and 6M financial statements prepared under the IFRS. The company's annual report for the reporting period included annual financial statements prepared under the IFRS, along with the auditor's report. 2. The company discloses complete information on its capital structure, as stated in Recommendation 290 of the Code, in its annual report and on the corporate website.	● Full Partial None	The Company adheres to this recommendation of the Code both in form and in substance: in particular, the Company makes an additional disclosure of its IFRS statements on a quarterly basis. This Annual Report has been prepared in accordance with the Code recommendations on additional disclosures to be made in the Annual Report (paragraph 293) and, in particular, contains analysis of key metrics presented in the Company's consolidated financial statements for 2018 (MD&A). The IFRS statements for 2018 and the auditor's report are disclosed in the English and Russian languages on the issuer's website, Interfax information disclosure website, and referred to in this Annual Report. Thus, investors have equal and easy access to the IFRS statements.
6.2.3	The company's annual report, as one of the most important tools of its information exchange with shareholders and other stakeholders, contains information enabling assessment of the company's annual performance results.	1. The company's annual report contains information on the key aspects of the company's operations and financial results. 2. The company's annual report contains information on the environmental and social aspects of the company's operations.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
6.3	**The company provides information and documents requested by its shareholders in compliance with principles of fairness and ease of access.**			
6.3.1	The company provides information and documents requested by its shareholders in compliance with principles of fairness and ease of access.	The company's information policy establishes the procedure for providing shareholders with easy access to information, including information on legal entities controlled by the company, as requested by shareholders.	● Full Partial None	
6.3.2	When providing information to shareholders, the company ensures reasonable balance between the interests of particular shareholders and its own interests consisting in preserving the confidentiality of important commercial information which may materially affect its competitiveness.	1. In the reporting period, the company did not refuse shareholders' requests for information, or such refusals were justified. 2. In cases defined by the information policy, shareholders are warned of the confidential nature of the information and undertake to maintain its confidentiality.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
7.1	**Actions that materially affect or may affect the company's share capital structure and financial position and accordingly the position of its shareholders ("material corporate actions") are taken on fair terms ensuring that the rights and interests of shareholders and other stakeholders are observed.**			
7.1.1	Material corporate actions include reorganization of the company, acquisition of 30% or more of the company's voting shares (takeover), execution by the company of major transactions, increase or decrease of the company's authorized capital, listing or de-listing of company shares, as well as other actions which may lead to material changes in the rights of shareholders or violation of their interests. The company's articles of association provide for a list (criteria) of transactions or other actions classified as material corporate actions within the jurisdiction of the company's board of directors.	1. The company's articles of association include a list of transactions or other actions deemed to be material corporate actions, and their identification criteria. Resolutions on material corporate actions are referred to the jurisdiction of the board of directors. When execution of such corporate actions is expressly referred by law to the jurisdiction of the general meeting of shareholders, the board of directors presents relevant recommendations to shareholders. 2. According to the company's articles of association, material corporate actions include at least: company reorganization, acquisition of 30% or more of the company's voting shares (takeover), execution by the company of major transactions, increase or decrease of the company's authorized capital, listing or de-listing of company shares.	● Full Partial None	
7.1.2	The board of directors plays a key role in passing resolutions or making recommendations on material corporate actions, relying on the opinions of the company's independent directors.	The company has in place a procedure enabling independent directors to express their opinions on material corporate actions prior to approval thereof.	● Full Partial None	
7.1.3	When taking material corporate actions affecting the rights and legitimate interests of shareholders, equal terms and conditions are guaranteed for all shareholders; if the statutory procedure designed to protect shareholders' rights proves insufficient, additional measures are taken to protect their rights and legitimate interests. In doing so, the company is guided by the corporate governance principles set forth in the Code, as well as by formal statutory requirements.	1. Due to the specifics of the company's operations, the company's articles of association contain less stringent criteria for material corporate actions than required by law. 2. All material corporate actions in the reporting period were duly approved before they were taken.	● Full Partial None	

No.	Corporate governance principles	Compliance criteria	Compliance status	Reasons for non-compliance
7.2	**The company performs material corporate actions in such a way as to ensure that shareholders timely receive complete information about such actions, allowing them to influence such actions and guaranteeing adequate protection of their rights when performing such actions.**			
7.2.1	Information about material corporate actions is disclosed with explanations of the grounds, circumstances, and consequences.	In the reporting period, the company disclosed information about its material corporate actions in due time and in detail, including the grounds for, and timelines of, such actions.	● Full Partial None	
7.2.2	Rules and procedures related to material corporate actions taken by the company are set out in the company's internal documents.	1. The company's internal documents set out a procedure for engaging an independent appraiser to determine the value of the property disposed of or acquired pursuant to a major transaction or an interested party transaction. 2. The company's internal documents set out a procedure for engaging an independent appraiser to determine the value of shares acquired and bought back by the company. 3. The company's internal documents provide for an expanded list of grounds on which members of the company's board of directors as well as other persons as per the applicable law are deemed to be interested parties to the company's transactions.	Full ● Partial None	1. The Company's internal documents do not provide for a procedure for engaging an independent appraiser to determine the value of the property disposed of or acquired pursuant to a major transaction or an interested party transaction. The value of the property is controlled by the Board of Directors within the scope of its authority. The Board of Directors includes independent directors the number of which is sufficient for exercising control over the fair value of the property disposed of or acquired. In accordance with the Company's Articles of Association, any transactions associated with acquisition, alienation, pledge, leasing, or other disposal of immovable property are subject to approval by the Company's Board of Directors. The Company does not intend to review its approach to this matter in the near future. 2. The Company's internal documents do not provide for engagement of an independent appraiser to determine the value of the shares acquired and bought back by the Company as Company shares are traded on the highest quotation list of the exchange, have sufficient liquidity, and therefore, the Company has fair knowledge of their value. The Company does not intend to review its approach to this matter in the near future. 3. The Company's internal documents provide for an expanded list of grounds on which members of the Company's Board of Directors as well as other persons as per the applicable law are deemed to be interested parties to the Company's transactions. Pursuant to the Regulations on the Company's Board of Directors, members of the Board of Directors are to refrain from actions that will or may result in a conflict between their interests and those of the Company, and should such a conflict arise, they will promptly disclose to the Company any relevant information. Analysis of implementation of the Regulations set forth above confirms its efficiency and reasonable sufficiency, so the Company does not intend to introduce additional interested party criteria in the near future.

CONSOLIDATED FINANCIAL STATEMENTS AND MANAGEMENT DISCUSSION

For the year ended 31 December 2018

The following review of our financial position and results of operations is based on, and should be read in conjunction with, our consolidated financial statements and related notes for the year ended December 31, 2018 , published on the Company's website at https://www.tmk-group.com/Financial_results (Financial Results section).

Certain information, including our forecasts and strategy, contains forward-looking statements and is subject to risks and uncertainties, domestically and internationally. In assessing these forward-looking statements, readers should consider various risk factors as the company's actual results may differ materially from the expected results discussed in this report.

Rounding

Certain monetary amounts, percentages and other figures included in this report are subject to rounding adjustments. On occasion, therefore, amounts shown in tables may not be the arithmetic accumulation of the figures that precede them, and figures expressed as percentages in the text and in tables may not total 100 percent. Changes for periods between monetary amounts are calculated based on the amounts in thousands of U.S. dollars stated in our consolidated financial statements, and then rounded to the nearest million or percent.

Executive Overview

We are 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 our company are the production and distribution of seamless and welded pipes, including pipes with the entire range of premium connections backed by extensive technical support

Our plants produce almost the entire range of existing pipes used in the oil-and-gas sector, the chemical and petrochemical industries, energy and machine-building, construction and municipal housing, shipbuilding, aviation and aerospace, and agriculture.

We created an up-to date technological complex based on advanced scientific research, manufacturing high-quality competitive products.

Our operations are geographically diversified with manufacturing facilities in Russia, the United States, Canada, Romania and Kazakhstan. We operate R&D centers in Russia and the U.S. Our global market presence is supported by a wide distribution network. In 2018, we delivered 60% of our tubular products to our customers located in Russia and 24% in North America. We estimate our share on global market of seamless OCTG at around 14%.

We are the largest exporter of pipes in Russia. Exports of pipes produced by our Russian plants accounted for 15% of our total sales in 2018.

In 2018, we sold 3,989 thousand tonnes of steel pipes. Seamless pipes comprised 69% of our sales volumes. Sales of seamless and welded OCTG reached 1,930 thousand tonnes, a 10% year-on-year increase, sales of LDP were up by 14% year-on-year to 303 thousand tonnes.

In 2018, our total consolidated revenue increased by 16% to $5,099 million as compared to 2017. Adjusted EBITDA1 grew to $700 million as compared to $605 million in the previous year. Adjusted EBITDA margin was flat as compared to 2017 at 14%.

[1] *Adjusted EBITDA – See* "**Selected financial data**".

Market Conditions for 2018

The Russian pipe market grew 2% year-on-year, largely driven by higher demand for large diameter pipe. The OCTG market was flat year-on-year, while seamless OCTG consumption was up 2.5%, supported by increasing complexity of hydrocarbon production projects in Russia and higher share of horizontal drilling (from 41% in 2017 to 48% in 2018).

In the U.S., the average rig count increased by 18%, according to Baker Hughes, supported by a recovery in crude oil prices and higher E&P spending by the oil and gas companies. This drove higher demand for OCTG pipe throughout the year, with OCTG consumption increasing by 17% year-on-year. The high level of inventories formed by distributors at the beginning of the year, ahead of the implementation of Section 232, fell steadily in the last three quarters of the year to normalized levels.

In 2018, conditions in the European pipe market noticeably improved compared to 2017, with higher pipe consumption from both U.S. and domestic customers, increased capacity utilization and a better pricing environment.

Business Structure

Our operating segments reflect TMK's management structure and the way financial information is regularly reviewed. For management purposes, TMK is organised into business divisions based on geographical location and has three reporting segments:

- ***Russian division:*** manufacturing facilities located in the Russian Federation and Kazakhstan, and oilfield service companies and trading companies in Russia, Kazakhstan, Switzerland and the United Arab Emirates. The Russian division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies
- ***American division:*** manufacturing facilities and trading companies located in the United States and Canada. The American division is engaged in the production and supply of seamless and welded pipe, premium products and the provision of related services to oil and gas companies
- ***European division:*** manufacturing facilities located in Romania and trading companies located in Italy and Germany. The European division is engaged in the production and supply of seamless pipe and steel billets

Key Events

In February, we won a tender to supply 8,000 tonnes of high tech tubing with 13% share of chrome (13Cr) and TMK UP PF premium threaded connections to Rosneft during 2018–2019.

In February, we commissioned a new integrated heat treatment line for seamless pipes at TMK-ARTROM, Romania. The facility's treatment capacity stands at 165 thousand tonnes of pipes per annum. The facility enables a full range of heat-treatment services, such as tempering and quenching, normalization, soft annealing and hot straightening. The new facility provides heat treatment for 60–273 mm diameter pipes with 5–60 mm pipe walls.

In February, we successfully completed testing the unique proprietary TMK UP KATRAN premium connection under the Gazprom Scientific and Research Institute of Natural Gases and Gas Technologies (Gazprom VNIIGAZ) program. TMK UP KATRAN is a unique, quick-assembly high-torque connection used for 20 to 36 inches (508 mm to 914 mm) casing assemblies. TMK UP KATRAN is the only connection that can be used in all Russian offshore projects at any depth and in the most challenging climatic conditions. The connection has been developed entirely by TMK, and is the first 100% Russian product of its kind – previously this type of connections could only be purchased abroad.

In February, Moody's Investors Service (Moody's) has changed the outlook on TMK's ratings from «Negative» to «Stable» and affirmed the Company's B1 corporate rating.

On the July 2, 2018 we paid dividends for 2017 in the amount of RUB 2,356 billion ($38 million at the exchange rate at the payment date) or RUB 2.28 per share ($0.04 per share).

In September, TMK's Board of Directors approved a program to repurchase the Company's shares including depositary receipts representing such shares in the open market (the "Buyback Program") for an aggregate amount of up to $30 million. The Buyback Program is to be carried out in 2018–2019.

In September, we partially disposed the ownership in TMK GIPI (to 27.7%).

In October, we shipped a batch of corrosion resistant 13Cr casing pipe with TMK UP premium threaded connections to Gazprom for the Kirinskoye oil and gas condensate field. The pipes were successfully run into the well with TMK NGS-Buzuluk supervisors' involvement. These pipes were produced under the "future thing" agreement, signed in October 2015 for design, production launch and manufacture of products to Gazprom's specifications for use in the oil major's existing and planned projects.

In November, we opened a new external coating facility at TMK IPSCO's Wilder. The 250 thousand tonnes of annual coating capacity for pipes up to 24 inches (609.6 mm) in diameter is available in Fusion Bond Epoxy (FBE), Abrasion Resistant Overcoat (ARO) and Speciality Coating. The facility is certified to industry and end users' specific standards.

In December, we shipped the batch of casing pipe with TMK UP PF premium threaded connections, prodused at VTZ, to Sakhalin Energy under the long-term agreement for premium oil&gas pipe supplies.

YEAR ENDED 31 DECEMBER 2018 RESULTS

Results of operations

In 2018, our sales volumes and key financial indicators increased year-on-year, reflecting improved results of all divisions.

	2018, *$ million*	**2017,** *$ million*	**Change,** *$ million*
Sales volume (in thousand tonnes)	**3,989**	3 784	204
Revenue	**5,099**	4 394	705
Cost of sales	**(4,183)**	(3,521)	(662)
GROSS PROFIT	**916**	872	43
Gross profit margin	**18%**	20%	
Net operating expenses [1]	**(517)**	(544)	27
Impairment of assets	**(17)**	(7)	(9)
Foreign exchange gain/(loss), net	**(72)**	28	(100)
Gain/(loss) on changes in fair value of derivative financial instrument	**0**	(3)	3
Finance costs, net	**(232)**	(268)	36
Gain/(loss) on disposal of subsidiaries	**(24)**	0	(24)
Other non-operating income/(expenses)	**(9)**	1	(9)
PROFIT/(LOSS) BEFORE TAX	**45**	78	(33)
Income tax benefit/(expense	**(45)**	(48)	3
NET PROFIT/(LOSS)	**(0.2)**	30	(30)
NET INCOME MARGIN	**0%**	1%	
ADJUSTED EBITDA	**700**	605	95
ADJUSTED EBITDA MARGIN	**14%**	14%	

[1] *Net operating expenses include selling and distribution, general and administrative, advertising and promotion, research and development, share of profit in associate, gain on disposal of subsidiary and net other operating income/(expense)*

SALES

In 2018, our consolidated revenue increased by $705 million or 16%. Negative currency translation effect[1] was $250 million. Excluding this effect our revenue increased by $955 million year-on-year.

Sales by reporting segments are as follows:

	2018	2017	Change	Change
	in thousand tonnes		*in thousand tonnes*	*in %*
Russia	2,985	2,926	59	2%
America	804	673	131	19%
Europe	201	186	15	8%
TOTAL PIPE	3,989	3,784	204	5%
	in million dollars		*in million dollars*	*in %*
Russia	3,442	3,163	279	9%
America	1,349	989	360	36%
Europe	308	242	66	27%
TOTAL REVENUE	5,099	4,394	705	16%

Sales by group of products are as follows:

	2018	2017	Change	Change
	in thousand tonnes		*in thousand tonnes*	*in %*
Seamless pipe	2,743	2,926	72	3%
Welded pipe	1,246	673	132	12%
TOTAL PIPE	3,989	3,784	204	5%
	in million dollars		*in million dollars*	*in %*
Seamless pipe	3,550	3,074	476	15%
Welded pipe	1,272	1,086	185	17%
TOTAL PIPE	4,822	4,161	661	16%
Other operations	277	233	44	19%
TOTAL REVENUE	5,099	4,394	705	16%

[1] The currency translation effect on income/expense items illustrates the influence of different exchange rates we use to convert these items from functional currencies into the presentation currency, the U.S. dollar, in different reporting periods for financial reporting purposes.

Russia. The division's revenue increased by $279 million or 9% year-on-year. Negative currency translation effect was $258 million. Excluding this effect revenue was up by $537 million.

Revenue from sales of seamless pipe increased by $391 million due to better sales mix, reflecting higher sales volumes of OCTG, and better pricing environment.

Revenue from sales of welded pipe increased by $68 million mainly as a result of higher LDP sales, which also led to better product mix.

Revenue from other operations increased by $79 million mainly as a result of a significant growth in billets sales

America. In the American division revenue increased by $360 million or 36% year-on-year.

The stabilization on the North American market conditions resulted in a considerable growth in sales volumes, primarily OCTG. Following an improved market environment, revenue from sales of both seamless and welded pipe increased by $183 million and $175 million respectively following higher OCTG sales and better pricing environment.

Revenue from other operations increased by $2 million.

Europe. In the European division revenue increased by $66 million or 27% year-on-year. Favorable currency translation effect was $8 million. Excluding this effect revenue grew by $58 million.

Revenue from sales of seamless pipe increased by $78 million as compared to the last year as a result of better product mix, pricing environment and higher sales volumes.

Revenue from other operations, mostly from billets sales, decreased by $20 million as compared to previous year following lower sales volumes.

GROSS PROFIT

In 2018, our consolidated gross profit increased by $43 million or 5% year-on-year and amounted to $916 million. Negative currency translation effect was $57 million. Excluding this effect our gross profit increased by $100 million. Gross profit margin was 18% compared to 20% in 2017.

Gross profit results by reporting segments are as follows

	2018		2017		Change
	in million dollars	*in % to revenue*	*in million dollars*	*in % to revenue*	*in million dollars*
Russia	652	19%	655	21%	(3)
America	182	13%	170	17%	12
Europe	82	27%	48	20%	34
TOTAL GROSS PROFIT	916	18%	872	20%	43

Gross profit results by group of products are as follows

	2018		2017		Change
	in million dollars	*in % to revenue*	*in million dollars*	*in % to revenue*	*in million dollars*
Seamless pipe	824	23%	732	24%	92
Welded pipe	67	5%	111	10%	(44)
TOTAL PIPE	892	18%	843	20%	48
Other operations	24	9%	29	13%	(5)
TOTAL GROSS PROFIT	916	18%	872	20%	43

Russia. The division's gross profit decreased by $3 million. Negative currency translation effect was $59 million. Excluding this effect gross profit increased by $56 million. Gross profit margin was 19% compared to 21% in 2017.

Gross profit from sales of seamless pipe grew by $75 million as a result of the improved product mix and favorable pricing environment. Gross profit was negatively affected by raw material prices.

Gross profit from sales of welded pipe decreased by $10 million as a result of higher raw material prices.

Gross profit from other operations decreased by $9 million, the effect of higher sales volumes was fully offset by growth in raw material prices.

Net operating expenses

Net operating expenses were lower by $27 million or 5% primarily as a result of negative currency translation effect. The share of net operating expenses, expressed as a percentage of revenue, was 10% compared to 12% in 2017.

America. The American division's gross profit increased by $12 million or 7%. Gross profit margin amounted to 13% compared to 17% in 2017.

Gross profit from sales of seamless pipe grew by $36 million following better market conditions and higher sales volumes. Gross profit was negatively affected by raw material prices.

Gross profit from sales of welded pipe decreased by $26 million affected by raw material prices.

Gross profit from other operations increased by $2 million.

Europe. Gross profit in the European division increased by $34 million. Favorable currency translation effect was $2 million. Excluding this effect gross profit increased by $32 million. Gross profit margin amounted to 27% compared to 20% in 2017.

Gross profit from sales of seamless pipe was up by $29 million as a result of better product mix, favorable pricing environment and higher sales.

Gross profit from other operations increased by $3 million as compared to 2017.

ADJUSTED EBITDA

In 2018, adjusted EBITDA increased by $95 million or 16% as compared to previous year. Adjusted EBITDA margin was flat at 14%.

	2018		2017		Change
	$ million	*in % to revenue*	*$ million*	*in % to revenue*	*$ million*
Russia	485	14%	463	15%	22
America	164	12%	114	12%	50
Europe	51	17%	28	12%	23
TOTAL ADJUSTED EBITDA	700	14%	605	14%	95

- ***Russia.*** Adjusted EBITDA was higher by $22 million following a decrease in selling, general and administrative expenses and other operating expenses. Adjusted EBITDA margin was 14% compared to 15% in 2017.
- ***America.*** Adjusted EBITDA increased by $50 million following an improved market environment. Adjusted EBITDA margin stayed almost flat and amounted to 12%.
- ***Europe.*** Adjusted EBITDA increased by $23 million as compared to 2017. An increase in gross profit was partially offset by growth in selling, general and administrative expenses. Adjusted EBITDA margin amounted to 17% as compared to 12% in 2017.

Impairment of Assets

In the year ended December 31, 2018, we recognized the impairment loss of $17 million compared to $7 million loss in 2017. The impairment loss in 2017 was $24 million and the reversal of impairment was $16 million.

Foreign Exchange Movements

In 2018, we recorded a foreign exchange loss in the amount of $72 million as compared to a $28 million gain in 2017. In addition, we recognised a foreign exchange loss from exchange rate fluctuations in the amount of $116 million (net of income tax) in 2018 as compared to a $14 million gain (net of income tax) in 2017 in the statement of other comprehensive income. The amount in the statement of comprehensive income represents the effective portion of foreign exchange gains or losses on our hedging instruments.

In 2018, we 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 $23 million (net of income tax), related to partially disposed ownership in TMK GIPI.

Net Finance Costs

Net finance costs decreased by $36 million or 14%. The weighted average nominal interest rate was 7.29% as of 31 December 2018 as compared to 8.16% as at December 31, 2017.

CASH FLOWS

The following table presents our cash flows

	2018	2017	Change
	in million dollars	*in million dollars*	*in million dollars*
Net cash provided by operating activities	510	312	199
Payments for property and equipment	(273)	(233)	(41)
Other investments	18	(2)	21
Free Cash Flow	256	77	179
Change in loans	(46)	318	(364)
Interest paid	(235)	(270)	34
Other financing activities	(31)	108	(139)
Free Cash Flow to Equity	(57)	233	(290)
Dividends paid	(39)	(36)	(3)
Effect of exchange rate changes	(4)	17	(21)
Cash and cash equivalents at the beginning of period	491	277	215
Cash and cash equivalents at period end	392	491	(99)

Net cash flows provided by operating activities increased by $199 million to $510 million from $312 million in the previous year. In 2018, working capital increased by $145 million compared to a $252 million increase in 2017. The increase was mainly a result of growth in inventories and trade receivables.

Net repayment of borrowings amounted to $46 million as compared to $318 million of net proceeds in 2017.

Cash and cash equivalents at the end of the period amounted to $392 million as compared to $491 million at the end of 2017.

INDEBTEDNESS

Our overall financial debt decreased to $2,867 million as of 31 December 2018 from $3,239 million as of 31 December 2017. Net repayment of borrowings in 2018 was $46 million. The depreciation of the Rouble against the U.S. dollar also resulted in our debt decrease. Our Net debt amounted to $2,437 million as compared to $2,688 million as of 31 December 2017.

As of 31 December 2018, our debt portfolio comprised diversified debt instruments, including bank loans, bonds and other credit facilities. As of 31 December 2018, the U.S. dollar-denominated portion of our debt represented 43%, Rouble-denominated portion of debt represented 53%, euro-denominated portion of debt represented 3% of our total debt.

The share of our short-term debt increased to 31% as of 31 December 2018 compared to 18% as of 31 December 2017.

As of 31 December 2018, our debt portfolio comprised fixed and floating interest rate debt facilities. Borrowings with a floating interest rate represented $141 million or 5% of total debt, and borrowings with a fixed interest rate represented $2,743 million or 95% of our total debt.

As of 31 December of 2018, our weighted average nominal interest rate was 7.29%, which was an 87 basis point decrease compared to 31 December 2017.

Our most significant credit facilities as of 31 December 2018 were as follows:

Type of borrowing	Bank	Original currency	Outstanding principal amount *in millions of U.S. dollars*	Maturity period
6.75% bonds		USD	500	April 2020
Loan	Gazprombank	USD	400	June 2021
Loan	Sberbank	RUR	202	August 2022
Loan	Gazprombank	RUR	144	August 2019
Loan	VTB	RUR	144	December 2021
Bonds		RUR	144	May 2021
Loan	Gazprombank	RUR	129	March 2019
Loan	Sberbank	RUR	103	August 2022
Loan	Alfa bank	RUR	86	July 2021
Loan	Sberbank	RUR	86	December 2021
			1 938	
Other credit facilities			937	
Unamortised debt issue costs			(8)	
TOTAL LOANS AND BORROWINGS			2 867	

Development trends

In Russia, we expect pipe consumption of the domestic oil and gas companies to remain strong in 2019. The increased complexity of hydrocarbon production projects in Russia is expected to result in higher demand for high tech products.

In the U.S., the rig count continued to grow in 2018 driving higher demand for OCTG pipe. Consumption in the North American pipe market remained flat, reflecting marginally higher drilling activity in the United States, as operators took a wait-and-see approach to falling oil prices. As of the end of 2018, inventories returned to normalized levels.

In Europe, we expect stable demand for seamless industrial pipe in 2019. The division's sales mix is estimated to include a higher share of high value-added products.

Overall, we anticipate higher EBITDA for FY 2019 supported by further improvements across all three divisions, with EBITDA margin being slightly above the level of full-year 2018.

SELECTED FINANCIAL DATA

Adjusted EBITDA

Reconciliation of income before tax to Adjusted EBITDA for the twelve months ended

in million dollars

	31 December 2018	30 September 2018	30 June 2018	31 March 2018	31 December 2017
Income before tax	**45**	43	79	35	78
Depreciation and amortisation	**268**	271	270	268	263
Finance costs, net	**232**	246	256	266	268
Impairment of assets	**17**	10	10	7	7
Loss/(gain) on changes in fair value of derivative financial instrument	**0**	0	0	0	3
Foreign exchange (gain)/loss, net	**72**	48	24	21	(28)
Loss/(gain) on disposal of property, plant and equipment	**12**	22	22	21	21
Movement in allowances and provisions (except for provisions for bonuses)	**5**	1	9	(12)	(25)
Other non-operating income/(expenses)	**50**	42	18	17	17
Other non-cash items	**(1)**	0	0	0	0
ADJUSTED EBITDA	**700**	**682**	**687**	**624**	**605**

Adjusted EBITDA is not a measure of our operating performance under IFRS and should not be considered as an alternative to gross profit, net profit or any other performance measures derived in accordance with IFRS or as an alternative to cash flow from operating activities or as a measure of our liquidity. In particular, Adjusted EBITDA should not be considered to be a measure of discretionary cash available to invest in our growth. Adjusted EBITDA has limitations as an analytical tool, and potential investors should not consider it in isolation, or as a substitute for analysis of our operating results as reported under IFRS.

The following limitations of Adjusted EBITDA as an analytical tool should be considered:

- Adjusted EBITDA does not reflect the impact of financing or finance costs on our operating performance, which can be significant and could further increase if we were to incur more debt
- Adjusted EBITDA does not reflect the impact of income taxes on our operating performance
- Adjusted EBITDA does not reflect the impact of depreciation and amortisation on our 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, it does not reflect our future cash requirements for these replacements; and
- Adjusted EBITDA does not reflect the impact of other non-cash items on our operating performance, such as foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions, (gain)/loss on disposal of property, plant and equipment, (gain)/loss on changes in fair value of financial instruments, share of (profit)/loss of associate and other non-cash items.

NET DEBT

Net debt has been calculated as of the dates indicated:

	31 December 2018	30 September 2018	30 June 2018	31 March 2018	31 December 2017
					in million dollars
Loans and borrowings less interest payable	2 867	2 941	2 990	3 127	3 239
Net of: **Cash and short-term financial investments[1]**	(430)	(317)	(275)	(416)	(551)
NET DEBT	2 437	2 624	2 715	2 710	2 688
NET DEBT TO EBITDA (LTM[2])	3,48	3,85	3,95	4,35	4,44

Net Debt is not a measure under IFRS, and it should not be considered to be 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 of our operating performance that is not required by, or presented in accordance with, IFRS. Although Net Debt is a non IFRS measure, it is widely used to assess liquidity and the adequacy of a company's financial structure. Management believes Net Debt provides an accurate indicator of our ability to meet our financial obligations, represented by gross debt, from available cash. Net Debt demonstrates investors the trend in our net financial position over the periods presented.

[1] *Cash and short-term financial investments include Cash and cash equivalents, Other financial assets and short-term loans issued. Cash and short-term financial investments include Cash and cash equivalents, Other financial assets and short-term loans issued.*

[2] *Net Debt-to-EBITDA ratio is defined as the quotient of Net Debt at the end of the given reporting date divided by the Adjusted EBITDA for the 12 months immediately preceding the given reporting date. Adjusted EBITDA – see* **"Selected financial data"**

INDUSTRY RISKS

Dependence on the oil and gas industry

The oil and gas industry is the principal consumer of steel pipe products worldwide and accounts for most of our sales, in particular sales of OCTG,

line pipe and large-diameter pipe. In 2018, sales volumes of pipes used in oil and gas industry accounted for approximately 78% of our tubular products.

The oil and gas industry has historically been volatile and downturns in the oil and gas markets can adversely affect demand for our products, which

largely depends 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. The level of investment activities of oil and gas companies, which is largely driven by prevailing prices for oil and natural gas and their stability, significantly affects the level of consumption of our products.

Thus, the decline in oil and gas exploration, drilling and production activities, prices for energy commodities and other economic factors beyond our control could adversely affect our results of operations

Increases in the cost of raw materials

We require substantial quantities of raw materials to produce steel pipes. The principal raw materials used in production processes include scrap and ferroalloys for use in steelmaking operations, steel billets used for the production of seamless pipe and steel coils and plates for the production of welded pipe. The demand for the principal raw materials we utilize is generally correlated with macroeconomic fluctuations, which in turn are affected by global economic conditions.

Prices for raw materials and supplies have a key influence on our production costs and are one of the main factors affecting our results of operations. There are many factors which influence raw materials prices, including oil and gas prices, worldwide production capacity, capacity utilization rates, inflation, exchange rates, trade barriers and developments in steelmaking processes. In 2018, the cost of scrap metal in Russia in Rouble-terms increased on average by 19%, and the cost of coils increased by 16%. At the same time, we are negotiating new contract terms with our major clients based on pricing formulas, which secure us against growing raw materials prices. The share of raw materials' and consumables' costs in the total cost of production in 2018 was 67%. The increase in prices for scrap, coils and other raw materials, if not passed to customers can adversely affect our profit margins and results of operations.

Our plants also consume significant quantities of energy, particularly electricity and gas. In 2018, energy and utility costs comprised approximately 7% of our total cost of production. The prices for electricity for our plants increased by 5% in Rouble-terms compared to 2017, while the average prices for domestic natural gas for our plants increased by 3% in Rouble-terms. If we are required to pay higher prices for gas and electricity in the future, our costs will rise and this could have a material adverse effect on our business, financial condition, results of operations and prospects.

Dependence on a small group of customers

As we focus on supplying primarily the oil and gas industry, our largest customers are oil and gas companies. In 2018, our five largest customers were Rosneft, Gazprom, Surgutneftegas, CTAP LLC and SOONER PIPE LLC, which together accounted for 37% of our total sales volumes. The increased dependence of pipe sales on a single large customer bears the risk of an adverse effect on results of operations in the event that our relationship with any of these major customers deteriorates.

Our LDP business is largely dependent on one of our largest customers, Gazprom. In 2018, 68% of our LDP were sold for Gazprom projects. Increased competition in the supply of LDP or a change in relationships with Gazprom could negatively affect our competitive position in the large-diameter pipe market, resulting in decreased revenues from sales of these products and adversely affecting our business, financial position and results of operations. Additionally, large-diameter pipe business depends significantly upon the level of construction of new oil and gas pipelines in Russia and the CIS. The delay, cancellation or other changes in the scale or

scope of significant pipeline projects, or the selection by the sponsors of such projects of other suppliers could have an adverse effect on our sales of LDP, and thus on the results of operations and financial position.

Competition

The global market for steel pipe products, particularly in the oil and gas sector, is highly competitive. In the Russian and CIS markets, we face competition primarily from ChTPZ, OMK, and the Ukrainian and Chinese pipe producers.

After accession to the WTO Russia had adjusted its national legislation in full accordance with WTO rules and regulations, what allowed Russia along with the EEU (Eurasian Economic Union) to use WTO trade defense mechanism for the national market protection. To date, the following antidumping measures are effective in EEU: antidumping duties in the amount 18.9%-19.9% on imports of some types of steel tubes and pipes originated from Ukraine that were extended till 2021, anti-dumping duties ranging from 4.32% to 18.96% on imports of seamless corrosion resistant steel tubes and pipes originating from Ukraine, antidumping duties in the amount 19.15% on imports of cold-drawn stainless steel pipes originated from China and Malaysia, antidumping duties 12.23%-31% in respect to OGTG originated from China.

Outside Russia and the CIS, we compete against a limited number of premium-quality pipe products producers, including Tenaris, Vallourec, Sumitomo, Voestalpine and Chinese producers.

The US market is protected by more than 50 defense measures, the trade defense of the American market is constantly being improved. For example, in 2018 in the USA antidumping duties were prolonged in the amount of 30.8% for LDP from Japan, the following defense measures were introduced for pipe products: anti-dumping and countervailing duties for non-alloy welded pipes from Brazil, Mexico, Korea and Taiwan in the amount of 4.91% to 103.38%, on welded carbon pipes from Taiwan – from 9.7% to 43.7%

A number of new trade investigations were also initiated: anti-dumping on welded pipes from China, compensatory and anti-dumping against the import of large-diameter pipes from Canada, Greece, Turkey, China and India.

In accordance with Section 232 of the Trade Expansion Act, in February 2018, protective duties, which amounts to 25%, were imposed in the USA on imports of steel goods. These decisions are expected to ensure the alignment of conditions of the competition in the market of pipe products in Russia and America and contribute to the improvement of market positions of Russian and American plants.

We may not be able to compete effectively against existing or potential producers and preserve our current share of the various geographical or product markets in which we operate. A failure to compete effectively in one or more of these markets could have a material adverse effect on our business, financial condition, results of operations and prospects.

FINANCIAL RISKS

Liquidity risk

Liquidity risk is the risk that TMK will not be able to meet its financial obligations as they fall due. TMK's approach to managing liquidity is to ensure that it will always have sufficient liquidity assets to meet its obligations when due.

TMK manages liquidity risk by maintaining adequate cash reserves and borrowing facilities, by continuously monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities.

As of December 31, 2018, our total debt increased to $2,867 million as compared to $3,239 million at the end of 2017, partially due to the Rouble depreciation against the U.S. dollar. Net repayment amounted to $46 million. As of December 31, 2018, our Net-Debt-to-EBITDA ratio was 3.48x.

As of 31 December 2018, we committed credit lines in Russian, European and American banks with the available limit of $423.4 million.

Nevertheless, there can be no assurance that our efforts to improve liquidity profile and reduce leverage will prove successful. The negative debt market reaction on deteriorating global political and financial situation, US and EU sanctions, economic situation in Russia may have an adverse impact on our ability to borrow in banks or capital markets, and may put pressure on our liquidity, significantly increase borrowing costs, temporary reduce the availability of credit lines or lead to and possibility to incur financing on acceptable terms.

Compliance with covenants

Certain amount of our loan agreements and public debt securities currently include financial covenants. Some covenants impose financial ratios that must be maintained, others impose restrictions in respect of certain transactions, including restrictions in respect of indebtedness, pledging of assets and material asset disposals. A breach of financial or other covenants in existing debt facilities, if not resolved by means such as obtaining a waiver from the relevant lender and/or making amendments to debt facilities, could trigger a default under our obligations.

We are in compliance with lenders' requirements under covenants.

In case financial markets or economic situation on the markets, where we operate, deteriorate in the future, we may not comply with relevant covenants. In case of possible breach we will apply best efforts to obtain all necessary waivers or standstill letters. We do not expect the occurrence of such events in the near future.

Interest rate risk

Some of our loans and borrowings are subject to variable rates of interest. Accordingly, we remain subject to interest rate risk resulting from fluctuations in the relevant reference rates for such debt. Some loan agreements contain a right of creditors at its sole discretion to change interest rates including in case of change of credit indicators by the Central Bank of Russia and in some other cases.

The increase in such interest rates will result in an increase in our interest expense and could have a material adverse effect on our financial condition, results of operations or prospects.

Currency risk

Our products' prices as well as our costs are nominated both in Roubles and in other currencies (generally, in U.S. dollars and euro).We hedge our net investment in operations located in the United States against foreign currency risks using U.S. dollar denominated liabilities. Gains or losses on the hedging

instruments relating to the effective portion of the hedge are recognised as other comprehensive income while any gains or losses relating to the ineffective portion are recognised in the income statement. In 2018, we incurred foreign exchange loss from spot rate changes in the total amount of $72 million. In addition, we recognised foreign exchange loss of $116 million (net of income tax) in the statement of comprehensive income.

Also TMK is exposed to currency risk on the borrowings that are denominated in currencies other than the functional currencies of the respective TMK's members. The currencies in which these transactions are denominated are primarily Rubles, US dollars and euro. As of December 31, 2018, 43% of our loans were denominated in U.S. dollar. In this regards, as well as taking into consideration continuing volatility of the Rouble against U.S. dollar, the risk of losses owing to the Rouble devaluation remains sufficiently high. Depreciation of the Rouble against the U.S. dollar could adversely affect our net profit as coherent losses will be reflected in our consolidated income statements. Nevertheless, TMK is partly secured from currency risks as foreign currency denominated sales occasionally are used to cover repayment of foreign currency denominated borrowings.

Inflation risk

A significant amount of our production activities are located in Russia, and a majority of direct costs are incurred in Roubles. We tend to experience inflation-driven increases in certain costs, such as raw material costs, transportation costs, energy costs and salaries that are linked to the general price level in Russia. In 2018, inflation in Russia increased to 4.3% as compared to 2.5% in 2017. In spite of the measures of the Russian government to contain inflation, growth of inflation rates may be significant in the short-term outlook. We may not be able to increase the prices sufficiently in order to preserve existing operating margins.

Inflation rates in the United States, with respect to our American division operations, are historically much lower than in Russia. In 2018, inflation in the United States was 1.9% and remained close to the level of the previous year.

High rates of inflation, especially in Russia, could increase our costs, decrease our operating margins and adversely affect our business and financial position.

LEGAL RISKS

Changes in tax legislation and tax system

Our subsidiaries make significant tax and non-budgetary funds payments, in particular, profit tax, VAT, property tax and payments to social security funds. Changes in tax legislation could lead to an increase in tax payments and, consequently, to a lowering of financial results. As significant part of the operations is located in Russia, the main risks relate to changes in the legislation of the Russian tax system. The Russian Government continually reviews the Russian tax legislation. The new laws generally reduce the number of taxes and the overall tax burden on business while simplifying tax legislation. Nevertheless, should the Russian taxation system suffer any changes related to increasing of tax rates, this could adversely affect our business.

Moreover, the Russian oil industry is subject to substantial taxes, including significant resources production taxes and significant export customs duties. Changes to the tax regime and customs duties rates may adversely affect the level of oil and gas exploration and development in Russia, which can adversely affect the demand for our products in Russia.

Changes in environmental law

We meet the requirements of national environmental laws at our industrial capacities location areas: the directives and regulations of Russian, the United States, the European Union, Romanian and Kazakhstan legislation.

The main ecological-and-economical risks of our Russian plants are related to changes and tightening of the Russian environmental protection laws. Environmental legislation in Russia is constantly developing. The imposition of a new law and regulation system may require further expenditures to install new technological and waste disposal equipment, pollution and wastewater control equipment, as well as will lead to growth of the rate of payments for negative impact on the environment. It is expected that compliance with the regulations will be accompanied by stricter control by state monitoring authorities.

We estimate that the environmental legislation of the European Union and the United States, Romania and Kazakhstan will not undergo any material changes in the near future. Nevertheless, if such changes arise, the cost of compliance with new requirements could have a material adverse effect on our business.

OTHER RISKS

Equipment failures or production curtailments or shutdowns

Our 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. Our 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 us to close part or all of the relevant production facility or cause us to reduce production on one or more of our production lines.

Any interruption in production capability may require us to make significant and unanticipated capital expenditures to effect repairs, which could have a negative effect on our profitability and cash flows. Any recoveries under insurance coverage that we may obtain may not offset the lost revenues or increased costs resulting from a disruption of our operations.

A sustained disruption to our business could also result in delays to or cancellations of customer orders and contractual penalties, which may also negatively impact our reputation among our customers. Any or all of these occurrences could have a material adverse effect on our business, results of operations, financial condition and prospects.

Insurance against all potential risks and losses

We maintain insurance against losses that may arise in case of property damage including business interruption insurance, accidents, transportation of goods. We also maintain corporate product liability and directors and officers liability insurance policies.

We maintain obligatory insurance policies required by law and provide employees with medical insurance as part of our compensation arrangements with our employees.

Nevertheless, we do not carry insurance against all potential risks and losses, and our insurance might be inadequate to cover all of our losses or liabilities or may not be available on commercially reasonable terms.

Ability to effect staff alterations and shortages of skilled labor

Our Russian subsidiaries are in many regions the largest employers in the cities in which they operate, such as Volzhsky, Taganrog, Kamensk-Uralsky and Polevskoy. While we do not have any specific legal social obligations or responsibilities with respect to these regions, the ability to effect alterations in the number our employees may nevertheless be subject to political and social considerations. Any inability to make planned reductions in the number of employees or other changes to operations in such regions could have an adverse effect on the results of operations and prospects.

Competition for skilled labor in the steel pipe industry remains relatively intense, and labor costs continue to increase moderately, particularly in the CIS, Eastern Europe and the United States. We expect the demand and, hence, costs for skilled engineers and operators will continue to increase, reflecting the significant demand from other metallurgical companies and other industries. Continual high demand for skilled labor and continued increases in labor costs could have a material adverse effect on our business, financial position and results of operations.

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS MAJOR TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No major transactions were made by PAO TMK in 2018.

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
1	Surety – PAO TMK Bank – Sberbank Beneficiary – JSC Volzhsky Pipe Plant	Addendum to the surety agreement provided to secure performance of JSC Volzhsky Pipe Plant's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: until August 17, 2023	3,000,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Beneficiary's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Beneficiary's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company.	Board of Directors, February 12, 2018	Does not exceed 2% of NAV
2	Surety – PAO TMK Bank – Sberbank Beneficiary – PJSC TAGMET	Addendum to the surety agreement provided to secure performance of PJSC TAGMET's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: until August 17, 2023	3,000,000,000		Board of Directors, February 12, 2018	Does not exceed 2% of NAV
3	Surety – PAO TMK Bank – Sberbank Beneficiary – PJSC Seversky Pipe Plant	Addendum to the surety agreement provided to secure performance of PJSC Seversky Pipe Plant's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: until August 17, 2023	3,000,000,000		Board of Directors, February 12, 2018	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
4	Surety – PAO TMK Lender – Gazprombank (Switzerland) Ltd Beneficiary – TMK Gulf International Pipe Industry LLC	The Surety shall uphold, jointly with TMK Gulf International Pipe Industry LLC (Debtor I), the obligations assumed by Debtor I towards the Lender under the credit agreement between the Lender and Debtor I, according to which the Lender establishes an unconfirmed revolving credit facility for Debtor I Transaction term: until December 31, 2023	860,745,541	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors. 3. V. Shmatovich, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors.	Board of Directors, March 12, 2018	Does not exceed 2% of NAV
5	Surety – PAO TMK Lender – Gazprombank (Switzerland) Ltd Beneficiaries – TMK Global SA and TMK Middle East FZCO	The Surety shall uphold, jointly with TMK GLOBAL SA and TMK Middle East FZCO (jointly – Debtor II), the obligations assumed by Debtor II towards the Bank under the framework agreement on establishment of letters of credit between the Bank and Debtor II, according to which the Bank establishes an unconfirmed letter of credit facility for Debtor II Transaction term: until December 31, 2023	Aggregate transaction limit for transactions 5 and 6: 5,940,027,204	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors. Interested parties' stakes in the authorized capital of PAO TMK: TMK STEEL HOLDINGS LIMITED – 65.0584% A. Zimin – 0.000072% Interested parties' stakes in the authorized capital of the Lender and the Beneficiaries: 0%	Board of Directors, March 12, 2018	2.8% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
6	Surety – PAO TMK Lender – Gazprombank (Switzerland) Ltd Beneficiaries – TMK Global SA and TMK Middle East FZCO	The Surety shall uphold, jointly with TMK Global SA and TMK Middle East FZCO (jointly – Debtor III), the obligations assumed by Debtor III towards Gazprombank (Switzerland) Ltd, Bank GPB (International) S.A. or any Lender that has become such under Loan Agreement II (Lenders), under the loan agreement between Gazprombank (Switzerland) Ltd (acting as Agent, Security Agent, and Original Lender), Bank GPB (International) S.A. (acting as Original Lender), and Debtor III, according to which the Lenders establish an unconfirmed revolving credit facility for Debtor III Transaction term: until December 31, 2023				

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
7	Surety – PAO TMK Debtor – JSC Volzhsky Pipe Plant	Surety fee contract for a surety issued under a bank guarantee agreement between the Debtor and Sberbank Transaction term: until November 31, 2020	14,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Debtor's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Debtor's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
8	Debtor – PAO TMK Surety – PJSC Seversky Pipe Plant	Surety fee contract for a surety issued under a loan agreement between the Debtor and JSC Gazprombank Transaction term: June 30, 2021	12,828,225	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Surety's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Surety's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Surety's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Surety's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Surety's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
9	Debtor – PAO TMK Surety – PJSC TAGMET	Surety fee contract for a surety issued under a loan agreement between the Debtor and JSC Gazprombank Transaction term: June 30, 2021	12,828,225		Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
10	Debtor – PAO TMK Surety – PJSC Sinarsky Pipe Plant	Surety fee contract for a surety issued under a loan agreement between the Debtor and JSC Gazprombank Transaction term: June 30, 2021	12,828,225		Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
11	Surety – PAO TMK Debtors – TMK Global SA and TMK Middle East FZCO	Surety fee contract for a surety issued to secure performance of the Debtors' obligations under a loan agreement Transaction term: until the obligations have been discharged in full	31,315,648	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
12	Guarantor – PAO TMK Debtor – TMK Gulf International Pipe Industry LLC	Surety fee contract for the guarantee provided by the Guarantor to secure performance of the Debtor's obligations under a loan agreement between the Debtor and Gazprombank (Switzerland) Ltd Transaction term: until the obligations have been discharged in full	4,834,376	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors. 3. V. Shmatovich, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
13	Surety – PJSC Seversky Pipe Plant Debtor – PAO TMK	Surety fee contract for a surety issued under a loan agreement between the Debtor and JSC Gazprombank Transaction term: until October 09, 2020	35,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Surety's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Surety's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Surety's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Surety's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Surety's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Surety's Board of Directors and a member of the Management Board of the Surety's management company.	Approval not required (does not exceed 0.1% of NAV	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
14	Lender – PAO TMK Borrower – TMK Gulf International Pipe Industry LLC	Loan Maturity date – March 22, 2018	453,611,819	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Borrower's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors. 3. V. Shmatovich, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors.	Pending approval	Does not exceed 2% of NAV
15	Guarantor – PAO TMK Beneficiary – RBI Leasing GmbH Principal – Powerstream Holdings Limited	Mixed contract comprising an agreement between the Guarantor and the Beneficiary on the guarantee terms, and a guarantee issued by the Guarantor in favor of the Beneficiary at the Principal's request Transaction term: June 23, 2027	2,023,632,600	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Principal's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Principal's Board of Directors.	Board of Directors, April 19, 2018	Does not exceed 2% of NAV
16	Lender – PAO TMK Borrower – TMK Completions LTD.	Addendum to a loan agreement Maturity date – October 24, 2018	91,084,879	PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Borrower's controlling entity.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
17	Lender – PAO TMK Borrower – Powerstream Holdings Limited	Loan Maturity date – August 11, 2023	63,437,755	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Borrower's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
18	Lender – PAO TMK Borrower – JSC Sinara Group	Loan Maturity date – April 01, 2019	157,378,767	1. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Borrower's Board of Directors. 2. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Borrower's Board of Directors. 3. S. Papin, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors. 4. A. Pumpyanskiy, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors. 5. D. Pumpyanskiy, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
19	Surety – PAO TMK Lender – Sberbank Beneficiary – JSC Volzhsky Pipe Plant	Addendum to the surety agreement provided to secure performance of JSC Volzhsky Pipe Plant's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: August 17, 2020	5,000,000,000	1. AO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Beneficiary's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Beneficiary's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. Interested parties' stakes in the authorized capital of PAO TMK: TMK STEEL HOLDINGS LIMITED – 65.0584% A. Shiryaev – 0.015% A. Kaplunov – 0.0067% T. Petrosyan – 0.0016% A. Zimin – 0.000072% V. Popkov – 0.001509% Interested parties' stakes in the authorized capital of the Lender and the Beneficiary: 0%	Board of Directors, October 24, 2018	2.3% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
20	Debtor – JSC Volzhsky Pipe Plant Surety – PAO TMK	Addendum to the surety fee contract for a surety issued by PAO TMK under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit between JSC Volzhsky Pipe Plant and Sberbank Transaction term: August 17, 2020	35,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Debtor's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Debtor's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
21	Surety – PAO TMK Lender – Sberbank Beneficiary – PJSC TAGMET	Addendum to the surety agreement provided to secure performance of PJSC TAGMET's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: August 17, 2020	5,000,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Beneficiary's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Beneficiary's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company Interested parties' stakes in the authorized capital of PAO TMK: TMK STEEL HOLDINGS LIMITED – 65.0584% A. Shiryaev – 0.015% A. Kaplunov – 0.0067% T. Petrosyan – 0.0016% A. Zimin – 0.000072% V. Popkov – 0.001509% Interested parties' stakes in the authorized capital of the Lender and the Beneficiary: 0%	Board of Directors, October 24, 2018	2.3% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
22	Debtor – PJSC TAGMET Surety – PAO TMK	Addendum to the surety fee contract for a surety issued by PAO TMK under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit between PJSC TAGMET and Sberbank Transaction term: August 17, 2020	35,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Debtor's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Debtor's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
23	Surety – PAO TMK Lender – Sberbank Beneficiary – PJSC Seversky Pipe Plant	Addendum to the surety agreement provided to secure performance of PJSC Seversky Pipe Plant's obligations under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit Transaction term: August 17, 2020	5,000,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Beneficiary's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Beneficiary's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Beneficiary's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Beneficiary's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Beneficiary's Board of Directors and a member of the Management Board of the Beneficiary's management company. Interested parties' stakes in the authorized capital of PAO TMK: TMK STEEL HOLDINGS LIMITED – 65.0584% A. Shiryaev – 0.015% A. Kaplunov – 0.0067% T. Petrosyan – 0.0016% A. Zimin – 0.000072% V. Popkov – 0.001509% Interested parties' stakes in the authorizedcapital of the Lender and the Beneficiary: 0%	Board of Directors, October 24, 2018	2.3% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
24	Debtor – PJSC Seversky Pipe Plant Surety – PAO TMK	Addendum to the surety fee contract for a surety issued by PAO TMK under the General Agreement on Establishment of a Revolving Limit for Financing Trade Operations through Uncovered Letters of Credit between PJSC Seversky Pipe Plant and Sberbank Transaction term: August 17, 2020	35,000,000	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Debtor's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Debtor's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Debtor's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Debtor's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Debtor's Board of Directors and a member of the Management Board of the Debtor's management company.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
25	Guarantor – PAO TMK Beneficiary – BANCA TRANSILVANIA S.A. Principal – TMK-ARTROM S.A	Mixed contract comprising an agreement between the Guarantor and the Beneficiary on the guarantee terms, and a guarantee issued by the Guarantor in favor of the Beneficiary at the Principal's request Transaction term: June 29, 2020	1,523,182,320	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Principal's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Principal's Board of Directors.	Board of Directors, October 25, 2018	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
26	Lender – PAO TMK Borrower – JSC Volzhsky Pipe Plant	Loan Maturity date – July 02, 2020	2,958,412,381	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Borrower's controlling entity. 2. A. Shiryaev, PAO TMK's CEO and a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Borrower's Board of Directors, as well as the CEO and a member of the Board of Directors and the Management Board of the Borrower's management company. 3. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Borrower's Board of Directors, as well as a member of the Board of Directors and the Management Board of the Borrower's management company. 4. T. Petrosyan, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors and a member of the Management Board of the Borrower's management company. 5. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors and a member of the Management Board of the Borrower's management company. 6. V. Popkov, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors and a member of the Management Board of the Borrower's management company.	Pending approval	Does not exceed 2% of NAV

LIST OF TRANSACTIONS MADE BY PAO TMK IN 2018 AND RECOGNIZED AS INTERESTED PARTY TRANSACTIONS IN ACCORDANCE WITH THE FEDERAL LAW ON JOINT STOCK COMPANIES

No.	Parties to, and beneficiaries of, the transaction	Subject matter and term of the transaction	Transaction price, RUB	Interested parties	Governing body that approved/subsequently approved the transaction, date of resolution	Transaction price, % of net asset value (NAV)
27	Lender – PAO TMK Borrower – Powerstream Holdings Limited	Loan Maturity date – August 11, 2023	63,345,846	1. PAO TMK's controlling entity, TMK STEEL HOLDINGS LIMITED, is simultaneously the Borrower's controlling entity. 2. A. Zimin, a member of PAO TMK's Management Board, is simultaneously a member of the Borrower's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
28	Lender – PAO TMK Borrower – JSC Sinara Group	Loan Maturity date – April 01, 2019	156,519,863	1. A. Shiryaev, PAO TMK's CEO, a member of the Board of Directors and the Management Board, is simultaneously a member of the Borrower's Board of Directors. 2. A. Kaplunov, a member of PAO TMK's Board of Directors and Management Board, is simultaneously a member of the Borrower's Board of Directors. 3. S. Papin, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors. 4. A. Pumpyanskiy, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors. 5. D. Pumpyanskiy, a member of PAO TMK's Board of Directors, is simultaneously a member of the Borrower's Board of Directors.	Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV
29	Lender – PAO TMK Borrower – JSC Sinara Group	Loan Maturity date – April 01, 2019	163,000,685		Approval not required (does not exceed 0.1% of NAV)	Does not exceed 2% of NAV

GLOSSARY

Adjusted EBITDA	Adjusted EBITDA is determined as profit/(loss) for the period excluding finance costs and finance income, income tax (benefit)/expense, depreciation and amortization, foreign exchange (gain)/loss, impairment/(reversal of impairment) of non-current assets, movements in allowances and provisions (except for provision 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
Casing	Steel pipe used to reinforce the walls of a well
CHP	Combined heat and power
dB	Decibel
Drill pipe	Threaded seamless steel butted pipe used for well drilling
EAF	Electric arc furnace
FQM	Fine Quality Mill, a seamless rolling mill
GDR	Global depository receipt
HBI	Hot-briquetted iron
IAS	Internal Audit Service
IFRS	International Financial Reporting Standards
ISO 13679:2002	Oil and gas industry. Standardized procedures to test casing and tubing connections
ISO 14001:2004	Environmental Management System. Requirements and guidelines
LDP	Large diameter pipe
Line pipe	Pipe used in the construction and workover of upstream, transmission, and process pipelines
OCTG	Oil country tubular goods
PQF	Premium Quality Finishing, a seamless rolling mill
RAS	Russian Accounting Standards
SAGD	Steam Assisted Gravity Drainage
Seamless pipe	Pipe manufactured through the insertion of a solid billet in a press or a piercing mill (with subsequent hot or cold working)
TAGMET	PJSC Taganrog Metallurgical Works
Tubing	Plain-end steel pipe or steel pipe with externally upset ends for oil and gas well operation
Welded pipe	Pipes made from metal coil, plate, strip or sheet, rolled and welded, and manufactured on a tube welding mill
y-o-y	Year-on-year change in a variable

CONTACTS

Company Profile

Full name: PAO TMK
Short name: TMK
Registered address: 40 Pokrovka Street, bld. 2A, Moscow, 105062, Russian Federation
Tel.: +7 495 775 7600
Fax: +7 495 775 7601
E-mail: tmk@tmk-group.com

Information subject to disclosure in accordance with Russian laws on the securities market: *www.e-disclosure.ru/portal/company.aspx?id=274*

Investor Information

Irina Yarotskaya
Head of Investor Relations
Tel.: +7 495 775 7600
E-mail: ir@tmk-group.com

Website

Russian version: *www.tmk-group.ru*
English version: *www.tmk-group.com*

Depository Bank

THE BANK OF NEW YORK MELLON
Address: 101 Barclay Street, 22 Floor, 10286 New York
Contact person: Tatyana Vesselovskaya
Tel.: +1 212 815 2867
E-mail: Tatyana.Vesselovskaya@BNYMellon.com

Registrar

JSC R.O.S.T. Registrar
Address: 18 Stromynka Street, bld. 13, Moscow, Russian Federation
License: 10–000–1-00264 of December 12, 2002 (indefinite)
Tel.: +7 495 771 7335
E-mail: rost@rrost.ru

Auditor

LLC Ernst & Young
Address: 77 Sadovnicheskaya Embankment, bld. 1, Moscow, 115035, Russian Federation
Tel.: +7 495 755 9700
E-mail: Moscow@ru.ey.com
Ernst & Young is a member of the Audit Chamber of Russia Self-Regulated Non-Profit Partnership.

PAO TMK

Consolidated Financial Statements

Year ended December 31, 2018

PAO TMK

Consolidated Financial Statements
Year ended December 31, 2018

Contents

Совершенствуя бизнес,
улучшаем мир

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.	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.
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.

Совершенствуя бизнес,
улучшаем мир

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)

	NOTES	Year ended December 31, 2018	Year ended December 31, 2017
Revenue	3	5,098,776	4,393,653
Cost of sales	4	(4,183,177)	(3,521,159)
Gross profit		**915,599**	**872,494**
Selling and distribution expenses	5	(230,780)	(260,595)
Advertising and promotion expenses		(7,156)	(6,881)
General and administrative expenses	6	(250,410)	(231,233)
Research and development expenses	7	(7,257)	(11,465)
Other operating income/(expenses)	8	(22,441)	(33,796)
Operating profit		**397,555**	**328,524**
Impairment of goodwill	17	(16,613)	(21,979)
Impairment of property, plant and equipment	16	-	(1,615)
Reversal of impairment of property, plant and equipment	16	-	16,263
Foreign exchange gain/(loss)		(72,264)	27,515
Finance costs		(241,523)	(281,022)
Finance income		9,464	12,679
Gain/(loss) on derivatives		-	(3,439)
Share of profit/(loss) of associates		606	(9)
Gain/(loss) on disposal of subsidiaries	11	(23,732)	-
Other non-operating income/(expenses)		(8,678)	583
Profit/(loss) before tax		**44,815**	**77,500**
Income tax benefit/(expense)	9	(44,972)	(47,931)
Profit/(loss) for the period		**(157)**	**29,569**
Attributable to:			
Equity holders of the parent entity		2,409	35,548
Non-controlling interests		(2,566)	(5,979)
		(157)	**29,569**
Earnings/(loss) per share attributable to the equity holders of the parent entity, basic and diluted (in US dollars)	10	**0.00**	**0.03**

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income
Year ended December 31, 2018

(All amounts in thousands of US dollars)

	NOTES	Year ended December 31, 2018	2017
Profit/(loss) for the period		**(157)**	**29,569**
Items that may be reclassified subsequently to profit or loss:			
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)	29 (iv)	(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.

The accompanying notes are an integral part of these consolidated financial statements.

PAO TMK

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**

The accompanying notes are an integral part of these consolidated financial statements.

PAO TMK

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**

The accompanying notes are an integral part of these consolidated financial statements.

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)**	**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)**	**234,655**	**17,178**	**1,237,524**	**(959,439)**	**10,965**	**883,160**	**50,079**	**933,239**

The accompanying notes are an integral part of these consolidated financial statements.

PAO TMK

Consolidated Statement of Cash Flows
Year ended December 31, 2018

(All amounts in thousands of US dollars)

	NOTES	Year ended December 31, 2018	Year ended December 31, 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		4,677	10,591
(Gain)/loss on disposal of property, plant and equipment	8	11,736	21,070
Impairment of goodwill	17	16,613	21,979
Impairment of property, plant and equipment	16	-	1,615
Reversal of impairment of property, plant and equipment	16	-	(16,263)
Foreign exchange (gain)/loss		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**
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		80,158	15,346
Interest received		9,018	13,796
Other cash movements		414	500
Net cash flows used in investing activities		**(254,607)**	**(234,779)**

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows
Year ended December 31, 2018 (continued)

(All amounts in thousands of US dollars)

	NOTES	Year ended December 31, 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**

The accompanying notes are an integral part of these consolidated financial statements.

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.

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.

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.

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.

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.

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.

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. Protective rights of other investors, such as those that relate to fundamental changes of 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 re-measured 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:

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.

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.

2) Significant Accounting Policies (continued)

vii) Business Combination and Goodwill (continued)

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 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.

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.

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.

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.

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 pre-tax 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.

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.

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.

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, respectively.

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.

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.

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.

(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	**651,904**	**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**

(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**

(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**

(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 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**

(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

(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 comprehensive 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 December 31,	
	2018	**2017**
Profit/(loss) for the period attributable to the equity holders of the parent entity	2,409	35,548
Weighted average number of ordinary shares outstanding	1,033,044,169	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.

(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 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**

(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
<u>Cost</u>							
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**
<u>Accumulated depreciation and 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**

(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	Construction 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**

(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**
Accumulated amortisation and 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).

(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.

(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).

(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).

(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 31, 2018		December 31, 2017	
	Minimum payments	Present value of payments	Minimum payments	Present value of 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**

(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 countries		TOTAL	
	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:

	Russia		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 %
Turnover	Age-related statistical distribution	Age-related statistical distribution	Age-related statistical distribution	Age-related statistical distribution

(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:

	Volatility range		Russia		Other countries	
			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, 2017
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 %

(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.

(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.

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.

(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.

(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			
	Volatility range		Effect on profit/(loss) before tax		Volatility range		Effect on profit/(loss) before tax	
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

(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 range		Effect on profit/(loss) before tax		Effect on other comprehensive income/(loss)	
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 range		Effect on profit/(loss) before tax		Effect on other comprehensive income/(loss)	
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
Interest-bearing loans and borrowings:				
Principal	889,135	1,938,580	47,790	**2,875,505**
Interest	175,144	225,628	9,253	**410,025**
Finance lease liability	13,880	43,613	47,755	**105,248**
Trade and other payables	656,151	-	-	**656,151**
Other liabilities	86,280	2,644	-	**88,924**
	1,820,590	**2,210,465**	**104,798**	**4,135,853**

(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 31, 2018		December 31, 2017	
	Gross amount	Impairment	Gross amount	Impairment
Current trade and other receivables - not past due	751,701	(7,281)	726,796	(5,539)
Current trade and other receivables - past due:				
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 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.

(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 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.