MOSCOW EXCHANGE

Open Markets

New

OPPORTUNITIES

Annual Report | 2018

Main Events of 2018

EXCHANGE FORUMS

Exchange Forums are held annually across the world's major investment centers, such as London, New York, Shanghai and Moscow.

X5 RETAIL GROUP GDR LISTED ON MOEX

X5 Retail Group's global depositary receipts (GDR) were added to the MOEX Level 1 List.

THE CORPORATE GOVERNANCE IN RUSSIA 2018 CONFERENCE

Delegates discussed Russian and international trends in corporate legislation and regulation, as well as the role of information technologies in improving corporate governance.

FINFAIR FINANCIAL SOLUTIONS FAIR

FINFAIR, a large-scale event across Moscow, was attended by approximately 7,000 people seeking how to preserve and grow their personal savings.

AGREEMENT WITH BANKS TO PROMOTE A MARKETPLACE FOR FINANCIAL PRODUCTS

At the Finopolis innovative financial technologies forum in Sochi, the Exchange signed a memorandum of cooperation with 21 banks to push forward the financial Marketplace project.

FIRST BPIFS LAUNCHED ON MOEX

Units of the first two mutual funds (BPIF) – on the MOEX total return index and shares of the top 100 global technology companies by market capitalization – were placed on MOEX.

ROUNDTABLE WITH THE FEDERAL TREASURY

The Federal Treasury awarded medals to employees of Moscow Exchange for their long-term cooperation and to mark the Treasury's 25th anniversary.

CEREMONY TO AWARD WINNERS OF THE ANNUAL REPORT COMPETITION

The contest promotes transparency and effective disclosure for the benefit of investors and clients. In 2018, 122 companies participated in the competition.

MOSCOW EXCHANGE AT SPIEF

The Exchange was a business program partner of the St. Petersburg International Economic Forum (SPIEF).

RUSSIA-CHINA INVESTMENT CONFERENCE

Held in partnership with Shanghai Stock Exchange in Moscow and St. Petersburg, the conference addressed the outlook for the capital markets of Russia and China.

FX & MM MARKET FORUM

The annual MOEX FX and Money Market Forum took place in Sochi. Market leaders were awarded as part of the event.

MOEX DIRECTORS WON DIRECTOR OF THE YEAR NATIONAL AWARD

Maria Gordon and Bella Zlatkis, members of the Supervisory Board of the Moscow Exchange, were winners of the 13th Director of the Year National Award.

INTERNATIONAL FINANCIAL CONGRESS

The Exchange presented a prototype of the financial products Marketplace in St. Petersburg together with the CBR.

TRADING IN SUNFLOWER SEEDS LAUNCHED

Since 2015, MOEX has promoted regulated commodities market trading in agricultural products. In addition to sunflower seeds, it offers trading in cereals (wheat, barley and corn), grain legumes (soy) and sugar.

AGREEMENT WITH KASE

The strategic partnership agreement with Kazakhstan Stock Exchange (KASE) will provide companies from Russia and Kazakhstan with cost-effective capital raising opportunities and offer investors new investment vehicles.

MOEX RANKED AMONG THE WORLD'S BEST EMPLOYERS

The Exchange was recognized as one of the World's Best Employers for the second year in a row according to Forbes Magazine's top 500 global employers ranking.

MOEX CORPORATE CLUBS

MOEX employees are active participants of eight corporate sport clubs as well as entertainment and intellectual clubs such as the MOEX Smart Club, MOEX Data Science, MOEX Walk, MOEX Kitchen and MOEX Dance.

RING THE BELL FOR GENDER EQUALITY

A ceremony dedicated to gender equality and recognition of the contribution women make to business, politics and the economy was held as part of an initiative supported by 61 securities exchanges worldwide.

MOSCOW EXCHANGE

Annual Report 2018

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About Moscow Exchange

Moscow Exchange Group manages Russia's main trading platform for equities, bonds, derivatives, currencies, money market instruments and commodities.

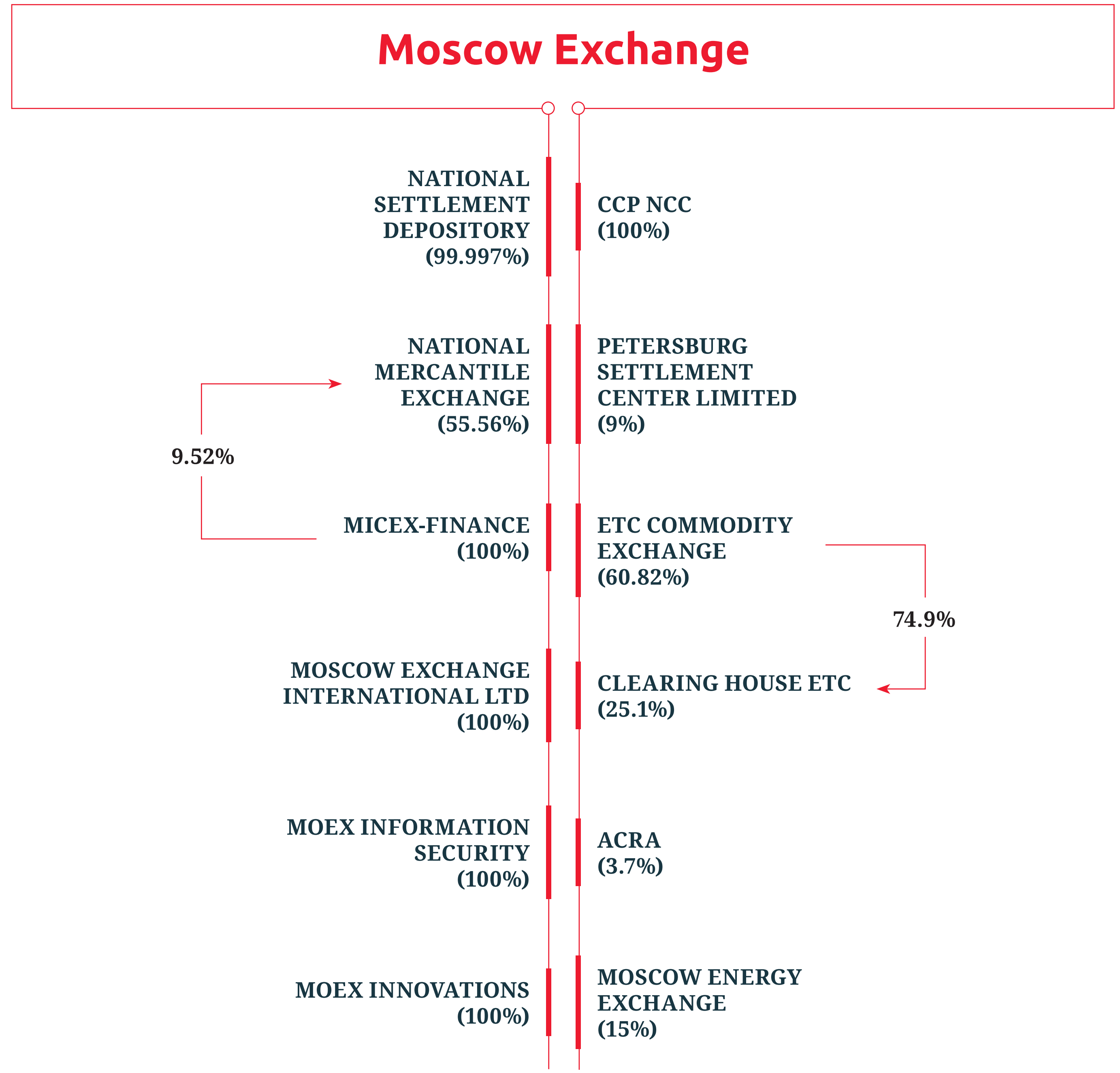
The Group comprises:

- PJSC Moscow Exchange MICEX-RTS, which operates the Equity & Bond Market, FX Market, Money Market, Derivatives Market and Precious Metals Market;
- NCO CJSC National Settlement Depository (NSD), the central securities depository;
- JSC Non-Banking Credit Institution – Central Counterparty National Clearing Center (CCP NCC, or NCC);
- JSC National Mercantile Exchange (NAMEX), which operates the Commodities Market;
- MOEX Innovations, which develops innovative technologies and works with fintech start-ups.

Moscow Exchange holds majority stakes in all key subsidiaries, including a 100% stake in NCC, a 99.997% stake in the NSD and a 65.08% stake in the NAMEX.

Moscow Exchange was formed in December 2011 from a merger of Russia's two main exchange groups: MICEX Group, the oldest domestic exchange and operator of the leading equities, bonds, foreign exchange and money markets in Russia; and RTS Group, which at that time operated Russia's leading derivatives market. This combination created a vertically integrated exchange for trading of all major asset classes. In February 2013, Moscow Exchange completed an initial public offering on its own platform (ticker: MOEX). As of 31 December 2018, the company's market capitalization was RUB 184.30 billion, and the free float was 57.6%.

Moscow Exchange Group



Business model

CLIENTS

26,500
Legal entities

699
Professional brokerage companies

2.0 mln
Retail investors

CLIENT SERVICES

MARKETS

MARKET DATA

EQUITY & BOND MARKET

- Russian and foreign shares
- Sovereign bonds (OFZ)
- Regional and corporate bonds
- Sovereign and corporate Eurobonds
- Depositary receipts
- Shares or investment units of mutual funds
- Mortgage participation certificates
- Exchange-traded funds (ETFs)
- Bank of Russia bonds
- Units of mutual funds and ETFs

Trading Volumes, RUB trln

2014	2015	2016	2017	2018
20.9	20.6	23.9	35.4	40.7

DERIVATIVES MARKET

Futures and options on:
- Indices (MOEX Russia Index, RTS Index, RVI)
- Russian and foreign shares
- OFZ and sovereign Eurobonds
- Currency pairs
- Interest rates
- Oil and sugar
- Metals (gold, silver, platinum, palladium, copper, aluminum, zink, nickel)

Trading Volumes, RUB trln

2014	2015	2016	2017	2018
61.3	93.7	115.3	84.5	89.3

FX MARKET

- USD – RUB
- EUR – RUB
- CNY – RUB
- USD – CNY
- HKD – RUB
- GBP – RUB
- GBP – USD
- CHF – RUB
- USD – CHF
- TRY – RUB
- USD – TRY
- BYN – RUB
- KZT – RUB
- USD – KZT
- EUR – USD
- JPY – RUB

Trading Volumes, RUB trln

2014	2015	2016	2017	2018
228.5	310.8	330.0	347.7	348.4

MONEY MARKET

- Repo with the CCP
- GCC repo
- Inter-dealer repo
- Direct repo with the CBR
- Repo with collateral management system
- Deposit operations with the CCP
- Deposit and credit operations

Trading Volumes, RUB trln

2014	2015	2016	2017	2018
204.4	213.8	333.9	377.1	364.2

COMMODITIES MARKET

- Gold
- Silver
- Wheat
- Barley
- Corn
- Soybean
- Sunflower seeds
- Sugar

Trading Volumes, RUB bln

2014	2015	2016	2017	2018
18.4	116.6	137.4	127.6	152.3

Advantages of cycle-protected business model. Fee & commission income:

	Equity Market	Bond Market
2018	▲20.0%	▲9.6%
2017	▲1.3%	▲33.7%
2016	▼3.2%	▲25.4%

Derivatives Market:

2018	▲15.3%
2017	▼2.0%
2016	▲39.5%

FX Market:

2018	▲4.3%
2017	▼11.9%
2016	▲0.4%

Money Market:

2018	▲13.1%
2017	▲16.8%
2016	▲24.8%

Post-trading Services

- Clearing (NCC)
- Depository and settlement services (NSD)

Depository and settlement services

2018	▲8.3%
2017	▲17.4%
2016	▲2.9%

OPERATING INCOME

23,647.1
RUB mln
Fee & commission income

16,061.0
RUB mln
Interest and other finance income

193.3
RUB mln
Other operating income

39,901.4
RUB mln
Total

Statement from the Chairman of the Supervisory Board

Oleg Viyugin,

Chairman of the Supervisory Board

Today, Moscow Exchange is the main platform for attracting public capital into Russia's economy.

DEAR SHAREHOLDERS,

It is an honor as Chairman of the Supervisory Board to present the key results of Moscow Exchange for 2018.

For Moscow Exchange, 2018 was a year of significant achievements and important decisions. The key goals set by the Supervisory Board – namely growth of fee and commission income, expansion of the retail investor base, development of the corporate bond market and acceleration of project completion – were successfully achieved.

Fee and commission income increased by 11.5% year-on-year, accounting for a record high 59% of total operating income. Time-to-market for new products decreased by a third. The number of retail brokerage accounts increased by 50% in 2018.

Today, Moscow Exchange is the main platform for attracting public capital into the country's economy. Over the course of the year, Russian companies raised more than RUB 2.3 trillion from Russian and international investors via the Exchange, and the Russian government attracted RUB 1 trillion through offerings of government securities.

One of the important areas of focus for the Exchange is to build meaningful dialogue between Russian and foreign investors and market players using major industry conferences. The Exchange is a partner of the St. Petersburg International Economic Forum (SPIEF), the Finopolis forum for financial innovations and the International Financial Congress. It also holds its own investment conferences branded Moscow Exchange Forum in global financial centers Moscow, Shanghai, London and New York. These forums provide the business and investment communities an opportunity to learn about the Russian economy and financial market first-hand.

The Exchange has established active and direct communication with its customers – its market participants. Nineteen user committees and two expert committees have been established and work actively to discuss the latest issues for specific markets or specific groups of clients.

As part of the long-term effort to develop the financial markets of the Eurasian Economic Union, Moscow Exchange forged an agreement with Kazakhstan Stock Exchange (KASE) that contributes to harmonization of the regulatory framework and infrastructure of the Russian and Kazakh financial markets and enables issuers of our countries to effectively attract capital on the open market to finance their businesses and help investors unlock more opportunities.

Environmental, social and governance (ESG) criteria play an increasing role in investment decisions on international markets. Moscow Exchange is contributing to this trend by encouraging issuers to expand disclosure in this area and helping investors better assess companies' corporate social responsibility performance. Notably, Moscow Exchange joined the United Nations' Sustainable Stock Exchanges (SSE) initiative, which brings together more than 80 securities exchanges from around the world. The Exchange also penned a cooperation agreement with the Russian Union of Industrialists and Entrepreneurs (RSPP), to calculate sustainability indices based on ESG reporting. In order to facilitate financing of companies involved in environmental or social projects, a new Sustainability Sector is envisaged to enable precise positioning of issuers and investors with targeted investments.

Moscow Exchange also strives to adhere to best practice with regards to its own corporate governance. Seven of the 12 members of the Supervisory Board are independent directors and the Board audit, strategic planning, nomination and remuneration and technical policy committees are all chaired by independent directors. Active participation of independent directors on the Board helps to ensure transparent and effective corporate governance.

In order to make it more convenient for shareholders to participate in corporate actions, the Exchange implemented remote digital voting during general meetings of shareholders. The new platform created by the National Settlement Depository (NSD) enables more shareholders to participate in corporate governance and has seen strong demand among Russian issuers. For Moscow Exchange, this new technology has become particularly important given that in 2018 the number of individuals holding shares in the Exchange more than doubled to exceed 35,000.

The Supervisory Board remains committed to a policy of distributing the majority of profits to shareholders as dividends. The Exchange's approach to dividends is an important part of the company's investment case. Moscow Exchange is amongst the leaders in Russia and globally in terms of the percentage of net profit returned to shareholders in the form of dividends. The Board has recommended that 89% of 2018 net profit be paid out to shareholders as dividends.

Payment of dividends will be made based on full-year results, in line with the Exchange's dividend policy. The Supervisory Board recommended not to pay an interim dividend for the first half of the year in order to sustain a high capital adequacy level of the National Clearing Center (NCC). In the context of highly volatile financial markets, market participants increased volumes and their share of trading with the central counterparty, thus increasing pressure on its capital.

Taking into account the importance of balanced development of the Exchange as the central element of Russia's financial market infrastructure, the Supervisory Board acts in constant cooperation with the management team and is responsible for strategic oversight of the Exchange and its sustainable growth. We can already state that Moscow Exchange has implemented the key elements of its Strategy 2020 and achieved the financial and operational targets included in that strategy. In view of this, in 2018 the Supervisory Board began development of a new strategy and plans to present it to shareholders, the investor community and analysts in the near future.

This year, we will start delivering on our new 2019-2024 strategy that pursues a significant transformation of the company's business model. We also plan to release an updated dividend policy to ensure predictability and stability of dividend payments to our shareholders.

Finally, I would like to express my gratitude to the shareholders and the customers of Moscow Exchange for their trust and support and effective cooperation as we work together to further develop the Russian financial market. The Supervisory Board will continue its hard work aimed at ensuring operational reliability and adequate return on invested capital for our shareholders.

Statement from the Chief Executive Officer

Alexander Afanasiev,

Chief Executive Officer

DEAR SHAREHOLDERS,

I am pleased to report that in 2018 the Exchange once again delivered record fee and commission income, with trading volumes increasing across virtually all markets. An important factor in this achievement was the unprecedented growth in transactions by retail investors: In 2018, nearly 700 thousand individuals opened new brokerage accounts, and the number of retail investors reached almost 2 million during the year.

This suggests that the efforts of the Exchange and the entire financial community to develop the Russian investor base are delivering results. I am confident the active inflow of individual investors to exchange-based trading will continue thanks to ongoing projects to promote investment and improve financial literacy.

In 2018, the Exchange implemented online customer registration. As a result, individual investors are able to start trading just a few minutes after opening an account via a brokerage or bank web site. A project has been launched to create a marketplace for financial products that will allow individuals to view offers from Russian financial institutions online, and to compare and acquire them remotely. Specialist competitions for private investors (Invest Trial and Best Private Investor) are held annually, while the Moscow Exchange School gave around 40 thousand private investors the knowledge and skills they need for investment portfolio management in 2018. For the second year in a row, the Exchange organized FINFAIR, a large-scale event across Moscow, with around 7 thousand people taking part. In partnership with leading Russian brokerages, we are developing an online platform where any beginner investor can find information on the most popular exchange instruments and get access to the market.

The Exchange's most important mission is to promote Russia's economic growth by providing access to the capital market for both large companies and medium-sized businesses. In 2018, Russian issuers raised more than RUB 2 trillion on our platform to develop their businesses, mainly through bond placements.

> In 2018, nearly 700,000 individuals opened new brokerage accounts, and the number of retail investors reached almost 2 million during the year. This demonstrates that the efforts of the Exchange and the broader financial community to grow the domestic investor base are delivering results.

A new type of membership with direct access to trading has been introduced to allow Russian companies in the real sector of the economy to trade directly on MOEX's FX and Money Markets. This has stimulated the inflow of new liquidity to the market, while the companies themselves have been able to increase efficiency and hedge risks related to financial transactions due to the high degree of transparency of on-exchange trading and the presence of the central counterparty. To date, more than 100 companies have already become trading members. The distance between issuers and corporate investors is fading.

In 2018, the Unified Collateral Pool (UCP) – a large-scale cross-market project – was completed. As a result, trading members can now use a single trading account to manage collateral across all markets, with full netting in settlements and cross-margining between markets. This allows members to substantially reduce costs and free up significant cash. In 2018, 20% of the total volume of on-exchange trading was done using UCP accounts.

Higher levels of trading activity by customers suggest that the Exchange's products and services, as well as innovative solutions in clearing and collateral management, are in demand among trading members. We are successfully differentiating our product line, developing new asset classes and creating and introducing unique technologies for the convenience of our customers.

In 2018, trading was launched in new currency pairs, futures contracts for oil, gold and non-ferrous metals, and an index of international shares. Equity units of the first exchange-based mutual investment funds (EMIF) issued under Russian laws – the Russian equivalent of ETFs – also entered circulation. The grain market is gaining momentum, with trading volumes multiplying and the product range expanding all the time.

The Exchange is extending its services and technologies over the OTC market as well. In 2018, the OTC debt market system was launched, a project for access to global currency liquidity was implemented, and a system of indicative quotations put into operation. These projects will enable the Exchange to increase business volumes and to shift part of the OTC market to the Exchange's post-trade platform.

Despite the geopolitical environment, international investors are not reducing operational volumes on the Russian exchange market. This means that our growth strategy, the quality of our market infrastructure and the potential of the Russian market remain attractive to investors.

Because of the unique nature of its business, the Exchange works closely with universities and seeks to engage with up-and-coming talent: student financial competitions are supported, and funds are allocated for individual university projects. MOEX staff deliver lectures and conduct seminars at leading universities across Russia, and the best students are offered employment following internships with the Exchange.

In 2018, the Exchange was recognized as one of the world's most attractive employers for the second year in a row. The ranking compiled by Forbes includes 500 employers, and the Exchange was ranked #1 among Russian companies.

We believe it is important to help those in need and support educational projects, and we work with established charitable foundations. In 2018, around 30 million rubles were allocated to charity.

The trust of customers, investors and shareholders is an important success factor in achieving the goals we have set ourselves. I would like to thank you for your help, support and active involvement in the development of Russia's exchange infrastructure. The continued high-quality growth of our business gives us every reason to be optimistic regarding the Exchange's prospects in 2019.

We can already state that Moscow Exchange has implemented the key elements of its Strategy 2020 and achieved the financial and operational targets included in that strategy.

Oleg Viyugin,
Chairman
of the Supervisory Board

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Industry Overview

OVERVIEW OF THE EXCHANGE INDUSTRY

Exchanges are organized markets designed to provide centralized facilities for the trading of financial instruments, including stocks and bonds, currencies, commodities and derivatives. Exchanges typically generate core revenue by collecting fees from issuers for the admission to trading of their securities, fees from financial intermediaries who deal directly in the financial instruments traded on the exchange, and the sale of market data, technological solutions and services.

In many countries, depository, clearing and settlement services are provided by separate independent organizations, although, over the last few years, there is a tendency for major exchange operators to adopt a vertical structure and integrate most or all types of operations within a single group of companies. Vertically integrated exchanges receive additional income from settlement and clearing and depository services, as well as net interest income from placement of customer funds held on the group's balance sheet.

The exchange industry is generally supervised by a financial regulatory agency responsible for the regulation of the financial sector of economy. In some cases, exchanges have quasi-governmental authority acting through self-regulatory organizations (SRO).

GLOBAL TRENDS

In 2018, key trends of previous years remained relevant. Primarily, this meant the expansion of the list of financial instruments traded on exchanges through the launch of new instruments on existing trading platforms and through the acquisition by exchanges of already existing trading platforms as additions to their product range.

Another trend in the exchanges sector was the ongoing development of products created based on market data, e.g., indices designed for passive investments and created to meet the needs of funds. This is caused both by growing demand for such products from users and by competition between exchanges in non-trade services. Artificial intelligence/computer-assisted learning and big data are actively used in the development of market data products, both by exchanges acting on their own and through partnerships and mergers/acquisitions.

2018 was marked with a number of projects relating to mutual cooperation between exchanges and the globalization of access to investor markets. In March, Euronext European Exchange completed the purchase of Irish Stock Exchange, increasing Euronext's reach to venues in six European countries. Daily quotas for stock trades increased four-fold under the trade and clearing cooperation process between Shanghai Stock Exchange and Hong Kong Stock Exchange (Shanghai-Hong Kong Stock Connect). The launch of another major Chinese project, the Shanghai-London Stock Link, was postponed to 2019 due to doubts about its necessity. In addition, cooperation projects between the Hong Kong Stock Exchange and New Zealand Stock Exchange, London Stock Exchange and National Stock Exchange of India, Singapore Stock Exchange and National Stock Exchange of India, Shanghai Stock Exchange and Luxembourg Stock Exchange, Toronto Stock Exchange and Shanghai Clearing House/Central Securities Depository and Clearing Organisation of China are now at the stage of negotiations.

Centralized clearing continued to extend to OTC markets (swaps, repo, etc.) and end customers (segregation, portability). The second pan-European stress testing of central counterparties (estimate of risk transfer probability in case of default of two major participants under market shocks and in case of repo unavailability with a central bank) was successfully completed.

In 2018, artificial intelligence and cloud services were major technological priorities in the capital markets. At the same time, the most highly discussed technologies among market participants are still at an early stage. Projects implemented in the area of artificial intelligence include market supervision (JPX, HKEX, Nasdaq), index formation (STOXX) and financial report creation (Nasdaq).

Prices in crypto currency markets dropped while volatility was high, primarily due to the speculative nature of the market and low liquidity. At the same time, the fragmentation of the crypto currency market prevents efficient pricing. The number of bitcoin transactions decreased significantly due to key obstacles, including low speed and high costs. Moreover, the launch of bitcoin futures contributed to the emergence of bearish investors, causing the collapse of the crypto currency. The mass expansion of bitcoin is prevented by distrust (including due to unfavorable pricing), fraud with ICOs, exposure to hacker attacks and the complexity of storage and conversion to fiat money (and back).

MOSCOW EXCHANGE COMPETITORS

The main competitors of MOEX are London Stock Exchange (LSE), the New York Stock Exchange (NYSE), NASDAQ, EBS FX Platform (ICAP Group), the Chicago Mercantile Exchange (CME Group), Deutsche Börse and the Hong Kong Stock Exchange (HKEx).

The LSE is both one of the largest financial global centers and the largest overseas venue for trading in global depositary receipts on shares of Russian companies. When a company chooses to join the LSE, it can list shares on the Main Market or the Alternative Investment Market (AIM). The LSE Group also owns Turquoise, a trading platform competing with Moscow Exchange in Russian equities and index derivatives.

The NYSE (owned by ICE) is one of the largest global stock exchanges and has hosted trading in global depositary receipts of Russian corporate issuers since 1996.

NASDAQ is one of the largest global stock exchanges, and it has traded in global depositary receipts on shares of Russian corporate issuers since 1999.

The CME is one of the largest global derivative exchanges with a wide offering of derivative instruments based on various asset classes, including equity indices, interest rates, FX, commodities and real estate. The CME provides matching, CCP clearing and settlements services for its customers. The CME is the MOEX's primary competitor in USD/RUB futures and options.

The CME also includes **EBS FX Platform** which is the largest global inter-dealer broker and a global leader in FX trading. EBS is MOEX's main competitor in spot trading of the USD/RUB EUR/RUB currency pairs.

Deutsche Börse is one of the largest exchange centers in Europe and worldwide. Deutsche Börse represents a vertically integrated holding comprising the Xetra trading system, the Clearstream settlement depository and the EUREX derivatives exchange. EUREX offers a trading venue for RDX futures and an index for depositary receipts on Russian blue chips calculated by Wiener Boerse.

HKEx is one of the largest Asian exchanges. At the present, shares of one Russian company are traded on HKEx.

MOSCOW EXCHANGE IN THE GLOBAL CONTEXT

№	Exchange	Country	Trading volume, USD bln	Including repo
1	BME	Spain	6,791	√
2	Oslo Borse	Norway	3,885	√
3	**Moscow Exchange**	**Russia**	**3,668**	**√**
4	Johannesburg SE	South African Republic	2,341	√
5	Korea Exchange	Korea	2,193	×
6	Bolsa de Valores de Colombia	Colombia	333	×
7	LSE Group	UK	297	×
8	Shanghai SE	China	295	×
9	Nasdaq OMX	USA	277	√
10	Santiago SE	Chile	249	√

TOP 10 exchanges for bonds[1]

№	Exchange	Country	Trading volume, contracts, mln
1	CME Group	USA	4,764
2	NSE India	India	3,808
3	BM&FBOVESPA	Brazil	2,246
4	ICE&NYSE	USA	2,212
5	Deutsche Boerse	Germany	1,931
6	**Moscow Exchange**	**Russia**	**1,499**
7	CBOE	USA	1.434
8	Korea Exchange	Korea	1,411
9	Nasdaq OMX	USA	1,270
10	Shanghai Fut. Exchange	China	1,175

TOP 10 derivatives exchanges[2]

№	Exchange	Country	Market capitalization, USD bln	Number of issuers	Trading volume, USD bln
1	ICE&NYSE	US	20,679	2,285	19,341
2	Nasdaq OMX	US	11,080	4,077	17,639
3	Shenzhen SE	China	2,405	2,134	7,563
4	Japan Exchange	Japan	5,297	3,657	6,297
5	Shanghai SE	China	3,919	1,450	6,116
6	LSE Group	UK	3,638	2,479	2,548
7	Korea Exchange	Korea	1,414	2,207	2,521
8	HKEx	Hong Kong	3,819	2,315	2,340
9	Euronext	EU	3,730	1,208	2,203
10	Deutsche Boerse	Germany	1,755	514	1,818
…	…	…	…	…	…
24	**Moscow Exchange**	**Russia**	**576**	**225**	**167**

TOP 25 exchanges for equities[3]

№	Exchange	Country	Capitalization, USD bln
1	CME	USA	67.3
2	ICE&NYSE	USA	42.9
3	HKEx	Hong Kong	36.2
4	Deutsche Boerse	Germany	22.8
5	LSE Group	UK	18.0
6	BM&FBovespa	Brazil	14.3
7	Nasdaq OMX	USA	13.4
8	CBOE	USA	11.0
9	Japan Exchange	Japan	8.6
10	ASX	Australia	8.2
11	SGX	Singapore	5.6
12	Euronext	EU	4.0
13	BATS	USA	3.4
14	TMX Group	Canada	2.9
15	**Moscow Exchange**	**Russia**	**2.7**

TOP 15 publicly traded exchanges by market capitalization[4]

Source: Moscow Exchange, WFE (as of 22 January 2019), Bloomberg, LSE Group

1. Bond market data may be incomparable across the marketplaces due to difference in methods. Data for 2018.
2. Data for 2018.
3. The largest equity exchanges by equity trading volume (EOB only). The data does not include data on BATS (as figures on its market cap and number of companies on the market is not available). Data for 2018.
4. Market capitalization of public exchanges as of 31 December 2018 according to Bloomberg.

Mission and Corporate Values

MISSION

Moscow Exchange Group's mission is to promote economic growth in Russia and contribute to the restructuring of the Russian economy by expanding capital-raising opportunities for issuers and facilitating a client-friendly, safe and transparent environment for domestic and international investors. The Group's strategy is focused on achieving this mission. The goals and tasks set out in the strategy support the company's corporate values. In 2015, the company established four main corporate values, the adherence to which will help achieve the Group's goals.

CORPORATE VALUES

WE ARE RESPONSIBLE FOR THE FUTURE OF THE COMPANY

We share a common goal, we are accountable for our results and for the future of the company.

WE STRIVE FOR EXCELLENCE AND ARE OPEN TO CHANGE

We are ready for changes, continually striving for excellence, innovation and adhering to best practices.

WE WORK IN PARTNERSHIP WITH OUR CUSTOMERS

We listen to our clients and stakeholders, we understand their needs and offer them the best solutions.

WE VALUE TRANSPARENCY AND INTEGRITY

We are supportive and have confidence in each other as we pursue our common goal.

Strategic Priorities

IMPLEMENTED IN 2018:

STRATEGIC AREAS	DIVERSIFICATION	OPTIMIZATION	INTEGRATION	MARKET DEVELOPMENT	STANDARDIZATION
IMPLEMENTED INITIATIVES	▸ A Strategic Partnership Agreement with the Kazakhstan Stock Exchange was signed. ▸ The range of FX Market instruments was expanded: · New currency pairs introduced: GBP/USD, TRY/RUB, JPY/RUB, USD/CHF, USD/CNY, USD/KZT and USD/TRY; · For the EUR/USD currency pair, trading began in instruments with SPT (T+2) settlements and TOM/SPT swaps; · For the KZT/RUB currency pair, TOM and SPT instruments, as well as one-day to six-month swaps, were intorduced; · For TRY, trading began in instruments with TOM settlements and one-day overnight swaps. ▸ The trading volume on the grain and sugar market increased seven-fold; trading in sunflower seeds and soya was launched. ▸ New products were launched on the Derivatives Market: deliverable gold futures, USD/INR futures, LME traded non-ferrous metals futures, Light Sweet Crude Oil futures and US500 Index futures. ▸ The OTC system of the Bond Market was launched. ▸ FX Market participants were provided with technological access to global liquidity providers. Participants can now execute OTC trades with EUR/USD and GBP/USD currency pairs. In the future, there are plans to expand the range of available currency instruments.	▸ The formation of mandatory banking and tax NCC reports was restructured; this project won the title of 'Project of the Year: Selection of IT Directors in Russia' in the Best Solution category. ▸ Registration of new Equity and Bond Market and FX Market clients was enabled through an API connection for trading members.	▸ A Russia-China investment conference was held in collaboration with the Shanghai Stock Exchange. ▸ The Unified Collateral Pool project was completed. Participants were given the opportunity to use a single trading account for collateral in all markets and to perform full netting of settlements and cross-margining between markets.	▸ Under the project to provide non-financial companies with direct access to the Money Market and the FX Market, deposits in foreign currency with CCP were launched. As of the end of 2018, 109 companies had received access to the Money Market and 36 companies to the FX Market. ▸ Events for retail investors were held, including Invest Trial and Best Private Investor. In September, the FINFAIR Financial Solutions Fair was held, which was attended by approximately 7,000 people. ▸ A prototype of the financial products marketplace was presented, which enables individuals anywhere in the world to see online offers of Russian financial institutions, to compare them with each other, and to purchase them remotely. MOEX acts as a platform operator and NSD as a registrar of financial transactions, guaranteeing all transactions.	▸ Sponsored Market Access (SMA) technology was launched on the Derivatives Market. ▸ MOEX signed a statement of commitment to the FX Global Code, joining more than 100 other signatories, whose ranks include central banks, international financial institutions and trading platforms. ▸ The NSD passed all stages of the accreditation process for the Global Legal Entity Identifier Foundation (GLEIF) and received the status of local operating unit (LOU). ▸ NSD and Interfax put into operation the Single Disclosure Window, a product intended to give issuers the ability to disclose material facts via news agencies, as well as to provide the NSD's Corporate Actions Center with information on corporate actions.

IMPLEMENTED IN 2015-2018:

STRATEGIC AREAS

IMPLEMENTED INITIATIVES

DIVERSIFICATION

Development of new Money Market instruments:

- Repo with CCP;
- Repo with GCC;
- M-Deposits.

Commodities Market development.

Access to FX Market and Money Market for corporations.

Development of Innovations and Investment Market.

New products and services: exchange-registered bond programs, new currency pairs, new currency pair futures, opening auction, ETFs, deliverable futures, currency fixing.

Strategic Partnership Agreement with KASE.

MARKET DEVELOPMENT

Bondization (adding depth and breadth to the Bond Market):

- Launch of one-day bonds;
- Simplification of bond issue;
- On-exchange book-building;
- New services;
- OTC platform for the debt market.

Retailization:

- Creation of an investment Marketplace;
- Events for retail investors.

INTEGRATION

Trading links with global liquidity providers.

Unified collateral pool.

OPTIMIZATION

New data center.

Batch client registration.

Tariff reform.

New budgeting system.

Front office reorganization.

Integration and optimization of internal IT system architecture.

Development of API interfaces with market participants.

STANDARDIZATION

International clearing members (ICM).

SMA to Equity and Bond Market, FX Market and Derivatives Market.

Listing and corporate governance reform.

E-voting service.

Compliance with IOSCO principles for indices and fixings.

Price center development.

Single disclosure window.

MOEX has implemented all Key Strategic Initiatives slated for 2015-2020. The Group's new strategy is under development.

Risks Associated with Implemention of Strategy

STRATEGIC AREAS	**DIVERSIFICATION**	**OPTIMIZATION**	**DEVELOPMENT OF RISK AND COLLATERAL MANAGEMENT PRODUCTS**	**DEEPENING THE MARKET**	**RUSSIAN INFRASTRUCTURE STANDARDIZATION**
FINANCIAL RISKS / IMPACT ON KPI's	Launch of new products may lead to an increase in assets that are exposed to credit and market risks, which may adversely affect capital adequacy. At the same time, product diversification opens up opportunities for managing interest-rate and liquidity risks, while also mitigating concentration risk.	Optimization of business processes in the field of risk management strengthens risk protection.	Development of risk and collateral management methods and technologies results in stricter requirements for accuracy and reliability of financial risk assessment models, and also improves risk protection.	Deepening of the market through expansion of the investor base may potentially increase the credit risk level, particularly in view of the expected rise in assets exposed to credit risk. At the same time, attracting new investors will enable the Company to better manage liquidity risk and mitigate the concentration risk of exposure to individual counterparties.	Gradual alignment of Russian financial market infrastructure with international standards imposes financial and non-financial risks due to foreign investors being granted access to trading and clearing platforms.
NON-FINANCIAL RISKS / IMPACT ON KPI's	**SWITCHING TO NEW TECHNOLOGY AIMED AT OPTIMIZING EXISTING TECHNOLOGIES AND PROCESSES AND LAUNCHING NEW PRODUCTS MAY LEAD TO:** Higher operational risks due to new products and processes being embedded into the existing infrastructure; increased HR risks associated with staff not fully meeting the requirements of new technologies and new business processes; potential that the current system of controls becomes insufficient, disrupting the operation of Moscow Exchange's key systems and processes; development of new products increases external exposure of the company's IT infrastructure, which increases the risk of interference with the Exchange's systems and creates new challenges related to maintaining the company's cybersecurity.			Attraction of new investors (including retail investors) may lead to higher operational risks due to new products and processes being embedded into the existing infrastructure as well as absence of necessary financial, technical and human resources or partial provision thereof.	There are risks concerning the inability to effect changes to legislation and/or obtain regulatory approval.

Key projects

Key functions of Moscow Exchange are to provide domestic companies with a wide range of opportunities to raise funds and to foster a reliable and transparent investment environment for Russian and overseas investors. To this end, the Exchange constantly works to improve technologies, develop new products and services, expand the range of instruments, attract new categories of participants to the on-exchange market and open up new markets.

Over the past 25 years, the Exchange has done a great deal to create efficient and liquid trading markets where professional market participants can both execute their own transactions with a wide range of financial instruments and act on behalf of various categories of clients. At the same time, the development of technologies and changes to market structure and regulation have created opportunities to extend the Exchange's services to OTC transactions and new categories of participants. As a result, active development of OTC platforms and direct access to the on-exchange market for new categories of clients were key trends in 2018.

Attracting new categories of participants

106
companies
the number of participants in the deposit market with the CCP tripled

19.45
RUB trln
total trading volume

The technology facilitating client access to trading on Moscow Exchange was launched in 2012, when brokerage companies, along with banks, came to the FX Market as participants bringing end clients with them, namely Russian individuals and legal entities, as well as non-residents. Over the previous 20 years, the Exchange's FX Market had remained an exclusively interbank market, and all trading members were credit institutions.

In 2017, the Exchange provided direct access to the FX and Money Markets for Russian legal entities that are neither credit institutions nor professional securities market participants. The rise of this new category of participants is in line with global trends and contributes to liquidity growth. Companies themselves increased the efficiency of operations due to the high degree of information transparency of exchange trading. They also benefitted from the ability to execute transactions at the best price and to deposit cash with the CCP at market repo rates. The presence of the Central Counterparty, NCC, guarantees the fulfillment of obligations in relation to all bona fide participants, and eliminates the need to assess risks and set limits on each other.

In 2018, 18 major Russian companies from different industries were admitted to trading on the FX Market, bring the total number of such corporate participants to 35. Total trading volumes by corporates doubled versus 2017 to RUB 538 bln. In 2018, the number of participants in the deposit market with the CCP tripled, reaching 106 companies, including manufacturing companies, banks, insurance and asset management companies, and international financial organizations. In 2018, their total trading volume increased 7.7 times amounting up RUB to 19.45 trln.

Development of OTC services

14
bidders
joined the Indicative Quote System at the end of 2018

543
RUB mln
Total volumes

OTC SYSTEM OF THE FIXED INCOME MARKET

In 2018, an important Bond Market project was launched, the OTC system of the fixed income market that offers participants a full-cycle product: from searching for counterparties and negotiating to conducting a transaction on the selected platform, whether on-exchange or over-the-counter.

The OTC system solves several problems at once: offering participants a number of electronic pre- and post-trade services that are not available in the organized trading; access to end investors; and significant broadening of the range of instruments, including in the OTC segment. The introduction of the new product will allow the Exchange to expand its fixed income business and shift a portion of the OTC market to the Group's electronic services.

ACCESS TO GLOBAL FX LIQUIDITY

In mid-December 2018, the Exchange launched a project to facilitate access to global FX liquidity. The Exchange's clients are now able to execute OTC trades with the EUR/USD and GBP/USD currency pairs, using the Exchange's infrastructure and interfaces of the FX Market on quotes of world currencies from the major international banks that act as liquidity providers.

Clearing and settlement are carried out by the NCC acting as the Central Counterparty, which allows participants to take advantage of the benefits and services of a single collateral pool, including cross-margining with all Moscow Exchange markets and unified collateral requirements.

At the end of 2018, two liquidity providers transmitted quotes and seven clearing participants joined the service. Among them, five participants executed their first transactions.

INDICATIVE QUOTE SYSTEM

In 2018, a new service, the Indicative Quote System (IQS), the OTC platform of the Derivatives Market, became available to trading members and their clients on the Exchange's Derivatives Market. The purpose of creating the Indicative Quote System was to stimulate trading in low-liquidity futures and options and to enable Exchange clients to use these instruments in their trading strategies and for risk hedging. Thanks to this service, participants who are liquidity providers in the first instance were able to reduce costs when trading on the Derivatives Market through to the absence of blocking margin requirement when applying. In addition, the risk of conducting an unwanted transaction is reduced, since the passive party has the opportunity not to confirm the completion of the trade.

At the end of 2018, 14 bidders, with trading volume totaling RUB 543 mln, joined the Indicative Quote System.

Exchange products for retail investors

1.96
mln
The number of unique individual clients

325
RUB bln
Retail investments in bonds

The Exchange offers a wide range of opportunities for retail investors to trade on financial markets. Currently, individuals can trade equities, government and corporate bonds, Eurobonds, ETFs, currency pairs, derivatives and precious metals.

The Exchange holds events, workshops and contests, and runs extensive financial education projects to promote on-exchange investment and attract retail investors to trade on the Exchange.

In 2018, the Exchange launched a project to create an online marketplace for financial products to provide individuals with access to offerings from Russian financial institutions, tools to compare them and the means to purchase them remotely. A client's My Account page will provide information on all products purchased via the marketplace and facilitate remote product management. In the first phase of the project, clients will be given access to bank deposits. Lending, insurance and investment products will be added later on.

In 2017, MOEX launched an online platform to promote exchange-based trading instruments. The Internet portal place.moex.com gives novice investors information about the most popular trading tools, as well as access to the on-exchange market by opening a brokerage account with the project's partner companies. In 2018, new services introduced on the portal included personal investor accounts and a Virtual Portfolio service to buy exchange-traded instruments using virtual money, create a portfolio and track returns online.

Since 2016, MOEX has developed the Manager Ranking information resource, which allows retail investors to compare the performance of asset management companies on the Russian securities market. As part of the project, MOEX calculates the return on investment of asset management companies and other performance indicators based on the on-exchange trades they execute. As of the end of 2018, the Portfolio Managers Ranking project included 18 strategies implemented by professional market participants. The strategies are ranked by risk profile and expected return. In 2018, four asset management companies joined the project, bringing the total number to 12, while assets under management increased to RUB 4.7 bln. At the end of 2018, the project was transformed into a marketplace of mutual funds and asset management specialists. In the near future, information about more than 50 mutual funds will be published on the website.

Since 2017, FINFAIR, a financial solutions fair, has been held in Moscow to raise public awareness about the how to preserve personal savings and promote informed planning of family budgets. In 2018, over 100 presentations, master classes and discussions were held with participation from heads of regulatory bodies, senior managers of major companies, banks and brokerage companies, and professors of economic universities. About 7,000 people took part.

Since 2014, the Moscow Exchange School project has held webinars and face-to-face seminars and given individual investors the knowledge and skills they need to manage their personal finances independently. In 2018, about 900 training webinars were held. More than 37,000 private investors have gained knowledge and skills in managing investment portfolios on various MOEX markets.

To popularize investments on the on-exchange market, MOEX annually organizes contests to demonstrate the possibilities that financial instruments offer. Held since 2015, the Invest Trial contest allows participants to gain investment experience in demo mode (without risk to their own funds) and win real cash prizes. In 2018, the contest attracted more than 21,000 novice investors. There were more than 1,100 winners, and participants opened more than 4,000 brokerage accounts. The prize fund amounted to RUB 8 mln.

Since 2003, the Best Private Investor contest has been held for more experienced investors. The main purpose is to demonstrate the possibilities and profitability of trading on MOEX. In 2018, almost 6,000 investors participated, with total trade turnover amounting to more than RUB 1.4 trln. The total starting portfolio of participants exceeded RUB 6.6 bln, and the total prize fund amounted to RUB 9 mln.

Increased interest in investment services among Russian retail investors is being driven by tax incentives, as well as the development of digital technologies and remote identification services that allow individuals to open a brokerage account from home. The online client registration technology implemented by MOEX allows users to start trading in just a few minutes after opening an account on the broker's or bank's website.

Thanks to these efforts, 2018 saw an active inflow of retail investors to the Exchange: at the end of 2018, the number of unique individual clients stood at just shy of 2 mln (1.96 mln), an increase of 50% from the end of 2017. The number of active accounts of individuals who conducted at least one transaction in the past year increased by 63% in 2018, to 609,000.

In 2018, individuals accounted for 35% of share trading volumes, 7% of bond market trading volumes, and 43% of trading on the derivatives market. Retail investors are also active in buying bond placements. In 2018, they repurchased new corporate bonds totaling RUB 251 bln, almost four times more than in 2017 (16.9% of total placement volume), and government bonds totaling RUB 74.2 bln (7.2% of the total).

2018 was a strong year for fee and commission income, which increased by 11.5%. Fee and commission growth accelerated year-on-year and outpaced the rolling four-year CAGR. The fastest-growing business segments were Equities (+20.0%), Derivatives (+15.3%) and the Money Market (13.1%). Fees and commissions accounted for 59.3% of operating income in 2018.

Maxim Lapin,
Chief Financial Officer

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Financial results review

In 2018, the Exchange reported record fee and commission income. Fees and commissions accounted for 59% of total operating income, the highest share ever in the Exchange's history as a public company. Net interest and other finance income[1] slightly decreased on the back of lower realized gains/losses from investment portfolio revaluation. As a result, MOEX's operating income rose 3.5% YoY.

The Exchange maintained its focus on cost control. Operating expenses (net of other operating expenses) increased 7.6% YoY, primarily on the back of rising amortization and amortization expenses. In early 2018, the company revised amortization schedules and reduced useful lives of certain intangible assets. As a result, the amortization expense for the year increased. Excluding this impact, operating expenses added just 5.1% YoY.

Changes in the cost[2] and revenue structure led to a further reduction in the cost-to-income ratio, underscoring that greater operating efficiency was the key driver of higher fee income, not that fee growth outstripped cost growth.

EBITDA grew by 2.6% YoY. The EBITDA margin remained strong at 72.1%. Net profit declined 2.6% YoY.

Financial highlights, RUB mln

	2014	2015	2016	2017	2018	Change 2018/2017
Operating expenses	**30,394.0**	**45,990.0**	**43,567.2**	**38,538.9**	**39,901.4**	**3.5%**
Fee and commission income	15,586.0	17,784.0	19,797.6	21,207.6	**23,647.1**	11.5%
Net interest and other finance income	14,279.4	28,084.9	23,695.0	17,285.3	**16,061.0**	-7.1%
Other operating income	528.7	121.1	74.6	46.0	**193.3**	320.2%
Operating Expenses (excl. other operating expenses)	-10,373.3	-11,271.9	-12,259.4	-13,431.8	**-14,453.7**	7.6%
Operating Profit (before other operating expenses)	**20,020.8**	**34,718.1**	**31,307.8**	**25,107.1**	**25,447.7**	**1.4%**
EBITDA (before other operating expenses)	21,616.1	36,519.0	33,602.1	28,059.6	**28,787.2**	2.6%
EBITDA margin, %	*71.1*	*79.4*	*77.1*	*72.8*	***72.1***	*-0.7 p.p.*
Other operating expenses	-	-	-	-	**-1.075.2**	-
Net Profit	**15,993.2**	**27,852.1**	**25,182.6**	**20,255.2**	**19,720.3**	**-2.6%**
Basic earnings per share, RUB	7.21	12.51	11.22	9.02	**8.76**	-2.8%

1. Calculated as the sum of interest and other finance income, gains/losses on FVTOCI, gains/losses on AFS and foreign exchange gains less losses less interest expense.
2. Operating expenses (net of other operating expenses) excluding amortization and depreciation expenses.

Fee and Commission Income

In 2018, all major fee and commission income lines grew. Fee and commission income remained well diversified; the Money Market, MOEX's largest market business, accounted for 27% of total fee and commission income. The growth leaders were the Equities, Derivatives and Money Markets.

Fee and commission income structure, RUB mln

	2017	2018	Change 2018/2017	Change 2018/2017
Money Market	5,650.0	6,389.8	739.8	13.1%
Depository and Settlement Services	4,183.9	4,530.7	346.8	8.3%
FX Market	3,827.0	3,990.0	163.0	4.3%
Derivatives Market	2,012.0	2,318.9	306.9	15.3%
IT services, listing fees and other fees and commissions[1]	1,942.0	2,312.0	370.0	19.1%
Bond Market	1,982.5	2,173.5	191.0	9.6%
Equity Market	1,610.2	1,932.2	322.0	20.0%

MONEY MARKET

Fees and commissions from the Money Market grew 13.1% YoY to a record RUB 6.39 bln. Trading volumes declined 3.4% YoY to RUB 364.22 trln due to lower volumes of repo with the CBR (-97.7% YoY) and interdealer repo (-31.4% YoY). The decrease was partially offset by GCC repo, where volumes were up 7.6x YoY. The shift towards value-added GCC repo along with extension of repo terms supported the effective fee on the Money Market.

DEPOSITORY AND SETTLEMENT SERVICES

Fees totaled RUB 4.53 bln, up 8.3% YoY. The growth was driven by higher depository income (as average assets on deposits were up 16.4% YoY to RUB 42.8 trln). At the same time, volumes of repo transactions with collateral management through NSD decreased by 58.8% YoY, which had an adverse effect on total income of the depository.

FX MARKET

Fee & commission income from the FX Market increased 4.3% YoY to RUB 3.99 bln. Trading volumes remained nearly flat (+0.2% YoY) at RUB 348.37 trln. Spot trading volumes increased 10.6% YoY, while swap and forward trading volumes were down 2.8% YoY. A shift in demand to higher fee spot instruments supported the effective rate.

DERIVATIVES MARKET

Derivatives trading volumes increased by 5.6% YoY, due to double-digit growth of trading volumes of commodity and single-stock contracts (+29.0% YoY and +30.6% YoY, respectively). Trading volumes of index contracts grew by 2.9% YoY. A shift of interest towards commodity and single-stock contracts helped achieve an increase of fee and commission income, outpacing trading volumes: fees and commissions grew 15.3% YoY to RUB 2.32 bln.

BOND MARKET

Fee income from the Bond Market increased 9.6% YoY to RUB 2.17 bln. Trading volumes of bonds (excluding overnight bonds) grew by 28.1% YoY to RUB 21.22 trln. The effective fee in the Bond Market declined due to the shorter average maturity of bonds placed. In particular, this was due to a higher proportion of CBR bonds in the primary market.

EQUITY MARKET

Fee and commission income from the Equity Market grew by 20.0% YoY to RUB 1.93 bln. Trading volumes in the market in 2018 totaled RUB 10.83 trln versus RUB 9.19 trln in 2017. The total market capitalization of companies listed on MOEX was RUB 40.2 trln (USD 600.2 bln) as of 31 December 2018.

1. Other fees and commissions include sale of software and technical services, information services and other fee income.

IT SERVICES, LISTING AND OTHER FEES AND COMMISSIONS

Fees from IT services, listing and other services were RUB 2.31 bln, up 19.1% YoY. Sales of information services contributed RUB 792.4 mln, up 2.9% YoY. Income from sales of software and technical services grew by 10.3% YoY to RUB 695.9 mln. Listing and other service fees from the Equity and Bond Market decreased by 13.8% YoY. Other fee and commission income increased twofold to RUB 485.4 mln, thanks to income from the Commodities Market.

Net interest and other finance income

Net interest and other finance income declined 7.1% YoY and amounted to RUB 16.06 bln. The decrease was mainly caused by a smaller effect from revaluation of the investment portfolio[1]. Excluding that impact, net interest and other finance income was down just 2.9% YoY. The average size of the investment portfolio for 2018 was RUB 670.06 bln (2017: RUB 748.59 bln).

Other operating income

Other operating income in 2018 was RUB 193.3 mln, of which RUB 117.5 mln was the result of an adjustment to a provision for expected credit losses on the securities portfolio. The provision was made in early 2018 following adoption of the IFRS 9 standard.

Cash and cash equivalents

The cash position[2] at year-end 2018 amounted to RUB 89.73 bln. The company had no debt as of 31 December 2018.

Operating expenses[3]

Operating expenses grew by 7.6% YoY in 2018 to RUB 14.45 bln. Personnel expenses increased by 5.8% YoY to RUB 6.51 bln. General and administrative expenses grew by 9.1% YoY to RUB 7.94 bln on the back of higher amortization expenses (up 34.1% YoY) and spending on services of grain elevators intended to grow the Grain Market and included into professional services costs (+34.3% YoY). Excluding those two expense items, general and administrative expenses grew just 0.2% YoY.

Other operating expenses

In 2018, the Exchange recognized other operating expenses of RUB 1.08 bln. They consisted of two components: 1) a provision of RUB 856.4 mln made in Q1 2018 due to an unprecedented operating error that occurred during the default management process with respect to a clearing member. The provision was written off throughout 2018, and 2) a RUB 218.3 mln (25% of the claim amount) provision with respect of a claim against the Exchange. The latter provision was made in Q2 2018 to cover 100% of the amount claimed by the plaintiff and then 75% reversed in Q4 2018 following a judgment in the Exchange's favor in the cassation court.

Capital expenditures

Capex amounted to RUB 2.01 bln. The majority of capex went toward software development and enhancement, as well as purchases of equipment and software.

1. Net gain/(loss) on financial assets available-for-sale.
2. Cash position is calculated as the sum of cash and cash equivalents, financial assets at fair value through profit and loss, due from financial institutions, investments available for sale less balances of market participants, distributions payable to holders of securities and margin account.
3. Net of other operating expenses.

Expense structure, RUB million

	2017	2018	Change 2018/2017	Change 2018/2017
General and administrative expenses	**7,278.9**	**7,941.4**	**662.5**	**9.1%**
Depreciation of property and equipment	1,464.3	1,343.9	-120.4	-8.2%
Amortization of intangible assets	1,488.2	1,995.6	507.4	34.1%
Equipment and intangible assets maintenance	1,120.1	1,205.5	85.4	7.6%
Professional services	426.3	572.6	146.3	34.3%
Taxes (other than income tax)	540.0	554.3	14.3	2.6%
Market maker fees	522.2	517.0	-5.2	-1.0%
Other administrative and other expenses	308.5	257.2	-51.3	-16.6%
Registrar and foreign depository services	292.2	292.3	0.1	0.0%
Rent and office maintenance	475.3	484.6	9.3	2.0%
Communication services	123.3	104.7	-18.6	-15.1%
Information services	187.7	237.6	49.9	26.6%
Advertising costs	330.8	376.1	45.3	13.7%
Personnel expenses	**6,152.9**	**6,512.3**	**359.4**	**5.8%**
Employees benefits except for share-based payments	4,932.7	5,250.8	318.1	6.4%
Payroll related taxes	952.3	975.7	23.4	2.5%
Share-based payment expense on equity settled instruments	242.2	273.3	31.1	12.8%
Share-based payment expense on cash settled instruments	25.7	12.5	-13.2	-51.4%

Moscow Exchange's markets

In 2018, the implementation of a large-scale cross-market Unified Collateral Pool project, aimed at creating a single clearing procedure across the Group, was completed. In particular, market participants were given the opportunity of cross-margining (the ability to transfer margin between different positions in contracts with the same underlying asset) between markets, allowing for more effective use of collateral and full netting of settlements between the Equity & Bond Market, FX Market and Derivatives Market. As part of this project, the risk management system of the Derivatives Market was improved in terms of calculating risk parameters and margining calendar spreads. Advantages of the unified collateral pool are:

- single trade account for the participant's collateral across all MOEX markets;
- unification of assets accepted as collateral;
- reduced volumes of cash in settlements as a result of netting of liabilities and claims across all markets with the Central Counterparty (CCP);
- cross-margining to help reduce collateral requirements and costs for participants.

The project enables market participants to fully benefit from MOEX's unique position and from the ability to use a single platform to trade in a variety of asset classes. Participants are also able to enjoy a major reduction in their costs and release significant funds.

At the end of 2018, 20% of total volumes of stock trading was performed using the single pool accounts; 41 companies began using the new service.

EQUITY AND BOND MARKET

The Equity and Bond Market is a liquidity center for operations with Russian securities and the main platform for Russian companies to raise capital. MOEX is the venue for placements and trading of shares and depositary receipts; government, regional and corporate bonds; bonds of the Bank of Russia; sovereign and corporate Eurobonds; shares of mutual funds (PIF) and exchange-traded fund shares of mutual funds (BPIF); mortgage participation certificates; and shares of exchange-traded funds (ETF).

Equity Market

	2016	2017	2018	Change 2018/2017
Equity Market trading volumes, RUB billion	**9,277**	**9,185**	**10,830**	**17.9%**

Bond Market

	2016	2017	2018	Change 2018/2017
Bond Market trading volumes, RUB billion	**14,616**	**26,228**	**29,841**	**13.8%**
Secondary trading, RUB billion	**9,589**	**10,979**	**10,219**	**-6.9%**
Sovereign bonds (OFZ)	4,961	6,470	6,538	1.1%
Bank of Russia bonds (OBR)		101	537	434.2%
Municipal bonds	398	337	274	-18.6%
Corporate bonds	4,135	3,928	2,767	-29.6%
Other	95	143	102	-28.7%
Primary market and bond redemptions, RUB billion	**5,027**	**15,250**	**19,622**	**28.7%**
Sovereign bonds (OFZ)	1,123	1,715	1,034	-39.7%
Bank of Russia bonds (OBR)		502	7,017	1298.1%
Municipal bonds	159	214	86	-59.8%
Corporate bonds	2,342	3,148	2,850	-9.5%
One-day bonds	1,401	9,665	8,625	-10.8%
Other	2	6	10	68.3%

	December 2016	December 2017	December 2018	Change 2018/2017
Number of private investors with brokerage accounts	**1,102,966**	**1,310,296**	**1,955,118**	**49.2%**

Trading Results

In 2018, total trading volumes on the Equity and Bond Market increased by 14.8% to RUB 40.7 trln. Trading volumes on the Equities Market increased by 17.9% to RUB to 10.8 trln, surpassing the RUB 10 trln mark for the first time since 2014. On the Bond Market, total trading volumes amounted to RUB 29.84 trln, a 13.8% decrease versus 2017.

In 2018, the volume of bond placements increased by 28.7% to RUB 19.6 trln. Of this, RUB 8.1 trln was accounted for by quasi-sovereign bonds and bonds of the Bank of Russia, RUB 2.85 trln by corporate bonds, and RUB 8.6 trln by one-day corporate bonds.

In 2018, 38 new corporate bond issuers entered the Equity and Bond Market, placing 50 issues for a total of RUB 62 bln.

Attracting Retail Investors

2018 saw an active inflow of retail investors to the Equity and Bond Market. At the end of 2018, the number of unique individual clients stood at just shy of 2 mln, an increase of 50% from the end of 2017.

Increased interest in investment services among Russian retail investors is being driven by tax incentives, as well as the development of digital technologies and remote identification services that allow individuals to open a brokerage account from home. The online client registration technology implemented by MOEX allows users to start trading in just a few minutes after opening an account on the broker's or bank's website.

Individual investment accounts (IIA), which offer tax incentives designed to stimulate investments in the Russian Equity and Bond market, constitute a significant share of accounts held by individuals at MOEX. At the end of 2018, MOEX registered almost 600,000 IIAs, with more than 55% being opened by new private investors who had never previously had brokerage accounts.

Expanding the Range of Instruments

Development of the product line and the launch of specialist instruments aimed at retail investors supported an active inflow of private investors to the Russian on-exchange market.

In 2018, infrastructure and regulatory framework were put in place for the launch of trading in exchange-traded investment funds (BPIF) – the equivalent of ETFs under Russian law. The market maker control system was also significantly improved to meet regulatory requirements. Exchange-traded funds are designed primarily for individual investors; they greatly facilitate portfolio investment by strictly following the structure of stock indices, allowing investors to purchase the whole market or individual sectors with “just one click” and at minimal cost. As of the end of 2018, total trading volumes of exchange-traded funds (BPIFs and ETFs) increased 2.5 times and amounted to RUB 23.5 bln.

In 2018, shares of the first two mutual funds (BPIF) – on the MOEX total return index and shares of global technology companies, respectively – were placed on MOEX. The range of foreign exchange-traded funds was also expanded, with trading launched in ETF shares on the RTS index, Russian Eurobonds, and the Kazakhstan companies share index of the Kazakhstan Stock Exchange (KASE). At the end of 2018, shares of 15 ETFs and fund shares of two exchange-traded funds issued under Russian law were traded on MOEX. The underlying assets of the funds are stock indices, shares, bonds and commodities.

Technological Development

MOEX is constantly working to improve technologies and provide modern and convenient services to its participants and clients. In 2018, online registration of clients on the Equity and Bond Market was introduced, giving private investors access to trading almost instantly after opening a brokerage account. In April 2018, trading members were provided with an online registration service through file exchange within the Electronic Document Interchange system (EDI system); in October, a project for registering new clients via API connection of trading members to MOEX systems was implemented.

In 2018, the Sponsored Market Access (SMA) service, available since the end of 2017, was improved. SMA enables clients of trading members to participate directly in trading on MOEX's Equity and Bond Market. As part of the improved SMA functionality, clients are given the ability to act as market makers. At the end of 2018, more than 50 clients from 10 brokerage companies used this service.

The methodology for determining tick sizes for shares, depositary receipts and exchange funds was developed and implemented in line with global best practice. The new methodology ensures compatibility of European and Russian regulations on tick sizes, reduces possible regulatory barriers for European companies when working in the Russian market due to the introduction of MiFID II requirements, and draws on best international practices to improve the quality of the stock market.

In the debt market, income transfer in Eurobond sales from sellers to the buyers after the date of ownership listing was implemented; and admission of bonds for redemption on the offer dates was automated, which accelerated admission of securities for redemption.

In addition, labeling of bonds with inaccurate parameters was launched to give investors better information about and draw attention to the parameters of such securities.

To increase transparency of bond data, MOEX continued to develop the debt portal on its website. New pages were added with interactive content including a list of suspensions on bond trading and key facts, with the ability to search for bonds and select time intervals, and a search widget with advanced filtering and display of bond information. It also became possible to build an interactive curve of zero-coupon yield, which is a key indicator for the bond market; and a new calculator was added to identify yield value by duration.

Liquidity

MOEX actively works with the professional community under a number of market-maker programs to boost liquidity in the Equity and Bond Market. At the end of 2018, more than 100 contracts with 35 market makers were in force on the Bond Market with about 60 contracts concluded in 2018. At the end of 2018, 75 contracts with 26 market makers were in force on the Equities Market. During the year, 39 new market-maker contracts were signed, and some of them began to be executed in 2019.

Due to increasing requirements for the liquidity of shares in the first and second level quotation lists effective 1 January 2019, MOEX worked to expand the number of issuers that attract market makers to maintain quotations of securities. As a result, 13 new market-maker agreements on shares were concluded in January 2019.

Attracting SMEs

In 2018, 24 new issuers of small-cap bonds with issue sizes of less than RUB 500 mln – representing industries including IT, finance (leasing companies, micro-finance institutions, pawnshops) and construction and development – made their debuts on MOEX. The number of regional issuers with high growth potential increased (from seven to 22).

To encourage SMEs to tap the public markets, the Growth Sector has been functioning since 2017 on MOEX. The Growth Sector is intended to attract additional funds to high potential companies in the real sector of the economy, to expand the range of traded instruments on the financial market and to diversify investments.

MOEX’s regional subsidiaries in St. Petersburg, Rostov-on-Don, Nizhny Novgorod, Novosibirsk, Ekaterinburg and Samara work with prospective issuers and investors. In 2018, 36 regional companies were given direct access to the MOEX FX and Money Markets and 18 regional issuers placed bonds.

Information cooperation agreements were signed with financial market participants and noncommercial organisations from Samara, Saratov and Ulyanovsk regions and Tatarstan, as well as with the Novosibirsk-based Interregional Association of Enterprise Leaders, to help businesses enter the debt market.

The agreements aim to support our joint efforts to inform potential issuers and investors about capital- raising opportunities including borrowing through corporate bond issuance, as well as to arrange forums, workshops and thematic events to highlight and promote the financial market.

The Growth Sector is supported by the SME Corporation, Industry Development Fund (IDF), Russian Direct Investment Fund (RDIF), Russian Export Centre (REC), the Ministry of Economic Development and the Ministry of Industry and Trade. The main partner in this project is the Bank of Russia. The requirements relating to free float were relaxed for the Sector's issuers: for the second level of listing, RUB 500 mln instead of RUB 1 bln for ordinary shares, and RUB 250 mln instead of RUB 500 mln for preferred shares. At the end of 2018, 15 securities – three stocks and 12 bonds – were traded in the Growth Sector. Total securities trading volumes amounted to RUB 11.57 bln.

Development of the infrastructure of the Growth Sector, primarily in terms of support tools, continued throughout 2018. In April, legislative changes came into force giving bond issuers in the Growth Sector the right to receive subsidies from the government for paying coupon income (up to 70% of the basic indicator) from the Ministry of Industry and Trade.

Together with the SME Corporation, draft rules were developed to establish the procedure for granting guarantees by the Corporation for bond issues by SMEs, which will help reduce the rate on bonds placed and improve their credit quality from the point of view of potential investors.

Implementation of the national SME project began. One of the most important goals of the project, which is planned to run through 2024, is to expand access of SMEs to financial resources, including by encouraging SMEs to enter the on-exchange market. The project includes measures to support Growth Sector issuers including:

- subsidizing the coupon rate on bonds;
- subsidizing the costs of companies' entry to the Equity and Bond Market;
- participation of development institutions in facilitating SMEs' access to the Equity and Bond Market, including the provision of anchor investments and guarantees;
- providing tax incentives to investors;
- involvement of regional infrastructure in the process of searching for companies to enter the Equity and Bond Market and informing potential issuers.

In the future, it is planned to expand the range of support tools for issuers of bonds of the Growth Sector.

In 2018, bonds of three SMEs totaling RUB 730 mln were placed in the Growth Sector; and exchange-registered bonds of a number of issuers were traded. For example, an SME bank's pilot trade involving securitization of a RUB 7 bln portfolio of loans granted to SMEs was executed.

The Innovation and Investment Market (IIM) has successfully operated on MOEX since 2009. The IIM was created in conjunction with RUSNANO to promote investment in the innovation sector of the Russian economy. One of the support measures for the sector is tax incentives for investors: investment income from securities of issuers with a market capitalization of up to RUB 10 bln (RUB 25 bln from 1 January 2019) is not taxable, provided that the investor holds them for at least one year.

In 2018, total securities trading volumes in the IIM Sector increased by 90% YoY to RUB 48.2 bln. At the end of 2018, 24 securities were traded in the Sector. In particular, RUSNANO placed a total of RUB 10 bln worth of bonds. At the end of 2018, the capitalization of the Sector stood at RUB 379.2 bln.

To support growing technology companies, MOEX and the Ministry of Economic Development held a competition in 2018 with 14 innovative companies being selected for subsequent public market entry in the IIM Sector. The companies may receive advisory support, including access to pre-IPO financing from funds, and access to a pool of "anchor" investors. They are also provided with information support, including support in interaction with public authorities and development institutions.

Listing of Securities

MOEX is constantly working to increase the quality of securities included in its quotation lists by improving issuing procedures and encouraging issuers to follow best practices of corporate governance. This work is aimed at increasing the transparency and attractiveness of the Russian Equity and Bond Market and protecting the interests of private and institutional investors.

In 2018, a new version of the listing rules came into force that introduces additional requirements for securities and issuers whose shares are included in MOEX's quotation lists. In particular, it establishes requirements for information disclosure, including five years of dividend payments, dividend policy and contact information for investors. In addition, MOEX developed recommendations on disclosure of the annual report and IFRS statements, material facts, and the investor's schedule of planned events. When holding General Meetings of Shareholders, MOEX recommends that issuers use electronic voting, to broadcast the General Meeting of Shareholders on the website, and to give shareholders the opportunity to send questions on the agenda in advance.

To improve corporate governance at public companies, MOEX updated methodological recommendations for assessing the compliance of Directors with independence criteria and for recognizing Directors as independent despite not meeting all of the formal requirements. If a candidate for or a member of the Board of Directors is recognized as independent for listing purposes, the issuer is also recommended to ensure that the candidate or Board member signs the Independent Director Declaration, and that information about the signing is published on the issuer's website.

To improve the quality of traded securities in the quotation lists, MOEX introduced requirements for the minimum daily median volume for shares included in the second level listing, and increased the requirements from RUB 1 mln to RUB 3 mln for shares included in the first level listing.

As part of its work to improve the dividend policies of public companies, MOEX developed a checklist that allows issuers to evaluate whether or not their dividend policy or draft dividend policy complies with the Exchange's Methodological Recommendations. The Methodological Recommendations were developed by MOEX in 2017 to assist Russian issuers in complying with the Listing Rules, and to provide issuers with the tools they need to set out a clear and understandable approach to determining dividend payments in their dividend policies.

MOEX continued to implement its strategy to digitalize listing services for issuers. In 2018, MOEX switched to electronic interaction with issuers, including through electronic digital signatures, and introduced electronic document management during the registration of issue documents of exchange-registered bonds. The use of electronic signatures reduces costs for issues by eliminating paper document management, increases the speed of interaction with MOEX and improves the reliability of document management. At the end of 2018, 167 issuers (26%) used electronic signatures for listing purposes, while 33 issuers submitted 347 issue documents for registration using an electronic signature.

New tariffs for listing services were introduced, almost halving the burden on MOEX infrastructure for small bond loans in Q4 2018 alone.

In October 2018, the listing course (an educational project for issuers, organizers and consultants) was launched to improve the level of listing knowledge of MOEX's clients and to familiarize new clients with the public debt market. The course is held in the form of face-to-face lectures and webinars with internal and external speakers. During the course, issuers can learn about how to enter the public market, listing procedures and corporate governance requirements.

At the end of 2018, 1,872 securities of 642 issuers, including 278 shares of 225 issuers and 1,460 bonds of 408 issuers, were admitted to on-exchange trading. MOEX's quotation lists included 802 securities of 248 issuers.

Basic requirements for inclusion of ordinary shares in quotation lists

Criteria	First level listing	Second level listing
Free float	≥ 10% of the issuer's capitalization > RUB 60 bln and market value of the free float ≥ RUB 3 bln determined by the formula with capitalization < RUB 60 bln and market value of the free float ≥ RUB 3 bln	≥ 10% of shares Market value of the free float ≥ RUB 1 bln
Length of issuer's existence	≥ 3 years	≥ 1 year
Preparation and disclosure of IFRS statements	3 years	1 year
Corporate governance	▸ At least 1/5 of members of the Board of Directors, but not less than three independent directors ▸ Audit, Remuneration, and HR Committees ▸ Corporate Secretary and approved Regulations on the Corporate Secretary. ▸ Approved dividend policy ▸ Internal Audit Unit and approved internal audit policy	▸ At least two independent members of the Board of Directors ▸ Audit Committee ▸ Corporate Secretary

DERIVATIVES MARKET

Moscow Exchange's Derivatives Market is Russia's largest and one of the world's leading venues for derivatives trading. The market brings together deep liquidity, a broad product offering, performance guarantees from the Central Counterparty and state-of-the-art technologies for the trading of futures and options. Derivatives Market participants can trade derivative financial instruments on indices, Russian and foreign shares, Russian government bonds (OFZ), foreign currencies, interest rates and commodities (oil, precious metals and industrial metals).

	2016	2017	2018	Change 2018/2017
Derivatives Market trading volumes, RUB billion	**115,271**	**84,497**	**89,263**	**5.6%**
Futures, RUB billion	**109,489**	**77,624**	**82,397**	**6.1%**
FX	64,561	39,460	37,868	-4.0%
Interest	27	17	10	-38.7%
Single stock	3,529	3,383	4,439	31.2%
Indices	26,138	18,486	19,161	3.7%
Commodities	15,234	16,278	20,918	28.5%
Options, RUB billion	**5,782**	**6,873**	**6,866**	**-0.1%**
FX	2,119	2,184	2,047	-6.3%
Single stock	87	35	25	-28.7%
Indices	3,434	4,440	4,438	-0.1%
Commodities	142	213	356	67.4%

Trading Volumes

In 2018, total trading volumes on the Derivatives Market increased by 5.6% YoY, reaching RUB 89.26 trln. Futures trading volumes increased by 6.15% YoY to RUB 82.4 trln, while options trading volumes remained approximately at the level of 2017 and amounted to RUB 6.87 trln.

The modest rate of trading volume growth was due to low volatility of currency exchange rates and indices, i.e. the underlying assets of the most heavily traded Derivatives Market instruments. At the same time, trading volumes in the commodities section showed steady growth: in 2018, commodity futures trading volumes increased by 33.5% YoY, and commodity options trading volumes increased by 67.4% YoY. Open interest in commodity futures in December 2018 increased by 30.5% YoY, reaching RUB 50.6 bln. Trading volumes in Brent oil futures posted the strongest growth, increasing by 19.5% YoY for a total of RUB 17.25 trln. MOEX was one of the leading global exchanges for trading of Brent futures, according to the Futures Industry Association (FIA).

New Instruments

In 2018, the Derivatives Market saw the launch of a number of new contracts. Notably, Russian market participants and their clients were offered more opportunities to invest in global financial market instruments. The new contracts allow investors to carry out transactions with foreign instruments in the Russian jurisdiction using clear mechanisms with the advantages of the on-exchange market: transparent pricing, liquidity and a reliable infrastructure.

US500 index futures contracts began trading in June 2018. Their underlying asset is the Solactive US Large Cap Index calculated on the basis of stock prices of the 500 largest publicly traded American companies. Since the contract began trading Derivatives Market participants have executed more than 2,000 transactions totaling RUB 93 bln. Open interest at the end of 2018 amounted to RUB 530 mln.

In the context of strong growth of commodity derivatives in 2018, MOEX launched a number of new instruments in this segment. Futures on Light Sweet Crude Oil, one of the most popular grades of crude oil in the world, and margined options on them began trading in April 2018. Since the start of trading, more than 820 market participants have made transactions totaling RUB 50 bln in futures and RUB 5.7 bln in options.

Futures contracts on non-ferrous metals (aluminum, nickel, zinc and copper) began trading at the end of October. Deliverable gold futures contracts also began trading in October, linking the Precious Metals Market with the Derivatives Market. Gold is supplied to the Precious Metals Market, and positions are credited to the precious metal accounts of the market participants opened with the NCC.

Due to the growing interest amongst market participants and their clients in emerging markets currencies, MOEX launched trading in USD/INR FX futures contracts. As per the FIA's global rating, USD/INR FX futures contracts occupy leading positions and are amongst the top three instruments in terms of FX futures contracts trading.

Technology

In November, MOEX made Sponsored Market Access (SMA) technology available to clients of market participants, allowing them to trade directly on the Derivatives Market. Previously, investors had access to the Derivatives Market only through infrastructure solutions of brokerage companies and banks. New preliminary checks were developed as part of this service, specifically: for price deviation in bids, maximum amount in the order and for the trading day, maximum position and additional broker control functionality.

Liquidity

To support liquidity and improve order book quality, a number of significant changes were introduced to the programs aimed at incentivizing derivatives market makers over the course of 2018. During the year, more than 60% of instruments were supported by market makers, including index, commodity and FX futures contracts launched in 2018.

The launch of the Indicative Quote System (IQS), a new service that solves the problem of interest income lost by diverting the margin requirement at quotation, allowed trading of less liquid derivatives using their unrealized potential in the market. The provisions for maintaining liquidity in less liquid futures and options series were added to the market maker programs.

Standardized Derivatives Market

MOEX's Standardized Derivatives Market was created in 2013 in response to a G20 resolution on strengthening the role of the Central Counterparty in financial markets and the need to transfer trading in standardized derivative financial instruments to on-exchange marketplaces.

In 2018, the Standardized Derivatives Market showed impressive results and strong financial performance. For the year, total trading volumes in the Standardized Derivatives Market were RUB 883 bln, which was eight times higher than in 2017. FX swaps, interest rate swaps and FX interest rate swaps were the most heavily traded instruments.

In 2018, six new banks joined the Standardized Derivatives Market, and the number of market participants reached 45.

At the same time, the terms of transactions significantly increased: while in previous years market participants preferred transactions with a term of up to one year, in 2018, transactions with a term of five years became more common.

FX MARKET

Moscow Exchange is the oldest regulated trading venue in Russia, and has offered FX trading since 1992. The FX Market is the primary liquidity center for the ruble, and as such is a crucial element in Russia's national financial system. The Bank of Russia relies on the FX Market to implement monetary policy and sets the official USD/RUB rate using results of trading on the FX Market. In 2018, operations on MOEX accounted for 65.5% of USD/RUB conversions in Russia and 76% of EUR/RUB conversions in Russia.

The MOEX daily fixing family calculates FX rates for USD/RUB, EUR/RUB, CNY/RUB and EUR/USD necessary for settlement and execution of currency derivatives, and fixings for trades with currency swaps for USD/RUB transactions ranging from one week to one year. The price of execution of futures contracts on the Derivatives Market is calculated based on fixings.

	2016	2017	2018	Change 2018/2017
FX Market trading volumes, RUB billion	**329,954**	**347,671**	**348,368**	**0.2%**
Spot	107,169	78,380	86,682	10.6%
Swaps and forwards	222,785	269,291	261,686	-2.8%
Currency pairs, RUB billion				
USD – RUB	278,334	285,962	277,751	-2.9%
EUR – RUB	43,065	48,231	59,243	22.8%
EUR – USD	7,669	12,869	10,084	-21.6%
CNY – USD	776	492	1,081	119.9%
Other	110	117	209	79.4%

Trading Volumes

In 2018, FX Market trading volumes grew by 0.2% YoY to RUB 348.4 trln. Spot trading volumes increased by 11% YoY to RUB 86.7 trln, and trading volumes in the swap and forward segment (lending transactions under pledge of currency) decreased by 2.8% YoY to RUB 261.7 trln.

In 2018, one notable trend was a decrease in USD/RUB trading and an increase in EUR/RUB trading: the share of trading accounted for by the USD/RUB pair decreased from 82% to 80% and the share of trading accounted for by the EUR/RUB pair increased from 14% to 17%. In 2018, the remaining currencies accounted for 3% (versus 4% in 2017), with the most rapid growth in the following pairs: CHF/RUB (growth of nearly six times), CNY/RUB (growth of more than two times), GBP/RUB (51% growth) and KZT/RUB (50% growth).

Expansion of the Client Base

In 2018, MOEX actively expanded its client base by attracting new categories of market participants. In December, Russia's Federal Treasury received direct access to trading on MOEX's FX Market. This became possible after issuance of a Regulation by the Government of the Russian Federation setting the rules for management of remaining budgetary funds by the Federal Treasury and following introduction of relevant amendments to the statutory regulations of MOEX and NCC.

The project that commenced in 2017 to provide direct access to the on-exchange FX Market for Russian legal entities that are not credit institutions or professional securities market participants continued in 2018. In 2018, 18 major Russian companies from various sectors of the economy were granted access to trade on the FX Market. At year-end 2018, 35 companies traded on the market, and their aggregate trading volume for the year was approximately twice that of 2017 at RUB 538 bln.

More and more brokerage companies started providing their clients with direct access to MOEX's FX Market during the year. The volume of FX transactions by individuals amounted to RUB 14.4 trln, up 47% YoY, and their share of spot transactions was 8.2% (compared to 6.2% in 2017).

Attracting Non-Residents

In 2018, MOEX continued to develop services and implement projects to encourage non-residents to access the FX Market. These initiatives included Direct Market Access (DMA), Sponsored Market Access (SMA) and International Clearing Membership (ICM).

As at the end of 2018, the FX Market's client base included approximately 12,000 registered non-resident clients from 114 countries. Non-residents still account for approximately 40% of spot turnover.

In 2018, as part of development of the integrated FX Market of the Eurasian Economic Union (EAEU), access to the FX Market was provided to Kaspi Bank (Republic of Kazakhstan), Moscow-Minsk Bank (Republic of Belarus), and VTB Bank (Armenia). As at the end of 2018, direct access to MOEX's FX Market was provided to 14 banks from five Eurasian Economic Union countries, including two international financial institutions: the Interstate Bank and the Eurasian Development Bank (EDB). For 2018, total trading volumes generated by participants of the integrated FX Market almost tripled versus 2017, and amounted to RUB 1.9 trln.

MOEX was the first Russian financial institution to join the FX Global Code, confirming its commitment to global principles of good practice in the foreign exchange market. By signing and publishing the Statement of Commitment to the FX Global Code, the Exchange agreed to adhere to a common set of guidelines to promote the integrity and effective functioning of the wholesale foreign exchange market.

New Product Offering

As part of its efforts to streamline its product offering and provide participants with additional arbitrage opportunities, MOEX launched trading in new RUB pairs, namely JPY/RUB and TRY/RUB, and new USD pairs: GBP/USD, USD/CHF, USD/CNY, USD/KZT and USD/TRY.

As for the TRY/RUB pair, in January, trades with TOD ("today") settlement and 100% depositing were launched, TOM products and one-day swaps were added in September. As for USD currency pairs, transactions are made with TOD, TOM, SPT (day after tomorrow) products, and swaps. Moreover, the product offering for some traded currency pairs was expanded: for the EUR/USD pair, SPT products and TOMSPT swaps became available; and for KZT/RUB, TOM, SPT and swaps. For the year, the total volume of trades with new products amounted to RUB 825 mln.

New product offerings provide participants with additional possibilities to diversify FX transactions and promote liquidity of MOEX's FX Market. Increased opportunities to trade national currencies of EAEU, BRICS and other countries promote their use in foreign economic activity.

In 2018, two half-year marketing programs for USDRUB_TOM were launched. To stimulate liquidity, MOEX has 16 market maker programs for RUB pairs in place, under which market makers execute transactions to enhance trade parameters.

MONEY MARKET

Moscow Exchange's Money Market is one of the most important segments of the Russian financial market. The Bank of Russia implements monetary policy via the Money Market, and market participants rely on it for day-to-day cash liquidity management.

The key segment of the Money Market is repo transactions with the Central Counterparty (CCP), performed by NCC, which guarantees fulfillment of obligations before all participants.

Repo with the CCP is now the most widely traded key segment on the MOEX Money Market. Since 2016, the Exchange has offered CCP-cleared repo in general collateral certificates (GCC), and since 2017, provided direct access to GCC repo for Russian companies following the launch of deposits with the CCP.

Trading Volumes

In 2018, total Money Market trading volumes amounted to RUB 364.2 trln, which was 3.4% lower than in 2017. Repo trading volumes for 2018 totaled RUB 309.9 trln, accounting for 85% of total Money Market trading volumes; trading volumes of deposit and credit transactions for 2018 totaled RUB 54.3 trln.

The decrease in total Money Market trading volumes was the result of a reduction of direct repo transactions by the Bank of Russia in the context of the liquidity surplus and by the extension of repo transactions with the CCP. Total trading volumes of repos with the CCP (including GCC repos with the CCP) in 2018 increased by 12% YoY to RUB 259.4 tn, accounting for 84% of repo trading volumes at MOEX. The average daily open interest in repos with the CCP (including GCC repos with the CCP) in 2018 grew by one third, amounting to RUB 2.6 trln, and the average duration of repos with the CCP (including GCC repos with the CCP) increased to 3.5 days from 3.2 days in 2017.

GCC repo with the CCP was the fastest-growing repo product: trading volumes in that segment totaled RUB 46.9 trln, 7.6 times higher than in 2017. The average daily open interest in GCC repos in 2018 increased ten-fold to RUB 336 bln.

GCC is a non-issue security provided by NCC in exchange for assets contributed by a clearing member to the property pool. The market participant retains title to the securities contributed to the pool, including the right to receive profits and take part in corporate actions, while at the same time gaining the right to replace those assets with others, or to use them for fulfillment of obligations related to transactions on the Equity & Bond Market and for repos with the CCP.

Trading volumes of deposits with the CCP in 2018 increased 7.7 times to RUB 19.5 trln, accounting for 26% of total volumes of deposit and credit transactions. Average daily open interest in 2018 increased 3.8 times to RUB 107 bln.

The number of participants on the Deposit Market with the CCP tripled in 2018 to more than 100, including industrial corporates, insurance and asset management companies and international financial organizations. Settlement in USD and Euro became available for participants of the Deposit Market with the CCP.

	2016	2017	2018	Change 2018/2017
Money Market trading volumes, RUB billion	**333,883**	**377,141**	**364,216**	**-3.4%**
On-exchange repo	**296,226**	**339,509**	**309,913**	**-8.7%**
Direct repo with the Bank of Russia	54,662	35,575	829	-97.7%
Interdealer repo	65,393	72,397	49,663	-31.4%
CCP-cleared repo	176,171	231,537	259,421	12.0%
including GCC-repo	324	6,170	46,888	659.9%
Credit market	**37,657**	**37,631**	**54,303**	**44.3%**

Average repo term, number of days

	2016	2017	2018
Direct repo with the Bank of Russia	7.0	2.7	1.5
Interdealer repo	3.3	2.9	2.5
CCP-cleared repo	2.3	3.2	3.5
including GCC-repo	1.6	2.0	3.1

Expanding the Range of Instruments

As part of continual efforts to strengthen the Money Market and provide additional opportunities for participants seeking liquidity management when using GCC repos, in 2018 two new property pools were created: GCC GC Expanded, which covers all bonds admitted for repo with the CCP, including bonds that are not accepted by NCC as collateral; and GCC OFZ which covers only OFZs denominated in Russian rubles. Thus, there are now four property pools available to participants: GCC GC Expanded, GCC OFZ, GCC GC Bonds (which cover all bonds that are accepted by NCC as the collateral and cash) and GCC GC Shares (all shares that are accepted by NCC as collateral and cash).

In 2018, the possibility of settlements in USD and Euro for all GCC materialized. The new settlement modes in foreign currency were only available to banks with the use of proprietary accounts. At the beginning of 2019, settlements in foreign currency became available for all participants of the GCC repo market.

In 2018, over 300 securities were admitted for repo transactions, including 250 securities for repo with the CCP and more than 60 foreign securities for inter-dealer repo. The most liquid securities for repos with the CCP were GCC GC Bonds, which represented 12.6% of total repo trading volumes.

COMMODITIES MARKETS

MOEX promotes commodities trading through two key commodities markets: precious metals and agricultural. Precious metals are traded on the MOEX FX Market platform, while trading in agricultural products is operated by the National Mercantile Exchange (NAMEX), part of Moscow Exchange Group.

On-exchange Trading of Agricultural Products

Since 2015, MOEX has promoted regulated commodities market trading in agricultural products (deliverable forward contracts for grain). Currently, there is a full line of exchange instruments (forward and swap contracts) for trading in derivatives on cereals (wheat, barley and corn), grain legumes (soy), oil-bearing crops (sunflower) and sugar. Soy and sunflower trading commenced in 2018.

Agricultural products are traded on the Urozhai trading and clearing platform, which enables functionality and specifications to be adapted to industry trade and logistics standards, and allows swift launching of trade with a wide range of underlying assets. The technology provides direct market access for brokers, as well as partners and end clients.

The main advantages of exchange-based trading are transparent pricing and guaranteed fulfillment of awarded contracts. For every buyer or seller, the Central Counterparty represented by NCC acts as a counterparty under the transaction and a guarantor that the transaction will be fulfilled. It also acts as a Commodity Delivery Facility (CDF) and grain keeper, maintains the participants' commodity accounts, and keeps records of cash and guaranteed funds.

As of the end of 2018, total trading volumes in agricultural products increased by seven times year-on-year and reached RUB 38.1 bln. On the grain market, trading volumes in swap instruments increased by seven times and amounted to RUB 34.8 bln, while the forward transactions increased by 24 times and amounted to RUB 1.4 bln (119,000 tons). Since the beginning of operations in May 2018, trading volumes in soy reached RUB 2.3 bln on one accredited base. By the end of 2018, 12 accredited elevators were offered for use in soy trading. In 2018, the sugar market increased by more than eight times and reached RUB 1.9 bln (58,200 tons). As of the end of 2018, 12 brokers, five agricultural holdings and over 280 clients (twice as many as in 2017) traded on the market.

Partners of MOEX's agricultural commodity trading program include Russia’s largest agricultural holdings, processing firms, grain traders and exporters. In 2018, 13 grain elevators and 11 sugar storage facilities were accredited. At the end of 2018, the delivery bases included 56 elevators and 20 sugar storage facilities in three federal districts of Russia.

In 2018, NAMEX was again recognized as the winner in an open tender among exchanges for government procurement and commodity interventions. In 2018, the sales volumes from the government intervention fund reached 1,025,300 tons of grain and amounted of RUB 9.94 bln. In total, since 2002, 31.7 mln tons of grain were sold totaling RUB 180.1 bln by way of government interventions, and the total number of trading participants reached over 9,000 producers.

Precious Metals Market

MOEX has offered on-exchange trading in precious metals (gold and silver) since 2013. Gold and silver are traded on the FX Market platform using a unified system of margining and risk management. NCC acts as the Central Counterparty and provides clearing and settlement services on the market. Metals are delivered to clearing members' precious metal accounts opened with CCP NCC. Post-trade services include dealing with bullion at NCC's depository in Moscow, and an option to use precious metals held on members' accounts with correspondent banks in London and Zurich as collateral.

As of the end of 2018, MOEX total turnover in spot and swap instruments on the precious metals market amounted to RUB 102.3 bln (compared to RUB 121.9 bln in 2017). The spot market also increased by four times year-on-year and reached RUB 17.0 bln.

Forty-five banks, including the Bank of Russia, and 13 brokerage firms now trade on the market.

	2016	2017	2018	Change 2018/2017
Precious Metals Market trading volumes, RUB billion	**124.9**	**121.9**	**102.3**	**-16.1%**
Grain and Sugar Market trading volumes, RUB billion	**12.5**	**5.7**	**50.0**	**771.9%**
Grain	12.5	5.3	46.1	773.7%
Sugar		0.5	3.9	751.5%

Post-trade services

CLEARING

Since 2007, the NCC (part of Moscow Exchange Group) has acted as a Clearing House and a Central Counterparty (CCP) for the Russian financial market. Its primary goal is to provide clearing services to market participants and to maintain stability across the Exchange's market by operating an advanced risk management system that meets the highest international standards. The NCC enjoys the status of a qualifying Central Counterparty and is recognized as a systemically important CCP by the Bank of Russia. The NCC is a member of the Global Association of Central Counterparties (CCP12) and the European Association of Central Counterparty Clearing Houses (EACH).

Ratings

In 2018, Fitch Ratings affirmed the NCC's ratings. The long-term local currency Issuer Default Rating (IDR) was affirmed at BBB with a Stable outlook (one notch higher than Russia's sovereign rating), while its foreign currency IDR was affirmed at BBB- with a Positive outlook (on par with Russia's sovereign rating).

The Analytical Credit Rating Agency (ACRA) affirmed the NCC's national scale rating at AAA(RU) with a Stable outlook. According to the ACRA, the NCC's credit rating and outlook are due to its strong and stable business profile, exceptional liquidity and capital adequacy position. The rating is additionally supported by the systemic importance status that the NCC enjoys in the Russian financial market.

Central Counterparty Safeguard Structure

In 2018, the CCP safeguard structure was further improved by unifying the size of clearing members' contribution to the Default Fund in all markets. The contribution of clearing members on the Standardized Derivatives Market was increased to RUB 10 mln.

Alignment of CCP safeguard structures across MOEX's markets is aimed at boosting the reliability and viability of the Central Counterparty and ensuring that the NCC remains financially robust irrespective of market conditions. The safeguard structure put in place meets the highest international CCP standards and the requirements of the Bank of Russia.

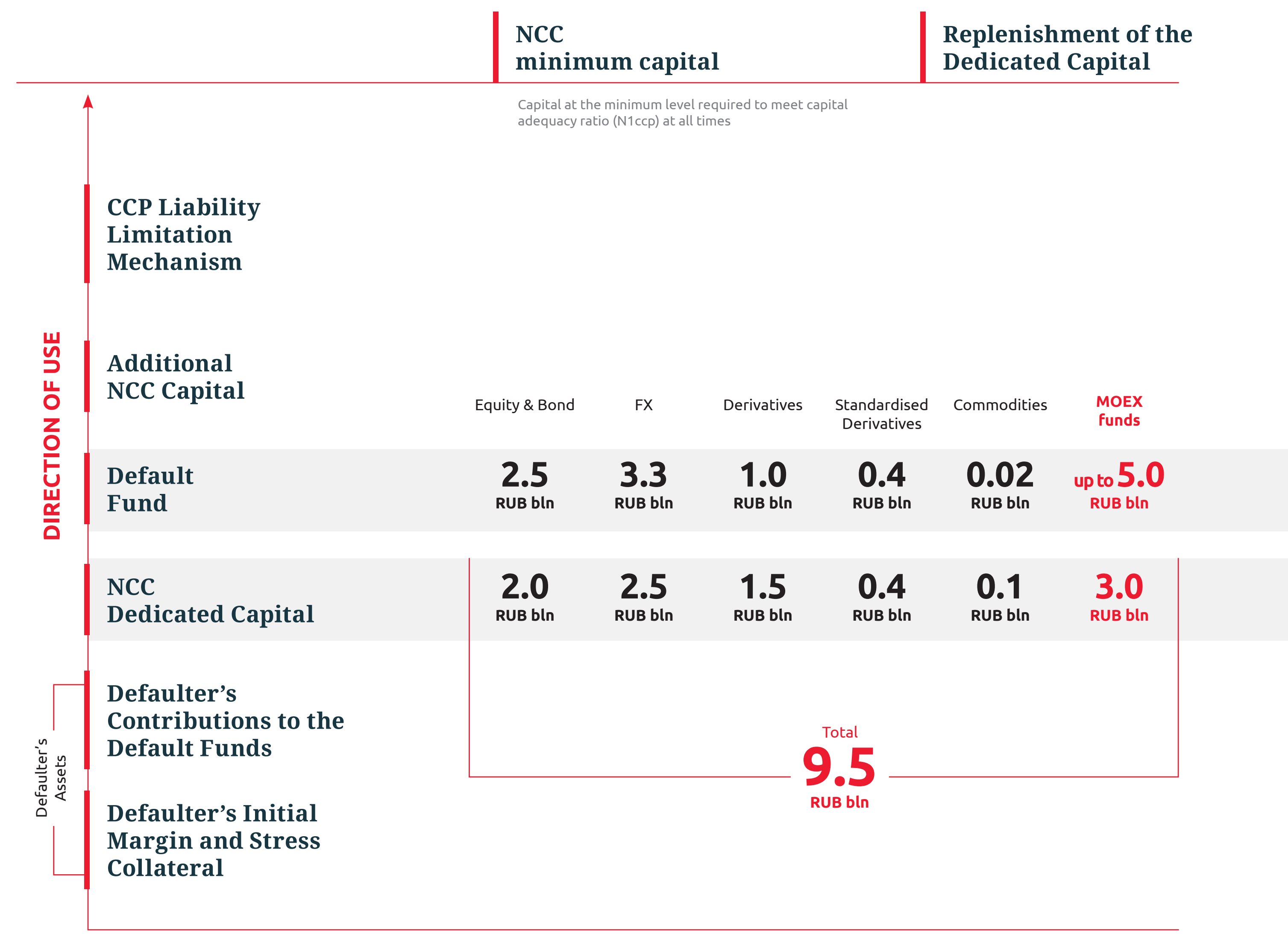
Reporting and Audit

The NCC Reporting project won the annual 'Project of the Year - Selection of IT Directors in Russia' contest in the Best Solution in the Sector category. The project aims to develop a more effective solution to creating the NCC's mandatory banking and tax reports. The project provided for a systematic restructuring of the procedure for creating mandatory banking and tax reports, as well as reports sent to Rosfinmonitoring. As a result, the reporting process became at least three times faster. Following project implementation, the system needs about 120 minutes to calculate complex interconnected forms on about 60 million transactions per day. The daily report package is created in 10-15 minutes instead of an hour.

In 2018, the NCC successfully passed an operational audit by Deloitte & Touche CIS in accordance with the requirements of the Bank of Russia's Regulation on the Procedure for the Central Counterparty Operational Audit, covering elements of the CCP activities including risk management, model accuracy assessment, stress testing of risks, dedicated capital determination and financial stability restoration.

The international registrar companies Det Norske Veritas and Germanischer Lloyd confirmed the compliance of the NCC quality management system with the international standards of management systems. The certificate of conformity is valid until 10 December 2021 for clearing services, including the function of the Central Counterparty.

CCP SAFEGUARD STRUCTURE



NATIONAL SETTLEMENT DEPOSITORY

The National Settlement Depository (NSD) is Russia's central securities depository, offering its clients a wide range of services, including depository services, settlement and cash services, registration of OTC trades, information services, collateral management services and technology services.

The NSD is recognized by the Bank of Russia as a systemically important central securities depository, settlement depository and repository. The NSD payment system is of systemic and national importance. The NSD has accounts in central securities depositories and international settlement and clearing houses in seven countries, as well as correspondent accounts in several top-tier foreign and Russian banks. At present, the NSD is servicing securities of issuers from over 40 countries.

In 2018, the value of assets deposited at the NSD increased by 12% YoY to RUB 43.9 trln. In 2018, the NSD handled 20,100 corporate actions involving Russian securities, up 30% YoY. The number of corporate actions involving foreign securities grew by 48% YoY, to 12,600.

The value of OFZ balances in foreign nominee accounts totaled RUB 1.7 trln, compared to RUB 2.2 trln in 2017.

Central Securities Depository

In 2018, the NSD continued to develop the centralized system for record keeping of mutual fund units (Mutual Fund Platform), aimed at unifying interactions between brokers, asset management companies and specialized depositories/registrars in the collective investment market. The integration of the Mutual Fund Platform with the QUIK software package was successfully completed, which allowed brokers' clients (nominees) to enter the collective investment market. This integration stimulated brokers, asset management companies and investors to conduct transactions with mutual fund units on the primary market. In 2018, eight new clients, including four asset management companies, joined the Mutual Fund Platform.

In 2018, the NSD continued to develop expertise on the use of blockchain technology. For the first time in Russia, bonds were placed using the NSD's blockchain-based smart contracts. In addition, a pilot ICO was performed together with Sberbank and the Bank of Russia. When regulatory changes in this area come into force, a further decision will be made in relation to the development of this service.

The NSD continuously develops services focused on operations with foreign assets and international markets. In 2018, the NSD provided its clients with an opportunity to open individual accounts for settlements at International Central Securities Depositories (ICSDs). At the end of the year, 10 segregated accounts were opened in Euroclear Bank, allowing for the separate accounting of depositors' securities. The main advantage here is the ability to make payments in the "back-to-back" mode, when funding for a trade is carried out using the difference between the receipt and delivery of securities. Further advantages are additional services used by the ICSDs (technical netting, linked transactions, prioritization of instructions), which increase liquidity and allow a trade to be funded immediately prior to settlement rather than in advance.

Collateral Management

In 2018, the value of repo transactions serviced by the NSD's collateral management system (CMS) totaled RUB 17.6 trln, compared to RUB 42.6 trln in 2017. This included Federal Treasury repo transactions with the CMS totaling RUB 17.3 trln. The average open position of repo transactions with the Federal Treasury's quasi-sovereign bonds with the CMS totaled RUB 300 bln, while the average period of repo transactions increased from 2.89 days in 2017 to 6.17 days in 2018.

In April, participants were given access to repo transactions with a floating rate calculated using monetary indicators developed jointly with the Federal Treasury. The new monetary indicators are linked to the RUONIA ruble money market benchmark and take into account banks' contributions to the mandatory reserve fund. This tool allows participants to raise funds for longer periods and makes borrowing cheaper and more attractive. In 2018, MOEX began connecting Federal Treasury repo transactions to its OTC terminal.

In 2018, the world's first trilateral repo transaction was executed with the use of blockchain-based smart contracts. For settlements, the NSD's collateral management services were used, which allow the parties of repo transactions to automate the performance of mark-to-market margins and report on the OTC trade to the repository.

Repository

In 2018, the number of trades registered with the NSD's Repository increased by 10.6% YoY to RUB 12.5 mln. The volume of registered trades amounted to RUB 434.8 trln (compared to RUB 472.3 trln in 2017).

The format and logic verification (FLV) service launched in 2017 helped to significantly improve the quality of information provided by clients to the repository. FLV plays an important role in minimizing the number of inaccurate trade parameters and curbing the submission of information that does not meet reporting deadlines specified by applicable legislation.

Corporate Actions Center

In 2018, 3,969 meetings of securities holders were organized through e-voting technology, 338 corporate actions on the repurchase of securities totaling RUB 65 bln and 40 corporate actions related to the exercise of preemptive rights, which resulted in RUB 6.3 bln worth of securities being purchased.

In 2018, 13 shareholder meetings were held using e-voting technology; the e-voting systems and the registrar's system were used simultaneously at several meetings, providing investors and issuers with the widest possible opportunity to use the e-voting service.

Settlement and Payment System

In 2018, the value of money transfers in Russian rubles decreased by 18% YoY to RUB 288.8 trln, while the value of transfers in foreign currency increased by 20% YoY to RUB 46.9 trln. In 2018, the total value of operations in Russian rubles and foreign currency on clients' bank accounts totaled RUB 335.7 trln.

In 2018, the NSD improved communication channels with clients via an API (a banking webservice). The system now enables the connection of clients' software packages to the NSD's payment services in real time.

Identification of Market Participants

In January 2018, the NSD was the first company in the Russia and CIS region to obtain local operating unit (LOU) status, having passed all stages of the accreditation process by the Global Legal Entity Identifier Foundation (GLEIF). In addition to the Russian Federation, the NSD as LOU serves other jurisdictions, including the CIS, Western and Eastern European countries, and other countries of the world, whose market participants may apply to the NSD for the assignment and service of legal entity identifiers (LEI).

The NSD also acts as the National Numbering Agency for Russia and the Substitute Numbering Agency for the CIS countries that assigns international security code numbers, such as ISIN, CFI and FISN. In 2018, the NSD, as the National Numbering Agency, assigned 1,754 ISIN, CFI and FISN codes to Russian financial instruments, and 34 codes as the Substitute Numbering Agency.

The NSD, as the Numbering Agency and LOU, ensures the implementation of international codification standards in the Russian and CIS markets, which increases market transparency, promotes the markets' integration into the international market infrastructure and simplifies and optimizes operations in the financial market.

Technology Services

In 2018, 13 new users were granted technical access to SWIFT services, bringing the total number of users to 69. The average monthly traffic of Service Bureau clients rose 43% YoY, amounting to 332,000 messages per month. In 2018, the Bank of Asia became the first client of the NSD's SWIFT Service Bureau in the Kyrgyz Republic.

The Transit 2.0 project, a new system for the exchange of financial messages between corporations and banks, created by the NSD based on the previous version of Transit, continued to be actively developed. Until now, its main user base has been professional securities market participants who exchanged electronic documents during depository activities and cash settlements. The updated version of the project significantly expands the user base and capability of users. The system can now be used by corporations and banks for automatic exchange of payment and documentation, including messages in the ISO 20022 international format.

Information products

INDICES

The MOEX Russia Index and RTS Index are the key benchmarks for the Russian equity market. They are calculated based on the most liquid shares of major Russian issuers. The MOEX index family includes the Blue Chip Index comprising 15 shares of the most liquid and largest capitalization issuers, the Mid- and Small-Cap Stock Index consisting of liquid shares of mid- and small-cap companies, and the Broad Market Stock Index that includes the top 100 Russian companies based on their liquidity and capitalization. The shares covered by the Broad Market Index are used to form baskets of industry indices by dividing its calculation base by sector profiles. MOEX also calculates several industry-specific indices, namely the indicators of a certain market segment not included in the basic line: public sector indices, innovations indices and the MOEX 10 Index. The MOEX bond index family includes the indices of corporate, government and municipal bonds segmented by their duration and credit quality.

Index Rebranding

MOEX completed the rebranding of its entire index offering. At the first stage, in late 2017, MOEX changed the name of the main stock market benchmark: the MICEX Index was renamed the MOEX Russia Index (with a new trading code of IMOEX). The second stage came to fruition on 21 January 2019, when an additional 19 indices were renamed to reflect the MOEX Russia Index brand. The name of the RTS Index remained unchanged. The MOEX Russia Index and RTS Index have identical constituents with identical weightings, but are calculated in different currencies (MOEX Russia in RUB, RTS in USD).

The rebranded suite of indices helps to raise the awareness and value of the Group's brand and contributes to a more cohesive perception of MOEX and the Russian financial market among domestic and international professional and retail investors.

The trading codes of indices are used on the MOEX website, in newsletters, in the trading systems of stock and forward markets, on the statistical server, in information products and in FAST threads.

New Indicators

MOEX started calculating and publishing a new index tracking performance of the Money Market, the MOEXREPO GCC Index, which is determined based on CCP-cleared repo transactions using general collateral certificates (GCC).

The new index reflects the value of secured money as free of any counterparty risk or the specifics of certain securities issues, and provides for rapid comparison between the rates across different segments of the highly liquid CCP repo market. The MOEXREPO GCC Index has become another gauge in the line of repo rate indicators with CCP with bonds and shares.

In 2018, MOEX developed a new service for calculating the indicative Net Asset Value (iNAV) for asset managers and participants engaged in the roll out and support of structured financial products. This service became especially relevant in 2018 in view of newly introduced regulation of exchange-traded investment funds.

Late in 2018, MOEX launched a new benchmark, the MOEX Russia Index of Russian Liquid Eurobonds, which is the market indicator of sovereign and corporate Eurobonds issued by or for the benefit of Russian issuers. The Index includes the 10 most liquid Eurobond issues of high credit quality maturing in one to ten years, and is calculated based on total return.

MOEX calculates indices at clients' request. Indices may cover various segments, such as shares or bonds traded both on MOEX and on other foreign platforms. Such indices are widespread globally and are used to implement trading and investment strategies.

International Recognition of Indices

The results of an annual external audit by Ernst & Young confirmed that the Index Management Division complies with the 19 principles of the International Organisation of Securities Commissions (IOSCO).

The audit covered FX fixings, equity indices, government and corporate bonds indices, pension indices and repo and swap rate indicators.

The report confirms the transparency of MOEX’s index management procedures; the high quality of the Exchange’s index generation, calculation, and disclosure process; and the effectiveness of MOEX’s internal controls over the development, calculation and release of financial indices and market benchmarks.

MARKET DATA

The primary focus of Moscow Exchange's information services is providing market data containing value, quantity and volume parameters for bids and transactions made on its markets, as well as aggregated indicators used in its financial and investment activities: market prices and recognized quotations. Information services related to the provision of market data include real-time quotation flows, official trade results for each trade session on each market, and archival data accumulated by MOEX over a long period. Information about quotations provided by MOEX is used extensively by traders in their risk management and automatic trade systems, and is posted on public websites of media vendors and traders to attract new clients and create new derivative indicators reflecting the condition of the Russian financial market.

To deliver information about trading, MOEX uses both the infrastructure of partners who include leading Russian and international media vendors (currently more than 20), and the interfaces of its own corporate website and those of special programs developed by MOEX. As part of the development of its information business to provide quotation flows and historical data, MOEX has concluded over 450 information agreements, including almost 400 with Russian counterparties.

In 2018, MOEX launched a new information service for traders that provides prompt reports on non-standard transactions in order to improve the internal control over compliance with legal requirements and the requirements of the financial markets regulator on the traders' side. This service makes it possible for market participants to receive and respond on a daily basis to information about their own non-standard bids and transactions, and to respond to non-standard bids and transactions by clients. Besides higher efficiency, traders are able to evenly distribute their month's work in terms of analyzing non-standard bids and transactions and preparing monthly reporting to the regulator.

MOEX introduced new principles of defining Non-Display Usage of its market data for its traders and information clients. This step helped to further align the terms of using the Exchange’s market data for traders and other clients who benefit from MOEX’s information services. In 2018, more than 200 contracts were signed with new partners.

All necessary technologies have been prepared to launch a service giving access to historical trading data on the bonds market, which will help to increase interest among new potential players and investors to this segment of the on-exchange equity & bond market, including by enabling deeper analysis of historical data on fixed income instruments. The product is planned to launch in the first quarter of 2019.

VALUATION CENTER

The NSD’s Valuation Centre is being further developed. Every day it calculates the value of about 800 exchange-traded ruble-denominated and mortgage-backed bonds and publishes reference pricing data for over 1,500 instruments.

In 2018, the Valuation Center’s Expert Council approved the Fair Value Measurement methodology for Russian bonds placed by the Finance Ministry on the global capital market. The methodology is based on IFRS 13 and measures fair prices of eurobonds taking into account data about the Russian and foreign OTC markets, quotations, price behaviors of issues with different maturity dates, and interest rates. Publication of Eurobond prices using the new methodology started in December 2018.

In 2018, MOEX and the Interfax news agency launched RU Data Price, a service intended to measure the value and risks of bonds using data from the Price Centre and Thomson Reuters. MOEX also launched its new product, a "single window" for corporate information disclosure.

ANALYTICAL PRODUCTS

MOEX has implemented new analytical products for funds, algorithmic and high-frequency traders. Developed using market data, they enable investors to improve the efficiency of their existing strategies and create new ones.

- The Aggregated Net Volume 2 product is calculated for the ten most liquid shares traded on MOEX and is primarily intended for algorithmic traders.
- The Timestamps Analysis product makes it possible for HFTs to measure the timestamps for their own bids on various sections of the exchange infrastructure as compared to other bids.

MOEX also calculates the Aggregated Net Volume 1 , which is the net volume of trades as of the day end by groups of clients, defined based on numbers of transactions and daily average trading volumes. The product is provided for Sberbank and Gazprom shares in the USD/RUB currency pair, as well as for RTS Index futures and the USD/RUB pair.

Client services

In 2018, Moscow Exchange continued improving its services to ensure effective cooperation with clients and customers, reduce costs incurred by them and optimizing document flow.

In addition to professional financial market participants (Russian banks and brokerage companies) and non-residents, who historically have been the main customer groups of MOEX, since 2017 our customer base expanded to include non-financial and insurance companies, who were granted direct access to the Exchange’s FX and Money Markets.

To improve the quality of client service by the client support department, in 2018 six key areas were identified: work with corporate customers, cooperation with foreign participants, commodities market operations, improvement of internal processes, market-making and clearing. By developing their expertise in these areas, personal managers will be able to respond to customers' requests faster and with higher quality.

As a part of the ongoing expansion of communication channels with customers, we added more functionality to the Trading Participant Online Account service, which is now used to provide trading and clearing reports on all markets, information on market admission statuses and financial information.

The single registration service for clients of trading members was improved. In April 2018, trading members were provided with an online registration service through file exchange within the Electronic Document Interchange system (EDI system). In October, a project to register new clients via trading members’ API connections to MOEX systems was implemented. This allowed private investors to gain access to trading almost instantly after opening a brokerage account.

To cut costs and optimize document flow by implementing procedures for obtaining information from publicly available sources (Federal Tax Service and Rosstat websites), the list of documents to be submitted by customers for admission to trading was reduced by 50%. Work on transition of the Money Market to the unified scheme has been completed, with uniform admission regulations, a uniform participation agreement and depersonification of traders. This allowed a further 30% reduction in document flow for Money Market participants.

Restructuring of the departments in charge of customer relations increased the efficiency of client service and the transparency of procedures, and allowed for more diversified and qualified support to be provided to customers. To speed up admission procedures and support regional customers, some of the functionalities were delegated to MOEX regional offices.

In 2019, it is planned to reduce the quantity of paper documents received from customers, with key interactions taking place by submission of electronic documents through an online account. At the beginning of 2019, a large project will start to simplify and automate acceptance for servicing, which will significantly reduce the waiting time for admission to trading and clearing, as well as the volume of document flow and the resources used by these processes by the Exchange and by customers.

Information technoligy

Moscow Exchange is both a diversified venue for trading of financial instruments and a company with a sophisticated informational technology infrastructure including unique proprietary solutions across trading, clearing and risk management. The Group places a major emphasis on strengthening its IT systems and providing clients with highly reliable infrastructure and best-in-class services. MOEX's technologies for trading and settlements are based on state-of-the-art IT platforms on the level of the world's most sophisticated trading venues.

INFRASTRUCTURE

MOEX's computing capacities are placed in two cutting-edge data processing centers (Data Centers), namely DataSpace (primary) and M1 (standby). DataSpace is the first commercial data processing center in continental Europe and Russia to be awarded Tier III Certification of Operational Sustainability-Gold, designations for the highest reliability and security.

On its platforms, MOEX operates the most advanced server and networking equipment offered by major global manufacturers.

TECHNOLOGICAL ACCESS TO TRADING

Moscow Exchange Group offers a complete range of solutions to allow clients to begin trading, with options to select the most appropriate operational efficiency, including remote connections through networks of authorized operators, global financial networks, dedicated channels, Internet, and international points of presence in key financial centers, such as London, Chicago, New York and Frankfurt. In 2018, MOEX increased its presence in Asia and the Middle East, making it possible to connect in Singapore, Hong Kong, Shanghai, Dubai and Mumbai, and it opened a new connection point in Chicago Data Centre in Aurora, Illinois that is home to the core CME GLOBEX.

Clients can access trading on the Group's markets and distribution of stock-ticker data through standardized protocols FAST and FIX as well as proprietary protocols TWIME and Plaza II. In 2018, MOEX released an updated version of the FAST protocol and rolled out the auxiliary FAST service Full_orders_log Online, the fastest way to receive real-time information about all on-exchange trades and orders on the Derivatives Market with nanosecond breakdown. The new service was launched in the first quarter of 2019.

The colocation area located in the primary Data Center (DataSpace) provides the highest level of reliability, accessibility and security of connectivity for high-frequency trading customers operating on MOEX's markets. At present, approximately 40 professional market participants use the colocation services. In 2018, under the development process of a range of the colocation services, MOEX put into operation several new services, including, but not limited to, the possibility of allocation of extra electricity supply above the standard offering, booking stands for up to three months without feed supply with the possibility of assembly and commutation of customer's equipment and connection of intake units of global positioning systems (GPS, GLONASS, etc.) for customer use.

In 2018, MOEX switched to a new model of by-login billing that reduces paperwork and operational expenses for business continuity. Under the project, MOEX performed a fundamental update of its information systems and business processes that allowed for a uniform model of technical access across all markets, a uniform system of control and monitoring of identifier issuance and a uniform billing system for technical access services.

In 2018, the Group put into operation MOEX Dealing, an expanded version of an electronic chat with participants of the interbank market being able both to hold negotiations and agree upon terms of bilateral transactions related to interbank financing and trades with FX spot and swap and to fix and save the achieved arrangement in special data retention modules for their back offices. The first customers were connected to this system in 2018.

RELIABILITY MANAGEMENT AND INFORMATION SECURITY

MOEX places great emphasis on reliability of its trading and settlement infrastructure. It completes the year with an availability indicator of 99.99%.

Uninterrupted functioning and fault tolerance is supported by "hot" and "warm" booking technologies that ensure quick recovery of trading and clearing systems.

MOEX's technical policy relating to IT infrastructure provides for reliability of the hardware systems: the server equipment servicing crucial trading and clearing transactions is under three years old, and networking equipment is under five years old. MOEX conducts regular information security audits, including tests for intrusion, regular anti-fishing tests and continues to improve the security systems.

In 2018, following the results of Lloyd's Register Quality Assurance, the Group received certificates of conformity with international standards ISO 27001:2013 (Information Security Management) and ISO 22301:2012 (Business Continuity Management) for organizers of on-exchange trading, clearing and provision of services at stock, derivatives, FX and money markets. The certification is voluntary, and it presupposes that MOEX and NCC completely comply with over 100 technical and administrative measures designed to ensure information security and business continuity.

In 2018, to improve safety, MOEX created a mobile standby office designed to ensure availability of services in case of emergency.

MODERNIZATION OF TRADING AND CLEARING SYSTEMS

MOEX's markets are based on two trading and clearing systems, ASTS (Equity, Money, FX and Precious Metals Markets) and SPECTRA (Derivatives Market). The software systems have a modular architecture that provides for both operational efficiency and fault tolerance of exchange infrastructure. The operational efficiency of MOEX's trading systems is in line with those of other major global trading venues. In the aggregate, the systems are capable of processing up to 200,000 transactions per second.

In 2018, the Group implemented a version of the trading and clearing system of the FX Market with independent hardware cores for trading and clearing. This was the most significant technological update in the history of the FX Market's trading and clearing system. In addition to a new architectural solution with integration of physically divided trading and clearing components through the high-speed data bus Confinity Low Latency Messaging, the hardware platform underwent a fundamental upgrade. Now, all servers interact under a high-speed network built with the use of Infiniband cards. As a result of these updates, the total operational efficiency of the system grew 1.5 times.

In the trading and clearing system of the Derivatives Market, risk module functioning algorithms were completely revised to extend integration between the FX, Equity and Derivatives markets and to develop functionality of a single pool. The module operation is supported by AVX vector processors in the hardware platform that allowed 2.5-3 times acceleration of the necessary computations.

The Group implemented a system of preparation of compulsory regulatory reporting created with the use of the technological stack Apache HADOOP and Oracle Application Express/ExaData. This system reduces the time required for preparation of reporting forms by 3-6 times. The use of free distributed software reduced the cost of ownership approximately 2 times. Under of this project, the Group built a data repository in the data-lake architecture to accumulate and work with large heterogeneous arrays of historical data.

Outlook for 2019

Moscow Exchange will continue delivering on its strategy aimed at expanding the customer base, including attracting new categories of investors, and upgrading technologies in order to provide the most modern and reliable services to market participants and customers.

GROWING THE RETAIL INVESTOR BASE

As part the program to attract retail investors to the regulated market, Moscow Exchange plans to launch the online financial supermarket "Marketplace". The technological capability of the electronic platform to open bank deposits remotely was ensured in February 2019. Access to the platform will be opened for consumers after the adoption of the necessary legislative changes. Initially, customers will be able to open deposits with banks that are participants of the project. By the end of 2019, the "supermarket" range of financial products may be expanded to include credit, insurance and investment products.

Access to the platform will be provided through the Unified System of Identification and Authentication (USIA, also known as the State Services portal) and the primary customer identification completed through a unified biometric system. The platform will ensure all stages in the conclusion of an agreement with the bank, secure transfer of funds to open a deposit, access to up-to-date account information and additional operations such as depositing, withdrawing or closing a deposit.

The Exchange will also continue the development of the MOEX Marketplace website, created to promote exchange-traded instruments among private investors. Any novice investor can find information about the most popular exchange-traded instruments on the Internet portal place.moex.com. In 2019, the Exchange plans to introduce remote opening of accounts with partner brokers through user account. At present, nine companies are partners of the project.

In March 2019, the Exchange introduced a new facility for retail investors – Trust Management Marketplace. The service publishes the investment performance of Russia's leading asset management firms. This marketplace helps customer's achieve financial goals through solutions offered by the professional investment community. The service will be further developed to offer customers the option of buying/selling shares of various asset management companies by using the customer's online account and monitoring their unified positions.

It is planned to further expand the FINFAIR Financial Solutions Fair, which will be held in the autumn of 2019. In addition, the Exchange will hold annual competitions for private investors, namely Invest Trial and Best Private Investor contests, as well as events under the auspices of the Moscow Exchange School.

BONDISATION

One of the Exchange's most important projects is "bondisation", i.e. development of the Bond Market in order to reduce borrowing costs for companies hailing from the real sectors of the economy, attract long-term money into Russia and expand opportunities for small businesses to tap the fixed income market. Despite the high level of liquidity in the banking system, small companies remain cut off from the debt market due to the increased pressure of such loans on banks' capital. Under these conditions, the Equity and Bond Market becomes an important resource for business development, especially given the arrival of retail investors, who consider bonds as an alternative to bank deposits.

To encourage new issuers to enter the market and to help companies that implement environmental and social projects to raise financing, in 2019 the Exchange plans to create a Sustainable Development Sector that will include "green" and "social" bonds. The Sector will allow for the correct positioning of these issuers, establish criteria that will allow these issuers to seek government support and provide investors with more complete information regarding sustainable financial instruments.

In 2019, boosting Bond Market liquidity will be a key area of emphasis as the Exchange continues to develop the market infrastructure. The focus will be on improving market-making programs and exploring new opportunities for auctions.

The Exchange will also continue to grow the Eurobond market. In particular, MOEX is considering granting admission to the OTC system of the Bond Market, which launched in 2018. This would significantly expand the list of products and services of the Bond Market.

MOEX seeks ways to expand a number of post-trading services and introduce some elements of an OTC book-building service.

The Exchange is considering reforming the listing levels of bonds, including the abolition of the second-level quotation list, as well as modernization of requirements and the segmentation of instruments. In addition, in 2019 the Listing Rules will be aligned with the amendments to the law On the Securities Market, simplifying issuance of securities. Those changes will then come into force in 2020.

As part of the modernization of bond indices, MOEX plans to launch a new index that will serve as the basis for creating fixed income exchange-traded funds, including the most liquid issues of Russian bonds with strong credit ratings.

Furthermore, the Exchange intends to begin using credit ratings assigned by Russian rating agencies to assess the credit quality of the issues when included in index calculation bases, which will increase the representativeness of various segments of the exchange-traded bond index family and allow market participants to assess market risks more accurately.

TECHNOLOGICAL DEVELOPMENT

The need to keep up with the latest trends in the global financial market, meet the technical needs of market participants and the importance of having services and technological products similar to leading international trading platforms, make technological development a priority when planning for the coming years. In short, maintaining cutting edge technology will allow the Exchange to remain competitive in the global market.

On the Equity and Bond Market, MOEX plans to introduce direct clearing membership for foreign members, i.e. International Clearing Membership (ICM), which was launched on the FX Market in 2014 and on the Derivatives Market in early 2019. The initiative aims to delineate "trading member" from "clearing member" status and provide clearing services first of all to non-resident clearing members.

In 2019, the Standardized Derivatives Market will be included in the Unified Collateral Pool project, which will allow the members to use euro and securities as the collateral (for now, the members can only use rubles and dollars as the collateral). The Exchange also plans to develop API services, which will provide participants of the Standardized Derivatives Market the opportunity to trade through external trading systems, for example, Bloomberg.

In 2019, under the development of a new model of by-login billing for technical access services, the Exchange plans to ensure integration with NCC services. In addition, MOEX will provide market participants with online services for full control of orders for information and technology services, thus minimizing the time required to gain access to trading.

In 2019, the Exchange will continue to expand its co-location area in the data processing center and develop new co-location IT services.

To enhance its service offering, the Exchange plans to roll out a collateral assessment service as part of the Unified Collateral Pool project. It is designed to help participants evaluate the collateral required for a certain portfolio, extra stress collateral and collateral for buying complex financial instruments when expanding an existing portfolio, as well as give guidance on how best to transfer assets to minimize total collateral requirements.

EXPANDING THE PRODUCT OFFERING

Moscow Exchange's product offering is one of the most diversified among the world's large trading platforms. Nonetheless, the Group constantly works to continue to expand its offerings.

In 2019, the Exchange plans to create a new Money Market benchmark calculated on the basis of GCC repo trades with the CCP, which will contribute to the formation of the interest rate curve. Futures contracts in the Derivatives Market and interest swaps in the Standardized Derivatives Market will be launched for the new Money Market benchmark. This will provide market participants with additional trading strategies.

Together with Sberbank, the Exchange plans to implement a project to launch a futures on real estate index, the basic asset of which will be the index of the cost per square meter of residential real estate in Moscow based on a database of mortgages issued.

The futures product line will be expanded with the addition of contracts on commodities, including Russian benchmarks. In particular, in cooperation with St. Petersburg International Mercantile Exchange (SPIMEX), MOEX plans the launch of commodity futures on energy assets. This will expand trading opportunities for market participants and allow them to simplify hedging of their price risks.

In the Standardized Derivatives Market, trading will begin on interest rate swaps for the rate of return on a currency swap for a period from three days to one year, as well as interest rate derivatives for the key rate of the Bank of Russia. The plans also include the modification of exchange-traded instruments, i.e. interest rate and interest rate currency swap in terms of extending the contract term from five to ten years.

The Equity and Bond Market will offer new exchange-traded funds (ETFs) – both foreign and domestic ETFs – to provide investors with more options to diversify their investments.

The Exchange will further streamline its FX offering by strengthening the USD/RUB Fixing Electronic Matching Service. Matching at the weighted average USD/RUB FX rate set by MOEX at 11:30 am MSK as the official Bank of Russia rate will be made available to give new opportunities to banks, brokers, their clients and companies involved in cross-border trade to make currency exchange transactions and sell foreign currency earned.

The Exchange will continue to expand the instruments on currency pairs on the FX Market. In particular, the end time of trading in CNY, CHF, KZT, BYN and TRY on TOD instruments and TODTOM swaps will be extended from 11.00 am to 12.00 noon.

Moscow Exchange is considering expanding the list of agricultural assets traded on the Commodities Market with the potential addition of oil-bearing crops, soybean meal, sunflower meal and sunflower oil. The Exchange also plans to launch cash-settled futures for Russian sugar and grain.

As part of the development of information services, in 2019 the Exchange intends to prepare a new separate information product with data on trading in the Money Market, including information on repo transactions and deposits. A service with information products of NSD and MOEX will be introduced on the unified platform via the Exchange's website to allow customers to use all information services of the Group via a single interface with a simplified document interchange process.

LIQUIDITY

To stimulate liquidity, expand different matching techniques and assess the impact thereof on liquidity, the Exchange will launch a pilot USD/RUB order book with a minimum lot of one million US dollars, simulated random delay for order entry and prioritized cancel transactions. A similar technique is employed by a number of international FX platforms; it eliminates arbitrage between technical access of different trading members and allows them to trade large lots.

The Exchange also intends to introduce a cross-market market-maker program, implying the simultaneous maintenance of the liquidity of “mirror” exchange-traded instruments in various markets of the Exchange. It will provide market makers with the opportunity to reimburse the commission paid for making transactions using instruments of each of the markets, as well as additional remuneration in case of fulfillment of market-maker obligations for the “mirror” instruments simultaneously in each of the markets. The new program will allow the use of the synergy effect of simultaneous quoting by large participants of related instruments, as well as to activate existing market makers.

EXPANDING THE CUSTOMER BASE

In 2019, Moscow Exchange plans to implement a new model of connecting foreign clients through international points of presence (in the UK, Germany, the US, Asia and the Middle East) and international telecommunication networks (ESP/NSP) specializing in the delivery of financial data. This will allow clients to access the Exchange’s data and trading services through communication channels with ESP/NSP networks without having to establish a physical connection directly to the exchange infrastructure in Moscow. Foreign clients will benefit from quicker access to the Russian financial market and correspondingly lower costs for network and other technological services.

Extending MOEX’s international presence facilitates access to the Exchange’s markets for international clients. In 2019, six new points of presence (PoP) will be added – in Hong Kong, Singapore, Shanghai, Dubai and Mumbai along with the PoP at the Aurora data center in Illinois which hosts the CME Globex matching engine. Existing PoPs are in London, Frankfurt, Chicago and New York.

As part of the Exchange’s efforts to attract Russian non-financial companies and non-residents to trade on its markets, the company will continue to streamline connectivity procedures for new customers. Connectivity mechanisms and plans will be designed for every new participant individually; the Exchange will hold workshops and special webinars, including events designed for English-speaking customers, to provide insight into issues on connectivity and on-exchange trading. Thanks to expansion of partnerships with technology providers, international participants will be given the opportunity to connect to the Exchange and trade on its markets using their usual software developed by the market leaders and certified by the Exchange.

It will become possible for new Derivatives Market clients to complete their registration online (since 2018, the Equity and FX Markets have had this functionality), which will allow new clients to begin trading almost instantly after opening an account on the broker’s or bank’s website.

The Exchange plans to provide non-financial companies with direct access to the Standardized OTC Derivatives Market.

MOEX will continue to actively develop its OTC systems. In the FX Market, MOEX plans to organize a special trading mode for clearing members by attracting foreign currency liquidity in G10 currency pairs from large international banks under the Links With Foreign Liquidity Providers project. The development of the project involves an increase in the number of liquidity providers and the addition of new currency pairs, namely USD/CNY and USD/TRY.

Together with the China Foreign Exchange Trade System (CFETS) and the Shanghai Clearing House (SHCH), the Exchange is designing a joint infrastructure solution to create a single trading pool in the CNY/RUB currency pair through a joint link with CFETS.

The Exchange also plans to expand new customized mechanisms for liquidity takers/makers that are recognized globally among OTC FX platforms: Request for Streams (RFS), ESP (Executable Streaming Prices) and liquidity aggregation.

Human resources

HUMAN RESOURCES POLICY

Moscow Exchange aims to be a first-choice employer, offering its employees equal opportunities to harness their skills, talents and potential regardless of age, race, gender or social background.

The Exchange’s human resources policy has three main objectives:
- to attract, incentivize and retain highly qualified professionals and managers;
- to facilitate continuous professional development of employees;
- to create an atmosphere that allows each employee to achieve his or her full potential and contribute to the success of MOEX and the achievement of MOEX's strategic goals.

In accordance with applicable laws and Moscow Exchange’s Code of Business Ethics, the Exchange does not tolerate labor discrimination. The Code of Business Ethics, amended in 2016, calls for all employees to adhere to principles of equality with respect to labor rights, to not discriminate towards personnel and customers on the basis of gender, race, skin color, nationality, language, origin, property, marital status, social or occupational position, age, residency, religious beliefs, personal opinions and affiliation or non-affiliation with non-governmental associations or social groups. MOEX shall also respect each employee's culture, personal views and lifestyle and refrain from any action that would promote the creation an atmosphere of intimidation, hostility, offence or violation of human dignity in the workplace.

The Code of Business Ethics is published on MOEX's intranet portal and incorporated in all job descriptions and employment contracts. As part of the on-boarding program, all new employees are provided with a New Employee Handbook that includes a section on business ethics. In addition, a course on business ethics is included in the Group’s compulsory training program. Newcomers are also briefed on matters related to business ethics, conflicts of interest and the use of insider and confidential information by the Internal Control Department as part of the on-boarding program.

In 2018, MOEX LAB was launched. Under this program, any employee may propose a project, assume responsibility for its implementation and receive resources for its development. The program is aimed at identifying new opportunities for growth or diversification of the Group’s business, improving the experience of users of MOEX products and services, enhancing customer loyalty, training employees and increasing the attractiveness of MOEX's HR brand among young professionals.

MOEX continuously improves its HR management processes and employee training programs. In 2018, the HR Strategy focused on the well-being and comfort of employees, and implementation of initiatives to give employees greater flexibility in terms of their workplace, schedule and hours on the job. The Exchange continues to develop its HR Digital platform, an HR environment intended to underpin policy implementation with advanced HR technologies.

In addition to the continuing automation of different areas of HR, in December of 2018 the Group introduced MOEX FeedBack to replace Net Promoter Score (NPS), with the aim of enhancing efficiency of cross-functional cooperation and activity of employees, boosting the level of employee engagement and strengthen internal processes. This service allows each employee to provide and receive feedback continuously (365 days a year) with respect to any event/project or cooperation of employees.

Personnel structure by category[1]

Employees excl. those with a second job in the Group (incl. maternity leaves).	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
Senior executives	17	4	17	4	14	5
Heads of functional units	243	176	256	176	239	161
Specialists	533	609	564	589	610	629
Laborers	31	0	31	0	31	0
Total	**824**	**789**	**868**	**769**	**894**	**795**
	1 613		**1 637**		**1 689**	

Personnel structure by age[1]

Employees excl. those with a second job in the Group (incl. maternity leaves).	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
Under 25	42	29	56	32	45	37
26-35	278	283	304	274	297	269
36-55	392	421	395	411	426	426
Over 56	112	56	113	52	126	63
Total	**824**	**789**	**868**	**769**	**894**	**795**
	1,613		**1,637**		**1,689**	

1. As at the end of the period.

Staff turnover

	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
Under 25	5.6%	2.7%	16.1%	15.6%	22.2%	13.5%
26-35	13.8%	6.2%	10.9%	10.6%	15.2%	10.8%
36-55	7.9%	3.3%	7.1%	4.6%	7.5%	4.0%
Over 56	3.0%	9.2%	7.1%	9.6%	8.7%	4.8%
Total	**9.2%**	**4.7%**	**9.0%**	**7.5%**	**11.0%**	**6.8%**
	7.0%		**8.3%**		**9.0%**	

Average number of training hours

Corporate training								
			Total training hours					
			Training breakdown by gender		Training breakdown by employee category			
	Average annual number of training hours per employee	Corporate (skills) training	Male	Female	Senior executives	Heads of functional units	Specialists	Laborers
2016	10.18	16,418	9,051	7,367	658	7,829	7,931	-
2017	10.51	17,208	7,280	9,928	1,176	5,336	10,696	-
2018	6.52	11,014	6,687	4,327	596	6,184	4,234	-

Professional training

	Total training hours							
			Training breakdown by gender		Training breakdown by employee category			
	Average annual number of training hours per employee	Professional training	Male	Female	Senior executives	Heads of functional units	Specialists	Laborers
2016	15.58	25,124	13,638	11,486	568	8,240	16,316	-
2017	11.20	18,337	9,773	8,564	754	6,431	11,152	-
2018	12.52	21,147	10,541	10,606	445	6,897	13,373	432

Professional and corporate (skills) training

	Total training hours	Average annual number of training hours per employee
2016	41,542	25.75
2017	35,545	21.71
2018	32,161	19.04

Assessment of performance and career progress

	Employees assessed by category				Employees assessed by gender	
	Senior executives	Heads of functional units	Specialists	Laborers	Men	Women
2015	-	97%	95%	97%	93%	93%
2016	-	97%	93%	96%	97%	90%
2017	-	96%	93%	93%	94%	97%
2018	-	99%	91%	100%	90%	95%

Mandatory occupational safety activities in the Group	2016	2017	2018
Occupational safety training for heads of units (number of heads)	64	120	9
Operational control (number of workplaces)	19	820	900
Pre-employment and scheduled medical examinations (number of people)	66	8	108
Special evaluation of working conditions (workplace declaration), number of workplaces	145	19	1101
Psychiatric examinations	-	16	-
First aid training	-	45	136

ORGANIZATIONAL STRUCTURE

MOEX pays close attention to continually improving efficiency of its business processes and management systems.

In 2018, two key areas – sales and product development – were separated as part of an effort to ensure standard market division structures. To promote the Exchange's products and services for designated segments of customers and to facilitate cross-market activities, as well as to organize complex cross-market work with key customers and issuers, new business units were established. These changes were aimed at enhancing the efficiency of each market, optimizing business processes and unifying the customer engagement process, including with the aim of improving customer satisfaction and the total volume of services. This transformation was designed to introduce a flatter management structure within business units, which is in line with the goals of implementing MOEX's cross-market strategic initiatives, and growing career opportunities for employees. In 2018, a new business unit was established to create a financial product Marketplace platform.

The organizational chart is shown in Appendix .

At the end of the reporting year, the membership of the MOEX's Executive Board decreased from six to five members as Sergey Polyakov, Managing Director for IT, left for another company. Since December, Dmitry Shcheglov, Managing Director for Operations, a member of the Executive Board, has overseen the IT business units. Igor Marich, Managing Director of the Money and Derivatives Markets took responsibility for project management and process optimization.

REMUNERATION POLICY

Moscow Exchange pays a competitive level of remuneration to attract, retain and incentivize employees. MOEX's remuneration principles set out the fixed (base salary) and variable (annual bonus) components of remuneration. The fixed portion of remuneration and targeted size of the variable portion is determined based on the applicable system of basic salaries (grades) and data of the salary market. The variable portion of remuneration correlates with the performance of the Group and individual results of each employee, both of which are evaluated as part of the performance management process.

The Supervisory Board of Moscow Exchange approved corporate targets for 2018, including financial performance, progress on key projects as well as development of the MOEX's business and technologies.

Corporate targets of NCC and NSD differ from those of Moscow Exchange due to the specific nature of NCC and NSD's businesses (as a central counterparty and a central securities depository, respectively) and different legal requirements for credit institutions. As a result, the corporate targets for NCC and NSD are reviewed on a standalone basis and approved by their respective supervisory boards.

The Supervisory Board of the Exchange also approved the principles and parameters of a stock-based long-term remuneration program intended to help the Group retain key personnel and motivate them to contribute to the long-term sustainable growth of the Group.

In addition, the Group put in place a system of benefits, including several types of insurance and financial assistance plans.

MOEX consistently strengthens the competitiveness of its compensation packages for recruitment and retention of professionals. In the reporting year, MOEX strived to increase the interdependence of the variable portion of remuneration, especially bonuses for employees of market business units, with financial targets and implementation of strategic projects through a goal-setting system.

CORPORATE CULTURE

Fostering a strong corporate culture is one of Moscow Exchange Group's strategic priorities. Specifically, the Exchange aims to:
- Develop highly efficient employee behavior models to address business challenges;
- Strengthen employee engagement in the implementation of the Group's strategy;
- Enhance effective staff interaction (vertical, horizontal and cross-functional).

A strong corporate culture is built on the Exchange's values:
- We are responsible for the future of the Company;
- We strive for excellence and are open to change;
- We work in partnership with our clients;
- We value transparency and integrity.

To integrate these values into its everyday business, the Group incorporated them into all key processes and communication tools:
- Values and competences feedback;
- Internal communications;
- Top management as a role model for embracing the company's values;
- Audit of regular business processes to ensure compliance with the values;
- Employee training;
- Assessment of new employees based on the refined values;
- Non-financial incentives for employees;
- Talent management;
- HR brand development;
- Recognition programs with values-based categories;
- Corporate clubs.

Moscow Exchange strives to ensure a uniform approach to develop the company's corporate culture. With this in mind, 2019 was declared the year of a dialogue between Senior Management and employees, between internal customers and performers, as well as between colleagues.

To better understand the corporate culture, the Group conducted a survey to assess the level of engagement of employees, with 88% of the Group's employees participating. Following the results of this survey the Group identified key areas for development that it specifically plans to focus on in 2019.

TRAINING AND DEVELOPMENT

MOEX's training and development systems consist of educational programs, tools for growth in the work place and self-education. MOEX encourages employees to take charge of their own education, providing them with advanced technology and the necessary resources and opportunities. Starting from 2017, MOEX adhered to the 70-20-10 education concept that calls for shifting the educational focus to self-education and workplace development (70% of efforts), alongside with learning from others' experience (20%) and hands-on training sessions (10%).

692 employees took part in various educational programs and trainings.

Professional and compulsory training is the priority. MOEX also focuses on the development of employee competences along with the leadership and project management skills necessary to deliver on strategic projects. These educational initiatives account for up to 30% of time. In 2018, the third educational stream began, pursuant to the Management Faculty program with 40 Group employees expanding their leadership competences. Under the Project Faculty program, 30 employees developed their project management and design thinking skills.

The Professional Faculty launched an Internal Coaches project, under which the Group's employees hold master classes, trainings and workshops to share unique knowledge with their colleagues. In 2018, ten MOEX employees were elevated to the status of internal coaches, and held 16 trainings on various topics attended by 135 employees.

Every year the company holds a Week of Knowledge for Group employees to familiarize themselves with educational trends. In 2018, over 400 employees attended master classes dedicated to development of the critical thinking and emotional intelligence.

Educational programs for senior executives include both individual and group trainings. To ensure continuous development of the company's management, a leading European business school developed and implemented a program to develop strategic management and leadership skills.

Special attention was given to performance management, particularly the feedback component of performance management. The working instruments of the company's leadership in this regard were the results obtained from MOEX FeedBack and the updated 360-degree survey. Plans for 2019 consist of launch of Dialogue Workshop, a specialized training course for senior managers of all levels.

In 2018, MOEX upgraded its talent management program, seeking to put in place a consistent performance and capabilities assessment process to establish long-term individual plans for professional and career development. The program places particular emphasis on discussions around succession planning and building a pool of potential successors to key positions. The Group runs a succession planning program for members of executive bodies, including at the subsidiaries, to define a pool of successors to key positions and put in place individual succession development plans.

SOCIAL SUPPORT

Providing social support above and beyond the mandatory minimums prescribed by law is a part of the Group's social policy and is designed to ensure a sense of security for employees and to improve workforce performance and loyalty. Corporate social support is provided as per the Regulations on Corporate Social Support to Employees of Moscow Exchange approved by the Group's executive bodies in 2016. Healthcare, maternity leave and childcare are the key elements of the social support policy. All Group companies provide voluntary health insurance (VHI), international health insurance, medical insurance for travellers as well as personal accident and disease insurance plans for all employees. Insurance programs are subject to annual audits, including following the results of employee surveys assessing the quality of medical insurance coverage. Employees can have family members covered under VHI programs at the expense of the Group (subject to the predefined individual limit).

The Group has a standing Support Committee to handle such issues as providing financial assistance (and determining the size thereof) to employees who suffered an accident or emergency not covered by existing insurance plans.

Employees with work experience of six months or more are entitled to additional temporary incapacity payments if they fall ill or need to care for an ailing family member; while those with a track record of at least two years can also claim additional maternity leave payments.

The Group also promotes a healthy lifestyle among its employees, and offers influenza and viral respiratory infection vaccinations. A Health Days campaign was launched. Employees are entitled to special corporate discounts at leading fitness centers and can join a number of sports clubs (for running, triathlon, mini football, hockey, basketball, volleyball, yachting and chess), they can also use a small gym and showers, and for those who ride a bike to work, bicycle storage facilities are available. Employees can access special rates at leading fitness centers.

The Group established and successfully runs corporate clubs for entertainment and intellectual development, including: intellectual club MOEX Smart Club, scientific club MOEX Data Science, educational club MOEX Walk, culinary club MOEX Kitchen and dancing club MOEX Dance. These initiatives serve to strengthen the corporate culture and create a favorable environment for employees, including by promoting a healthy lifestyle.

The Group strictly adheres to labor laws providing social guarantees to certain categories of employees (including those with a family) and granting additional days off to parents taking care of disabled children and additional unpaid leave to employees taking care of babies.

HEALTHCARE AND OCCUPATIONAL SAFETY

Ensuring personal security and occupational safety with no negative impact on performance are among the Group's priorities.

Assuming full responsibility for protecting the lives and health of employees, the management of the Group adheres to high standards in the area of personal security and occupational safety and undertakes to:

- comply with the labor laws of the Russian Federation and state regulations on occupational safety;
- ensure safe working conditions and protect the lives and health of all employees by taking consistent and continuous steps (actions) to prevent accidents, cases of deterioration of health and occupational injuries and diseases, including through labor risk management;
- inform every employee about dangers, threats and professional risks identified in the workplace;
- provide for high-quality and timely training to maintain excellence in occupational safety and continuously improve employees' competencies in this area;
- implement an economic policy encouraging the creation of working conditions meeting the requirements of the state occupational safety regulations;
- provide employees with modern collective and individual protection equipment;
- ensure comprehensive control over compliance with state occupational safety regulations both in the individual workplace and across business units;
- provide the necessary resources and incentives to engage employees (or their authorized representative bodies) in occupational safety management and encourage them to bring working conditions into line with occupational safety requirements;
- provide personal motivation for every employee to participate in the creation of safe (to the fullest extent possible) working conditions by enforcing strict safety discipline;
- perform special working conditions assessments and workplace inspections of progress on sanitary and anti-epidemic (prevention) initiatives in a timely manner;
- ensure the availability of complete and accurate information on working conditions and the wider occupational safety situation in the Group both from the employer to the employee and from the employee to the employer (or its representative);
- constantly improve the occupational safety management system to ensure it meets the current needs of the Group.

The management assumes responsibility for the implementation of occupational safety initiatives by setting relevant targets and goals, planning and financing their achievement and undertaking to respect the aforementioned values – and setting the expectation that every employee do the same.

To provide the best working and recreational conditions for employees, MOEX and the Group carry out special working condition assessments and evaluate the implementation of and compliance with sanitary and anti-epidemic (prevention) initiatives in the workplace in a timely manner. This helps maintain employee productivity at a sustainably high level.

In 2018, a special assessment of working conditions was conducted at 1,101 working places. Following the results of these special assessments, no harmful or hazardous occupational conditions were detected; conditions were deemed acceptable.

To keep employees updated on working conditions and exposure to professional risks, the Group put in place the following communication toolkit:

- inclusion of relevant provisions in employment contracts;
- ensuring the results of special working conditions assessments are made available to employees;
- posting of special working conditions assessment summaries in relevant work spaces;
- use of online information resources and websites of legal entities that are part of the Moscow Exchange Group;
- posting of relevant information in public areas for employees.

The Group organizes an extensive range of briefings on occupational, electrical and fire safety, civil defense and emergencies. In 2018, induction occupational safety briefings were attended by 327 new employees.

An occupational safety training is arranged for executives in a specialized training center on a regular basis as required by applicable laws. In 2018, nine persons underwent such training and assessment of their knowledge of occupational safety regulations.

In 2018, 136 employees completed a first aid course.

All safety-related instructions and regulations are available on the corporate intranet portal, where employees can also find articles on occupational health and e-learning courses on safety.

To organize occupational health monitoring, MOEX approved:

- a procedure for mandatory (in line with the applicable regulations) and voluntary medical examinations and mental health assessments.
- a list of jobs (positions) subject to medical examinations and mental health assessments.

The Group arranges annual influenza vaccinations for employees. Employees are provided with antiseptics and medical face masks during outbreaks of influenza and viral respiratory infections. Germicidal air purifiers were purchased.

Should an employee feel unwell or require immediate medical assistance, he or she can visit one of the corporate doctors based in the Moscow offices.

To ensure and maintain safe working conditions and prevent occupational injuries and diseases, the Group put in place an accident prevention framework with response procedures including the approved and developed accident response and management plans, and also adopted procedures for investigating and reporting on any such occupational injuries and diseases, and executing reporting documents.

In 2013-2018, only one accident was reported at the Exchange (it occurred in 2017). The state labor inspector investigating the accident found no fault on the part of the Exchange.

In 2018, the Exchange launched new and upgraded e-courses on occupational and electrical safety.

Moscow Exchange and the community

COMMUNICATION WITH PROFESSIONAL COMMUNITY

Moscow Exchange is actively engaged in a constructive dialogue with existing and potential investors and market participants in the form of direct communication through its advisory bodies and working groups, as well as investment conferences, forums and specialized trainings. These activities assist in attracting new investors to MOEX's markets, expanding the client base, increasing liquidity on the markets and boosting investment into the Russian economy.

Moscow Exchange Council

MOEX actively maintains ongoing communication with market participants through its advisory bodies, with a view to receiving feedback from clients regarding new products and services, ways to improve the Exchange's infrastructure and proposed changes to financial market regulations.

MOEX's principle advisory body is the Moscow Exchange Council, whose primary objective is to put forward strategic proposals to further develop the Russian financial market, as well as to represent traders and consumers of the Exchange's services in order to ensure full and comprehensive recognition of their needs when addressing any issues related to the organization and development of the financial market infrastructure. The Moscow Exchange Council is comprised of representatives form the largest market participants, self-regulatory organizations, asset management companies, investment banks and the Bank of Russia.

In 2018, the Moscow Exchange Council consisted of 25 members; its membership was approved by the Supervisory Board of the Moscow Exchange at the end of 2017. The Chairman of the Council is Andrey Zvezdochkin, Chief Executive Officer of ATON investment company.

Andrey ZVYOZDOCHKIN,

Chairman of the Exchange Council and Chief Executive Officer of Aton

The Exchange Council consists of senior executives representing the largest Russian market participants, including banks, brokerages, asset managers and self-regulatory organizations. There is no other body in Russia that acts as a forum to discuss issues related to the entire financial industry.

The Council's main focus is on development of the exchange infrastructure and the market as a whole. Topics that the Council engages with include legislative initiatives aimed at improving the financial market and protecting investors' interests, measures to boost the size of the market and liquidity and the introduction of new products and technologies. These are all things that help the financial sector to evolve and thrive.

2018 was another successful year for the investment sector. Russia's securities market continues to demonstrate strong growth potential. The Exchange Council's work in addressing the most important issues facilitates the unlocking of that potential.

In 2018, the Moscow Exchange Council held five meetings, where the following issues were considered:

- the decentralized depository for digital assets project;
- interaction with companies issuing securities;
- regulatory initiatives;
- methods of listing bonds;
- the financial products Marketplace project;
- status of the Unified Collateral Pool project;
- legislative initiatives to develop the financial market;
- introduction of a system of active monitoring of trading through filing/withdrawal of applications;
- feasibility for Russian investors to access global financial market products via MOEX.

User Committees

Nineteen user committees (based on financial market participant groups and issuers) operate under the auspices of Moscow Exchange and NSD.

Most of the committees are formed on an annual basis and composed of representatives of professional market participants, including banks, brokers, asset management companies, issuers and non-financial companies. They are mainly tasked with the preparation of proposals to amend legislation and regulations; the consideration of regulatory matters associated with public trading and issuance of securities, disclosure of information on the securities market and corporate governance. In addition, they develop proposals for managing securities trading, improving clearing and settlement technologies, as well as expanding the range of available tools and services. Matters put forth for review by the Moscow Exchange Council are often preliminarily debated in the user committees.

For the convenience of committee members, clients and market participants, MOEX publishes a monthly digest containing information on discussions and decisions taken at Exchange Council and user committees meetings.

Information on the activities of the committees and the Exchange Council is publicly available and can be accessed on the website of MOEX and NSD.

Expert Council on Listing

In order to deepen analysis and improve the quality of listed securities, the Expert Council on Listing was established. Its main function is to develop recommendations for MOEX on listing, delisting, changes in the level of listings of securities and the strengthening of listing requirements. The Expert Council is an advisory body and its recommendations are intended to augment the expertise of the Exchange.

In 2018, a new membership of the Expert Council on Listing was elected, consisting of 42 members, including appraisers, auditors, bankers, lawyers, analysts, investors and methodologists. Meetings of the Expert Council are held in the form of working groups made up of seven to ten experts, appointed by the Chairman of the Expert Council to consider certain agenda items.

In 2018, the Expert Council on Listing held 15 meetings, 37 issues were considered, including the development of recommendations and criteria for the inclusion of shares, bonds and collective investment instruments in the securities sector of uncertain investment risk; development of recommendations on the disclosure of information by issuers of shares from the first and second level quotation lists; development of recommendations on changes in the level of listing or delisting of securities of certain issuers.

IR Academy

Since 2016 the IR Academy has operated at Moscow Exchange. The IR Academy is a discussion platform for investor relations (IR) specialists and a center for the development of professional IR principles and standards.

The IR Academy holds seminars for investor relations professionals at public companies aimed at helping them strengthen their IR function, improve communications with the investment community and elevate disclosure of information and corporate governance standards. The seminars assist IROs in adopting best practices of interaction with investors.

In 2018, the second phase of the IR Academy project was launched. Since the launch of the IR Academy in September 2016, 15 seminars have been held, hosting about 100 speakers.

Development of Corporate Governance in Russia

The annual report competition organized by Moscow Exchange together with the RCB Media Group is one of the most important events in the sphere of corporate governance and investor communication in Russia. The Competition celebrates transparency of public companies and excellence in disclosure of information for the benefit of investors and clients. In 2018, the 21st Annual Report Competition was held: 122 companies participated, including five companies for the first time.

MOEX convened the Corporate Governance in Russia 2018 conference, an event dedicated to discussion of Russian and international trends in corporate legislation and regulation, as well as the role of information technologies in improving corporate governance. At the conference, the Bank of Russia presented its digest "On Corporate Governance Practices in Russian Public Companies."

Maria Gordon and Bella Zlatkis, members of the Supervisory Board of the Moscow Exchange, became winners of the 13th Director of the Year National Award held in the framework of the 8th All-Russian Corporate Governance Forum. Maria Gordon won in the Independent Director nomination, Bella Zlatkis received an award for her contribution to the development of the institute of independent directors.

Interaction with the Investment Community

For many years, MOEX has convened its own events and supported the largest professional conferences of financial market participants. Since 2009, the Exchange has organized Exchange Forums across the world's major investment centers, such as London, New York, Shanghai and Moscow, annually drawing over 2,000 representatives of global institutional investors and banks, heads of trading divisions and portfolio managers. The Forums provide a unique platform for dialogue among government officials, representatives of investment funds and banks and CEOs of Russian issuers while marketing the Russian financial market to domestic and international investor. In 2018, the Moscow Exchange Forum was held in two cities in China, Shanghai and Beijing.

The Exchange also held the Annual Money Market Forum, the On-Exchange Derivatives Market: Looking Forward conference and the Retail Investor conference, which was the opening event of the Financial Solutions Fair 2018. The Exchange was a business program partner of the St. Petersburg International Economic Forum (SPIEF), the International Financial Congress held annually by the Bank of Russia in St. Petersburg and the Finopolis innovative financial technologies forum in Sochi. In addition, the Exchange supported the events of self-regulatory organizations, i.e. conferences organized by the National Association of Equity and Bond Market Participants (NAUFOR), namely the Russian Equity and Bond Market conference and the Russian Structural Products Market conference as well as sponsoring the Repo-Forum organized by the National Financial Association (NFA).

In 2018, agreements for information cooperation related to the promotion of enterprises on the debt market were signed with financial market participants and public organizations from the Samara, Saratov and Ulyanovsk Regions, the Republic of Tatarstan and the Novosibirsk public organization Interregional Association of Business Leaders. The cooperation agreements are aimed at providing potential issuers and investors with information on financing opportunities, including through the issue of corporate bonds and the organization of scientific, practical and thematic events focused on the coverage and development of the financial market.

International Cooperation

Moscow Exchange places great emphasis on cooperation with international financial organizations, with a view to exchanging experience and embracing global best practices. In 2018, this work focused on expanding cooperation with Chinese companies, banks and exchanges, including hosting joint events and signing cooperation agreements.

In September, MOEX hosted the first Russian-Chinese Investment Conference in Moscow and St. Petersburg jointly with the Shanghai Stock Exchange to discuss the future development of the capital markets of the two countries. The events were attended by the heads of Chinese brokerage and asset management companies, representatives of the corporate sector, representatives of the Bank of Russia and the Russian Ministry of Finance, leading Russian banks and brokerage companies and major Russian and Chinese investment funds.

In November, the traditional Exchange Forums on the Russian capital market were held for Chinese investors in Beijing and Shanghai. They were attended by representatives of MOEX and major Russian issuers, Chinese financial and infrastructure institutions as well as institutional investors. Forums and seminars were aimed at developing cooperation in the financial sector and creating joint projects in the public capital market.

In October, during a visit of a delegation from the Shenzhen Stock Exchange to Moscow, MOEX signed a memorandum of understanding committing to conduct joint marketing activities for Russian and Chinese investors and to implement projects ensuring mutual access to the markets of both countries, including potentially establishing a trading and clearing link between Moscow and Shenzhen, as well as cross-listing of ETFs on Russian and Chinese stock indices.

In November, in China, MOEX signed a memorandum of understanding with the Shanghai Clearing House (SHCH). Under this memorandum, the parties shall work out the possibility of building clearing and settlement links between the central counterparties of the Russian and Chinese markets, the NCC and the SHCH. The link will establish the settlement and clearing infrastructure necessary for allowing Chinese banks and investors to access MOEX FX Market and Bond Market instruments, and to allow Russian market participants to access the Chinese market.

MOEX also signed a memorandum of understanding with China International Capital Corporation (CICC) that aims to deepen investment cooperation between Russia and China and develop the off-shore CNY market in Russia. Under this agreement, the parties will explore projects that enable trading CNY instruments on MOEX, as well as cross-listing of ETFs and other financial instruments of the Russian and Chinese trading platforms.

In April, during the third annual Global Gold Market Summit 2018 held in China, MOEX signed a memorandum of understanding with the Shanghai Gold Exchange aimed at promoting cooperation between the two exchanges in the field of gold trading. The signing of this memorandum constituted the next step in the expansion of financial market cooperation between Russia and China and the development of a Regulated Precious Metals Market provided for by the cooperation agreement in the field of gold trading between the Bank of Russia and the People's Bank of China.

International cooperation was not limited only to Chinese financial institutions. In April, during the annual Exchange Forum held in Moscow, MOEX signed a memorandum of understanding with the Hanoi Stock Exchange (HNX), aimed at promoting cooperation and strengthening the partnership between the two exchanges. In October, MOEX signed a strategic partnership agreement with the Kazakhstan Stock Exchange (KASE), under which MOEX will acquire up to 20% of KASE. The main objectives of the partnership include integration of the Russian and Kazakhstan trading markets, mutual access to exchange markets for professional participants and investors, exchange of information on market development, promotion of the KASE's initial public offering and use of MOEX's experience in the initial placement of the KASE shares.

MOEX is a member of the World Federation of Exchanges (WFE) and the Futures Industry Association (FIA). In 2018, MOEX was represented at several WFE and FIA conferences in Chicago, London, Boca Raton and Athens. MOEX was also an active participant of the WFE working groups, including those studying exchanges' efforts to attract international investors to exchange markets.

Employer Brand and Attraction of Young Specialists

The Exchange was recognized as one of the World's Best Employers for the second year in a row. The ranking by Forbes Magazine ranked 500 top employers globally, with only four Russian companies making the list.

Due to the unique profile of MOEX, one of the priorities of the personnel policy is to attract highly qualified employees and young specialists. In 2018, MOEX targeted young talent by putting in place an internship program for 46 students of financial and IT departments of universities, giving them an opportunity to participate in real Moscow Exchange projects and undergo a comprehensive training program to develop and improve their skills and competencies. The most successful interns were offered the opportunity to continue their career at the Exchange.

In 2019, MOEX will continue working with young specialists and developing internship programs in accordance with the best practices. In April 2019, the Exchange will launch three internship programs:

- **MOEX Future Leaders** is an annual internship for senior university students who want to undergo training in the financial markets industry and strive to become true leaders. During the year, students will be able to work in several divisions of the Exchange and gain universal experience.
- **MOEX Study&Work** is a program for students wishing to participate in research activities under the supervision of experienced professionals at MOEX.
- **MOEX Start** is a three-month internship that allows interns to get acquainted with the activities of the Exchange and gain first-hand work experience during their summer holidays.

Collaboration with Universities

MOEX actively participates in financial literacy initiatives, implementing various initiatives in this area. Together with one of Russia's leading economic universities, the Financial University under the Government of the Russian Federation, MOEX convenes Fincontest, a competition focused on the financial markets. Fincontest tests the knowledge of participants in the fields of corporate finance, the securities market and financial analysis, while assisting participants in beginning a professional career in finance. In 2018, more than 2,000 students took part in Fincontest; based on the results of a multi-stage selection process, two students were offered an internship at Moscow Exchange.

Moscow Exchange professionals are regularly involved in joint programs with leading Russian universities. In 2018, MOEX speakers held a series of master classes at the Moscow State Institute of International Relations (MGIMO), the Lomonosov Moscow State University (MSU), the Higher School of Economics (HSE), the Financial University under the Government of the Russian Federation and the Moscow Engineering Physics Institute (MEPhI). The financial literacy course of study, Master's Program in Securities and Financial Engineering, was launched in collaboration with the Financial University. Over the past few years, Moscow Exchange Group employees have run a special course on Financial Risk Management at Moscow State University's Faculty of Computational Mathematics and Cybernetics. MOEX has cooperated closely with MEPhI for 20 years, a partnership under which the MEPhI operates a faculty specializing in exchange trading technologies.

In 2018, Moscow Exchange Group supported the All-Russian Days of Financial Literacy in Educational Institutions, as well as the 13th All-Russian Contest on Financial Literacy & Financial Market and Financial Consumer Protection for senior pupils.

Moscow Exchange also facilitated the On-Exchange Market Cup of the Governor of the Novosibirsk Region, a tournament where 153 students from 14 Russian universities had the opportunity to get acquainted with securities exchange markets, try out trading strategies, practice forming an investment portfolio and gain work experience in the markets.

Together with the major brokers and banks, the Financial Triathlon – Treasure Exchange quest competition was held in St. Petersburg for students and undergraduates, who could get acquainted with stock exchange history in Russia, the mechanisms of operation of the exchanges and brokers, try themselves as investors while solving entertaining economic problems and mini-cases and answer quick-fire questions.

Stock Exchange History

Since 2002, the Exchange has operated a museum that chronicles the main stages of creation and development of the Exchange and the financial markets in Russia.

In 2018, on the basis of the collected historical materials, about 100 excursions, lectures and seminars were held, which were attended by about 2,500 people, including schoolchildren and university students, as well as official Russian and foreign delegations.

Tours of the museum for new employees, who are just beginning to get acquainted with the Exchange, resumed. In addition, in 2018, the Exchange joined the All-Russian Night of Museums with about 100 employees of the Exchange visiting the museum and listening to a lecture on stock exchange history.

MOEX constantly engages in new research, and in 2018, a collection of historical documents was prepared for publication, which included the Consolidated Charter of Joint-Stock Commercial Banks, materials of the Congress of Joint-Stock Commercial Banks of 1916 and an essay on the establishment and activities of this banking association during the First World War, the Bolshevik Revolution and emigration.

CHARITABLE ASSISTANCE

The charity program is carried out in accordance with the Company's Charity Policy, which was approved by the Executive Board of Moscow Exchange on 6 September 2012. The Group's charitable activities prioritize financial support for long-term social initiatives implemented by reputable specialist foundations and non-profit organizations. The Executive Board approves the list of projects to be funded based on recommendations of the Charity Policy Committee on an annual basis.

Moscow Exchange focuses its charitable initiatives on the following key areas:

- development, education and medical treatment of children;
- aid to those injured in catastrophes and natural disasters;
- support for veterans and the elderly.

The Exchange does not support organizations that discriminate based on gender, sexual orientation or nationality.

The Exchange does not, directly or indirectly, finance organizations whose activities are in any way associated with human rights violations or manufacturing and proliferation of weapons of mass destruction, and it does not take part in projects that carry risks of environmental pollution.

The Group cooperates with several reputable charitable foundations, which receive the bulk of its charity allocations. By working with partner non-profit organizations, the Exchange ensures that the funds impact a large number of people in need while also ensuring transparency of expenditures. In 2018, the Group's charity expenses amounted to RUB 27.5 mln.

In selecting new projects or deciding whether to continue funding existing projects, the Exchange applies the following criteria:

- The project's ability to address a socially significant problem in Russia;
- Measurable assessment of the project's impact;
- Opportunity for Moscow Exchange employees to take part in the project.

Support of Educational Programs

In 2018, as part of the Exchange's continued cooperation with the New Teacher Charity Foundation for Education Support and Development that began in 2016, it allocated RUB 3 mln to support the Teacher for Russia program, which is a Russian project that sends talented young people and graduates of Russia's leading higher education institutions to teach in public schools. The program is designed to provide access to quality education for children from areas with a challenging social environment, to raise the prestige of the teaching profession amongst top Russian graduates/attract talented teachers to the school system, to spur the transformation of ordinary public schools and to introduce new educational formats and technologies. At present, the program involves 170 teachers.

The Exchange's donations fund 10 mathematics and economics teachers from the Tambov, Voronezh, Kaluga and Novgorod regions with curriculum support and scholarships.

The Exchange allocated RUB 4.2 mln to support the Nikitsky Club of scientists and entrepreneurs. The club is intended to be an interdisciplinary forum for members of the professional community with a broad social view to discuss critical issues facing Russia and help society identify the country's interests and adequate policy responses to various issues.

Aid for Children

Since 2014, the Exchange has partnered with the Gift of Life Foundation, which focuses on helping children with cancer and other life-threatening illnesses. In 2018, the Exchange allocated RUB 3.5 mln to support the foundation's most important program – Voluntary Donation – which encourages citizens to donate enough blood to hospitals.

In 2018, NSD allocated over RUB 1.2 mln to the charitable foundations Touching the Heart (Dmitry Malikov's foundation), Strana Chudes and BELA Butterfly Children's Fund to purchase medicine, dressings, high-tech hearing aids and to pay for physical therapy for children.

NSD's financial support of RUB 300,000 to Our Children Foundation assisted 35 orphan children from the Shatalovsky orphanage and Safonovsky school for orphans, as well as seven camp counselors and three coordinators who took part in a summer sports and fitness program, "Holidays with a Cause". As part of aid provided to Sheredar charitable foundation (RUB 586,000), eight children who were cancer patients were able to receive two courses of cancer treatment each.

In 2018, NSD continued financing the Danilovtsy volunteer movement and donated RUB 300,000. Volunteers organized events for cancer patients at the Rogachev Children's Hematology Center, Burdenko Neurosurgery Institute and Russian Children's Clinical Hospital.

NSD also paid the salary (RUB 235,000) a teacher of the junior remedial class at the Elizavetinsky orphanage for six months. RUB 93,000 was donated to the Sozidanie charitable foundation to cover assistance to children with hearing impairments. RUB 65,000 was donated to the Udelninsky center of out-of-school activities at which orphan children reside; the funds went toward the purchase of toy building kits Maxiclastic and Fanclastic as well as sound equipment for a vocal studio.

Aid for the terminally ill and their families

In order to foster the development of hospice care in Russia, the Exchange works with the Vera Charity Foundation, which supports over 20 hospices in Moscow and the Russian regions.

In 2018, the Exchange donated RUB 3.5 mln to programs and activities aimed at providing material, medical and social aid to families with terminally ill children, hospices for children and adults and regional healthcare establishments that render palliative care, as well as to the state-run Moscow Full-Service Palliative Care Centre of the Moscow Department of Health.

Rehabilitation after stroke

Since 2014, the Exchange has cooperated with ORBI, the first and only foundation for combating stroke. The two organizations work to raise awareness of stroke prevention measures and to help stroke survivors get back to their normal lives, which also takes a financial burden off the government.

In 2018, the Exchange donated RUB 200,000 to help people who had suffered a stroke and their families. The funds were distributed between two programs:

- creation of occupational therapy simulation rooms at medical facilities engaged in rehabilitating patients with acute cerebrovascular diseases;
- organization of the Together Against Stroke campaign that aims to raise public awareness of stroke prevention and to foster healthy lifestyles.

Support for veterans and the disabled

In honor of the 73rd anniversary of the victory in World War II, Moscow Exchange Group provided financial assistance to veterans: one-time payments were received by 89 World War II veterans and disabled soldiers, home front workers, siege survivors and prisoners of concentration camps. The donations totaled RUB 5.2 mln.

In addition, in 2018 NSD rendered financial support of RUB 80,000 to the Duet Wheelchair Dance Club that allowed the group to participate in the Russian Wheelchair Dancing Championship.

Corporate volunteer program

Moscow Exchange employees have the opportunity to take part in charitable activities by volunteering or donating funds. Announcements of socially significant activities are included in the daily Company News morning newsletter, and reports and photo essays about events are posted on the Corporate Philanthropy intranet page, where employees can also register to participate in volunteer events or make a donation, as well as advertise alternative charitable projects.

In 2018, the Group's offices hosted Donor Days (in total, 123 employees donated blood) and charity fairs. The events were supported by the Blood Service and Gift of Life charitable foundation. The Group also organized campaigns to raise funds for the treatment of children suffering from cancer. Total funds donated by employees in all campaigns exceeded RUB 111,000 and were allocated to the Gift of Life foundation.

RESPONSIBLE INVESTMENT DEVELOPMENT

Corporate social responsibility is playing an increasingly important role in capital markets, pushing companies to apply ESG (Environmental, Social and Governance) principles. Environmental and social criteria cover environmental and society activities, while the governance criterion implies the adoption of an ethical corporate policy.

The Exchange is working hard to implement principles for responsible investment in Russia, encouraging issuers to disclose information to help investors determine their level of corporate social responsibility.

The Exchange Supports Sustainable Development

The Exchange is planning to join the global Sustainable Stock Exchanges (SSE) initiative, which was launched in 2009 by UN Secretary General Ban Ki-moon and is a partner program of UNCTAD, the United Nations Global Compact, UNEP FI and PRI. More than 80 stock exchanges around the world have joined the initiative, which supports four key areas: gender equality, disclosure of information about social responsibility, countering man-made climate change, and support for global partnerships. Participation in the initiative confirms the Exchange's intention to encourage dialogue among investors, issuers and regulators on matters related to long-term responsible investment, in order to improve corporate ESG practices and encourage information disclosure about action in these areas.

In March 2019, the Exchange entered into a cooperation agreement with the Russian Union of Industrialists and Entrepreneurs (RUIE) to develop and reinforce responsible business practices among issuers, strengthen their investment case, contribute to enhancing transparency from issuers and strengthen trust among investors. As part of this work, the Exchange calculates sustainable development stock indices, namely Responsibility and Transparency and Sustainable Development Vector, based on analysis of companies on ESG indicators carried out annually by RSPP. The calculation base for the indices includes the securities of issuers who disclose the most complete information on activity in the field of sustainable development and corporate social responsibility.

To promote responsible financing and the creation of a "green" financial system, the Exchange is planning to establish a Sustainable Development Sector, which will include green and social bonds. The new sector will align issuers and investors with target investments and will contribute to the financing of companies that implement environmental and social programs. The Exchange is currently actively negotiating with ministries and departments regarding government support for investors and issuers of "green" and social securities.

In 2018, the Exchange held a series of conferences and seminars with the participation of Russian issuers, banks, development institutes and institutional investors, which dealt with trends in and development prospects for socially responsible investment in Russia and around the world, increasing interest among investors in companies which meet ESG requirements, and the impact of ESG factors on securities issuers' credit ratings.

Support for Gender Equality

In 2018, the Exchange joined the global Ring the Bell for Gender Equality initiative, organizing an official ceremony dedicated to gender equality and support of women's contribution to business, politics and economy. The main goal of the initiative is to encourage businesses to promote sustainable development goals by increasing women's rights and opportunities. In 2018, the initiative was supported by 61 stock exchanges all over the world.

Adherence to gender equality principles is also a part of the Exchange's corporate culture. The Code of Business Ethics stipulates that all employees of the Exchange should adhere to the principles of equality in relation to respect of labor rights, absence of discrimination towards personnel and customers on the basis of their gender, race, skin color, nationality, language, origin, property, marital status, social and occupational position, age, residency, religious beliefs, opinions, affiliation or non-affiliation with non-governmental associations or any social groups. The Exchange also respects all employees' cultures, opinions and lifestyle, and refrains from any actions that would promote the creation of an atmosphere of intimidation, hostility, offence or violation of human dignity at the workplace.

Environmental efficiency

The environmental aspects of Moscow Exchange's activities are governed by Russian environmental legislation and standards, as well as by MOEX's own internal documents – the Environmental Monitoring and Industrial Control Program (adopted in 2017) and Waste Generation and Disposal Limits draft standards (adopted by the Moscow Department for Environmental Management and Protection for the five-year period through February 2023).

The internal environmental monitoring regulations used at all the Exchange's premises help MOEX meet modern environmental requirements:

- analyzing operational processes and selecting the best technologies for efficient use of resources and energy;
- introducing technologies for recycling and waste disposal;
- preventing pollution, reducing environmental impact;
- monitoring compliance with environmental legislation and maintaining a safe office environment and high levels of well-being for staff.

Analytical data on the environmental performance of the Exchange are given in the following sections.

WASTE COLLECTION AND RECYCLING

Waste on Exchange premises is collected, accumulated and disposed of by classification (by type, hazard level and other indicators to ensure correct collection, storage, disposal and recycling) and systematically in accordance with the approved draft standards on Waste Generation and Disposal Limits.

Waste is processed using the latest recycling and treatment technologies. Used oil and air filters, mercury lamps, office equipment and electronic items such as monitors, keyboards and cartridges, are all sent to specialist contractors for disposal. Passports for category I-IV waste have been obtained for this purpose and data submitted to the State Control Committee of state environmental agency Rosprirodnadzor.

All Moscow Exchange offices have battery collection and disposal points. Moscow Exchange employees have been using waste sorting bins since December 2018.

Waste records are kept at the offices on Bolsoi Kislovsky Pereulok and Sredny Kislovsky Pereulok, as well as on Spartakovsakaya Ulitsa. At other offices disposal and recycling of all waste classes is the responsibility of the landlord, and related expenses are included in rental costs.

Total solid waste, tons

Waste category[1]	2017	2018	Change 2018/2017
Category 1	0.17	0.19	11.1%
Category 2	--	0.11	–
Category 3	4.41	0.13	–97%
Category 4	209.00	224.20	7.3%
Category 5	26.21	44.19	68.6%
Total	**239.79**	**268.82**	**12.1** %

The increase in the share of Category 1 waste in 2018 was due to the planned replacement of fluorescent lamps with energy-saving LED lights in Exchange offices. The increase in the share of Category 2 waste was due to the recycling of uninterruptible power supplies (planned replacement of exhausted supplies is scheduled for every 5-7 years).

The change in the share of Category 3, 4, 5 waste was due to telecommunication equipment being recategorized down (from Category 3 to Category 4) in line with legal requirements, and also due to increased volumes of paper recycling.

1. Waste categories are established by the regulations of the Russian Federation.

Method	2017	2018	Change 2018/2017
Re-use	15.52	19.94	28.5%
Release of valuable components, including energy	4.57	2.53	–44.6%
Sent to landfill	215.95	242.46	12.3%
Other methods (deactivation and recycling)	3.75	3.86	3.0%
Total	**239.79**	**268.79**	**12.1** %

WATER

Total water consumption, liters

	2017	2018	Change 2018/2017
Municipal and other water supply systems	28,378,300	36,925,580	30.1%

Total water discharge[1], liters

	2017	2018	Change 2018/2017
Planned discharge volume	31,424,640	39,866,530	26.9%

Water consumption and discharge records are maintained for the Exchange's offices on Bolshoy Kislovsky Pereulok, Sredny Kislovsky Pereulok, and Spartakovskaya and Vozdvizhenka Streets[2]. For the rest of MOEX's facilities, costs for water, sewage and waste disposal are included in the rental costs and are the responsibility of the landlord.

Water offtake is organized through municipal water systems.

Water is discharged to the urban sewage system and rainwater flows through Mosvodostok, and does not require treatment.
The increase in water consumption is due to the relaunch of the fitness club on Bolshoi Kislovsky Pereulok in April 2018 following refurbishment. The fitness club, which is a sub-consumer of the water supply system, consumes 75% of the total volume of tap water received. For reference: water consumption before reconstruction in 2016 amounted to 41,419,950 liters.

1. Total discharge includes sewage and wastewater from the premises. Place of discharge: Mosvodostok, preliminary purification is not necessary.
2. Place of discharge: Mosvodostok, preliminary purification is not necessary.

ENERGY EFFICIENCY

Energy consumption by resource type[1]

Fuel	2017 Units	2017 MJ	2018 Units	2018 MJ	Change 2018/2017 (%)
Gasoline, liters	80,720.51	2,643,800.00	78,924.09	2,584,862.05	–2.2
Diesel, liters	4,524.44	159,600.00	7,048.00	248,616.08	55.8
Electricity, kWh (excluding regional subsidiaries outside Moscow)	10,651,436.95	38,345,173.02	10,996,641.71	39,587,909.75	3.2
Electricity, kWh (including regional subsidiaries outside Moscow)	10,897,701.47	39,231,725.27	11,246,767.20	40,488,361.92	3.2
Heat, GCal	4,590.05	19,990,310.07	5,029.38	21,903,482.50	9.6

Electricity consumption is monitored at all offices of the Exchange, NCC and NSD, both owned and leased. Heating costs are measured at offices in Moscow (Bolshoi Kislovsky Pereulok, Srednya Kislovsky Pereulok, Vozdvizhenka and Spartakovskaya Ulitsa) and at the Ekaterinburg subsidiary. At other facilities heating costs are included in rental expenses, and monitoring is the responsibility of the landlord. Fuel consumption is measured at all Group companies and facilities.

The reduction in gasoline consumption is due to a decrease in the use of company cars. Diesel fuel consumption in 2018 increased due to more frequent use of the diesel power generator as a result of cuts from the municipal grid, as well as a longer operating time. At the same time, use of diesel vehicles also increased. Higher heating costs were the result of a colder winter compared to 2017. The increase in electricity consumption was linked to the installation of new air conditioners and heaters.

A number of measures have been taken to reduce energy consumption:

- during non-office hours and on weekends corridor lighting, ventilation systems and office cooling systems are turned off;
- it is now possible to fully shut down air conditioning systems during the winter months;
- during the repair and renovation of the premises, the continued use of energy-saving LED lamps is planned on top of the 530 lamps that have already been installed in the period from 2016 up to 2018 (13.3% of the total amount).

Moscow Exchange uses two data centers – Dataspace1 and M1 – as part of its activities. Electricity consumption at the data centers is the responsibility of the centers themselves, which maintain independent energy consumption records, and electricity costs are included in payment for their services. To give a more complete picture of the Exchange's environmental impact, below are data on MOEX's energy consumption at the data centers.

1. Other types of energy resources (including nuclear, electromagnetic, oil, fuel oil, natural gas, coal, oil shale, peat) were not used during the accounting year.

Data center energy consumption, kWh[1]

	2017	2018	Change (%)
Electricity	4,958,557	4,768,674	–3.8

In 2018, gasoline costs increased due to a change in the make/model of vehicles being used, as well as due to a rise in gasoline prices. The increase in electricity costs was due to higher consumption as well as an increase in tariffs in 2018. Higher heating costs compared to 2017 were the result of a colder winter and an increase in heat transfer agent tariffs from 1 July 2018.

Energy costs, RUB thousand[2]

Resource	2017	2018	Δ 2018/2017, RUB thousand	Change 2018/2017 (%)
Gasoline	2,796.34	3,212.77	416.43	14.89
Diesel fuel	144.94	291.86	146.92	101.37
Electricity	54,192.25	56,495.66	2,303.41	4.25
Heat	6,438.40	7,500.09	1,061.69	16.49
Total	63,571.93	67,500.38	3,928.45	6.18

1. Data are not included in the company's resource usage tables and are included solely to simplify the calculation of indirect environmental impact
2. Excluding VAT

ENVIRONMENTAL SAFETY COSTS

Total environmental protection expenditures and investments, RUB thousand*

Costs for waste and discharge treatment and environmental remediation costs	2017	2018	Change 2018/2017 (%)
Production and consumption waste disposal charge (tax)	78.36	94.87	21.6
Environmental impact charge (tax)	74.09	25.60	–65.5
Cost of pollutant wastewater discharges to the municipal sewerage	27.83	21.40	–23.1
Disposal of fluorescent lamps	58.98	64.51	9.4
Disposal of office equipment	71.66	122.03	70.3
Disposal of other waste (oil; air and oil filters; paper; cardboard; ferrous scrap metals)	326.68	508.98	55.8
Disposal of bulk waste	64.00	128.00	100
Contract for the obtaining of certification for waste of hazard Classes 1-4 and the registration in the State Control information system of the Federal Service for Supervision of Natural Resources (Rosprirodnadzor)	130.00 (one-time action)	0.00	–
Contract for the report preparation and filing with Rosprirodnadzor	35.00	149.00	325.7
Contract for the development of the Waste Generation and Disposal Limits draft standards	245.00 (Waste Generation and Disposal Limits draft standards, once every 5 years)	0.00	–
Contract for the development of the Environmental Monitoring and Industrial Control Program; waste disposal regulations for hazard Classes 1 and 2; collection, accumulation, storage, accounting and disposal regulations for production and consumption waste, as well as related health and safety regulations	150.00 (one-time action)	0.00	–
Total	**1,261.60**	**1,114.39**	**– 11.7**

* Excluding VAT.

The increase in recycling costs was due to replacement of office furniture and scheduled replacement of fluorescent lamps with energy-efficient LED lamps. The sharp increase in the cost of bulk waste disposal was due to the large amount of repair work at Moscow Exchange premises and the resulting disposal of a large amount of broken furniture. This waste was disposed of at specialized landfills.

Moscow Exchange's environmental footprint is relatively light, but we are still doing our best to further reduce this impact. Agreements, programs and other documents have been put in place to allow the Exchange to work with third-party specialist contractors and state oversight bodies as part of MOEX's drive to ensure waste is properly disposed of and to include environmental reporting in the company's management system.

Environmental impact prevention and environmental management system costs, RUB thousand[1]

	2017	2018	Change 2018/2017 (%)
Total	625.565	1,619.000	158.81

1. Excluding VAT

It is crucial for me that the company follows best practices not formally but in its core DNA. The Exchange is dynamic yet prudent in its approach, open to change and leaving behind outdated rules that hinder its development. It is constantly searching for new ways how to be most effective and advanced

Rainer Riess,
Member of the Supervisory Board,
Independent Director

Corporate Governance

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Corporate governance system

MOSCOW EXCHANGE CORPORATE GOVERNANCE MODEL AND PRACTICE IN BRIEF

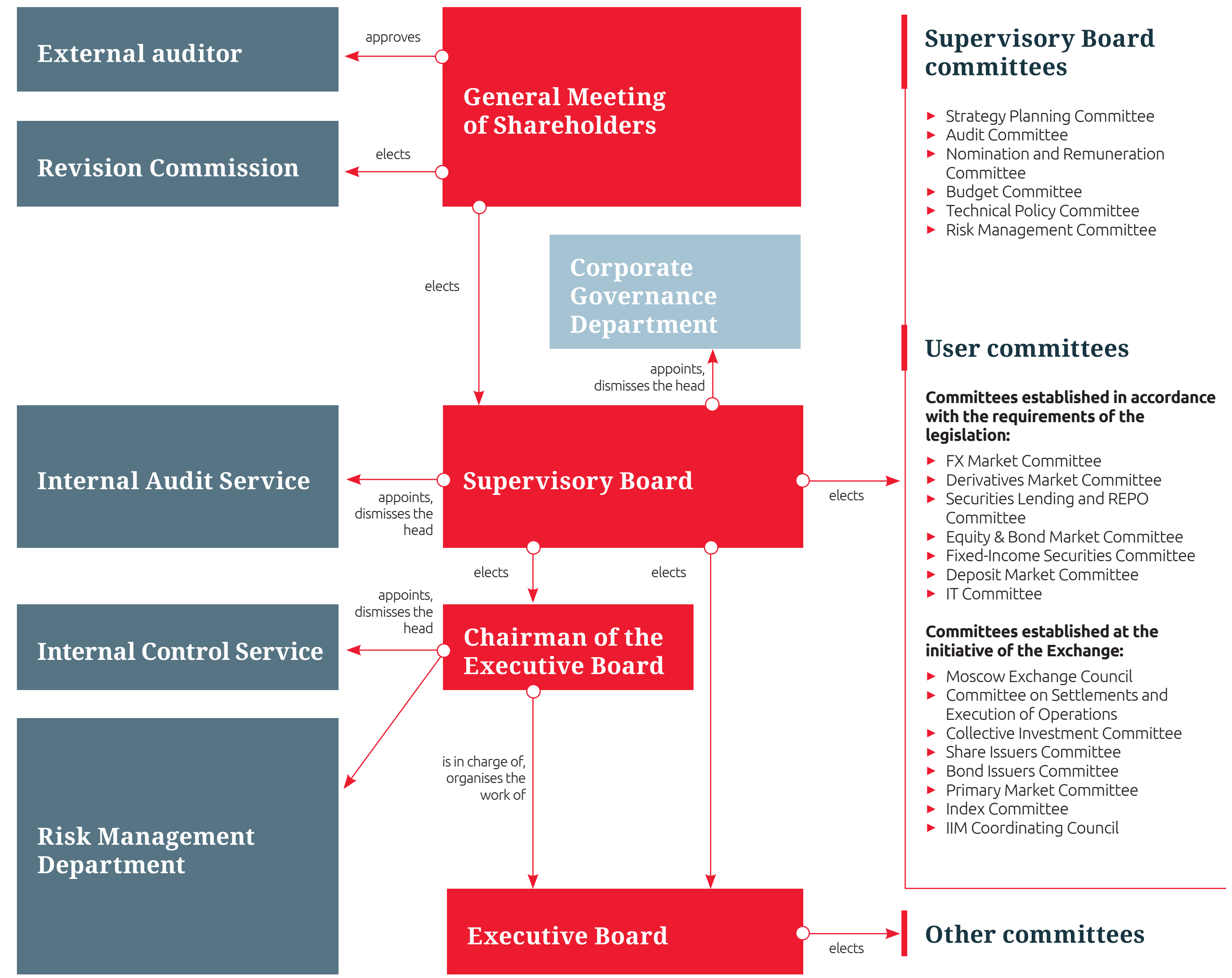
Moscow Exchange is one of Russia's largest public companies, and its shares are included in key financial market indicators such as the MOEX Russia Index and RTS Index. One of the Exchange's shareholders is the Bank of Russia, which acts as a regulator of the financial market. The Exchange is also a market infrastructure operator that establishes rules for other issuers. Because of all these factors, the Exchange must demonstrate higher corporate governance standards and serve as a model for other issuers. Continued development of the corporate governance system is aimed primarily at improving MOEX's effectiveness and competitiveness, and at maintaining positive perceptions of the Exchange's corporate governance system amongst shareholders, investors and the business community.

The Exchange continuously evaluates and responds to developments in corporate legislation and corporate governance practices in Russia and internationally. It complies with the Federal Law on Organized Trading (No. 325-FZ dated 21 November 2011), which outlines the requirements for the trading organizer's corporate governance system; the principles and recommendations prescribed in the Corporate Governance Code of the Bank of Russia; the requirements of the Listing Rules; the G20/OECD corporate governance principles; international standards and principles relating to corporate social responsibility and sustainable development; as well as the disclosure standards developed by the Global Reporting Initiative (GRI).

Shares of Moscow Exchange are traded on the exchange's own platform and included in the first (highest) level quotation list. To ensure that the Exchange's activities and documents fully comply with the corporate governance requirements set out in the Listing Rules and with the Bank of Russia's Corporate Governance Code, the following measures were taken in 2018:

- Five independent directors were elected to the Supervisory Board, which consists of 12 members, and two more directors received independent director status during the reporting period;
- All independent directors meet the independence criteria set by the Listing Rules;
- An independent director was elected as Chairman of the Supervisory Board;
- The Audit Committee and the Nomination and Remuneration Committee consist only of independent members of the Supervisory Board.

CORPORATE GOVERNANCE SYSTEM STRUCTURE



Governing bodies
Control and audit bodies
Advisory bodies
Corporate Secretary

* Advisory bodies of the Exchange established in accordance with the requirements of Article 10 of the Federal Law No. 325-FZ dated 21 November 2011 "On Organised Trading" and Regulations of the Bank of Russia No. 437-P dated 17 October 2014 "On Organised Trading Activities"

GENERAL MEETING OF SHAREHOLDERS

The General Meeting of Shareholders is the supreme governing body of Moscow Exchange. General Meetings of Shareholders adopt resolutions on strategic issues. The scope of issues within the terms of reference of General Meetings of Shareholders is determined by the Federal Law on Joint-Stock Companies (No. 208-FZ dated 26 December 1995) and the Moscow Exchange Charter.

On 26 April 2018, the Annual General Meeting of Shareholders (AGM) of Moscow Exchange was held, with the following resolutions being adopted:

- To approve Moscow Exchange's Annual Report and Accounting (Financial) Statements for 2017.
- To elect members of the Supervisory Board and the Revision Commission.
- To pay remuneration to members of the Supervisory Board and the Revision Commission for the 2017-2018 corporate year.
- To approve related-party transactions with subsidiaries in accordance with current legislation.
- To approve Deloitte & Touche CIS, one of the Big Four international audit companies, as the Exchange's auditor for 2018.
- To distribute profit and pay dividends for 2017 in the amount of RUB 5.47 per ordinary registered share, excluding interim dividends for the half-year of 2017 in the total amount of RUB 2.49 per share paid in the second half of 2017.

SUPERVISORY BOARD

Role of the Supervisory Board

The Supervisory Board is a key element of the corporate governance system with overall responsibility for the activities of Moscow Exchange.

The Supervisory Board is accountable to the General Meeting of Shareholders: members of the Supervisory Board are elected by the General Meeting of Shareholders, and their powers may be terminated at any time by the General Meeting of Shareholders.

Members of the Supervisory Board take part in the AGM. The Chairman of the Supervisory Board presides at the General Meetings of Shareholders. Any shareholder of the Exchange may speak on agenda items or at any time address the Chairman of the Supervisory Board, ensuring the necessary degree of objectivity when considering agenda items.

When developing Moscow Exchange's strategy, the Supervisory Board takes into account the shareholders' vision for the Exchange's development. The Supervisory Board considers appeals filed by shareholders and investors and, if necessary, gives appropriate instructions to senior managers.

The terms of reference of the Supervisory Board are established in the Charter and are clearly separated from those of the executive bodies that manage the day-to-day activities of the Exchange. The Supervisory Board:

- determines the vision, mission and strategy of the Exchange;
- is responsible for strategic management of the Exchange and long-term sustainable development;
- establishes strategic goals and key performance indicators.

The Supervisory Board's work schedule for a calendar year is approved at the first meeting of the newly elected Supervisory Board held after the Annual General Meeting of Shareholders. The work schedule includes the main activities of the Exchange, which are correlated with the strategic planning cycle and ongoing business cycles. When preparing the work schedule, proposals of members of the Supervisory Board and senior managers on priority issues are taken into account.

The agenda of each in-person meeting of the Supervisory Board includes from three to five significant issues, as well as management reports on performance for the past period. Issues arising from execution of priority projects, budget and instructions of the Supervisory Board are considered as frequently as required.

In-person meetings of the Supervisory Board are held in Moscow with the participation of all directors. The first meeting of the newly elected Supervisory Board is held in person, as a rule, on the date of the General Meeting of Shareholders, when the Supervisory Board is elected.

Information on the activities of the Supervisory Board, including its composition, meetings held and work of its committees, is disclosed on the official website of the Exchange in the form of press releases and corporate action notices, as well as the Annual Report, which ensures transparency of the activities of the Supervisory Board.

Structure of the Supervisory Board

The Supervisory Board of Moscow Exchange consists of directors who have the experience and professional skills required to oversee implementation of the Exchange's strategy.

In accordance with the decision of the Annual General Meeting of Shareholders held on 27 April 2016, the Supervisory Board comprises 12 people.

The Supervisory Board is managed and administered by the Chairman of the Supervisory Board.

The Chairman is elected and re-elected by the members of the Supervisory Board from among themselves, by a majority vote.

The following committees were formed by the Supervisory Board for preliminary consideration of key issues and preparation of recommendations for the Supervisory Board:

- Strategy Planning Committee;
- Audit Committee;
- Nomination and Remuneration Committee;
- Budget Committee;
- Technical Policy Committee;
- Risk Management Committee.

The Committees are formed annually from among the members of the Supervisory Board. Four of the six Supervisory Board Committees are headed by independent directors; the Audit Committee and the Nomination and Remuneration Committee are composed only of independent directors. Non-Board member IT experts are also invited to participate in the Technical Policy Committee.

The Supervisory Board comprises members who have the experience and professional skills required to oversee implementation of the Exchange's strategy. Members of the Supervisory Board of the Exchange are experts in financial market infrastructure, international organized trading, IT in the financial sector, operational and financial risk management, financial reporting and budgeting. They also have skills in personnel policy and modern approaches to incentivizing top managers.

Following the election at the 2018 Annual General Meeting of Shareholders, the Supervisory Board included five independent directors who met all the independence criteria set forth in the Listing Rules (no relationship with the Exchange, its significant shareholders, significant competitors, or counterparties, as well as no relationship with the government), and seven non-executive directors. In 2018, two directors were qualified as independent directors, notwithstanding the existing formal relationship with counterparties. Thus, Oleg Viyugin is also a member of the Board of Directors of the National Association of Securities Market Participants (NAUFOR), and Mikhail Bratanov is a member of the Board of Directors of the National Financial Association (NFA), for which the Exchange is a significant counterparty.

The Exchange did not receive information on the conflict of interests of the Supervisory Board members and the Executive Board members (including those relating to the participation of the said persons in the governing bodies of the Exchange's competitors).

Composition of the Supervisory Board

	Composition of the Supervisory Board as of 01 January 2018		Composition of the Supervisory Board elected on 26 April 2018
Independent directors			
1	Rainer Riess – Senior Independent Director	1	Rainer Riess
2	Maria Gordon	2	Maria Gordon
3	Anatoly Karachinsky	3	Anatoly Karachinsky
4	Duncan Paterson	4	Duncan Paterson
5	Oleg Viyugin	5	Oleg Viyugin (independent director since 26 April 2018)
		6	Alexander Izosimov
		7	Mikhail Bratanov (independent director since 27 September 2018)
Non-executive directors			
6	Andrey Golikov	8	Andrey Golikov
7	Valery Goreglyad	9	Valery Goreglyad
8	Bella Zlatkis	10	Bella Zlatkis
9	Anatoly Braverman	11	Anatoly Braverman
10	Yury Denisov	12	Yury Denisov
11	Alexey Kudrin		
Executive director			
12	Alexander Afanasiev		

INFORMATION ON THE SUPERVISORY BOARD MEMBERS ELECTED AT THE ANNUAL GENERAL MEETING OF SHAREHOLDERS HELD ON 26 APRIL 2018[1]

Oleg Viyugin,

Chairman of the Supervisory Board, Independent Director

Member of the Strategic Planning Committee, member of the Nomination and Remuneration Committee.

Born on 29 July 1952 in Ufa.

He graduated from the Lomonosov Moscow State University with a qualification in Mathematics in 1974.

- He has a PhD in Physics and Mathematics.
- He was Chief Advisor for Russia and CIS to Morgan Stanley Bank LLC from 2013 until 2015.
- He is a professor in the Finance Department at the Higher School of Economics.
- He is a member of the Council of the Strategic Development Center and AGAT Youth Entrepreneurship Fund; the Chairman of the Board of Directors of NAUFOR and SAFMAR Financial Investment; a member of the Board of Directors of Skolkovo Ventures, Rosneft and Unipro; a member of the Presidium of the National Council on Corporate Governance; and the Deputy Chairman of the Supervisory Board at NSD.
- He was elected to Moscow Exchange's Supervisory Board on 27 April 2017.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Andrey Golikov,

Deputy Chairman of the Supervisory Board

Chairman of the Budget Committee, member of the Strategic Planning Committee, member of the Technical Policy Committee.

Born on 14 March 1969 in Volzhsky, Volgograd region.

In 1991 he graduated from the Lomonosov Moscow State University with a qualification in Mechanics.

In 2016, he graduated from the Institute of Directors (IoD) with the Diploma in Company Direction.

- From 2009 to 2011, he held various positions in Sberbank, including the Vice President and Head of Treasury & Financial Markets. He was a member of the Executive Board of Sberbank.
- He is a member of the Supervisory Board of Russian National Reinsurance Company, an independent director of Otkritie Bank and Absolut Bank, a member of the Supervisory Board of CCP NCC, and co-Chairman of the Board of Directors of NFA.
- He was first elected to Moscow Exchange's Supervisory Board on 24 April 2003.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

1. Information on the Exchange's Supervisory Board members is provided as of 31 December 2018. Information on the professional experience of the Supervisory Board members is given for the last five years.

Maria Gordon,
Member of the Supervisory Board, Independent Director

Member of the Audit Committee, member of the Budget Committee.

Born on 13 February 1974 in Vladikavkaz.

In 1995, she graduated from the University of Wisconsin (USA) with a Bachelor's degree in Political Science. in 1998, she graduated from the Fletcher School of Law and Diplomacy at Tufts University with a Master of Arts degree.

- From 2010 to 2014, she worked as the Chief Emerging Markets Equity Portfolio Manager at Pacific Investment Management Co. (PIMCO).
- She is a member of the Supervisory Board of ALROSA.
- She is a member of the Supervisory Board of Polyus.
- She was first elected to Moscow Exchange's Supervisory Board on 27 April 2016.

She has no interest in the share capital/ordinary shares of the Exchange.

She reported no transactions involving shares in Moscow Exchange in 2018.

Valery Goreglyad,
Member of the Supervisory Board

Member of the Risk Management Committee.

Born on 18 June 1958 in Glusk, Glusk district, Mogilev region.

In 1981, he graduated from the Ordzhonikidze Moscow Aviation Institute with a Mechanical Engineering qualification (Aircraft Production).

In 2017, he graduated from the Russian Presidential Academy of National Economy and Public Administration with a degree in Jurisprudence.

He has a PhD in Economics.

- From 2010 to 2013, he served as the Deputy Chairman of the Account Chamber of the Russian Federation.
- Since 2013, he has been the Chief Auditor of the Bank of Russia.
- He is a professor at the Higher School of State Audit at the Lomonosov Moscow State University.
- He is a member of the Supervisory Board of Russian National Reinsurance Company; a member of the Supervisory Board of the Russian Union for Collection (ROSINKAS); a member of the Board of Directors of Rosgosstrakh; a member of the Supervisory Board of Asset Management Company of the Banking Sector Consolidation Fund; a member of the Supervisory Board of Sberbank.
- He was first elected to Moscow Exchange's Supervisory Board on 26 June 2014.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Yury Denisov,
Member of the Supervisory Board

Chairman of the Risk Management Committee, member of the Strategic Planning Committee.

Born on 31 May 1970 in Moscow.

In 1993, he graduated from the Moscow State Institute of International Relations with a qualification in International Economic Relations.

- From 2010 to 2011, he was Deputy Chairman of the Executive Board of Moscow Exchange.
- Since 2008, he has been a member of the Supervisory Board of CCP NCC; currently he is its Chairman.
- He was first elected to Moscow Exchange's Supervisory Board on 25 June 2013.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Anatoly Braverman,
Member of the Supervisory Board

Member of the Strategic Planning Committee, member of the Budget Committee, member of the Risk Management Committee.

Born on 5 August 1985 in Moscow.

In 2007, he graduated from the Higher School of Economics with a qualification in Finance and Credit. He completed an individual postgraduate course "Oil Refining Technology: Key Processes, Modern Condition and Future Development" at the Gubkin Russian State University of Oil and Gas.

- Since 2011, he has been the First Deputy CEO of the Russian Direct Investment Fund (RDIF).
- From 2012 to 2017, he served as a member of the Board of Directors of Causie Investments Ltd.
- Currently, he is a member of the Board of Directors of RCIF Asset Management Ltd., RCIF Partners GP Ltd., Infrastructure Satellite Systems LLC, and Hyperloop Technologies, INC.
- He was elected to Moscow Exchange's Supervisory Board on 27 April 2017.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Bella Zlatkis,

Member of the Supervisory Board

Born on 5 July 1948 in Moscow.

In 1970, she graduated from the Moscow Finance Institute with a qualification in Finance and Credit.

She has a PhD in Economics.

- Over the past 15 years, she has been the Deputy Chairwoman of the Executive Board of Sberbank. Earlier, she worked in the Ministry of Finance of the Russian Federation for more than 30 years.
- Since 2011, she has been a member of the Supervisory Board of NSD; currently she is its Chairwoman, and a member of the Supervisory Board of Sberbank.
- She was first elected to Moscow Exchange's Supervisory Board on 19 May 2011.

She has no interest in the share capital/ordinary shares in Moscow Exchange.

She reported no transactions involving shares in Moscow Exchange in 2018.

Anatoly Karachinsky,

Member of the Supervisory Board, Independent Director

Chairman of the Technical Policy Committee.

Born on 12 July 1959 in Moscow.

In 1981, he graduated from the Moscow Institute of Railroad Transport Engineering with a qualification in Computer Science.

- Currently, he holds the positions of the President and Chairman of the Management Board of IBS Holding.
- For more than 10 years, he was the Chairman of the Supervisory Board of IBS Group.
- He is the Chairman of the Board of Directors of Luxoft Holding Inc; the Chairman of the Board of Directors of Newspaper Direct Inc (Canada); the Chairman of the Supervisory Board of Medialogia; the Chairman of the Board of Directors of IBS IT Services; a member of the Executive Board of the Russian Union of Industrialists and Entrepreneurs.
- He was first elected to Moscow Exchange's Supervisory Board on 20 June 2012.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Duncan Paterson,

Member of the Supervisory Board, Independent Director

Chairman of the Audit Committee, member of the Strategic Planning Committee.

Born on 11 January 1951 in the UK.

In 1973, he graduated from the Institute of Chartered Accountants in England and Wales. in 1978, he graduated from the London School of Economics and Political Science with a Master of Science degree in Accounting and Finance. in 2017, he received a Master of Arts degree in creative writing at Kingston University.

- He is currently the Non-Executive Chairman of GH Financials Limited.
- Professional background: Managing Partner in MA Partners, Senior Managing Director in Wilco International, Business Development Director in ACT Financial Systems, Chief Operating Officer in County NatWest Investment Management, Chief Financial Officer in Security Pacific Hoare Govett.
- He was elected to Moscow Exchange's Supervisory Board on 27 April 2016.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Rainer Riess,

Member of the Supervisory Board, Independent Director

Chairman of the Strategy Planning Committee, member of the Nomination and Remuneration Committee, member of the Audit Committee.

Born on 20 January 1966 in Darmstadt, Germany.

In 1993, he graduated from the University of Miami with an MBA degree in Business (Finance, Marketing).

In 1994, he graduated from the Wolfgang Goethe University (Frankfurt) with a Master of Arts degree in Economics.

- From 1995 to 2013, he served as a Managing Director at Deutsche Börse AG.
- From 2008 to 2013, he was the Deputy Chairman of the Executive Board of Frankfurt Stock Exchange.
- Currently, he is the Managing Partner and owner of Addwis GmbH (Frankfurt, Germany), as well as the General Director of the Federation of European Securities Exchanges AISBL (FASE).
- He was first elected to Moscow Exchange's Supervisory Board on 25 June 2013.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018

Mikhail Bratanov,

Member of the Supervisory Board, Independent Director

Chairman of the Nomination and Remuneration Committee.

Born on 16 May 1973 in Dolgoprudny, Moscow region.

In 2003, he graduated from the Moscow State Institute of Electronic Engineering with degrees in Electronic Engineering and Management.

He has a PhD degree in Economics.

In 2011, he graduated from the Moscow School of Management SKOLKOVO with an Executive MBA degree. in 2017, he graduated from the Institute of Directors (IoD) with a Chartered Director qualification.

- Since 2007, he has been the Director of the Securities Services Department, the Head of Societe Generale Securities Services in Russia and CIS at ROSBANK.
- He is a member of the Supervisory Board of NSD; a member of the Boards of Directors of Professional Association of Transfer-Agents, Registrars and Depositories (PARTAD), RB Specialised Depository, Russian National Reinsurance Company, and National Financial Association.
- He was first elected to Moscow Exchange's Supervisory Board on 19 May 2011.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Alexander Izosimov,

Member of the Supervisory Board, Independent Director

Member of the Strategy Planning Committee, member of the Technical Policy Committee.

Born on 10 January 1964 in Yakutsk.

In 1987, he graduated from the Moscow Aviation Institute with a qualification in System Engineering.

- Since 2012, he has been CEO of DRCAdvisors AB.
- From 2007 to 2015, he was a member of the Board of Directors of MTG AB; from 2012 to 2015, he was a member of the Board of Directors of LM Ericsson AB, Transcom AB.
- Currently, he is a member of the Board of Directors of EVRAZ Plc., Nilar AB.
- He was first elected to Moscow Exchange's Supervisory Board on 26 April 2018.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

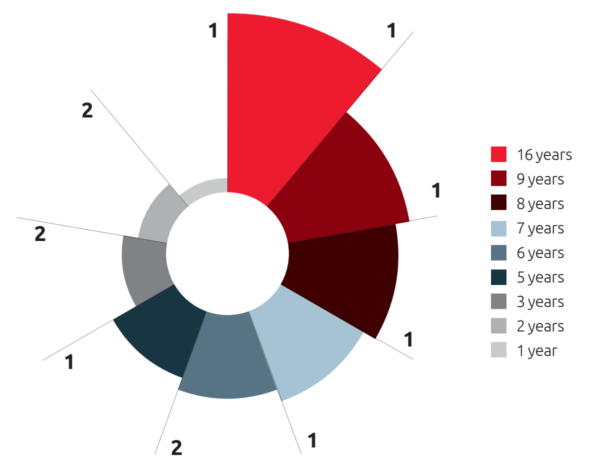
Activities of the Supervisory Board in 2018

From 1 January 2018 to 31 December 2018, the Supervisory Board held twenty meetings (including seven in-person).

Seven meetings of the Supervisory Board were held before and 13 meetings after the Annual General Meeting of Shareholders, which was held on 26 April 2018.

Full name	Number of meetings attended	% of meetings attended
Alexey Kudrin (member of the Supervisory Board until 26 April 2018)	6	85.7
Alexander Afanasiev (member of the Supervisory Board until 26 April 2018)	7	100
Anatoly Braverman	20	100
Mikhail Bratanov	13	100
Oleg Viyugin	20	100
Andrey Golikov	20	100
Maria Gordon	18	90
Valery Goreglyad	19	95
Yury Denisov	20	100
Bella Zlatkis	19	95
Alexander Izosimov	13	100
Anatoly Karachinsky	19	95
Duncan Paterson	19	95
Rainer Riess	20	100

Information on the length of service in the Supervisory Board



68 years

The cumulative length of service on the Supervisory Board of all its members

Many issues on the agenda of the Supervisory Board meetings are considered ahead of time by the relevant committees to allow for a more detailed discussion and to give recommendations to the Supervisory Board on voting.

In 2018, the Supervisory Board considered issues relating to the performance of its main functions, including:

strategy issues:
- implementation of the Marketplace project
- participation in the share capital of the Kazakhstan Stock Exchange
- development of the Moscow Exchange Group strategy 2020+

personnel issues:
- prolongation of powers of the Chairman of the MOEX Executive Board for 2 years, and powers of Anna Kuznetsova and Igor Marich, Executive Board members
- termination of powers of Sergey Polyakov, Executive Board member

business development issues:
- changes to tariffs on the Equity and Bond Market, deposit market, and Derivatives Market, fees for trades on the FX Market, and listing fees
- change of rates on ruble deposits with the Central Counterparty for corporate clients
- determination of rates on foreign currency deposits with the Central Counterparty for corporate clients
- compilation of rates for credit institutions and international financial organizations admitted to deposits with the Central Counterparty

key documents of Moscow Exchange:
- Listing Rules
- Rules of the Exchange's organized trading on different markets of the Exchange
- Rules of admission to the Exchange's organized trading on all markets

risk management issues:
- establishment of a MOEX subsidiary to implement information security measures
- resolution not to change the selected reserve data center of MOEX
- discussion of the Internal Control Service reports on the review of compliance of Public Joint-Stock Company Moscow Exchange MICEX-RTS activities as the trade organizer with the requirements of Federal Law No. 224-FZ dated 27 July 2010 "On Countering Wrongful Use of Insider Information and Market Manipulation, and on Amending Certain Legislative Acts of the Russian Federation" for the period from 1 July 2017 to 31 December 2017
- approval of a new version of the Business Continuity Planning
- approval of a new version of the Information Security Management Policy of Moscow Exchange
- approval of the Strategic Risk Management Policy of Moscow Exchange
- approval of the Financial Risk Management Policy of Moscow Exchange
- approval of a new version of the Information Security Risk Assessment Methodology and a new version of the Information Security Risk Management Procedure
- approval of a new version of the Audit Methodology for the Internal Control Service
- approval of a new version of the Business Continuity Plan of Moscow Exchange

Procedures for Appointment, Induction and Training of Members of the Supervisory Board

In accordance with the Federal Law on Joint Stock Companies, shareholders holding in aggregate at least 2% of the voting shares in Moscow Exchange may nominate candidates to the Supervisory Board of the Exchange, but not more than the number of members of the Supervisory Board of the Exchange. The Charter of the Exchange provides that such proposals shall be submitted no later than 60 days after the end of each fiscal year.

The Supervisory Board of the Exchange considers the received proposals and makes a decision on whether to include the proposed candidates in the list for voting at the General Meeting of Shareholders no later than five days after the date specified for the submission of proposals, i.e., on or before 6 March 2018.

At the end of 1 March 2018, the Exchange received proposals on the nomination of 12 candidates to the Supervisory Board to be elected at the Annual General Meeting of Shareholders in 2018, all of them were included in the list for voting at the General Meeting of Shareholders.

As part of the induction of newly elected directors, there is an induction program for members of the Supervisory Board of Moscow Exchange. The program includes the following activities:
- familiarization of Supervisory Board members with the key internal documents of the Exchange, resolutions adopted by the General Meeting of Shareholders and the Supervisory Board;
- familiarization of Supervisory Board members with the history of the Russian on-exchange market, basic information on the development strategy and operating activities of the Exchange;
- individual meetings with the Chairman of the Supervisory Board and the Chairman of the Executive Board;
- individual meeting with the Director of the Corporate Governance Department;
- meeting with the management of the Group in the form of a one-day introductory course held within two months from the date of election to the Supervisory Board;
- individual meeting(s) with the Chairperson(s) of the Supervisory Board Committee(s), whose members are also members of the Supervisory Board.

ACTIVITIES OF THE SUPERVISORY BOARD COMMITTEES IN 2018

Information on the Supervisory Board Members' Attendance at Meetings of the Supervisory Board Committees

For the period from 1 January 2018 to 31 December 2018:

- the Strategy Planning Committee of the Supervisory Board held five in-person meetings: one meeting before and four meetings after the annual General Meeting of Shareholders held on 26 April 2018. Also, two Strategy Days of the Supervisory Board were organized:

Full name	**Number of meetings attended**	**% of the total number of meetings**
Rainer Riess Chairman of the Committee	5	100
Duncan Paterson	4	80
Oleg Viyugin	4	80
Anatoly Braverman	4	80
Andrey Golikov	5	100
Yury Denisov	5	100
Alexander Izosimov Member of the Committee since 26 April 2018	2	50

- the Nomination and Remuneration Committee of the Supervisory Board held 13 meetings, including 8 in-person meetings: six meetings before and seven meetings after the annual General Meeting of Shareholders held on 26 April 2018.

Full name	**Number of meetings attended**	**% of the total number of meetings**
Mikhail Bratanov Chairman of the Committee Member of the Committee since 26 April 2018	7	100
Oleg Viyugin	13	100
Rainer Riess	13	100
Yury Denisov Member of the Committee until 26 April 2018	6	100

- the Audit Committee of the Supervisory Board held six meetings, including four in-person meetings: three meetings before and three meetings after the annual General Meeting of Shareholders held on 26 April 2018.

Full name	Number of meetings attended	% of the total number of meetings
Duncan Paterson Chairman of the Committee	6	100
Maria Gordon	6	100
Rainer Riess	6	100

- the Budget Committee of the Supervisory Board held 11 meetings, including 5 in-person meetings: two meetings before and nine meetings after the Annual General Meeting of Shareholders held on 26 April 2018.

Full name	Number of meetings attended	% of the total number of meetings
Andrey Golikov Chairman of the Committee	11	100
Anatoly Braverman	11	100
Maria Gordon Member of the Committee since 26 April 2018	7	77.8
Valery Goreglyad Member of the Committee until 26 April 2018	2	100

- the Technical Policy Committee of the Supervisory Board held one in-person meeting (after the General Meeting of Shareholders held on 26 April 2018):

Full name	Number of meetings attended	% of the total number of meetings
Anatoly Karachinsky Chairman of the Committee	1	100
Andrey Golikov	1	100
Alexander Izosimov Member of the Committee since 26 April 2018	1	100

- the Risk Management Committee of the Supervisory Board held eight meetings, including four absentee meetings: three meetings before and five meetings after the Annual General Meeting of Shareholders held on 26 April 2018.

Full name	Number of meetings attended	% of the total number of meetings
Yury Denisov Chairman of the Committee	8	100
Valery Goreglyad	7	87.5
Anatoly Braverman	5	62.5

AUDIT COMMITTEE

The primary purpose of the Audit Committee is to ensure the Supervisory Board is effective in addressing issues relating to the control of financial and economic activities.

The main tasks of the Audit Committee are:
- control, analysis, and participation in the discussions of issues relating to accounting (financial) reporting;
- control, analysis, and evaluation relating to risk management and internal control;
- ensuring independence and impartiality relating to internal and external audit;
- control relating to counteraction to unfair actions of the Exchange's employees and third parties;
- assistance in ensuring the participation of the Supervisory Board members in monitoring and personal awareness of the financial and economic activities of the Exchange and the Group companies;
- preliminary consideration, analysis, development, and provision of opinions and recommendations to the Supervisory Board of the Exchange on issues relating to the functions and tasks of the Audit Committee;
- preparation of the assessment of the auditor's report of the Exchange and its submission as materials for the Annual General Meeting of Shareholders of the Exchange.

Composition of the Committee:
- Duncan Paterson, Chairman of the Committee;
- members of the Committee: Rainer Riess, Maria Gordon.

In 2018, the Audit Committee of the Supervisory Board held six meetings, including four in-person meetings. 37 issues were considered at the meetings.

The main issues considered by the Committee in 2018 and on which recommendations were given to the Supervisory Board, related to the performance of the Group's external auditor, review of MOEX's consolidated financial statements, and reports of the Internal Audit Service.

The Audit Committee reviewed the results of the General Internal Control System Audit project, including the Internal Control System Organization Principles.

In 2018, with regard to the recommendations of the Audit Committee, the Supervisory Board advised the General Meeting of Shareholders to select Deloitte as the external auditor; and the relevant resolution was adopted by the Annual General Meeting of Shareholders. In September 2018, the Audit Committee discussed with the external auditor the audit strategy in respect of financial statements for 2018, and in December the interim results of the audit.

The Audit Committee reviewed the specifics of the introduction of the IFRS 9 standard to the Group's financial statements for 2017.

The Committee paid significant attention to the development of corporate governance. The Committee reviewed the action plan for compliance with the Corporate Governance Code of the Bank of Russia, discussed approaches to communication with investors and shareholders, reviewed the conflict of interest and corporate conflict management policy, and the new version of the Exchange's Corporate Governance Code.

The Committee also assessed the auditor's report on the Exchange's accounting (financial) statements for 2017, and reviewed the Report to Management on the Audit Results for the year ended 31 December 2017. The Committee gave recommendations to the Supervisory Board on awarding the head and employees of the Internal Audit Service of the Exchange based on their performance in 2017.

NOMINATION AND REMUNERATION COMMITTEE

The primary purpose of the Nomination and Remuneration Committee is to support the effective work of the Supervisory Board of the Exchange in addressing issues relating to the activities of the Exchange and other companies directly or indirectly controlled by the Exchange, and the nomination and remuneration of members of supervisory boards and executive bodies, other key executives, and members of revision commissions.

The key objectives of the Nomination and Remuneration Committee are the preliminary consideration, development and provision of recommendations and conclusions to the Supervisory Board of the Exchange, as well as to supervisory boards of the Group's companies, on the following issues:
- personnel planning (succession planning), enhancement of professional composition, and effectiveness of supervisory boards;

- effective and transparent remuneration of members of supervisory boards, members of the collegial executive body, and a person performing the functions of the sole executive body ("members of executive bodies"), as well as other key managers;
- priority activities of the Exchange and the Group companies in respect of nomination and remuneration of members of supervisory boards, members of executive bodies and other key managers, members of revision commissions;
- policies and standards for the selection of candidates for members of supervisory boards, members of executive bodies, aimed at attracting qualified specialists;
- determination of key performance indicators for top managers, and evaluation of their achievement.

Composition of the Committee:
- Mikhail Bratanov, Chairman of the Committee;
- members of the Committee: Oleg Viyugin, Rainer Riess.

In 2018, the Nomination and Remuneration Committee of the Supervisory Board held 13 meetings and considered 45 issues.

The main issues, which were considered by the Committee in 2018 and on which relevant recommendations were given to the Supervisory Board, related to planning of compositions of supervisory boards of the Exchange, NSD, and CPP NCC; assessment of the independence of candidates and members of the Supervisory Board of the Exchange; self-assessment and training of members of the Supervisory Board of the Exchange; nomination of candidates for the Supervisory Board; assessment of the expediency of reviewing the amount of remuneration payable to directors; giving recommendations on the determination and assessment of achievement of corporate KPIs (goals) of the Group and individual KPIs of members of executive bodies, and the Director of the Corporate Governance Department of the Exchange; management succession program and extension of powers of members of executive bodies; and option program for managers. In 2018, the Committee's work was focused primarily on giving recommendations on the candidacy of the Chairman of the Exchange's Executive Board, whose powers expired on the date of the Annual General Meeting of Shareholders of the Exchange in 2018.

STRATEGY PLANNING COMMITTEE

The primary purpose of the Strategy Planning Committee is to improve the performance of the Exchange and its subsidiaries and affiliates, as well as companies, directly or indirectly controlled by the Exchange, in the long and medium term.

Main tasks of the Strategy Planning Committee:
- coordination of strategic goals, control of strategy implementation, adjustment of the existing development strategy;
- coordination of priority activities;
- giving recommendations on dividend policy;
- evaluation of performance in the medium and long term;
- preliminary consideration and giving recommendations on participation in other organizations;
- evaluation of voluntary and mandatory offers to acquire shares in Moscow Exchange;
- consideration of the financial model and valuation model of business and its segments;
- consideration of reorganization and liquidation;
- consideration of changes in the organizational structure;
- consideration of reorganization of business processes.

Composition of the Committee:
- Rainer Riess, Chairman of the Committee;
- members of the Committee: Anatoly Braverman, Oleg Viyugin, Andrey Golikov, Yury Denisov, Duncan Paterson, and Alexander Izosimov.

In 2018, the Strategy Planning Committee of the Supervisory Board held five meetings and considered 23 issues.

The main issues considered by the Committee in 2018 and on which relevant recommendations were given to the Supervisory Board related to development of the main trends in the market, assessment of the implementation of the current strategy, innovation management, implementation of priority projects, and strategic development on the Kazakh market. The Committee's work was focused primarily on the development of a new strategy 2020+. The development of the strategy was divided into two stages. Stage A: the Committee discussed global and regional trends, digitalization trends and the competitive environment, conducted SWOT analysis, and evaluated promising business models and key development areas. Stage B: the Committee discussed key strategic projects, proposals for the wording of the mission and vision, and financial goals of the strategy. All members of the Supervisory Board were involved in the development of the new strategy during two Strategy Days specially organized to coincide with meetings of the Supervisory Board.

RISK MANAGEMENT COMMITTEE

The main task of the Risk Management Committee is to foster the improvement of the risk management system of the Exchange and Moscow Exchange Group companies in order to enhance the reliability and efficiency of the Exchange.

Main functions of the Risk Management Committee:
- giving recommendations for the Supervisory Board of the Exchange on priority areas for the development of the risk management system;
- analysis of internal risk management procedures, and recommendations to improve their efficiency, on behalf of the Supervisory Board of the Exchange;
- consideration of individual elements and/or parameters of the risk management system, and estimation of their adequacy and effectiveness;
- review of reports of the Exchange and the Moscow Exchange Group companies management on the functioning of the risk management system, if necessary;
- giving opinions on issues submitted to the Committee by the Exchange's Executive Board.

Composition of the Committee:
- Yury Denisov, Chairman of the Committee;
- members of the Committee: Valery Goreglyad, Anatoly Braverman.

In 2018, the Risk Management Committee of the Supervisory Board held eight meetings and considered 27 issues.

The main issues considered by the Committee in 2018 and on which relevant recommendations were given to the Supervisory Board related to the regular analysis of the Moscow Exchange Group's reports on management of various risks, including business continuity, operational and other risks. At the meetings of the Committee, special attention was paid to improving operational risk management, developing compliance risk regulation, and updating relevant policies and principles, which are fundamental documents of the Exchange's risk management.

BUDGET COMMITTEE

The primary purpose of the Budget Committee is to support the Supervisory Board of the Exchange in exercising control over the formation and expenditure of funds intended for financial support of the Exchange and the Group companies.

Main tasks of the Budget Committee:
- determining the principles of formation and expenditure of budget of the Exchange and Group companies;
- timely and reliable formation of the planned budgets of the Exchange and individual structural units and companies of the Group;
- ensuring operational management of the budgeting process of the Exchange and Group companies;
- assessment of the efficiency of the budgeting process of the Exchange and Group companies.

Composition of the Committee:
- Andrey Golikov, Chairman of the Committee;
- members of the Committee: Anatoly Braverman, Maria Gordon.

In 2018, the Budget Committee of the Supervisory Board held 11 meetings and considered 41 issues.

The main issues considered by the Committee in 2018 and on which relevant recommendations were given to the Supervisory Board related to planning of the consolidated budget and control over its execution; determination of the amount of dividends in accordance with the dividend policy, including with respect to the subsidiaries of the Exchange; determination of rates for all markets of the Exchange and effectiveness of the use of marketing periods; control of execution of priority project budgets; the Exchange's wealth management; conducting stress tests of the Exchange's financial model; and giving recommendations in respect of real estate owned by the Exchange, and data centers leased by the Exchange.

TECHNICAL POLICY COMMITTEE

The main objectives of the Technical Policy Committee are the development and improvement of effectiveness of the Group's activities through recommendations and expert opinions to the Supervisory Board of the Exchange, boards of directors (supervisory boards) of the Group companies and their committees, and executive bodies of the Exchange and the Group companies in respect of technical policy and development of IT and software of the Group.

The main tasks of the Technical Policy Committee are:

- effective interaction between the Exchange and Group companies and participants of the on-exchange, financial and commodity markets, namely users of the Group's software and hardware, in respect of issues of technical policy and IT and software development;
- ensuring full and comprehensive consideration of the needs of participants of the on-exchange, financial, and commodity markets in the IT and software development;
- coordination of activities relating to technical policy within the Group and ensuring centralized policy in matters within the competence of the Committee.

Composition of the Committee:

- Anatoly Karachinsky, Chairman of the Committee;
- members of the Committee: Andrey Golikov, Alexander Izosimov, Vladimir Kurlyandchik, Kirill Menshov, Yury Yartsev.

In 2018, the Technical Policy Committee of the Supervisory Board held one meeting and considered four issues.

The main issues considered by the Committee in 2018 and on which relevant recommendations were given to the Supervisory Board related to the establishment of the Exchange IT development program for 2019-2020 and subsequent years, as well as amendments to the Exchange's Technical Policy aimed at improving the efficiency of equipment use. In 2018, the Committee also reviewed reports on the implementation of new technologies and methods for developing and assessing their value in Moscow Exchange Group.

ASSESSMENT OF PERFORMANCE OF THE SUPERVISORY BOARD AND COMMITTEES

Assumptions and Grounds for Assessment

In accordance with the recommendations of the Russian Corporate Governance Code and best international practice, the Supervisory Board of the Exchange assesses its performance on an annual basis.

In 2017, the Nomination and Remuneration Committee reviewed the pool of competencies required for the Supervisory Board members. The pool is comprised of the knowledge of financial market infrastructure, exchange industry, information technologies for the centralized market infrastructure, operational and financial risk management, wealth management (investments, dividends), financial accounting, personnel policy and modern approaches to motivating top managers, innovation management, post-trading services and regulatory strategy.

Assessment Goals and Objectives

The assessment is aimed at monitoring positive changes in the activities of the Supervisory Board, and evaluating the work of the Committees, independent directors and the Chairman of the Supervisory Board. One important aspect of the assessment is to receive detailed feedback from members of the Supervisory Board.

In order to achieve these goals, with the help of a facilitator from the International Institute for Management Development (IMD), various aspects of the Supervisory Board's activities were assessed, including areas where the majority of directors gave critical comments, and areas where, by general consensus, no significant changes were required.

Assessment Participants

Nine out of twelve participants took part in the assessment of the Supervisory Board; they answered most of the questions and commented on the most difficult ones.

Assessment Results

Participants stated that many aspects of the Supervisory Board's activities in recent years have improved. However, there are some aspects that should be paid extra attention.

The following aspects of the Supervisory Board's activities deserve a positive assessment:

- leadership of the Supervisory Board in implementing the mission and vision of the company, managing the company, and ensuring its effectiveness;
- implementing strategic ideas and joint strategy development with managers;
- interaction between members of the Supervisory Board and managers;
- effective organization by the Chairman of the Supervisory Board of the work of the Board;
- technological support of work of the Supervisory Board.

The following areas were selected as areas to be improved:

- the vision of the development of the company in 10, 20 or 50 years is not clear enough;
- prevailing practice of commenting on presentations by managers at meetings of the Supervisory Board;
- inefficient use of time by members of the Supervisory Board;
- need for better preparation by all directors for meetings of the Supervisory Board;
- developing a risk-taking culture to foster innovation with an acceptable level of tolerance to possible failures.

CORPORATE SECRETARY OF THE EXCHANGE

In accordance with the resolution of the Supervisory Board, the function of the Exchange's Corporate Secretary is performed by the Corporate Governance Department headed by its Director, administratively reporting to the Chairman of the Executive Board, and functionally reporting to the Chairman of the Supervisory Board. Resolutions on appointment, dismissal, and remuneration of the Director of the Corporate Governance Department are adopted by the Supervisory Board, which ensures the necessary degree of independence of the work of the governing bodies.

The main tasks of the Corporate Governance Department, which performs the functions of the Corporate Secretary, include:

- participation in the improvement of the corporate governance system and practice of Group companies;
- coordination of the Exchange's actions to protect and exercise the rights and interests of its shareholders, and, if necessary, of shareholders/participants of the Group companies;
- effective current interaction with shareholders of the Exchange, and, if necessary, with shareholders/participants of Group companies;
- support of effective work of the Supervisory Board and advisory bodies of the Exchange's Supervisory Board (the "Supervisory Board Committees"), and, if necessary, of supervisory boards/ boards of directors of the Group companies;
- participation in the disclosure of information about the Exchange.

The monitoring of corporate governance practices of the Group and the internal assessment of the effectiveness of the Supervisory Board are conducted annually under the guidance of the Director of Corporate Governance Department.

Since October 2013, Alexander Kamensky has been the Director of the Corporate Governance Department of the Exchange.

Alexander Kamensky,

Corporate Secretary of Moscow Exchange

Born in 1982 in Moscow.

In 2005, he graduated with honors from the Lomonosov Moscow State University, Law Faculty, with a degree in Jurisprudence. He is also a graduate of the Leadership Programme at the INSEAD Business School. in 2014, he received a Director Certificate from the UK Institute of Directors.

He won the Director of the Year Prize awarded by AID and RSPP in the Corporate Secretary category in 2015; the ARISTOS2014 award in the Best Corporate Governance Director category; the Top-1000 Russian Managers 2017 award in the Best Corporate Governance Director category. in 2014–2018, he was ranked first in the Top 1000 Russian Managers of Financial Companies in the Corporate Governance Directors category.

Work experience:

- Since 2013: Director of the Corporate Governance Department—Corporate Secretary of Moscow Exchange.
- 2012–2013: Head of the Corporate Governance Centre—Corporate Secretary of MDM Bank.
- 2011–2012: Manager for Corporate Governance —Corporate Secretary of Enel Russia.
- Number of shares held / equity interest in Moscow Exchange: 145,005 pcs / 0.006369702%.

On 6 April 2018, he purchased 333,334 shares and sold 184,043 shares. on 24 September 2018, he sold 4,290 shares.

He does not own any shares in the Exchange's subsidiaries or affiliates. He has no family relations with any members of the governing and/or supervisory bodies of Moscow Exchange. He has been a member of the Council of the National Union of Corporate Secretaries since 10 October 2016.

REVISION COMMISSION OF THE EXCHANGE

The Annual General Meeting of Shareholders elects the Revision Commission, which consists of three members, to monitor the financial and business activities of the Exchange.

In accordance with the current legislation, the Revision Commission monitors the financial and business activities of the Exchange, conducts thematic inspections, assesses the reliability of data included in the Annual Report and contained in the Annual Financial Statements of the Exchange prepared according to Russian standards.

Composition of the Revision Commission elected by shareholders on 26 April 2018:

No.	Full name, position	Nominated by
1.	Vladislav Zimin Economic Advisor, Corporate Relations Department, Bank of Russia	Bank of Russia
2.	Olga Romantsova Executive Director, Head of Financial Market Operation Audit Department, Internal Audit Department, Sberbank	Sberbank
3.	Mikhail Kireev Senior Vice President, Russian Direct Investment Fund (RDIF)	RDIF Asset Management-6

FURTHER DEVELOPMENT OF THE CORPORATE GOVERNANCE SYSTEM

In 2017, the Supervisory Board determined the following goals (priorities) for 201-2018:

- consideration of the increase in the share of income from the sale of market and corporate data for the period until 2020;
- consideration of approaches to innovation management in Moscow Exchange Group;
- payment of interim dividends, and qualitative analysis of interaction with shareholders and investors;
- analysis and adjustment, if necessary, of the Moscow Exchange strategy until 2029.

The Supervisory Board determined the following priority activities for 2018-2019:

- Consideration of the increase in the share of income from the sale of market and corporate data for the period until 2020;
- Consideration of approaches to innovation management in Moscow Exchange Group;
- Analysis and development of MOEX's future long-term strategy and the new strategic plan;
- Consideration of the management succession program of Moscow Exchange Group;
- Consideration of organization of corporate governance in Moscow Exchange Group.

In 2018, the Supervisory Board considered the issues of innovation management, payment of interim dividends of the Exchange, and began to develop a new long-term strategy. Other issues are planned to be discussed during 2019.

MOSCOW EXCHANGE CORPORATE GOVERNANCE CODE

In 2015, Moscow Exchange approved its own Corporate Governance Code. The Code complies with Russian legislation and was drafted with respect to:
- the principles and recommendations of the Corporate Governance Code of the Bank of Russia;
- the OECD Corporate Governance Principles;
- corporate governance principles recommended by recognized international organizations.

The Code of the Exchange also contains general provisions on the operation of the Exchange, as well as Management's representations on adherence to best corporate governance practices, and also describes the principles and system of corporate governance, as well as how the Exchange implements specific corporate governance principles (corporate governance practice):
- in the enforcement of shareholders' rights and interacting with shareholders;
- in the practices of the Supervisory Board, executive bodies and the Corporate Secretary;
- in its risk management and internal control system;
- in disclosure of information by the Exchange and in performance of material corporate actions.

The Code also describes the objectives and principles of corporate social responsibility for Moscow Exchange, the principles of interaction with service users and other stakeholders, as well as the principles for elaboration of the corporate governance system for Moscow Exchange Group companies.

A specific feature of the Code is that it contains development plans for the implementation of corporate governance principles. This feature means that the Code is not a declarative document but rather a practical tool that enables Moscow Exchange to further improve its corporate governance framework.

In 2018, the Exchange updated its Code: the Material Corporate Actions section was significantly revised, the Corporate Conflict Resolution section was corrected, the actions performed were reflected as measures taken and used in the Exchange's corporate governance, and new development plans were specified.

The new version of the Code was approved by the Supervisory Board of the Exchange on 15 February 2019.

INFORMATION POLICY

The Exchange is committed to ensuring that its activities are as transparent as possible for its shareholders, investors and other stakeholders. Following the recommendations of the Corporate Governance Code of the Bank of Russia and the development plans of the Exchange, and taking into account the legislative requirements on information disclosure by issuers whose securities are admitted to trading, the Exchange adopted a new Information Policy in December 2015 (http://fs.moex.com/files/11122/). (In 2016, the Information Policy was amended in line with the recommendations of the Corporate Governance Code).

This document is a set of standards the Exchange abides by (including members of its management bodies, officials, and employees) when disclosing and/or providing information to shareholders and other stakeholders. In particular, the Information Policy determines:
- key objectives and binding principles of information disclosure of the Exchange as a securities issuer;
- groups of disclosed information, including a list of information that the Exchange may disclose voluntarily, as well as the disclosure procedure;
- the procedure for Moscow Exchange's interaction with stakeholders, including with individuals who are authorized to communicate on behalf of the Exchange;
- the procedure of granting access to the information and documents of the Exchange.

The Information Policy is aimed at providing stakeholders with additional opportunities to exercise their rights and interests and at improving the efficiency of information exchange between the Exchange and all stakeholders.

Methodology Used by Moscow Exchange to Assess the Principles of Corporate Governance Established in the Corporate Governance Code of the Bank of Russia

The recommendations established in Letter No. IN-06-52/8 of the Bank of Russia dated 17 February 2016 "On The Disclosure, in a Public Joint-Stock Company Annual Report, of a Report on Compliance with the Principles and Recommendations of the Corporate Governance Code" were used by the Exchange as the methodology for its assessment of the principles of corporate governance established in the Corporate Governance Code of the Bank of Russia.

As part of the assessment, an analysis was undertaken to determine whether the Exchange's corporate governance practices and internal procedures complied with the principles and recommendations of the Bank of Russia Corporate Governance Code.

The findings of the assessment are presented in the Report on Compliance with the Principles and Recommendations of the Corporate Governance Code, which forms an integral part of the Annual Report.

Over the past several years, the Exchange has been working on bringing its corporate governance practices in line with the Corporate Governance Code. The annual analysis of the results of corporate governance assessment shows a trend towards an increase in the number of principles and recommendations complied with.

Directors' Liability Insurance

Since 2013, the liability of Moscow Exchange's directors and officers (including independent directors), as members of the Company's management bodies, has been insured. The purpose of this insurance is to provide compensation for potential damages caused by unintended negligent actions (or by their inaction) on the part of the insured individuals in the performance of their administrative activities.

Under the insurance contract concluded in 2018, the insurance premium is USD 74,700, and the insured amount is USD 50 mln (the total additional insured amount is USD 5 mln for independent directors). The insurer is Ingosstrakh.

The terms and conditions of the insurance contract, including the insurance coverage, are consistent with the best global insurance practices.

EXTERNAL AUDITOR

Auditor's name	Deloitte & Touche CIS
INN	7703097990
OGRN	1027700425444
Address	5 Lesnaya St., Moscow 125047 Russia
The auditor is the member of Russian Union of Auditors (RUA)	The auditor is the member of Russian Union of Auditors (RUA)
The organization is located at:	8 Petrovskiy Pereulok, building 2, Moscow 107031.

Auditing Team:
- Sergei Neklyudov, Leading Partner;
- Ekaterina Ponomarenko, Partner, Quality Control;
- Anna Zdanevich, Audit Director;
- Anna Naydunova, Senior Audit Manager;
- Maria Vovk, Audit Manager;
- Natalia Kaprizina, Partner, Internal Control Audit;
- Julia Goncharova, Senior Manager, Internal Control Audit;
- Ksenia Andreeva, Manager, Internal Control Audit;
- Anton Shulga, Partner, Valuation;
- Aleksei Chagovets, Director, Valuation;
- Oksana Zhupina, Partner, Tax Audit;
- Anton Rudakov, Assistant Manager, Tax Audit;
- Anna Kostyra, Partner, Legal Affairs;
- Alfiya Mukhamatyanova, Senior Manager, Legal Affairs.

The fee for the audit of the annual accounting (financial) statements of Moscow Exchange and of the consolidated statements of Moscow Exchange Group for 2018 was RUB 42,295 thousand, including VAT.

Deloitte and Touche CIS rendered no other services to PJSC Moscow Exchange in 2018 beyond audit services.

EXTERNAL AUDITOR SELECTION PROCEDURE

In accordance with the Regulations on the Auditor Selection Commission, Moscow Exchange selects auditors every three years. The number of consecutive audit years by one organization normally does not exceed six years, i.e. two auditor selection periods. Deloitte & Touche CIS won the tender.

The best candidate is chosen by the Auditor Selection Commission in accordance with the Regulations on the Evaluation of Proposals for the Selection of the Auditor for Moscow Exchange and the Technical Requirements for Audit. Both are approved by the Supervisory Board's Audit Committee.

Technical Requirements determine the scope of matters the auditor will review during an audit, as well as the Exchange's requirements for the audit firm taking part in the competitive tender.

Before reviewing the bids for the audit of Moscow Exchange and Group companies, the Committee prepares an opinion on bidders' compliance with legislative requirements, including with regard to factors that may affect the independence and objectivity of the auditor. Only those candidates that comply with the requirements for the auditor's independence under Article 8 of Federal Law on Auditing (No. 307-FZ dated 23 December 2008) are admitted to the tender.

The auditor selection process is based on a review of the technical characteristics and prices of the bids providing the best terms for the audit of the financial (accounting) statements of Moscow Exchange and Group companies.

The Auditor Selection Commission reviews bids in two stages, assessing technical characteristics first and then pricing of bids, based on which it determines the winning candidate.

The review of technical characteristics assesses the audit methodology, quality of the auditor's report on the internal control framework to the Exchange's governing bodies, the bidders' professional expertise, and draft agreement for the audit of the Exchange and Group companies.

As regards the pricing of bids, the total audit fees for the current reporting period and for the two subsequent periods, as well as the fee payment schedule, are considered.

Based on its review of the bids, the Auditor Selection Commission determines the winning bid and recommends the candidate to the Supervisory Board's Audit Committee. In turn, the Committee recommends that the Supervisory Board should propose to the General Meeting of Shareholders of the Exchange to approve the candidate as the auditor.

The final decision on auditor selection is made by the Annual General Meeting of Shareholders.

REMUNERATION OF SUPERVISORY BOARD MEMBERS

The Exchange's remuneration system for Supervisory Board members is determined by the Remuneration and Compensation Policy approved by resolution of the Supervisory Board in December 2016 and by the Remuneration and Compensation Regulation approved by resolution of the Annual General Meeting of Shareholders in April 2016. The Nomination and Remuneration Committee actively participates in improvement of the remuneration system for Supervisory Board members, taking into account the best practices of corporate governance and the positive experience of public companies and foreign exchanges. The above Policy and Regulation apply only to the members of the Supervisory Board of the Exchange. During the reporting year, no amendments were made to these documents, and no assessment of the remuneration system was made by any external organizations. However, the Nomination and Remuneration Committee of the Supervisory Board conducted an expert assessment of the compliance of current remuneration with market conditions and practices of companies with similar capitalization, and did not recommend to revise the remuneration in 2018.

According to the Policy, the system of remuneration and compensation of Supervisory Board members is based on the following key interrelated principles:
- mechanisms of calculating remuneration and compensation are clear, and information on them is available to all interested parties;
- disclosure of information on the remuneration and compensation of Supervisory Board members, including the amount of individual remuneration, is done in proper time and in full;
- the amount of remuneration of Supervisory Board members is intended to motivate them to work effectively;
- contribution of each member of the Supervisory Board is assessed taking into account his/her duties, responsibilities, workload, and involvement.

The level of remuneration paid to Supervisory Board members shall be sufficient to attract, motivate, and retain persons with skills and qualifications necessary for the Exchange. The Nomination and Remuneration Committee gives recommendations on the level of remuneration of Supervisory Board members on the basis of an expert assessment of the level of remuneration paid by Russian companies with similar capitalization and competitors of the Exchange.

The Policy and Regulation govern all types of payments, benefits, and privileges provided to Supervisory Board members and contain no other forms of short-term or long-term incentives of Supervisory Board members.

In order to ensure independent decision making, the remuneration of Supervisory Board members is not tied to the Exchange's performance or share price and does not include option programs. Supervisory Board members enjoy no pension contributions, insurance programs (apart from the Supervisory Board member liability insurance and the conventional insurance associated with travelling to perform duties as a director or to participate in Supervisory Board activities), investment programs, or other benefits or privileges, unless specified in the Policy and Regulation. The Exchange does not provide loans to Supervisory Board members and does not enter into civil law contracts with them for the provision of services to the Exchange on non-market terms.

Remuneration for performing the duties of a member of the Supervisory Board of the Exchange shall not be paid to state employees, employees of the Bank of Russia, employees and managers of the Exchange and its subsidiaries.

Remuneration of directors for performing the duties of a member of the Supervisory Board comprises basic and supplementary components.

The amount of the basic remuneration of a member of the Supervisory Board depends on whether such member is independent or not, and:
- for an independent member of the Supervisory Board, amounts to RUB 5.5 mln;
- for a non-independent member of the Supervisory Board, amounts to RUB 4 mln.

The following differentiated supplementary remuneration is paid to Supervisory Board members for performance of additional duties, requiring extra time and effort, of Chairman of the Supervisory Board, Deputy Chairman of the Supervisory Board, Chairman of a Supervisory Board Committee, or a member of a Supervisory Board Committee, and:
- for the Chairman of the Supervisory Board, amounts to RUB 6 mln;
- for the Deputy Chairman of the Supervisory Board, amounts to RUB 3 mln;

- for the Chairman of the Supervisory Board Committee, amounts to RUB 2.5 mln;
- for a member of the Supervisory Board Committee, amounts to RUB 1.25 mln.

When a member of the Supervisory Board performs the duties of the Chairman and/or a member of more than one Committees of the Supervisory Board, such member is paid remuneration for the chairmanship and/or membership in each such Committee.

By resolution of the General Meeting of Shareholders of the Exchange, members of the Supervisory Board may be paid supplementary remuneration for participation in conferences or forums held at the initiative or with the participation of the Exchange and aimed at improving the Exchange's interaction with investors or financial market participants. The exact amount of the specified supplementary remuneration is determined taking into account the importance, duration and remoteness of the venue of the event and may not exceed RUB 400,000.

The amount of the basic and supplementary remuneration of a member of the Supervisory Board is fixed, reflects the expected time costs associated with performing the duties of a member of the Supervisory Board, and does not depend on participation in each meeting of the Supervisory Board or Supervisory Board Committees (including the unscheduled ones). However, the amount may be reduced by 25% or 50% if a member of the Supervisory Board attended less than 75% and 50% of in-person meetings of the Supervisory Board or Committees, respectively. If a member of the Supervisory Board took part in 1/3 or less of the total number of meetings of the Supervisory Board or in 1/4 or less of in-person meetings of the Supervisory Board, the General Meeting of Shareholders of the Exchange may decide not to pay remuneration to such member of the Supervisory Board.

In case of early termination of powers of a member of the Supervisory Board, the calculation of remuneration of such member is made for the actual period of performance of his/her duties.

Apart from the remuneration for work in the Supervisory Board and Supervisory Board Committees, in accordance with the Exchange's Policy, members of the Supervisory Board are reimbursed (compensated) for travel expenses relating to participation in in-person meetings of the Supervisory Board or its Committees, General Meetings of Shareholders, as well as in events attended under the performance of duties of Supervisory Board members. In addition, members of the Supervisory Board who travel to attend meetings and other events held outside their place of residence are reimbursed (compensated) for representation expenses.

Members of the Supervisory Board are entitled to classes of travel and accommodation equal to those members of executive bodies are entitled to in accordance with the internal documents regulating reimbursement of expenses in business trips.

In order to maintain the necessary professional level of Supervisory Board members, the Nomination and Remuneration Committee of the Supervisory Board may recommend paying for professional training and refresher courses.

An exhaustive list of reimbursable expenses is established by the Regulation.

The Nomination and Remuneration Committee ensures that Supervisory Board members participate in control over the remuneration of Supervisory Board members.

The amount of remuneration paid in 2018 to MOEX Supervisory Board members for the performance of their duties in the period from the date of election in 2017 to the date of termination of their powers in 2018 (corporate year) is determined in accordance with the Regulation.

The resolution to pay remuneration to Supervisory Board members for the performance of their duties during their term of office, as well as to determine the amount of individual remuneration of each director elected on 27 April 2017, was adopted at the Annual General Meeting of Shareholders held on 26 April 2018.

The remuneration of members of the Supervisory Board of the Exchange was previously reviewed by the Nomination and Remuneration Committee of the Supervisory Board of the Exchange, as well as by the Supervisory Board.

AMOUNT OF PAYMENTS (BY TYPES OF REMUNERATION), RUB THOUSAND

		2018 год					2017 год	2016 год
#	Full name	Basic remuneration	Supplementary remuneration	Reimbursement of travel expenses	Remuneration for work in governance bodies of subsidiaries	**Total amount of all payments and compensations**	Total amount of all payments and compensations	Total amount of all payments and compensations
1	Alexey Kudrin	3,000	6,000	0	0	**9,000**	10,000	8,020
2	Alexander Afanasiev	0	0	0	0	**0**	0	0
3	Oleg Viyugin	4,818.2	2,500	2,533.1	4,250.0	**14,101.2**	0	0
4	Anatoly Braverman	4,000	3,750	0	0.0	**7,750.0**	0	0
5	Andrey Golikov	4,000	8,000	694.4	5,250.0	**17,944.4**	17,250.0	12,711.5
6	Maria Gordon	5,500	2,011.7	507.8	0.0	**8,019.5**	9,882.8	340.6
7	Valery Goreglyad	0	0	508	0	**508**	0	0
8	Yury Denisov	4,000	5,000	562.2	6,000.0	**15,562.2**	14,430.5	9,086.5
9	Bella Zlatkis	4,000	0	0	4,750.0	**8,750.0**	8,750.0	7,375.0
10	Anatoly Karachinsky	5,500	2,500	0	0	**8,000.0**	8,817.4	6,500.0
11	Rainer Riess	5,500	8,515.8	575.6	0	**14,591.4**	11,533.9	9,746.3
12	Duncan Paterson	5,500	5,226.6	533.9	0	**11,260.5**	8,569.8	362.9

INFORMATION ON MEMBERS OF THE EXECUTIVE BOARD[1]

Chairman and Members of the Executive Board

The current activities of the Exchange are managed by the Chairman of the Executive Board, which is the sole executive body, and by the Executive Board, which is the collegial executive body of the Exchange.

INFORMATION ON THE CHAIRMAN OF THE EXECUTIVE BOARD OF THE EXCHANGE

Alexander Afanasiev,
Chairman of the Executive Board

Born on 12 January 1962 in Moscow.

In 1984, he graduated from the Moscow Financial Institute with a degree in International Economic Relations.

He has a PhD in Economics.

- From 1998 to 2011, he was the Deputy Chairman of the Executive Board at Bank WestLB Vostok, a subsidiary of the German banking group WestLB AG.
- Since 2011, he has been a member of the Executive Board of the Exchange.
- Since 21 June 2012, he has been the Chairman of the Executive Board of Moscow Exchange. His term of office is from 27 April 2018 to 27 April 2020, inclusive (established by resolution of the Supervisory Board of Moscow Exchange dated 23 March 2018 (Minutes No. 15 dated 23 March 2018)).
- He is a member of the Supervisory Board of CCP NCC; a member of the Supervisory Board of NSD; a member of the Executive Board of the Russian Union of Industrialists and Entrepreneurs.

Length of service with the Exchange: since 2011 to date.

Number of shares held / equity interest in Moscow Exchange: 2,948,385 / 0.1295196%.

He reported no transactions involving shares in Moscow Exchange in 2018.

1. Information on the Chairman and members of the Executive Board of the Exchange is as of 31 December 2018.

Anna Kuznetsova,
Managing Director of the Equity & Bond Market

Born on 20 September 1974 in Gorodishche, Stary Oskol district, Belgorod region.

In 1996, she graduated from the Lomonosov Moscow State University with a qualification in Mechanics and Applied Mathematics. in 1998, she graduated from the Lomonosov Moscow State University with a Bachelor degree in Economics. in 1999, she finished the post-graduate course of the Mechanics and Mathematics Faculty at the Lomonosov Moscow State University.

She has a PhD in Physics and Mathematics.

- From 1999 to 2001, she worked in NAUFOR, participated in the creation of the National Quotation System, and the development of the Complex Information Disclosure System.
- From 2001 to 2004, she worked in RTS; from 2003, she was Head of the New Markets Development Department of NP RTS Association.
- In 2004–2006, she worked as the Executive Director of REGION Brokerage Company where she was in charge of the organization of work and interaction between the Company's operating divisions.
- From 2006 to 2008, she worked as the Vice-President of NP RTS Association, and as the Deputy Chairman of the Executive Board of RTS.
- Since 2008, she worked as the Deputy CEO and, from 2013 to 2016, as the CEO of MICEX Stock Exchange.
- From 2011 to 2016, she worked as the Managing Director of the Equity & Bond Market
- Since 21 July 2016, she has been a member of the Executive Board and the Managing Director of the Equity & Bond Market. Her term of office is from 24 July 2018 to 21 July 2021, inclusive (determined by resolution of the Supervisory Board of the Moscow Exchange dated 5 June 2018 (Minutes No. 3 dated 5 June 2018)).
- Since 2018, she has been Professor, the Head of the Financial Markets Infrastructure Chair at the National Research University Higher School of Economics.

Length of service with the Exchange: since 2001 to date.

Number of shares held / equity interest in Moscow Exchange: 220,000 / 0.0096644%.

She reported no transactions involving shares in Moscow Exchange in 2018.

Igor Marich,

Managing Director of the Money and Derivatives Markets

Born on 1 April 1974 in Moscow.

In 1998, he graduated from the Finance Academy under the Government of the Russian Federation with a degree in Finance and Credit.

- Since 1994 to 1999, he worked in ELBIM Bank, where he raised from an Economist to the Head of the Securities Department.
- Since 2000, he has worked at the Exchange and led the development of the Derivatives Market on the Exchange, as well as the development and implementation of new instruments in the MICEX Group markets. He took an active part in the creation and subsequent development of the Repo Market, as well as in the organization of bank deposit and credit operations on the Exchange. Since 2011, he headed the Exchange's FX and Money Markets.
- Since 2013 to 2016, he worked as the Managing Director of the Money Market. Since 22 July 2016, he has been a member of the Executive Board and the Managing Director of the Money and Derivatives Markets. His term of office is from 24 July 2018 to 21 July 2021, inclusive (determined by resolution of the Supervisory Board of the Moscow Exchange dated 5 June 2018 (Minutes No. 3 dated 5 June 2018)).
- Currently, he is a member of the Board of Directors of MB Innovations LLC; Chairman of the Supervisory Board of the National Mercantile Exchange; member of the Board of Directors of the Kazakhstan Stock Exchange.

Length of service with the Exchange: since 2000 to date.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

Dmitry Shcheglov,

Chief Operating Officer

Born on 1 September 1975 in Orekhovo-Zuevo, Moscow region.

In 1998, he graduated from the Stankin Moscow State Technology University with a degree in Automation and Control. He has a PhD in Engineering Sciences.

- In 2016, he graduated from the Moscow School of Management Skolkovo with a degree of Master of Business Administration (Executive MBA).
- In 1998, he began to work at the Exchange as an expert of Trade System and Clearing Support Section of the Derivatives Market Division. Later, he held various positions in the FX Market Department of the Exchange. He was directly involved in the organization of CCP NCC activities and transfer of FX Market clearing functions to it. in 2009, he organized the work of the Operations Centre of the Exchange.
- Since April 2011, he was the Deputy Head of the Integration Project Centre.
- In 2012, he was appointed the Executive Director of Operations of the Exchange and, since 2013, he has been holding the position of the Chief Operating Officer.
- From 2013 to 2016, he was the Deputy CEO of MICEX Stock Exchange and a member of the Board of Directors of MICEX Stock Exchange.
- From 2017 to 2018, he was the Chairman of the Board of Directors of MB Innovations.
- Since 1 April 2013, he has been a member of the Executive Board of Moscow Exchange. His term of office is from 4 April 2017 to 2 April 2020, inclusive (established by resolution of the Supervisory Board of the Moscow Exchange dated 2 March 2017 (Minutes No. 15 dated 2 March 2017)).

Length of service with the Exchange: since 1998 to date.

Number of shares held / equity interest in Moscow Exchange: 17,258 / 0.00076%.

Information on transactions involving shares in Moscow Exchange in 2018

Transaction date	Transaction type (substance)	Before transaction		After transaction	
		number of shares	equity |interest, %	number of shares	equity interest, %
02 July 2018	Purchase of shares	90,261	0.00396	756,928	0.03325
02 July 2018	Sale of shares	756,928	0.03325	374,258	0.01644
16 July 2018	Sale of shares	374,258	0.01644	317,258	0.01394
27 July 2018	Sale of shares	317,258	0.01394	17,258	0.00076

Max Lapin,
Chief Financial Officer

Born on 28 October 1979 in Shuya, Ivanovo region.

In 2003, he graduated from Lomonosov Moscow State University with a degree in Economics.

- In 2007, he graduated from Columbia Business School with a degree of Master of Business Administration in Finance.
- From October 2009 to January 2014, he worked as the Director of Planning and Analysis at Sibur.
- Since February 2014, he headed the Business Development & Performance Management Department of the Magnitogorsk Iron and Steel Works.
- In August 2017, he continued his work as an Advisor to Moscow Exchange.
- Since 2 October 2017, he has been a member of the Executive Board of Moscow Exchange. His term of office is from 2 October 2017 to 1 October 2019 (established by resolution of the Supervisory Board of the Moscow Exchange dated 28 September 2017 (Minutes No. 7 dated 29 September 2017)).
- Since 2018, he has been the Chairman of the Board of Directors of MB Innovations.

He has no interest in the share capital/ordinary shares in Moscow Exchange.

He reported no transactions involving shares in Moscow Exchange in 2018.

REMUNERATION PAYABLE TO MEMBERS OF THE EXECUTIVE BOARD

The remuneration system for members of Moscow Exchange's executive bodies is regulated according to the Policy on Remuneration and Compensation for Members of Executive Bodies approved by the resolution of the Supervisory Board in December 2016. This Policy establishes remuneration principles and approaches, procedures for determining the amount of remuneration and the types of payments, benefits and perquisites.

The Policy is based on the following key principles:

- Attracting and retaining professional and effective members of executive bodies capable of implementing the Exchange's strategy and other business priorities, as well as increasing shareholder value.
- Providing competitive remuneration sufficient to attract, motivate and retain competent and qualified members of the executive bodies.
- Maintaining an optimal balance when awarding compensation between the performance of Moscow Exchange as a whole and the personal contribution of each member of the executive body.

The Remuneration Policy is transparent and available to investors online[1].

Remuneration payable to executive body members is comprised of a fixed (salary) component and a variable component. The variable component constitutes a significant portion of total annual remuneration and consists of short- and long-term elements. Short-term variable compensation represents an annual bonus linked to the performance of Moscow Exchange and each executive body member's personal contribution. Long-term variable compensation is determined as per the share-based long-term incentive program.

Short-term variable compensation is linked to performance against key performance indicators (KPIs) reviewed and approved annually and including both corporate and individual KPIs. In 2018, corporate performance accounted for 40% and individual performance accounted for 60%.

To increase personal responsibility, the Supervisory Board may defer the payment of a portion of bonuses to members of executive bodies until it receives information on their financial and other achievements; the delayed portion may be reduced or cancelled in case of failure to attain a positive result in the relevant business line. Sixty percent of the approved bonus pool for 2018 will be paid in 2019, while 40% of the bonus pool will be paid in equal installments with a delay of one to two calendar years (20% after one calendar year, and the remaining 20% after another calendar year) as per decisions of the Supervisory Board. This allows the Group to account for the risks associated with decisions made by members of the executive body.

To improve motivation and accountability of Moscow Exchange executive body members, to ensure their interests are aligned with those of shareholders and to link remuneration to the Exchange's long-term performance, the Group runs a share-based long-term incentive program as per principles and parameters approved by the Supervisory Board. Under this program, the right to sell shares vests in stages, in one, two and three years subject to continued employment.

Similar to other employees of the Moscow Exchange, members of executive bodies are entitled to the following benefits:

- voluntary medical insurance and international medical insurance;
- life and accident insurance;
- financial assistance;
- salary payments for a certain number of days of incapacity from work per year.

In addition, members of the executive bodies are provided with a corporate car and a business mobile phone plan and are entitled to reimbursement of hospitality and travel expenses.

1. http://www.moex.com/s798

No severance pay is determined or paid in instances where a member of an executive body resigns or is dismissed on grounds related to disciplinary action, or their employment is terminated as a result of delinquency of the executive.

The compensation payable in the event of an executive body members' early termination (following the relevant resolution of the Supervisory Board) subject to no fraudulent actions on their part shall not exceed the fixed portion of their annual remuneration. If a member of an executive body is dismissed on other grounds, compensation is only paid in instances and in the amount specified by the Labor Code of the Russian Federation.

Remuneration payable to each executive body member, payment terms and procedures, along with conditions for early termination of contracts, including severance pay, compensation or any other payments in excess of those required by law, as well as conditions for payment thereof, are reviewed and approved by the Supervisory Board based on recommendations issued by the Board's Nomination and Remuneration Committee. To prevent a conflict of interests, the sole executive body being the Executive Director shall abstain from voting on the issue of approval of contract terms with members of executive bodies.

The Supervisory Board, together with the Nomination and Remuneration Committee, supervises the implementation of the Remuneration Policy and amends it, as necessary. In 2018, the Nomination and Remuneration Committee did not assess the system of remuneration of the members of executive bodies, and did not consider the issue of the efficiency of the rate of the fixed and variable portions of remuneration for members of executive bodies given that that was done in 2017.

Along with that, in 2018, the ration rate of the fixed and variable portions of remuneration was repeatedly assessed by the Nomination and Remuneration Committee when: setting or changing the remuneration from a member of the Executive Board, discussing the Long-Term Incentive Program. Total remuneration for Executive Board members, including the rate of remuneration portions, was also assessed to ensure it was competitive with remuneration at comparable companies following the results of a remuneration study by a leading consultancy. In 2019 the Nomination and Remuneration Committee plans to assess the remuneration system and the effectiveness of the fixed and bonus portions of remuneration for members of executive bodies.

It should be noted that members of Moscow Exchange's executive bodies are not remunerated for serving on the Boards of Moscow Exchange Group companies.

Total remuneration paid to Executive Board members in 2018 was as follows:

Remuneration type	Remuneration amount, RUB
Remuneration for serving on a governance body (Board)	0.00
Salaries	161,494.10
Bonuses	176,435.00
Commission fees	0.00
Reimbursement for expenses	0.00
Other types of remuneration	6,645.25
Remuneration for serving on a governance body (Board) of a Missing number	
Total	344,574.36

Internal control system

Moscow Exchange has in place an internal control system to ensure its licensed activities comply with Russian legislation and other regulatory requirements, as well as the rules of organized trading and the Exchange's own constituent and internal documents.

The internal control system has several main tasks:
- To ensure the Exchange complies with Russian legislation and MOEX's own constituent and internal documents;
- To prevent misuse of insider information and/or market manipulation;
- To prevent any involvement of the Exchange and its employees in illegal and immoral activities, including money laundering and financing of terrorism;
- To prevent any conflicts of interests, including by identifying and monitoring conflicts of interests, and to avert the consequences of any conflicts of interests.

Internal control is based on the identification, analysis, assessment and monitoring of the risk of losses being sustained by the market operator and/or other adverse effects of potential non-compliance of its activities carried out under an exchange license or a trading system license with Russian legislation and regulatory requirements, the rules of organized trading, and the constituent and internal documents of the market operator, and as a result of actions taken by the Bank of Russia ("Compliance Risk"), as well as the management of such risk.

Within this framework, the Exchange's internal control system is based on the COSO internal control concept and utilizes a Three Lines of Defense model. Duties related to risk management and internal control are allocated among MOEX's governing bodies, control and coordination units, and the internal audit unit.

The First Line of Defesce is represented by all employees of the business and operational units of the Exchange, whose key functions are to identify, assess and manage the risks inherent in MOEX's daily activities, as well as to elaborate and implement policies and procedures governing existing business processes.

The Second Line of Defense is represented by the Department of Operational Risk, Information Security and Business Continuity, the Internal Control Service, and the Compliance Risk Management Department. Their key functions are to continuously monitor and manage risks, as well as to control the compliance of MOEX's activities with Russian legislation and regulations, the rules of organized trading, as well as the Exchange's constituent and internal documents, in the following areas:
- Ensuring information security, including protecting MOEX's interests/goals in the information sphere;
- Compliance with Russian legislation and the constituent and internal documents of Moscow Exchange;
- Preventing any involvement of Moscow Exchange and its employees in illegal and immoral activities, including money laundering and financing of terrorism;
- To prevent any misuse of insider information and/or market manipulation;
- To prevent any conflicts of interests, including by identifying and monitoring conflicts of interests, as well as averting the consequences of any conflict of interests.

These units provide support to the First Line of Defense units in terms of identifying compliance risks, elaborating and implementing control procedures, clarifying the requirements of applicable laws, and preparing monitoring reports for governing bodies.

The Third Line of Defense is represented by the Exchange's governing bodies, which determine the principles of and approaches to the organization of risk management and the internal control system in accordance with the Exchange's Charter and regulations on governing bodies; and by the Internal Audit Service, which monitors the efficiency and productivity of the Exchange's financial and economic activities, the efficiency of asset and liability management, including the safety of assets and the efficiency of the market operator's risk management.

MOEX's internal control system was subject to an independent audit, which evaluated the system as "mature". The current internal control system is appropriate to the Group's profile, business scale and environment. However, the Group continues to enhance its internal control system to improve efficiency and maintain the system at a high level.

Risk management

KEY RISKS

Moscow Exchange Group has built an integrated risk management system; however, each Group company faces its own inherent risks associated with the specific field of its activities. Thus, Moscow Exchange, as the parent company of the Group, assumes the risks of a market operator.

That said, the Group's principal risk taker is the National Clearing Centre (NCC) on the grounds that it operates as clearing house and central counterparty for all main markets of Moscow Exchange Group and an operator of deliveries in the Commodities Market.

The Group's comprehensive risk management system (RMS) extends to the NSD, the infrastructure powerhouse of the Russian financial market, whose priorities are the reliable operation and stable development of the following key areas:

- Central securities depository;
- Clearing system;
- Commodities repository;
- Tripartite services;
- Corporate information center.

SYSTEM FOR MANAGING RISKS TO THE CURRENT STRATEGY

The principles and approaches employed by the Group in installing and operating the risk management system (RMS) are based on best international practices implemented in compliance with national and international risk and capital management standards. The Group holds an annual audit of its compliance with the CPMI-IOSCO Principles for Financial Market Infrastructures, the COSO Enterprise Risk Management Framework, and the guidelines of the Basel Committee on Banking Supervision on procedures to be employed by credit institutions in the sphere of risk and capital management. In 2018, the CCP NCC, the principal risk taker of the Group, retained its DNV Business Assurance Management System Certificate ISO 9001:2015, an international standard denoting best global practice in the field of business and quality management. The Bank was audited by DNV GL, an international certification company. DNV GL's standards establish clear requirements for management of business processes to serve as the basis for a predictable and stable level of quality of products and services.

In 2018, the Exchange achieved the ISO 27001:2013 (Information Security Management Systems) and ISO 22301:2012 (Business Continuity Management Systems) certification covering the organization of on-exchange trading, clearing and other services on the Equity and Bond, Derivatives, FX and Money Markets. This certification ensures that the Exchange and NCC fully meet over 100 technical and administrative requirements in the area of information security and business continuity.

The integration of risk management functionality in business processes makes it possible to identify risks and assess their materiality in a timely manner, and to ensure an efficient response by mitigating potential adverse effects and/or by reducing the probability that they will materialize. Tools for mitigation include insurance, hedging, limit requirements and transaction collateral requirements.

The Group's Risk Management System operates on the following principles:
Comprehensive Coverage is premised on identifying risk factors and risk objects, determining risk appetite based on a comprehensive analysis of existing and proposed business processes (products), implementing universal RMS working procedures and elements, consistently applying methodological approaches in resolving similar risk assessment and risk management tasks, and assessing and managing key operational risks in close connection with the non-key operational RMS.

Continuity is premised on regular, coherent, target-driven procedures, such as assessment of existing risks, including monitoring risk parameters, review of key RMS parameters and how they are determined, including limits and other restrictions in respect of clearing members' transactions, analyzing RMS technologies and operational rules, holding stress tests and preparing reports for management.

Transparency is manifested by the Group providing relevant information regarding the RMS to clearing members / counterparties. Clearing members, including potential members, have access to methodological documents describing the RMS, including methodological approaches to risk assessment, as well as to key aspects of the procedures employed in monitoring the financial stability of clearing members / counterparties. At the same time, the assessment results of a specific clearing member or counterparty, as represented in the form of internal ratings, or limits, as well as other restrictions established in respect of treasury or administrative operations, are never made public and are never subject to disclosure.

Independent Assessment means that a comprehensive assessment and review of each risk is undertaken by separate divisions / employees who are independent from the divisions responsible for taking on risks or counterparties. These divisions / employees cannot be charged with any responsibilities that may give rise to a conflict of interest.

Paper Trail means that RMS guidelines, procedures and rules should be negotiated with the divisions involved in risk assessment and management procedures, and approved by the relevant governing bodies. **Prudence** suggests that the Group bases its decision-making on a prudent combination of RMS reliability and profitability in choosing methods of risk assessment and management, and in determining the acceptable level of risk (risk appetite).

Materiality means that, in implementing various RMS elements in its operations, the Group is guided by the relationship between the costs that implementation of risk analysis, control and management mechanisms will require, and the potential outcome of such implementation, as well as the costs of the development and implementation of products, services or tools carrying the relevant exposure. As part of the risk management strategy, and with a view to achieving strategic objectives, credit entities of the Group establish and annually review their risk appetite, which defines the risk limit assumed by them by reference to strategic objectives they have been set.

The current version of the Group's strategy includes five priority areas:

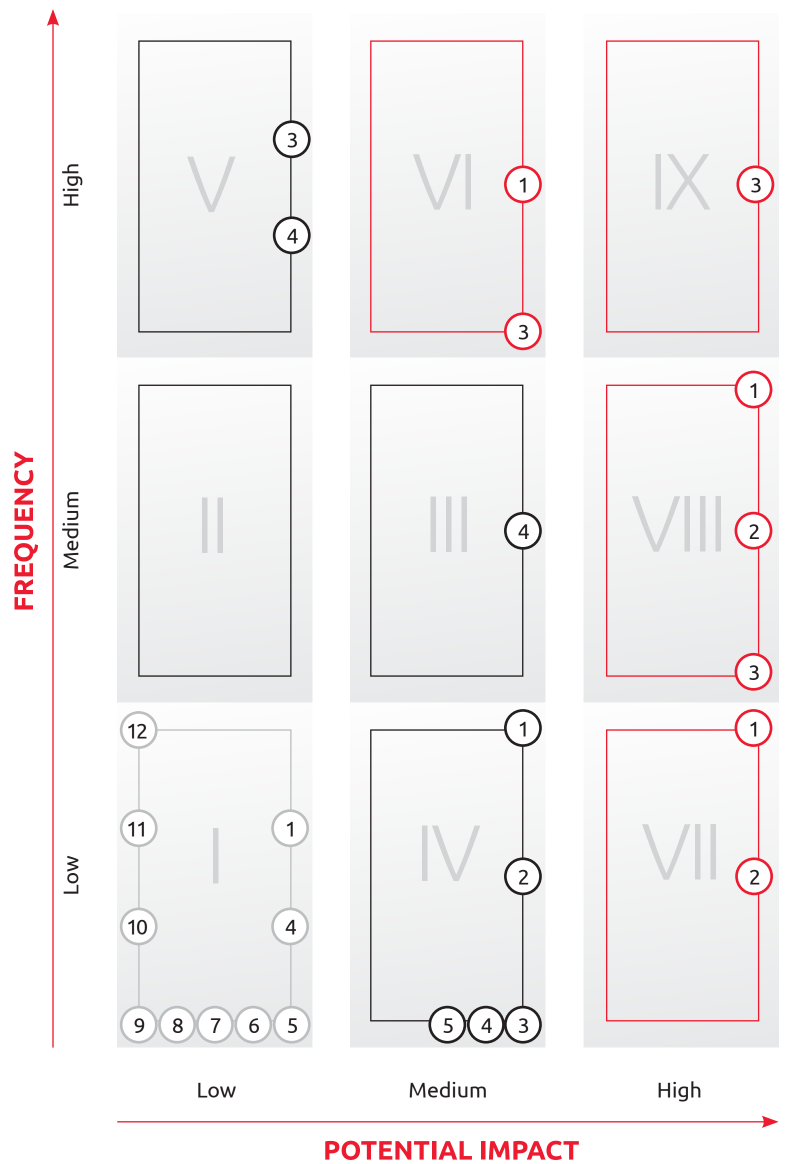
- Diversification. Strategic objective: to substantially increase income from classic infrastructure services, and to create new trading markets.
- Optimization. Strategic objective: to improve operational efficiency and streamline the Group's business processes.
- Market development (growth from the further development of the Russian financial markets). Strategic objective: to develop the local investor base, and to facilitate greater liquidity in Russia's financial markets.
- Integration. Strategic objective: to develop an advanced and integrated system managing risks, collateral pool and settlements, and extending to all Group markets.
- Standardization of infrastructure. Strategic objective: to complete the upgrade of key elements of Russian financial market infrastructure in accordance with evolving international standards.

These priority areas serve as the basis for calculating threshold values for specific target indicators. Compliance with these indicators is regularly reviewed and communicated to the Supervisory Board.

RISK MAP

The risk map is based on an annual risk identification procedure. The risk map based on the updated risk identification procedure of 2018 is shown below. The same type of risk may be represented by different events that vary in their potential impact and frequency of occurrence. If events of the same risk type fall into different matrix sectors, the risk significance is categorized via a simple majority based on the sector color:

- Red: the most significant risks – sectors VI, VII, VIII, IX;
- Gray: risks of medium significance – sectors II, III, IV, V;
- White: the least significant risks – sector I



1. Credit risk
2. Operational risk
3. Market risk
4. Liquidity risk
5. Legal risk
6. Compliance risk
7. Bank book interest risk
8. Reputational risk
9. Custody risk
10. Commercial risk
11. Systemic risk
12. Strategic risk

Financial risks

Risk	Description	Actions
Credit risk (incl. CCP risk and concentration risk)	Group's assets are subject to credit risk, which is defined as the risk of possible losses caused by failure of a Group's counterparty to perform or properly perform its obligations to it.	The Group controls credit risk by employing the following procedures: ▸ establishing single or group counterparty limits, subject to a comprehensive assessment of their financial position, the analysis of the macroeconomic environment they are operating in, the level of their information transparency, business reputation, as well as other financial and non-financial factors; ▸ using an internal rating system providing a weighted assessment of the counterparty's financial position, and the level of the credit risk assumed in its respect; ▸ controlling the credit risk concentration in accordance with the current regulatory requirements; ▸ establishing strict requirements for the types and quality of the acceptable collateral, including liquid securities, as well as cash in Russian rubles and in foreign currency. In order to reduce the credit risk associated with the CCP's operations, the Group has implemented a multi-level safeguard structure triggered upon a clearing member's failure to perform or properly perform its obligations, in compliance with regulatory requirements and strict international standards.
Liquidity risk	Risk of potential losses following an adverse change in the value of the instruments comprising the bank book, caused by changes in interest and/or yield rates.	The liquidity management system includes the following elements: ▸ distribution of powers in managing liquidity; ▸ specific liquidity management and control procedures; ▸ information system to accumulate and review liquidity-related information; ▸ a set of guidelines, performance indicators, and plans of initiatives designed to ensure efficient liquidity management and control; ▸ internal management accounts underlying any decision adopted in respect of the liquidity efficient control and management.

Risk	Description	Actions
Market risk	Market risk may emerge from a defaulting clearing member's need to close major positions / sell collateral, which in case of low market liquidity may adversely affect the price at which such position can be closed or the collateral can be sold.	The primary objective in managing the market risk upon investing idle cash is to improve the risk/profitability correlation, and to minimize any losses should any adverse events occur. With this view the Group: ▸ diversifies its securities portfolio (by maturity, issuer's industry profile); ▸ sets up maximum expiration periods for investments in securities; ▸ sets up maximum volumes of investment in securities (by the total volume, by types of investments, and issuers); ▸ classifies debt obligations and securities by risk groups; ▸ establishes provisions for potential losses under securities should they be not marked to market. ▸ The market risk emerging as part of trading or clearing operations, is primarily managed by: ▸ identifying, monitoring, and timely reviewing risk parameters, taking into account regular stress test results; ▸ establishing individual collateral rates taking into account concentration limits, profiles of the instruments traded at each of the markets, and possible volatility change scenarios; ▸ back testing collateral rates, and controlling collateral adequacy. In managing the market risk emerging as part of trading or clearing operations, the Group: ▸ devises mechanisms permitting to close positions of defaulting clearing members within two trading days; ▸ sets discounts for the assets accepted as collateral, with the view to covering possible changes in their values in the period from their most recent re-evaluation until the time of their sale; ▸ sets concentration limits that define clearing member's position volume, upon reaching which the underlying collateral is subject to heightened requirements; ▸ evaluates clearing members' collateral adequacy subject to market liquidity; ▸ develops procedures for resolving a situation, when a terminated obligation of a clearing member is secured by property other than the subject of the underling obligation; ▸ maintains a system of additional financial collateral meant to cover losses not secured by clearing member's clearing or any other collateral.
Bank book interest risk	Risk of potential losses following an adverse change in the value of the instruments comprising the bank book, caused by changes in interest and/or yield rates.	In order to measure the impact of the interest risk over the fair value of financial instruments, the Group holds regular assessment of potential losses, which may be caused by negative change of the market terms. The risk management division regularly monitors the financials of the Group and its principal members, assesses the sensitivity of the market value of the investment portfolio and of the proceeds to the interest risk.

Non-financial risks

Name	Description	Actions
Operational risk	Risk of potential losses caused by inconsistency of internal operational procedures to the nature and scope of the business, and/or statutory requirements, their nonobservance by employees, lack of functionality, inadequacy of information, technological and other systems and/or their failure, as well as by external events.	The principal operational risk management (mitigation) methods include development of organizational structure, internal operational rules and regulations, distribution of powers, approval (negotiation) and reporting of undertaken operations, all of which will permit to avoid (minimize) the probability of operational risk factors: ▸ development of control measures following the analysis of statistical data undertaken with the view to identifying typical operational risks on the basis of recurrent events; ▸ monitoring compliance with the adopted rules and procedures; ▸ technological automation of undertaken operations, and development of information protection systems; ▸ insurance, including both traditional property and personal insurance (insuring buildings, other property against destruction, damage, loss caused by a natural disaster and other accidents, as well as by actions of third parties or employees; insuring employees against accidents and personal injuries), ▸ as well as insurance of specific professional risks, both on a comprehensive basis and against separate types of risks; ▸ development of the system of business continuity measures to apply in the operational cycle, including emergency plans (business continuity and/or disaster recovery plans).
Continuity risk	Risk of discontinued critical services.	With the view to ensuring normal operations in emergency situations: ▸ the Group has put together a reserve complex including reserve office and firmware capabilities located at a safe distance from the principal office; ▸ the Group has developed business continuity and disaster recovery plans (BCDR Plans) that define critical business processes, priority actions in an emergency situation, timing and volumes of recovery operations, and business processes to enjoy priority recovery, as well as mandatory steps to be taken after the emergency situation subsides.
Legal risk	Risk of losses caused by breach of contractual obligations, litigations, criminal and administrative liability of Group members and/or their governing bodies acting in their official capacity.	Legal risk management procedures include: ▸ regular monitoring of laws, and verification of internal procedures as to their compliance with actual regulations; ▸ establishing quantitative and volume restrictions for claims, and controlling compliance with the established restrictions; ▸ analyzing the legal basis for new products and services; ▸ updating internal regulations with the view to avoiding fines. Losses associated with legal risks shall be reflected in the operational risk database.
Regulatory (compliance) risk	Risk of losses caused by inconsistency of Group's operations with the laws, its Charter, and internal regulations.	The regulatory risk is managed by the Internal Control Function, which takes the following steps to prevent losses caused by realization of the regulatory risk: ▸ monitors the laws; ▸ is in constant communication with regulatory authorities on matters of new regulations; ▸ identifies regulatory risk in the existing and scheduled procedures; ▸ analyses best practices in implementing internal control measures.

Name	Description	Actions
Reputational risk	Risk of losses caused by a negative public opinion of the Group's operational (technical) stability, quality of its services and its activities in general.	In order to avoid losses associated with the realization of the reputational risk, the Group continuously monitors media space for information about the Group and analyses its internal processes applying the impact assessment methodology to each identified event or factor. The primary source of the reputational risk is the realization of the operational risk, especially when such information becomes public. Thus, all actions taken to prevent and to mitigate the operational risk work simultaneously towards the reduction of the reputational risk.
Strategic risk	Risk of expenses (losses) sustained by the market operator as a result of mistakes (defects) made in deciding on the operator's business and development strategy.	Principal methods of strategic risk management include: ▸ building up a process for strategic planning and management commensurate with the Exchange's caliber and operations; ▸ preventing any decisions, including strategic, to be taken by a non-appropriate body from the hierarchic point of view; ▸ exercising general control over the performance of the risk management system; ▸ determining the process for major transactions, for development and implementation of prospective projects as part of the general concept of the Moscow Exchange Group's development; ▸ controlling the consistency of the risk management parameters with the Exchange's current condition and its development strategy.

RISK MANAGEMENT STRATEGY

All principal risk takers among the companies of the Group have developed a risk and capital management strategy. The principles and processes of the risk management strategy seek to build, use and develop a comprehensive system of capital and risk management to ensure business continuity both in normal and stressed economic conditions, to enhance transparency of the risk and capital management processes, as well as to identify and assess significant risks in a timely manner, support capital planning and take due account of risks in the decision-making process.

With a view to maintaining efficiency of the regular risk management processes:

- Group governing bodies and divisions regularly exchange information on matters connected with the recognition, identification, assessment and control of risks;
- Group governing bodies, divisions and employees have been engaged in a system of distribution of powers and responsibilities to implement key risk management principles;
- risks are regularly identified;
- responsibility for managing certain types of risks is allocated to dedicated employees;
- models are developed to quantify risks and to ensure they are comprehensively catalogued;
- measures are taken to mitigate risk factors;
- the Group's operations are tested for sensitivity against certain risk factors which are taken into account in risk assessment models;
- the Group holds regular stress tests for the adequacy of equity (capital) and clearing margin, including:
  - a complex scenario-based stress analysis that takes into account simultaneous change of several risk factors;
  - back stress testing;
- Back testing (evaluation of the CCP models accuracy;
- management accounts are systematically drawn up and sent to Group governing bodies, including on matters connected with the recognition, identification, assessment and control of risks;
- the NCC Supervisory Board Risk Committee, the Moscow Exchange Risk Committee and the NSD Management Board Risk Committee duly discharge their functions;
- the internal control system has been set up;
- financial resilience recovery plans and plans for engagement of additional resources have been developed.

Moscow Exchange has also established a separate market operator's risk management subsystem that enables it to identify and assess risks in a timely manner and to develop mitigation measures.

This system incorporates continuous monitoring of emergencies and assessment of their potential impact on the technical processes of the Exchange's markets, as well as updating the integrated operational and financial risk management system in line with adopted decisions and procedures. The Exchange is constantly developing and improving its risk management system to reduce the vulnerability of business processes and their recovery time, to improve system redundancy based on spacing and duplication of resources, and to improve the reliability of communication systems between traders, the Exchange and depository and settlement organizations.

In addition, the Exchange has also set up a separate structural unit responsible for managing its risks as a market operator. This unit aims to identify and assess risks in a timely manner and to develop mitigation measures. The Exchange has developed and approved the Regulations on Managing the Risks of a Market Operator, which establish, in particular:

- the principles of the risk management system related to the Company's operations;
- the principles and objectives of risk management related to the activities of a market operator.

The Regulations on Managing the Risks of a Market Operator:

- determine methodology principles and approaches to risk identification, assessment and monitoring;
- set out effect significance criteria regarding effects arising from the risk events to recognize the risk as material, as well as set out the procedure for mapping risk assessment results to those criteria;
- classify the risks inherent to the Exchange;
- establish the procedure and timeline for an audit of the efficiency of the risk management system;
- provide basic guidance and approaches to identifying, assessing and monitoring risks;
- set out the procedure for and frequency of threat identification regarding threats which may lead to a failure of trading facilities;
- establish the procedure and timeline for informing the Exchange's governing bodies, executives and divisions of identified risks;
- detail a list of measures to be taken by the Exchange to ensure confidentiality of risk-related information, including confidentiality of risk reports;
- establish the frequency of stress testing, as well as the requirements for scenarios used for such testing.

Short-term Risk Outlook

FINANCIAL RISKS

given that the Group's strategy calls for the development of new products, formation of new trading markets and the expansion of the investor base, **the management of financial risks will be key for the Company.**

REGULATORY AND LEGAL RISKS

given that the Exchange's strategic objectives include the standardization of the Company's financial infrastructure and the development of its product line, regulatory and legal risks will continue to have a high impact on the Exchange's activities; however, taking into account ongoing activities, **we do not expect a significant increase in the regulatory and legal risk.**

OPERATIONAL RISKS

Stabilization and Reliability program being implemented **will reduce operational risk;** however, the full effect of the program will be visible only in the long term.

INFORMATION SECURITY RISKS

plans to upgrade the Exchange's key information systems **will keep information security risks elevated.**

HR RISKS

this type of risk **will remain neutral,** given that most ongoing activities are long-term; however, staff turnover remains low.

REPUTATIONAL RISKS

we expect **reputational risk to decrease** on the back of several major marketing activities planned for the near future that will contribute to enhancing Moscow Exchange's image.

STRATEGIC RISKS

this type of risk **will remain neutral** given that no factors preventing the achievement of strategic objectives, as well as no substantial delays and/or negative variances in implementation of the budget for strategic projects and initiatives, are present.

For shareholders and investors

SHARE CAPITAL

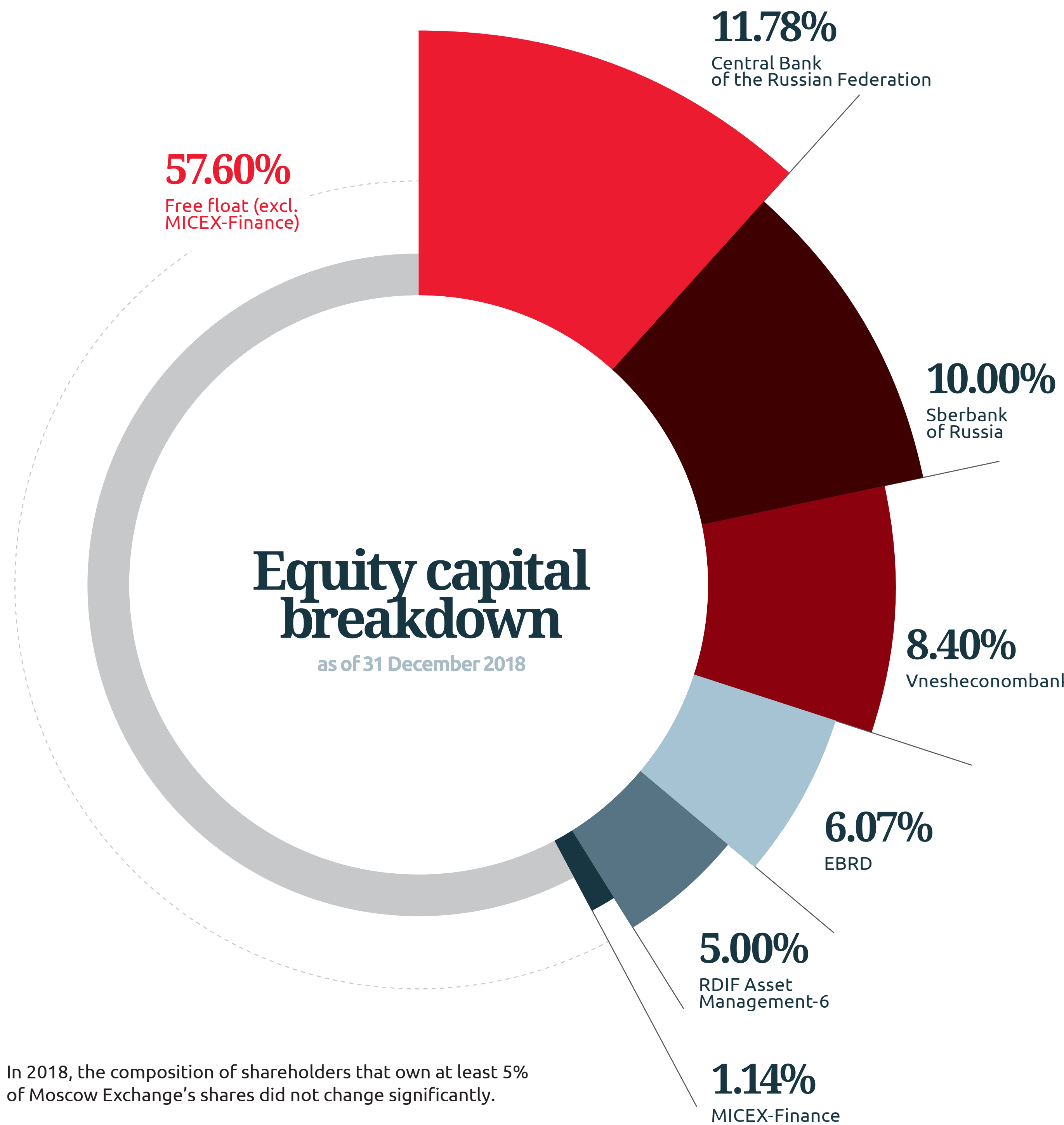
Information on shares composing the share capital

Type, category, and form of shares	Ordinary registered uncertificated shares
State registration number of shares issue	1-05-08443-H
Par value of one share	RUB 1
Number of shares composing the share capital	2,276,401,458 shares
Share capital	RUB 2,276,401,458
Share search code / ISIN	MOEX / RU000A0JR4A1

In 2018, Moscow Exchange's share capital remained unchanged. As of 31 December 2018, it amounted to RUB 2,276,401,458 and the number of outstanding ordinary shares stood at 2,276,401,458. Pursuant to the Exchange's Charter, each share grants the right to one vote at the General Meeting of Shareholders.

The shares are traded on Moscow Exchange's own trading platform (ticker: MOEX) and are included in the first-level quotation list. The shares are a constituent of the Russian market benchmark indices, the MOEX Russia Index and the RTS Index, which are comprised of up to 50 stocks issued by Russia's largest traded companies. The Exchange's shares are also a constituent of the MOEX Index 10 (which is comprised of the 10 most liquid Russian stocks), the sectoral index for Finance and the equity sub-index of the Pension Savings Assets Index.

The Exchange's shares are included in a number of global indices, such as those calculated by MSCI, MV Index Solutions, S&P, FTSE, STOXX, Bloomberg, etc. The international index provider MSCI includes MOEX's shares for the purpose of calculation of the MSCI Russia Index and the MSCI Emerging Markets Index. As of 25 January 2019, the weight of MOEX shares in the MSCI Russia Index was 0.96%. MV Index Solutions included the Exchange's shares in the MVIS Russia Index, a benchmark for the largest ETF focusing on the Russian stock market. As of 25 January 2019, the weight of MOEX shares in the index was 2.00%.



In 2018, the composition of shareholders that own at least 5% of Moscow Exchange's shares did not change significantly.

Shareholders that own at least 5% of Moscow Exchange's shares

	31 December 2017		31 December 2018	
Shareholders that own at least 5% of votes	**Number of shares**	**Equity interest**	**Number of shares**	**Equity interest**
Central Bank of the Russian Federation	268,151,437	11.780%	268,151,437	11.780%
Sberbank of Russia	227,682,160	10.002%	227,682,160	10.002%
Vnesheconombank	191,299,389	8.404%	191,299,389	8.404%
EBRD	138,172,902	6.070%	138,172,902	6.070%
RDIF Asset Management-6	113,893,490	5.003%	113,893,490	5.003%

According to the information available to the Exchange, no shareholder possesses any degree of control over the company disproportionate to their holding of the Exchange's share capital, as per a shareholder agreement or other agreement. The Exchange has not issued preferred shares, for instance those with a different nominal value. The share capital structure does not include any instrument that would provide the holder control over the company disproportionate to its stake in the company.

As of 31 December 2018, the total number of MOEX shareholders was 36,991, including 36,007 individual shareholders.

As of 31 December 2018, MICEX-Finance, a controlled entity of the Exchange, held 26,014,430 shares (1.143% of the capital).

In the reporting period, MOEX did not execute any related-party transactions with any special terms. All transactions were market-based and had the same terms as those of transactions made with the Company's other counterparties.

REGISTRAR

Registry society STATUS keeps the register of Moscow Exchange's shareholders.

Full company name	Joint-Stock Company "Registry company STATUS"
Address	23/1 Novokhokhlovskaya St., Office 1, 109052, Moscow Russian Federation
Registration details	State registration certificate No. 066.193 from 20 June 1997, certificate to confirm the legal entity from4 July 2002
Primary State Registration Number (OGRN)	1027700003924
License	Registrar License No. 10-000-1-00304 from 12 March 2004 (without limitation of the period of validity) issued by the Federal Financial Market Service
Contact details	General enquiries: +7 (495) 974-83-50 Shareholders service enquiries: +7 (495) 974-83-47 E-mail: info@rostatus.ru Fax: +7 (495) 678-71-10 E-mail: office@rostatus.ru

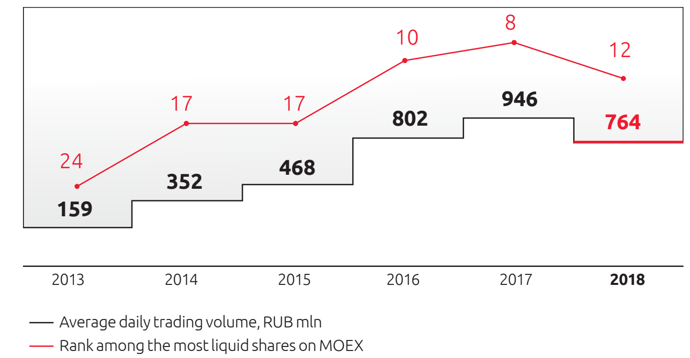
For more details, please visit the company's website: www.rostatus.ru .

MOEX SHARE

As at the end of 2018, Moscow Exchange's market capitalization was RUB 184.3 bln (vs. RUB 248.7 as at the end of 2017). Since MOEX's IPO in February 2013, the share price has increased by 47%.

In 2018, the ADTV of the company's shares slightly decreased year-on-year, although MOEX's shares remained one of the most liquid stocks on the Russian market, ranking 12th in terms of liquidity.

ADTV and liquidity position

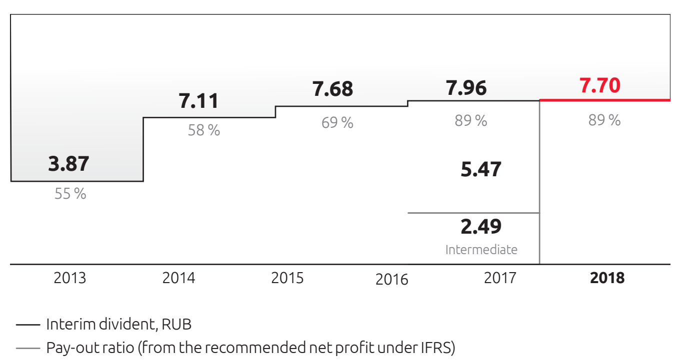


DIVIDENDS

For 2017, Moscow Exchange's Annual General Meeting of Shareholders (AGM) resolved to distribute dividends in the amount of RUB 5.47 per share. Taking into account the interim dividends in the amount of RUB 2.49 per share paid based on the results of H1 2017, the total dividend for 2017 was RUB 7.96 per share. In total, RUB 18.12 bln was allocated for the payment of dividends, equivalent to 89% of the 2017 IFRS consolidated net income of the Exchange. The Exchange's Dividend Policy, which was approved by the MOEX Supervisory Board in December 2015, requires that dividends equal at least 55% of IFRS consolidated net income.

On 22 March 2019, the Exchange's Supervisory Board recommended that shareholders at the AGM approve the payment of dividends based on the Exchange's 2018 results in the amount of RUB 7.70 per share. In total, it was recommended to allocate RUB 17.53 bln for the payment of dividends. If the AGM approves dividends at this level, the dividend payment for 2018 will be equivalent to 89% of the consolidated net income for the financial year. Interim dividends in 2018 were not distributed as per decision of the Exchange's Supervisory Board.

Dividends per share in 2013–2018 and recommended dividends for 2018, RUB



Dividend payments in 2014–2018:

Dividend payment year	Dividend period	Announcement date and grounds of the decision	Total pre-tax amount of dividends declared and paid	Actual payment date
2014	for 2013	26 June 2014 Minutes of AGM No. 52	RUB 5,423,154,900	24 July 2014 for nominee holders; 7 August 2014 for other registered holders
2015	for 2014	28 April 2015 Minutes of AGM No. 53	RUB 8,818,323,227.91	25 May 2015 for nominee holders; 16 June 2015 for other registered holders
2016	for 2015	29 April 2016 Minutes of AGM No. 54	RUB 16,201,105,465.23	27 May 2016 for nominee holders; 20 June 2016 for other registered holders
2017	for 2016	28 April 2017 Minutes of AGM No. 56	RUB 17,482,763,197.44	29 May 2017 for nominee holders; 20 June 2017 for other registered holders
2017	for H1 2017	14 September 2017 Minutes of EGMS No. 57	RUB 5,668,239,600	12 October 2017 for nominee holders; 2 November 2017 for other registered holders
2018	for 2017	26 April 2018 Minutes of AGM No. 58	RUB 12,451,915,975.26	29 May 2018 for nominee holders; 20 June 2018 for other registered holders

INVESTOR RELATIONS

Moscow Exchange engages with existing and prospective investors to provide them with an overview of the activities of the company and raise awareness of MOEX's business with the aim of continually diversifying the shareholder base. Investor relations activities are scheduled in such a manner that any investor can contact MOEX management with questions at least once a year and receive timely information for making reasonable investment decisions. It is one of Moscow Exchange's priorities to adhere to the highest standards of information disclosure given its roles as a public company and operator of Russia's key financial markets infrastructure.

In 2018, Moscow Exchange's management held 326 meetings with institutional investors and took part in 16 international conferences for investors, including Moscow Exchange Forums in Moscow, New York and London. It also held a number of investor roadshows across continental Europe, the UK, North America and Asia. Roadshows in Hong Kong and Canada were held for the first time in the company's history.

	2014	2015	2016	2017	2018
Number of meetings with investors	236	270	349	355	326

In total, in 2018, Moscow Exchange's management contacted 202 institutional investors who, according to Nasdaq IR Insight, at the end of 2018 owned 57.6% of shares in free float (as compared to 51% in 2017). 34% of business contacts were institutional investors from North America, 22% from the UK, 20% from continental Europe, 12% from Russia, 6% from Asia, and 6% from other regions.

Geography of institutional investors that had business contact with the Exchange

Region	2017	2018
North America	40%	34%
UK	24%	22%
Continental Europe	18%	20%
Russia	10%	12%
Asia	3%	6%
Others	5%	6%

MOEX places strong emphasis on engaging with retail investors. The number of such shareholders exceeded 36,000 at the end of 2018. Since 2014, MOEX has run an annual Shareholder Day for them, an event in the form of a conference call with representatives of senior management. At the Shareholder Day held on 19 April 2018, the Exchange's management gave details about new projects and development prospects of the company, and responded to questions about corporate governance and initiatives to attract private investors to the Russian financial market.

In 2018, within the Reinvent MOEX series of seminars, Moscow Exchange held three meetings with investors and analysts to give them a deeper understanding of the Exchange's activities. The seminars were devoted to new offering on the Bond Market, development of the Money Market and the Single Collateral Pool project, and the company's involvement in the Financial Services Marketplace project. In 2019, MOEX plans to hold three such seminars.

Investors' opinion on investor relations at Moscow Exchange

Since 2014, Moscow Exchange has annually commissioned a perception study to learn more about perception of MOEX among investors and analysts.

Results of the investors' opinion on investor relations at Moscow Exchange in 2018

Parameters	No response	Good	Very good	Excellent
Knowledge of the business	16%	0%	20%	64%
Quality of IR materials	16%	0%	16%	68%
Confidence and transparency	16%	0%	16%	68%
Responsiveness	16%	8%	36%	40%
Friendliness/helpfulness	16%	0%	4%	80%
Access to the management	16%	0%	0%	84%

ANALYSTS

MOEX's performance is closely monitored by leading Russian and international banks. They publish regular reports on MOEX's shares as well as provide stock recommendations and financial forecasts.

Sell-side covering analysts

Company	Analyst	Tel.	E-mail
Citigroup	Maria Semikhatova	+7 (495) 643 1462	maria.semikhatova@citi.com
Goldman Sachs	Andrey Pavlov-Rusinov	+7 (495) 645 4241	andrey.pavlov-rusinov@gs.com
HSBC Bank Plc	Andrzej Nowaczek	+44 (20) 7991 6709	andrzej.nowaczek@hsbcib.com
Raiffeisen Centrobank	Andrey Polischuk	+7 (495) 221 9849	andrey.polischuk@raiffeisen.ru
	Sergey Garamita	+7 (495) 721 9900	sergey.garamita@raiffeisen.ru
Sberbank CIB	Andrew Keeley	+44 (20) 7936 0439	andrew_keeley@sberbank-cib.ru
	Kirill Rogachev	+7 (495) 933 9817	kirill_rogachev@sberbank-cib.ru
SOVA Capital	Andrey Mikhailov	+7 (495) 213 1829	andrey.mikhailov@sovacapital.com
Wood & Company	Pawel Wieprzowski	+48 222 221 549	pawel.wieprzowski@wood.com
UBS	Bob Kommers	+44 (20) 7567 6980	bob.kommers@ubs.com
Alfa Bank	Eugene Kipnis	+7 (495) 795 3713	ekipnis@alfabank.ru
Aton	Mikhail Ganelin	+7 (495) 213 0338	mikhail.ganelin@aton.ru
BCS	Elena Tsareva	+7 (495) 213 1537	etsareva@bcsgm.com
VTB Capital	Svetlana Aslanova	+7 (495) 663 4788	svetlana.aslanova@vtbcapital.com
	Mikhail Shlemov	+7 (495) 663 4701	mikhail.shlemov@vtbcapital.com
Gazprombank	Andrey Klapko	+7 (495) 983 1800	andrey.klapko@gazprombank.ru

At the end of 2018, the market consensus forecast for MOEX shares based on forecasts of 13 analysts was RUB 124.9 per share.

The Unified Collateral Pool is the biggest upgrade to MOEX's infrastructure since the Exchange cancelled 100% advanced depositing of assets for equities and migrated to settlement on T+ basis. Market participants can now benefit in full from trading different classes of assets on one venue, with significantly reduced costs and released funds.

Igor Marich,
Managing Director
of the Money and Derivatives Markets

Consolidated Financial Statements

Deloitte.

AO Deloitte & Touche CIS
5 Lesnaya Street
Moscow, 125047,
Russia

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Fax: +7 (495) 787 06 01
deloitte.ru

INDEPENDENT AUDITOR'S REPORT

To the Shareholders and Supervisory Board of Public Joint-Stock Company "Moscow Exchange MICEX-RTS"

Opinion

We have audited the consolidated financial statements of Public Joint-Stock Company "Moscow Exchange MICEX-RTS" and its subsidiaries (the "Group"), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, 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 the year then ended 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 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 (the "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.

Why the matter was determined to be a key audit matter	How the matter was addressed in the audit
Information Technology systems and related controls We focused on this area because functioning of the financial accounting and reporting systems are reliant on integrity of complex information technology (the "IT") systems, and on the effectiveness of related control procedures. There is a risk that automated accounting procedures and IT related manual controls are not properly designed or operating ineffectively. We focused on testing of trading and clearing systems, as the most significant proportion of revenue is recognized based on automated data generated by these systems. In addition, starting January 2018, the Public Joint-Stock Company "Moscow Exchange MICEX-RTS" discontinued use of 1C in parallel accounting, with Oracle ("OeBS") general leger becoming master general leger for the company. Lack of controls over data integrity and processing, as well as ineffective algorithms may increase risk of errors in the financial data processed in OeBS.	We assessed the effectiveness of general IT controls. We tested design and operating effectiveness of general IT and certain application controls over significant IT systems that support information capture and processing in financial accounting and reporting processes. In respect of these systems we examined key controls over access security, change management, and operation of IT systems and key application controls relied on by management to address risks of material misstatement of the Group's consolidated financial statements. We obtained understanding of and tested for operating effectiveness key general IT controls over OeBS, including: • access management, including user rights granting and termination; • change management – testing and approvals of changes in algorithms and key reports used in preparation of the financial statements; • data transfer controls that ensure integrity and completeness of data transferred in and out of OeBS. In addition, we performed audit procedures over the opening balances in OeBS, including: • reconciliation of FY2018 opening balances in OeBS to the audited FY2017 closing balances in 1C; • review of the additional manual verification performed by the Group to ensure that critical automated algorithms in OeBS were functioning correctly. Our testing identified exceptions in respect of certain IT general controls; these exceptions have been mitigated by performing additional substantive audit procedures.
Impairment assessment for intangible assets and goodwill The carrying values of intangible assets and goodwill are significant for the users of consolidated financial statements. Recoverability of intangible assets and goodwill was determined to be a key audit matter, because management makes complex and subjective judgements and estimates for the purpose of testing goodwill and intangible assets for impairment, in	We obtained understanding of the management's methodology and process of initial and subsequent accounting and measurement of intangible assets and goodwill. These procedures include understanding of relevant controls over goodwill allocation to CGUs, the assessment of recoverable amounts of CGUs and recognition of impairment of intangible assets. As part of assessment of recoverability of goodwill and the client base, we checked the reasonableness of allocation of these assets to the CGUs.

particular in respect of the basis of goodwill allocation to specific CGUs, discount rate used and forecasts of future cash flows. Information on accounting for intangible assets and goodwill is disclosed in Notes 21 and 22 to the consolidated financial statements, respectively.	We checked the calculation of the recoverable amount of each CGU performed by the Group's management, and challenged key assumptions and judgements used in future cash flows forecasts and sensitivity of recoverable amount to changes in key assumptions. In particular, we focused on analysis of trade volumes, commission income and EBITDA forecasts, and discount rate applied to projected cash flows. We checked completeness and accuracy of disclosures in the consolidated financial statements, and their compliance with IFRS.
Controls over non-routine and non-core activities During the reporting period, the Group incurred losses due to operational error on non-routine operation, as disclosed in Note 12. Also, as disclosed in Note 37, subsequent to the reporting date, several incorrectly processed administrative payments were made from the Group's accounts that did not properly follow the Group's internal procedures. There is a risk that should the controls over non- routine and non-core activities be less developed than in the rest of the business, there may be incorrect recording of financial information or a financial loss to the Group. As it is required by International Standards of Auditing, we planned our audit so that we had a reasonable expectation of detecting material misstatements to the consolidated financial statements and accounting records due to fraud or error.	We examined the Group's internal investigation reports and other supporting and primary documents in order to determine whether the cases identified had any material effect to the consolidated financial statements. Management concluded in those internal reports that both incidents were isolated and related to non-standard or administrative non-core activity of the Group. We made inquiries of the responsible employees and management, performed public information search on the individuals and companies involved, analyzed remediation plans and actions undertaken thereof. We have evaluated the business rationale for any significant unusual transactions. We have tested journal entries that exhibit certain characteristics, which were identified using electronic data interrogation and manual techniques. We obtained an understanding of business processes and internal controls over the financial closing and reporting processes and performed other audit procedures we considered appropriate to the circumstances. We also assessed corporate governance procedures such as communication to the Supervisory Board, the Audit Commission, and other relevant bodies.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the consolidated financial statements and our auditor's report thereon. 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.

When we read the Annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance.

Responsibilities of Management and Those Charged with Governance 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 the 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.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion

We communicate with those charged with governance 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 those charged with governance 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 those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period, which constitute the key audit matters included herein.

Neklyudov Sergei Vyacheslavovich
Engagement partner

6 March 2019

The Entity: Public Joint-Stock Company "Moscow Exchange MICEX-RTS"

Primary State Registration Number: 1027739387411, record made in the State Register of Legal Entities on 16.10.2002.

Address: Russia 125009, Moscow, Bolshoy Kislovsky per., 13

Audit Firm: AO "Deloitte & Touche CIS"

Certificate of state registration № 018.482, issued by the Moscow Registration Chamber on 30.10.1992.

Primary State Registration Number: 1027700425444

Certificate of registration in the Unified State Register № 77 004840299 of 13.11.2002, issued by Moscow Interdistrict Inspectorate of the Russian Ministry of Taxation № 39.

Member of Self-regulated organization of auditors "Russian Union of auditors" (Association), ORNZ 11603080484.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED DECEMBER 31, 2018

(in millions of Russian rubles)

	Notes	Year ended December 31, 2018	Year ended December 31, 2017
Fee and commission income	4	23 647,1	21 207,6
Interest and other finance income	5	17 932,2	16 040,2
Interest expense	6	(446,5)	(829,8)
Net gain on financial assets at fair value through other comprehensive income		262,0	-
Net gain on financial assets available-for-sale		-	1 015,8
Foreign exchange gains less losses	7	(1 686,7)	1 059,1
Other operating income	8	193,3	46,0
Operating Income		**39 901,4**	**38 538,9**
General and administrative expenses	9	(7 941,4)	(7 278,9)
Personnel expenses	10	(6 512,3)	(6 152,9)
Profit before Other Operating Expenses and Tax		**25 447,7**	**25 107,1**
Other operating expenses	12	(1 075,2)	-
Profit before Tax		**24 372,5**	**25 107,1**
Income tax expense	13	(4 652,2)	(4 851,9)
Net Profit		**19 720,3**	**20 255,2**
Attributable to:			
Equity holders of the parent		19 716,5	20 265,7
Non-controlling interest		3,8	(10,5)
Earnings per share (rubles)			
Basic earnings per share	29	8,76	9,02
Diluted earnings per share	29	8,74	8,98

Chairman of the Executive Board
Afanasiev A.K.

March 6, 2019
Moscow

Chief Financial Officer, Executive Board Member
Lapin M.V.

March 6, 2019
Moscow

The notes 1-37 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED DECEMBER 31, 2018

(in millions of Russian rubles)

	Notes	Year ended December 31, 2018	Year ended December 31, 2017
Net profit		**19 720,3**	**20 255,2**
Other comprehensive income / (loss) that may be reclassified subsequently to profit or loss:			
Exchange differences on translating foreign operations		1,3	(1,2)
Movement on investment revaluation reserve for financial assets at fair value through other comprehensive income		(3 811,9)	-
Movement on the credit risk of financial assets at fair value through other comprehensive income	11	(146,6)	-
Net gain on investments at fair value through other comprehensive income reclassified to profit or loss		(262,0)	-
Net income resulting from revaluation of investments available-for-sale		-	1 323,9
Net gain on investments available-for sale reclassified to profit or loss		-	(1 015,8)
Income tax relating to items that may be reclassified		844,0	(61,6)
Other comprehensive (loss)/income that may be reclassified subsequently to profit or loss		**(3 375,2)**	**245,3**
Total comprehensive income		**16 345,1**	**20 500,5**
Attributable to:			
Equity holders of the parent		16 337,6	20 515,1
Non-controlling interest		7,5	(14,6)

The notes 1-37 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2018

(in millions of Russian rubles)

	Notes	December 31, 2018	December 31, 2017
ASSETS			
Cash and cash equivalents	14	416 391,2	273 248,6
Financial assets at fair value through profit or loss	15	4 350,9	413,6
Due from financial institutions	16	95 377,8	63 606,9
Central counterparty financial assets	17	3 312 020,2	2 430 083,8
Financial assets at fair value through other comprehensive income	18	210 752,4	-
Investments available-for-sale	19	-	215 132,2
Property and equipment	20	5 973,9	6 636,2
Intangible assets	21	17 604,3	18 307,9
Goodwill	22	15 971,4	15 971,4
Current tax prepayments		506,0	306,8
Deferred tax asset	13	125,1	243,4
Other assets	23	3 511,3	3 818,9
TOTAL ASSETS		**4 082 584,5**	**3 027 769,7**
LIABILITIES			
Balances of market participants	24	606 479,8	466 860,2
Overnight bank loans		5 003,1	-
Central counterparty financial liabilities	17	3 312 020,2	2 430 083,8
Distributions payable to holders of securities	25	24 676,0	2 507,8
Margin account		979,6	384,6
Current tax payables		30,9	-
Deferred tax liability	13	3 821,4	2 943,3
Other liabilities	26	3 968,9	3 711,2
TOTAL LIABILITIES		**3 956 979,9**	**2 906 490,9**
EQUITY			
Share capital	27	2 495,9	2 495,9
Share premium	27	32 140,2	32 105,5
Treasury shares	27	(1 768,2)	(1 908,1)
Foreign currency translation reserve		(20,9)	(18,5)
Investments revaluation reserve		(1 758,2)	1 357,0
Share-based payments		710,1	524,0
Retained earnings	28	93 623,3	86 546,4
Total equity attributable to owners of the parent		**125 422,2**	**121 102,2**
Non-controlling interest		182,4	176,6
TOTAL EQUITY		**125 604,6**	**121 278,8**
TOTAL LIABILITIES AND EQUITY		**4 082 584,5**	**3 027 769,7**

The notes 1-37 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2018

(in millions of Russian rubles)

	Notes	Year ended December 31, 2018	Year ended December 31, 2017
Cash flows from / (used in) operating activities:			
Profit before tax		24 372,5	25 107,1
Adjustments for:			
Depreciation and amortisation charge	9	3 339,5	2 952,5
Net change on deferred commission income		(94,2)	150,6
Revaluation of derivatives		(517,9)	(407,3)
Share-based payment expense	10	285,8	267,9
Unrealized (gain)/loss on foreign exchange operations		(277,5)	16,0
Gain on disposal of financial assets at FVTOCI		(262,0)	-
Gain on disposal of investments available-for-sale		-	(1 015,8)
Net change on interest accruals		707,6	(1 573,4)
Net loss on disposal of property and equipment		38,3	60,9
Impairment of investments available-for-sale		-	11,6
Change on allowance for expected credit losses	11	(117,5)	-
Impairment of intangible assets	21	-	15,0
Impairment of other assets	11	-	8,8
Change on other provisions	26	218,3	-
Cash flows from operating activities before changes on operating assets and liabilities		**27 692,9**	**25 593,9**
Changes on operating assets and liabilities:			
(Increase)/decrease on operating assets:			
Due from financial institutions		(16 439,5)	(2 697,4)
Financial assets at FVTPL		4 298,0	0,4
Central counterparty financial assets		(804 923,7)	(711 775,2)
Other assets		307,5	(1 734,4)
Increase/(decrease) on operating liabilities:			
Balances of market participants		46 552,0	(127 231,6)
Overnight bank loans		5 000,0	-
Central counterparty financial liabilities		804 923,7	711 775,2
Distributions payable to holders of securities		22 168,2	(444,5)
Margin account		595,0	384,6
Other liabilities		8,7	279,1
Net cash from/(used in) operating activities before taxation		**90 182,8**	**(105 849,9)**
Income tax paid		(2 965,4)	(4 848,2)
Net cash from/(used in) operating activities		**87 217,4**	**(110 698,1)**

The notes 1-37 form an integral part of these consolidated financial statements.

	Notes	Year ended December 31, 2018	Year ended December 31, 2017
Cash flows from / (used in) investing activities:			
Purchase of financial assets at at FVTOCI		(247 217,8)	-
Proceeds from disposal of financial assets at at FVTOCI		256 372,2	-
Purchase of investments available-for-sale		-	(162 317,9)
Proceeds from disposal of investments available-for-sale		-	165 877,7
Purchase of property and equipment and intangible assets		(1 976,3)	(2 102,1)
Proceeds from disposal of property and equipment and intangible assets		5,1	29,2
Net cash from investing activities		**7 183,2**	**1 486,9**
Cash flows from / (used in) financing activities:			
Dividends paid		(12 320,5)	(22 897,1)
Sale of treasury shares		87,4	49,5
Uncalled dividends paid		-	(162,1)
Net cash used on financing activities		**(12 233,1)**	**(23 009,7)**
Effect of changes on foreign exchange rates on cash and cash equivalents		60 979,8	24 952,9
Net increase/(decrease) on cash and cash equivalents		**143 147,3**	**(107 268,0)**
Cash and cash equivalents, beginning of period	**14**	**273 248,6**	**380 516,6**
Cash and cash equivalents, end of period	**14**	**416 395,9**	**273 248,6**

Interest received by the Group during the year ended December 31, 2018, amounted to RUB 18 644,7 mln (December 31, 2017: RUB 14 474,2 mln).

Interest paid by the Group during the year ended December 31, 2018, amounted to RUB 442,5 mln (December 31, 2017: RUB 832,3 mln).

The notes 1-37 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES ON EQUITY FOR THE YEAR ENDED DECEMBER 31, 2018

(in millions of Russian rubles)

	Share capital	Share premium	Treasury shares	Investments revaluation reserve	Share-based payments	Foreign currency translation reserve	Retained earnings	Total equity attributable to owners of the parent	Non-controlling interest	Total equity
December 31, 2016	**2 498,1**	**32 286,2**	**(2 271,9)**	**1 110,5**	**413,1**	**(21,4)**	**89 177,8**	**123 192,4**	**191,2**	**123 383,6**
Net profit	-	-	-	-	-	-	20 265,7	20 265,7	(10,5)	20 255,2
Other comprehensive income	-	-	-	246,5	-	2,9	-	249,4	(4,1)	245,3
Total comprehensive income for the period	**-**	**-**	**-**	**246,5**	**-**	**2,9**	**20 265,7**	**20 515,1**	**(14,6)**	**20 500,5**
Dividends declared (Note 28)	-	-	-	-	-	-	(22 897,1)	(22 897,1)	-	(22 897,1)
Share-based payments	-	(31,0)	211,9	-	110,9	-	-	291,8	-	291,8
Cancellation of treasury shares	(2,2)	(149,7)	151,9	-	-	-	-	-	-	-
Total transactions with owners	**(2,2)**	**(180,7)**	**363,8**	**-**	**110,9**	**-**	**(22 897,1)**	**(22 605,3)**	**-**	**(22 605,3)**
December 31, 2017	**2 495,9**	**32 105,5**	**(1 908,1)**	**1 357,0**	**524,0**	**(18,5)**	**86 546,4**	**121 102,2**	**176,6**	**121 278,8**
Effect of adoption of IFRS 9 (Note 2)	-	-	-	261,3	-	-	(319,1)	(57,8)	(1,7)	(59,5)
January 1, 2018 (with IFRS 9 effect)	**2 495,9**	**32 105,5**	**(1 908,1)**	**1 618,3**	**524,0**	**(18,5)**	**86 227,3**	**121 044,4**	**174,9**	**121 219,3**
Net profit	-	-	-	-	-	-	19 716,5	19 716,5	3,8	19 720,3
Other comprehensive loss	-	-	-	(3 376,5)	-	(2,4)	-	(3 378,9)	3,7	(3 375,2)
Total comprehensive income for the period	**-**	**-**	**-**	**(3 376,5)**	**-**	**(2,4)**	**19 716,5**	**16 337,6**	**7,5**	**16 345,1**
Dividends declared (Note 28)	-	-	-	-	-	-	(12 320,5)	(12 320,5)	-	(12 320,5)
Share-based payments	-	34,7	139,9	-	186,1	-	-	360,7	-	360,7
Total transactions with owners	**-**	**34,7**	**139,9**	**-**	**186,1**	**-**	**(12 320,5)**	**(11 959,8)**	**-**	**(11 959,8)**
December 31, 2018	**2 495,9**	**32 140,2**	**(1 768,2)**	**(1 758,2)**	**710,1**	**(20,9)**	**93 623,3**	**125 422,2**	**182,4**	**125 604,6**

The notes 1-37 form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2018

(in millions of Russian rubles, unless otherwise indicated)

Organization

Public Joint-Stock Company Moscow Exchange MICEX-RTS (Moscow Exchange) is a stock exchange based on Moscow, Russian Federation. It was established as closed joint-stock company "Moscow Interbank Currency Exchange" (MICEX) on 1992. In December 2011 the company was reorganized into the form of open joint-stock company and renamed to Open Joint-Stock Company MICEX-RTS. In July 2012 the name of the company was changed to Open Joint-Stock Company Moscow Exchange MICEX-RTS. On April 28, 2015, at Annual General Meeting of Shareholders of Moscow Exchange (AGM) the company's new business name as Public Joint Stock Company Moscow Exchange MICEX-RTS was approved to meet revised standards of the Russian Civil Code. The new business name and respective changes to the Charter of Moscow Exchange took effect from May 13, 2015, the day the registration authority recorded new version of the Charter.

The legal address of Moscow Exchange: 13 Bolshoy Kislovsky per., Moscow, the Russian Federation.

Moscow Exchange Group ("the Group") is an integrated exchange structure that provides financial market participants with a full set of competitive trading, clearing, settlement, depository and information services. The Group operates on the following markets: foreign currencies exchange market, government securities and money market, market of derivative financial instruments, equities market, corporate and regional bonds market, commodities market.

Moscow Exchange is the parent company of the Group, which includes the following entities:

Name	Principal activities	December 31, 2018	December 31, 2017
		Voting rights, %	Voting rights, %
JSC Central Counterparty National Clearing Centre (former Bank National Clearing Centre JSC) (NCC)	Clearing operations	100%	100%
JSC National Settlement Depository (NSD)	Depository, clearing, repository and settlement services	99,997%	99,997%
JSC National Mercantile Exchange (NAMEX)	Commodities exchange operations	65,08%	65,08%
OJSC Evraziyskaia Trading System Commodity Exchange (ETS)	Commodities exchange operations	60,82%	60,82%
MICEX Finance LLC (MICEX Finance)	Financial activities	100%	100%
MOEX Innovations LLC (MOEX Innovations)	Fintech start-ups, financial activities	100%	100%
MOEX Information Security LLC (MOEX Information Security)	Information security services	100%	-

NCC performs functions of a clearing organization and central counterparty on the financial market and holds licences for clearing operations and banking operations for non-banking credit institutions – central counterparties issued by the CBR. In November 2017 NCC was assigned a new status of a non-banking credit institution. From the moment of foundation on May 2006 to the assignment of a new status, the NCC functioned as a bank with the name Bank National Clearing Centre JSC.

NSD is the central securities depository of the Russian Federation. NSD is the Russian national numbering agency and the substitute numbering agency for the Commonwealth of Independent States (CIS), authorized to assign the international ISIN, CFI and LEI codes. NSD holds licences for depository, repository, clearing and settlement operations issued by the Central Bank of Russia (CBR).

NAMEX is a commodity exchange, which has a licence for organisation of trading on commodities on Russia.

ETS is a commodity exchange, which has a licence for organisation of trading on commodities on Kazakhstan.

MICEX Finance is established for facilitating financial activities of the Group.

MOEX Innovations concentrates on start-ups development on the fintech sphere.

MOEX Information Security was established on Russia on October 2018 for providing information security services.

Moscow Exchange and all subsidiaries are located on Russia, except for ETS which is located on Kazakhstan.

The Group has 1 710 employees as at December 31, 2018 (December 31, 2017: 1 662 employees).

The financial statements approval. Consolidated Financial Statements of the Group were approved for issue by the Management on March 6, 2019.

Basis of Presentation and Significant Accounting Policies

STATEMENT OF COMPLIANCE

These Consolidated Financial Statements of the Group have been prepared on accordance with the International Financial Reporting Standards ("IFRS").

BASIS OF PRESENTATION

These Consolidated Financial Statements are presented on millions of Russian rubles, unless otherwise indicated. These consolidated financial statements have been prepared assuming that the Group is a going concern and will continue operation for the foreseeable future. These Consolidated Financial Statements have been prepared on on the historical cost basis except for certain financial assets and liabilities that are measured at fair value.

Moscow Exchange and its subsidiaries registered on the Russian Federation maintain their accounting records on accordance with Russian Accounting Standards ("RAS"). Foreign subsidiaries of the Group maintain their accounting records on accordance with the accounting standards of the countries on which they operate. These Consolidated Financial Statements have been prepared on on basis of the statutory accounting records and have been adjusted to conform to IFRS.

The Russian ruble exchange rates applied on the preparation of these Consolidated Financial Statements are presented below:

	December 31, 2018	December 31, 2017
USD	69,4706	57,6002
EUR	79,4605	68,8668

The accounting policies adopted by the Group on the preparation of these Consolidated Financial Statements are consistent with those followed on the preparation of the Group's Consolidated Financial Statements for the year ended December 31, 2017, except for the accounting policies and impact of the adoption of the following new and amended Standards and Interpretations:

IFRS 9	*Financial Instruments*
IFRS 15	*Revenue from Contracts with Customers (and the related Clarifications)*
Amendments to IAS 40	*Transfers of Investment Property*
Amendments to IFRSs	*Annual Improvements to IFRS Standards 2014-2016 Cycle*
IFRIC 22	*Foreign Currency Transactions and Advance Consideration*

IMPACT OF INITIAL APPLICATION OF IFRS 9 FINANCIAL INSTRUMENTS

In the current year, the Group has applied IFRS 9 *Financial Instruments* (as revised on July 2014) and the related consequential amendments to other IFRS Standards that are effective for an annual period that begins on on or after January 1, 2018. The transition provisions of IFRS 9 allow the Group not to restate comparatives. Corresponding information was not restated, as the modified retrospective approach was applied on transition, which allows recognition of differences to to be accounted for on the opening retained earnings at the beginning of the period. Additionally, the Group adopted consequential amendments to to IFRS 7 *Financial Instruments: Disclosures* that were applied to the disclosures for 2018.

IFRS 9 introduced new requirements for:
1. The classification and measurement of financial assets and financial liabilities,
2. Impairment of financial assets, and
3. General hedge accounting.

Details of these new requirements as well as their impact on the Group's Consolidated Financial Statements are described below.

Interest income and interest expense

Interest income and expense for all financial instruments except for those classified as held for trading or those measured or designated as at fair value through profit or loss (FVTPL) are recognized on 'Interest and other finance income' and 'Interest expense' on the profit or loss using the effective interest method.

The effective interest rate (EIR) is the rate that exactly discounts estimated future cash flows of the financial instrument through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. The future cash flows are estimated taking into account all the contractual terms of the instrument.

The calculation of the EIR includes all fees and points paid or received between parties to the contract that are incremental and directly attributable to the specific transaction costs, and all other premiums or discounts. For financial assets at FVTPL transaction costs are recognized on profit or loss at initial recognition.

The interest income/ interest expense is calculated by applying the EIR to the gross carrying amount of non-credit impaired financial assets (i.e. at the amortised cost of the financial asset before adjusting for any expected credit loss allowance), or to the amortised cost of financial liabilities. For credit-impaired financial assets the interest income is calculated by applying the EIR to the amortised cost of the credit-impaired financial assets (i.e. the gross carrying amount less the allowance for expected credit losses (ECLs)). For financial assets originated or purchased credit-impaired (POCI) the EIR reflects the ECLs on determining the future cash flows expected to be received from the financial asset.

Fee and commission income and expense

Fee and commission income and expense include fees other than those that are an integral part of EIR (see above). Revenue for services provided over a period is recognized pro rata over the contractual term and consists of commission income on operations with long-term exchange instruments, listing fees, depository fees, and other.

Fee and commission expenses with regards to services are accounted for as the services are received.

Financial assets

All financial assets are measured at fair value at initial recognition, including transaction costs, except for those financial assets classified as at fair value through profit or loss (further – FVTPL). Transaction costs directly attributable to the acquisition of financial assets classified as at FVTPL are recognised immediately on profit or loss.

All recognised financial assets that are within the scope of IFRS 9 are required to be subsequently measured at amortised cost (further – AC) or fair value on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. Specifically:

- financial assets should be measured at amortised cost if both of the following criteria are met:
  a. financial asset is held within a business model with the objective to collect the contractual cash flows, and
  b. the contractual cash flows of financial asset are solely payments of principal and interest on the principal amount outstanding (SPPI); financial assets should be measured at fair value through other comprehensive income (FVTOCI) if both of the following criteria are met:
-
  a. financial asset is held within a business model with the objective both to collect the contractual cash flows and to sell the financial assets and
  b. the contractual cash flows of financial assets are SPPI;
- all other debt instruments (e.g. debt instruments managed on a fair value basis, or held for sale) and equity investments are subsequently measured at FVTPL.

An assessment of business models for managing financial assets is performed at the date of initial application of IFRS 9 to determine the classification of a financial asset. The business model is applied prospectively to all financial assets existing at the date of initial application of IFRS 9. An assessment of business models for managing financial assets is fundamental to the classification of a financial asset. The Group determines the business models on the basis that reflects how groups of financial assets are managed together to achieve a particular business objective. The Group's business models do not depend on management's intentions for an individual instrument, therefore the business model assessment is performed at a higher level of aggregation rather than on an instrument-by-instrument basis.

The Group has several business models for managing its financial instruments that reflect how the Group manages its financial assets on order to generate cash flows. The Group's business models determine whether cash flows will result from collecting contractual cash flows, selling financial assets or both.

The Group considers all relevant information available when making the business model assessment. However, this assessment is performed not on the basis of scenarios that the Group does not reasonably expect to occur, such as so-called 'worst case' or 'stress case' scenarios. The Group takes into account the following relevant evidence available such as:

- how the performance of the business model and the financial assets held within that business model are evaluated and reported to the Group's key management personnel;
- the risks that affect the performance of the business model (and the financial assets held within that business model) and, on particular, the way those risks are managed.

At initial recognition of a financial asset, the Group determines whether newly recognised financial asset is part of an existing business model or whether it reflects the commencement of a new business model, if the asset does not match the existing business models. The Group reassesses its business models every reporting period to determine whether they have changed or not since the preceding period. For the current reporting period, the Group has not identified a change on its business models.

Debt instruments at amortised cost or at FVTOCI

The Group assesses the classification and measurement of a financial asset based on contractual cash flow characteristics of the asset and the Group's business model for managing the asset.

For an asset to be classified and measured at amortised cost or at FVTOCI, its contractual terms should give rise to cash flows that are solely payments of principal and interest on the principal outstanding (SPPI).

For the purpose of SPPI test, principal is the fair value of the financial asset at initial recognition. That principal amount may change over the life of the financial asset (e.g. if there are repayments of principal). Interest accrued on principal amount outstanding consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs, as well as a profit margin. The SPPI assessment is performed on the currency on which the financial asset is denominated.

Contractual cash flows that are SPPI are consistent with a basic lending arrangement. Contractual terms that introduce exposure to risks or volatility on the contractual cash flows that are not related to a basic lending arrangement, such as exposure to changes on equity prices or commodity prices, do not give rise to contractual cash flows that are SPPI. An originated or an acquired financial asset can be a basic lending arrangement irrespective of whether it is a loan on its legal form.

When a debt instrument measured at FVTOCI is derecognised, the cumulative gain/loss previously recognised on OCI is reclassified from equity to profit or loss.

Debt instruments that are subsequently measured at amortised cost or at FVTOCI are subject to impairment.

Financial assets at FVTPL are:

- assets with contractual cash flows that are not SPPI; or/and
- assets that are held on a business model other than held to collect contractual cash flows or held to collect and sell.

The Group does not designate assets at FVTPL using the fair value option.

These assets are measured at fair value, with any gains/losses arising on remeasurement recognised on profit or loss.

Reclassifications

If the business model under which the Group holds financial assets changes, the financial assets affected are reclassified. The classification and measurement requirements related to the new category apply prospectively from the first day following the change on business model that results on reclassification the Group's financial assets. Changes on contractual cash flows are considered under the accounting policy on Modification and derecognition of financial assets described below.

Impairment

The Group recognises loss allowances for expected credit losses (ECLs) on the following financial instruments, not measured at FVTPL:

- due from financial institutions;
- cash and cash equivalents;
- debt investment securities;
- other financial assets subject to credit risk.

No loss allowances for expected credit losses are recognised on equity investments, financial assets arising from central counterparty (CCP) activity.

ECLs are required to be measured through a loss allowance at an amount equal to:

- 12-month ECL, i.e. lifetime ECL that result from those possible default events on the financial instrument that are possible within 12 months after the reporting date, (referred to as Stage 1); or
- full lifetime ECL, i.e. lifetime ECL that result from all possible default events over the life of the financial instrument, (referred to as Stage 2 and Stage 3).

Loss allowance for full lifetime ECL is required for a financial instrument if the credit risk attributable to that financial instrument has increased significantly since initial recognition. For all other financial instruments, ECLs are measured at an amount equal to the 12-month ECL. More details on the determination of a significant increase on credit risk are provided below.

ECLs are a probability-weighted estimate of the present value of potential credit losses. ECLs are measured as the present value of the difference between the cash flows due to the Group under the contract and the cash flows that the Group expects to receive arising from the weighting of multiple future economic scenarios. The Group measures ECLs on an individual basis or on a collective basis for portfolios of debtors that share similar value and economic risk characteristics.

The Group does not form any loss allowance on ECLs for CCP activities. The CCP is acting as an intermediary between the parties: i.e. as a seller for each buyer and as a buyer for each seller, so that replacing their contractual relations between each other with relevant contracts with a central counterparty. CCP assets and liabilities are simultaneously reflected on the Group's statement of financial position due to the following:

- the net market value of those deals at the end of each day is equal to zero (if there are no defaulted market participants);
- there are no uncollateralised receivables on case all the obligations are duly fulfilled by the clearing participants.

The risks of non-fulfilment or improper fulfilment of clearing participants obligations on the CCP deals are managed using the following risk-management system measures, organised according to the federal law as of 07.02.2011 № 7-FZ "On clearing, clearing activities and the central counterparty":

- setting the requirements for individual and collective clearing collateral to mitigate expected losses on case of non-fulfilment or improper fulfilment of clearing participants obligations;
- forming the CCP's guarantee fund – part of net assets designated according to the Clearing Rules to mitigate possible losses caused by non-fulfilment or improper fulfilment of clearing participants obligations;
- conducting regular stress-tests of the CCP capital adequacy, including the control of statutory ratios calculation;
- limitation of the CCP's liabilities.

Definition of default

Critical to the determination of ECLs is the definition of default. The definition of default is used on measuring the amount of ECLs and on the determination of whether the loss allowance is based on 12-month or lifetime ECLs, as default is a component of the probability of default (PD) which affects both the measurement of ECLs and the identification of a significant increase on credit risk.

The Group considers the following as constituting an event of default:

- the counterparty has gone bankrupt;
- a third party has filed a claim with the court to call the counterparty bankrupt and it has been accepted for hearing;
- the counterparty is permanently insolvent, i.e. has obligations to the Group that are past due for over 90 days; or
- the borrower's licence has been revoked.

Significant increase on credit risk

The Group monitors all financial assets that are subject to the impairment requirements to assess whether there has been a significant increase on credit risk since initial recognition. If there has been a significant increase on credit risk the Group will measure the loss allowance based on lifetime ECL.

When assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring to the financial instrument at the reporting date based on the remaining maturity of the instrument with the risk of a default that was anticipated for the remaining maturity at the reporting date when the financial instrument was first recognised. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable, including historical experience and forward-looking information that is available without undue cost or effort, based on the Group's historical experience and expert credit assessment including forward-looking information.

When an asset becomes past due for over 30 days, and not less than a half of the counterparty's credit ratings issued by international rating agencies declined or internal credit rating declined by 3 grades or more since initial recognition, the Group considers that a significant increase on credit risk has occurred and the asset is on stage 2 of the impairment model, i.e. the loss allowance is measured as the lifetime ECLs.

Probability of default (PD)

Multiple economic scenarios form the basis of determination of the probability of default at initial recognition and for the future. It is the weighting of these different scenarios that forms the basis of a weighted average probability of default that is used to determine whether credit risk has significantly increased.

To determine PD the Group uses:

- available data from international rating agencies;
- internal ratings if the data mentioned above is unavailable.

The Group allocates its counterparties to a relevant internal rating depending on their credit quality based on quantitative and qualitative information. The historical PD is identified using a migration matrix, where internal ratings are mapped to the rating scales of international rating agencies for those counterparties that are not rated by international rating agencies.

Modification and derecognition of financial assets

A modification of a financial asset occurs when the contractual terms governing cash flows of a financial asset are renegotiated or otherwise modified between initial recognition and maturity of the financial asset. A modification affects the amount and/or timing of the contractual cash flows either immediately or at a future date.

When a financial asset is modified the Group assesses whether this modification results on derecognition. In accordance with the Group's policy a modification results on derecognition when it gives rise to substantially different terms. To determine whether the modified terms differ substantially from the original contractual terms the Group considers the following qualitative factors:
a) contractual cash flows after modification are no longer SPPI;
b) change on currency;
c) change of counterparty;
d) the extent of change on interest rates;
e) maturity.

If these do not clearly indicate a substantial modification, then quantitative assessment is performed to compare the present value of the remaining contractual cash flows under the original terms with the contractual cash flows under the revised terms, both amounts discounted at the original effective interest. If the difference on present value is greater than 10% the Group deems the arrangement is substantially different leading to derecognition.

In the case when the financial asset is derecognised the loss allowance for ECLs is remeasured at the date of derecognition to determine the net carrying amount of the asset at that date. The difference between this revised carrying amount and the fair value of the new financial asset with the new terms will lead to a gain or loss on derecognition. The new financial asset will have a loss allowance measured based on 12-month ECL except on the eventual occasions where the new asset is considered to be originated-credit impaired. The Group monitors credit risk of modified financial assets by evaluating qualitative and quantitative information.

When the contractual terms of a financial asset are modified and the modification does not result on derecognition, the Group determines whether the credit risk associated with the financial asset has increased significantly since initial recognition by comparing:

- the remaining lifetime PD estimated based on data at initial recognition and the original contractual terms; with
- the remaining lifetime PD at the reporting date based on the modified terms.

Where a modification does not lead to derecognition the Group calculates the modification gain/loss comparing the gross carrying amount before and after the modification (excluding the ECL allowance). Then the Group measures ECL for the modified asset, where the expected cash flows arising from the modified financial asset are included on calculating the expected cash shortfalls from the original asset.

The Group derecognises a financial asset only when the contractual rights to the asset's cash flows expire (including expiry arising from a modification with substantially different terms), or when the financial asset and substantially all the risks and rewards of ownership of the asset are transferred to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest on the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset.

On derecognition of a financial asset on its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain/loss that had been recognised on OCI and accumulated on equity is recognised on profit or loss. The cumulative gain/loss on equity investment designated as measured at FVTOCI, previously recognised on OCI is not subsequently reclassified to profit or loss.

On derecognition of a financial asset other than on its entirety (e.g. when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain/loss allocated to it that had been recognised on OCI is recognised on profit or loss. A cumulative gain/loss that had been recognised on OCI is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts. This does not apply for equity investments designated as measured at FVTOCI, as the cumulative gain/loss previously recognised on OCI is not subsequently reclassified to profit or loss.

Write-off

Financial assets are written off when the Group has no reasonable expectations of recovering the financial asset (either on its entirety or a portion of it). This is the case when the Group determines that the counterparty does not have assets and/or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. A write-off constitutes a derecognition event. The Group may apply enforcement activities to financial assets written off. Recoveries resulting from the Group's enforcement activities will result on impairment gains.

Presentation of allowance for ECL on the statement of financial position

Loss allowances for ECL are presented on the statement of financial position as follows:
- for financial assets measured at amortised cost: as a deduction from the gross carrying amount of the assets;
- for debt instruments measured at FVTOCI: no loss allowance is recognised on the statement of financial position as the carrying amount is at fair value. However, the loss allowance is included as part of the revaluation amount on the investments revaluation reserve.

The table below illustrates the classification and measurement of financial assets and financial liabilities and the corresponding effect on equity and deferred tax under IFRS 9 and IAS 39 at the date of initial application January 1, 2018:

	Original measurement category under IAS 39	New measurement category under IFRS 9	Original carrying amount under IAS 39	Additional loss allowance under IFRS 9	Reclassification of carrying amount IFRS 9	New carrying amount under IFRS 9
Cash and cash equivalents	Loans and receivables	Financial assets at AC	273 248,6	(5,2)	-	273 243,4
Financial assets at fair value through profit or loss	Financial assets at FVTPL	Financial assets at FVTPL	413,6	-	7 639,4	8 053,0
Due from financial institutions	Loans and receivables	Financial assets at AC	63 606,9	(23,7)	-	63 583,2
Central counterparty financial assets	Loans and receivables (repo) / assets at FVTPL (currency)	Financial assets at AC (repo) / assets at FVTPL (currency)	2 430 083,8	-	-	2 430 083,8
Financial assets at fair value through other comprehensive income	Available-for-sale	Financial assets at FVOCI	215 132,2	-	(7 635,1)	207 497,1
Other financial assets	Loans and receivables	Financial assets at AC	734,9	(49,7)	-	685,2
Balances of market participants	Financial liabilities at AC	Financial liabilities at AC	466 860,2	-	-	466 860,2
Central counterparty financial liabilities	Financial liabilities at AC (repo) / FVTPL (currency)	Financial liabilities at amortised cost (repo) / FVTPL (currency)	2 430 083,8	-	-	2 430 083,8
Distributions payable to holders of securities	Financial liabilities at AC	Financial liabilities at AC	2 507,8	-	-	2 507,8
Margin account	Financial liabilities at AC	Financial liabilities at AC	384,6	-	-	384,6
Other financial liabilities	Financial liabilities at FVTPL (derivatives) / AC (other)	Financial liabilities at FVTPL (derivatives) / AC (other)	2 808,3	-	-	2 808,3
Deferred tax asset	n/a	n/a	243,4	15,7	(0,9)	258,2
Corresponding lines on Equity:						
Investments revaluation reserve	n/a	n/a	1 357,0	270,9	(9,6)	1 618,3
Retained earnings	n/a	n/a	86 546,4	(332,1)	13,0	86 227,3
Non-controlling interest	n/a	n/a	176,6	(1,7)	-	174,9

The additional loss allowance recognised upon the initial application of IFRS 9 as disclosed above resulted entirely from a change on the measurement attribute of the loss allowance relating to each financial asset (Note 11). The change on measurement category of the different financial assets had no significant impact on their respective carrying amounts on initial application. There were no financial assets or liabilities which the Group elected to designate as at FVTPL at the date of initial application. There were no equity instruments the changes on fair value of which the Group irrevocably elected to present on other comprehensive income.

Reclassification of carrying amount was due to the following:
- movement of equity investments from AFS to FVTPL on the amount of RUB 130,5 million;
- movement of debt instruments with contractual cash flows that are not SPPI from AFS to FVTPL on the amount of RUB 7 508,9 mln.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) held for trading, or (ii) it is designated as at FVTPL.

A financial liability is classified as held for trading if:
- it has been incurred principally for the purpose of repurchasing it on the near term; or

- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration that may be paid by an acquirer as part of a business combination may be designated as at FVTPL upon initial recognition if:
- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, on accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and IFRS 9 permits the entire hybrid (combined) contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains/losses arising on remeasurement recognized on profit or loss to the extent that they are not part of a designated hedging relationship.

Other financial liabilities

Other financial liabilities, including deposits and borrowings, are initially measured at fair value, net of transaction costs. Other financial liabilities are subsequently measured at amortized cost using the effective interest method (for details of the effective interest method see the Interest income and interest expense section above).

Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized on profit or loss.

When the Group exchanges with the existing lender one debt instrument into another one with substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Group accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate is at least 10 per cent different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between: (1) the carrying amount of the liability before the modification; and (2) the present value of the cash flows after modification should be recognised on profit or loss as the modification gain or loss within other gains and losses.

Derivative financial instruments

The Group enters into derivative financial instruments, some of which are held for trading while others are held to manage its exposure to foreign exchange rate risk.

Derivatives are initially recognized at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The resulting gain/loss is recognized on profit or loss immediately.

A derivative with a positive fair value is recognized as a financial asset whereas a derivative with a negative fair value is recognized as a financial liability.

THE ADOPTION OF NEW AND REVISED STANDARDS EXCEPT IFRS 9 FINANCIAL INSTRUMENTS

The adoption of the following new standards and amendments to IFRS Standards and Interpretations issued by the International Accounting Standards Board (IASB) has not had any material impact on the disclosures or on the amounts reported on these financial statements:

IFRS 15 Revenue from Contracts with Customers

The new standard introduces the core principle that revenue must be recognized when the goods or services are transferred to the customer, at the transaction price. Any bundled goods or services that are distinct must be separately recognized, and any discounts or rebates on the contract price must generally be allocated to the separate elements. When the consideration varies for any reason, minimum amounts must be recognized if they are not at significant risk of reversal. Costs incurred to secure contracts with customers have to be capitalized and amortized over the period when the benefits of the contract are consumed.

Specifically, the Standard introduces a 5-step approach to revenue recognition:
- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations on the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations on the contract
- Step 5: Recognise revenue when (or as) the entity satisfies a performance obligation

Under IFRS 15, an entity recognises revenue when or as a performance obligation is satisfied, i.e. when 'control' of the goods or services underlying the particular performance obligation is transferred to the customer. Far more prescriptive guidance has been added on IFRS 15 to deal with specific scenarios.

Amendments to IAS 40 Transfers of Investment Property

The amendments clarify that a transfer to, or from, investment property necessitates an assessment of whether a property meets, or has ceased to meet, the definition of investment property, supported by observable evidence that a change on use has occurred. The amendments further clarify that situations other than the ones listed on IAS 40 may evidence a change on use, and that a change on use is possible for properties under construction (i.e. a change on use is not limited to completed properties).

IFRIC 22 Foreign Currency Transactions and Advance Consideration

IFRIC 22 addresses how to determine the 'date of transaction' for the purpose of determining the exchange rate to use on initial recognition of an asset, expense or income, when consideration for that item has been paid or received on advance on a foreign currency which resulted on the recognition of a non-monetary asset or non-monetary liability (e.g. a non-refundable deposit or deferred revenue).

The Interpretation specifies that the date of transaction is the date on which the entity initially recognises the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. If there are multiple payments or receipts on advance, the Interpretation requires an entity to determine the date of transaction for each payment or receipt of advance consideration.

THE ACCOUNTING POLICIES, PRESENTATION AND METHODS OF COMPUTATION THAT HAVE BEEN FOLLOWED ON THE CURRENT YEAR AS WERE APPLIED ON THE PREPARATION OF THE GROUP'S FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2017

Inflation accounting

The Russian economy was considered hyperinflationary until December 31, 2002. As such, the Group applied IAS *29 Financial Reporting on Hyperinflationary Economies*. The effect of applying IAS 29 is that non-monetary items, including components of equity, were restated to the measuring units current at December 31, 2002 by applying the relevant inflation indices to the historical cost, and that these restated values were used as a basis for accounting on subsequent periods.

Basis for consolidation

Subsidiaries are investees controlled by the Group. The Group controls an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. In particular, the Group consolidates investees that it controls on the basis of de facto circumstances. The financial statements of subsidiaries are included on the consolidated financial statements from the date that control commences until the date that control ceases. All intra-group transactions, balances and unrealised gains on transactions between group companies are eliminated on full; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, accounting policies for subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

A change on the ownership interest of a subsidiary, without a change of control, is accounted for as an equity transaction. Losses are attributed to the non-controlling interests even if that results on a deficit balance.

If the Group loses control over a subsidiary, it derecognises the assets (including goodwill) and liabilities of the subsidiary, the carrying amount of any non-controlling interests, the cumulative translation differences, recorded on equity; recognises the fair value of the consideration received, the fair value of any investment retained and any surplus or deficit on profit or loss and reclassifies the parent's share of components previously recognised on other comprehensive income to profit or loss.

Business combinations

Business combinations are accounted for using the acquisition method. The consideration transferred on a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group on exchange for control of the acquiree. Acquisition-related costs are recognised on profit or loss as incurred.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interest on the acquiree, and the fair value of the acquirer's previously held equity interest on the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interest on the acquiree and the fair value of the acquirer's previously held interest on the acquiree (if any), the excess is recognised immediately on profit or loss as a bargain purchase gain.

When a business combination is achieved on stages, the Group's previously held equity interest on the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Group obtains control) and the resulting gain or loss, if any, is recognised on profit or loss. Amounts arising from interests on the acquiree prior to the acquisition date that have previously been recognised on other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see above) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or groups of cash-generating units) that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment at least annually, or more frequently when there is indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro rata based on the carrying amount of each asset on the unit. Any impairment loss for goodwill is recognised directly on profit or loss on the Consolidated Statement of Profit or Loss. An impairment loss recognised for goodwill is not reversed on subsequent periods. On disposal of the relevant cash-generating unit, the attributable amount of goodwill is included on the determination of the profit or loss on disposal.

The Group's policy for goodwill arising on the acquisition of an associate is described below.

Investments on associates

Associates are entities on which the Group generally has between 20% and 50% of the voting rights, or is otherwise able to exercise significant influence, but which it does not control or jointly control. Investments on associates are accounted for under the equity method and are initially recognised at cost, including goodwill. Subsequent changes on the carrying value reflect the post-acquisition changes on the Group's share of net assets of the associate. The Group's share of its associates' profits or losses is recognised on profit or loss, and its share of movements on reserves is recognised on other comprehensive income. However, when the Group's share of losses on an associate equals or exceeds its interest on the associate, the Group does not recognise further losses, unless the Group is obliged to make further payments to, or on behalf of, the associate.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest on the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Cash and cash equivalents

Cash and cash equivalents on the Consolidated Statement of Financial Position include cash on hand, unrestricted balances on correspondent and deposit accounts with banks with maturity up to one business day. Accrued interest on the above balances that is receivable on more than one business day is excluded from cash and cash equivalents the purpose of consolidated statement of cash flows. Amounts that are subject to restrictions on their availability, including minimum reserve deposits with the CBR, are not included on cash and cash equivalents.

Precious metals

Precious metals are represented by physical precious metals and accounts on precious metals. Precious metals are recorded on the reporting date at CBR prices, which approximate fair values. Corresponding accounts on precious metals are recorded within Due from financial institutions and physical precious metals are recorded within Other assets. Clients' accounts on precious metals are recorded within Balances of market participants. Precious metals are not financial instruments and therefore excluded from financial risk management disclosures on accordance with IFRS 7.

Property and equipment

Property and equipment is carried at historical cost less accumulated depreciation and any impairment losses.

Depreciation is recognised so as to write off the cost of assets (other than freehold land and properties under construction) less their residual values over their useful lives, using the straight-line method:

Buildings and other real estate	2%
Furniture and equipment	20-33%

Freehold land is not depreciated.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes on estimate accounted for on a prospective basis.

An item of property and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised on profit or loss.

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives at the annual rates of 10-25%. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes on estimate being accounted for on a prospective basis.

Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

Intangible assets acquired on a business combination

Intangible assets acquired on a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired on a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately. Amortisation is recognised on a straight-line basis. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes on estimate being accounted for on a prospective basis.

Internally developed intangible assets

Development costs that are directly associated with the production of identifiable and unique software products controlled by the Group are capitalised and an internally generated intangible asset is recognised only if it is probable that it will generate economic benefits exceeding costs beyond one year and the development costs can be measured reliably. An internally generated intangible asset is recognised only if the Group has the technical feasibility, resources and intention to complete the development and to use the product. Direct costs include software development employee costs and an appropriate portion of relevant overheads. Expenditure on research activities is recognised as an expense on the period on which it is incurred.

Subsequent expenditure on intangible assets is capitalised only when it increases the future economic benefits embodied on the specific asset to which it relates.

Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised on profit or loss when the asset is derecognised.

Impairment of tangible and intangible assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated on order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value on use. In assessing value on use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately on profit or loss, unless the relevant asset is carried at a revalued amount, on which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a cash-generating unit) on prior years. A reversal of an impairment loss is recognised immediately on profit or loss, unless the relevant asset is carried at a revalued amount, on which case the reversal of the impairment loss is treated as a revaluation increase.

Assets classified as held for sale

Assets and liabilities are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell.

Current income tax

Current income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date on the countries where the Group operates and generates taxable income.

Management of the Group periodically evaluates positions taken on the tax returns with respect to situations on which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred income tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised.

Deferred tax assets and liabilities are recognised for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability on a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- In respect of taxable temporary differences associated with investments on subsidiaries, associates and interests on joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse on the foreseeable future.

Operating taxes

Countries where the Group operates also have various other taxes, which are assessed on the Group's activities. These taxes are included as a component of operating expenses on the Consolidated Statement of Profit or Loss.

Share-based payments

The Group grants the right to some employees to purchase equity instruments on the terms set on individual contracts.

The cost of equity-settled transactions is recognised, together with a corresponding increase on equity within Share-based payments reserve, over the period on which the performance and/or service conditions are fulfilled.

The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The income statement expense or credit for a period represents the movement on cumulative expense recognised as at the beginning and end of that period (Note 10).

For cash-settled share-based payments, a liability is recognised for the goods or services acquired, measured initially at the fair value of the liability. At the end of each reporting period until the liability is settled, and at the date of settlement, the fair value of the liability is remeasured, with any changes on fair value recognised on profit or loss for the year.

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate of the amount of obligation can be made.

Contingencies

Contingent liabilities are not recognised on the Consolidated Statement of Financial Position but are disclosed unless the possibility of any outflow on settlement is remote. A contingent asset is not recognised on the Consolidated Statement of Financial Position but disclosed when an inflow of economic benefits is probable.

Fiduciary activities

The Group provides custodial services to its customers which include transactions with securities on their custody accounts. Assets accepted and liabilities incurred under the fiduciary activities are not included on the Group's Consolidated Financial Statements. The Group accepts the operational risk on these activities, but the Group's customers bear the credit and market risks associated with such operations. Revenue for provision of fiduciary services is recognised as services are provided.

Foreign currencies

In preparing the financial statements of each individual Group entity, transactions on currencies other than the entity's functional currency (foreign currencies) are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated on foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated on foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured on terms of historical cost on a foreign currency are not retranslated.

For the purposes of presenting Consolidated Financial Statements, the assets and liabilities of the Group's foreign operations are translated into RUB using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, on which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognised on other comprehensive income and accumulated on equity (attributed to non-controlling interest as appropriate).

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised on other comprehensive income.

Earnings per share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Group by the weighted average number of ordinary shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all dilutive potential ordinary shares.

Segment reporting

An operating segment is a component of a Group that engages on business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same Group); whose operating and financial results are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. As at December 31, 2018 and 2017, the Group comprised four operating segments (Note 34).

NEW AND REVISED IFRSS ON ISSUE BUT NOT YET EFFECTIVE

At the date of authorisation of these financial statements, the Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective:

IFRS 16	*Leases*
IFRS 17	*Insurance Contracts*
Amendments to IFRS 9	*Prepayment Features with Negative Compensation*
Amendments to IAS 28	*Long-term interests on Associates and Joint Ventures*
Annual Improvements to IFRS Standards 2015-2017 Cycle	Amendments to IFRS 3 *Business Combinations* , IFRS 11 *Joint Arrangements* , IAS 12 *Income Taxes and* IAS 23 *Borrowing Costs*
Amendments to IAS 19 Employee Benefits	*Plan Amendment Curtailment or Settlement*
IFRS 10 *Consolidated Financial Statements* and IAS 28 (amendments)	*Sale or Contribution of Assets between an Investor and its Associate or joint Venture*
IFRIC 23	*Uncertainty over Income Tax Treatments*
Amendments to IFRS 3	*Definition of Business*
Amendments to IAS 1 and IAS 8	*Definition to Material*

The management do not expect that the adoption of the Standards listed above will have a material impact on the financial statements of the Group on future periods, except as noted below:

IFRS 16 *Leases*

General impact of application of IFRS 16 Leases

IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment on the financial statements for both lessors and lessees. IFRS 16 will supersede the current lease guidance including IAS 17 *Leases* and the related Interpretations when it becomes effective for accounting periods beginning on or after January 1, 2019. The date of initial application of IFRS 16 for the Group will be January 1, 2019.

In contrast to lessee accounting, IFRS 16 substantially carries forward the lessor accounting requirements on IAS 17.

Impact of the new definition of a lease

The Group will make use of the practical expedient available on transition to IFRS 16 not to reassess whether a contract is or contains a lease. Accordingly, the definition of a lease on accordance with IAS 17 and IFRIC 4 will continue to apply to those leases entered or modified before January 1, 2019.

The change on definition of a lease mainly relates to the concept of control. IFRS 16 distinguishes between leases and service contracts on the basis of whether the use of an identified asset is controlled by the customer. Control is considered to exist if the customer has:
- the right to obtain substantially all of the economic benefits from the use of an identified asset; and
- the right to direct the use of that asset.

The Group will apply the definition of a lease and related guidance set out on IFRS 16 to all lease contracts entered into or modified on or after January 1, 2019 (whether it is a lessor or a lessee on the lease contract).

Impact on Lessee Accounting

Operating leases

IFRS 16 will change how the Group accounts for leases previously classified as operating leases under IAS 17, which were off-balance sheet.

On initial application of IFRS 16, for all leases (except as noted below), the Group will:
1. Recognise right-of-use assets and lease liabilities on the consolidated statement of financial position, initially measured at the present value of the future lease payments;

Recognise depreciation of right-of-use assets and interest on lease liabilities on the consolidated statement of profit or loss;

Separate the total amount of cash paid into a principal portion and interest on the consolidated cash flow statement.

Lease incentives (e.g. rent-free period) will be recognised as part of the measurement of the right-of-use assets and lease liabilities whereas under IAS 17 they resulted on the recognition of a lease liability incentive, amortised as a reduction of rental expenses on a straight-line basis.

Under IFRS 16, right-of-use assets will be tested for impairment on accordance with IAS 36 Impairment of Assets. This will replace the previous requirement to recognise a provision for onerous lease contracts.

For short-term leases (lease term of 12 months or less) and leases of low-value assets (such as personal computers and office furniture), the Group will opt to recognise a lease expense on a straight-line basis as permitted by IFRS 16.

As at December 31, 2018, the Group has non-cancellable operating lease commitments of RUB 250 mln. A preliminary assessment indicates that almost all of these arrangements relate to leases other than short-term leases and leases of low-value assets, and hence the Group will recognise a right-of-use asset of RUB 250 mln and a corresponding lease liability on equal amount on respect of all these leases. The impact on profit or loss is to decrease rent and office maintenance expense within general and administrative expenses by RUB 200 mln, to increase depreciation by RUB 190 mln and to increase interest expense by RUB 10 mln.

Under IAS 17, all lease payments on operating leases are presented as part of cash flows from operating activities. The impact of the changes under IFRS 16 would be to present the amount of cash paid related to leases other than short-term leases and leases of low-value assets on net cash used on financing activities.

IFRS 17 Insurance Contracts

The new Standard establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 *Insurance Contracts* .

The Standard outlines a General Model, which is modified for insurance contracts with direct participation features, described as the Variable Fee Approach. The General Model is simplified if certain criteria are met by measuring the liability for remaining coverage using the Premium Allocation Approach.

The General Model will use current assumptions to estimate the amount, timing and uncertainty of future cashflows and it will explicitly measure the cost of that uncertainty, it takes into account market interest rates and the impact of policyholders' options and guarantees.

The Standard is effective for annual reporting periods beginning on or after January 1, 2021, with early application permitted. It is applied retrospectively unless impracticable, on which case the modified retrospective approach or the fair value approach is applied.

For the purpose of the transition requirements, the date of initial application is the start if the annual reporting period on which the entity first applies the Standard, and the transition date is the beginning of the period immediately preceding the date of initial application.
The management of the Group do not anticipate that the application of the Standard on the future will have an impact on the Group's consolidated financial statements as the Group does not have instruments on scope of this standard.

Amendments to IFRS 9 Prepayment Features with Negative Compensation

The amendments to IFRS 9 clarify that for the purpose of assessing whether a prepayment feature meets the SPPI condition, the party exercising the option may pay or receive reasonable compensation for the prepayment irrespective of the reason for prepayment. In other words, prepayment features with negative compensation do not automatically fail SPPI.

The amendment applies to annual periods beginning on or after January 1, 2019, with earlier application permitted. There are specific transition provisions depending on when the amendments are first applied, relative to the initial application of IFRS 9.

The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Amendments to IAS 28 Long-term Interests on Associates and Joint Ventures

The amendment clarifies that IFRS 9, including its impairment requirements, applies to long-term interests. Furthermore, on applying IFRS 9 to long-term interests, an entity does not take into account adjustments to their carrying amount reauired by IAS 28 (i.e., adjustments to the carrying amount of long-term interests arising from the allocation of losses of the investee or assessment of impairment on accordance with IAS 28).

The amendments apply retrospectively to annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted. Specific transition provisions apply depending on whether the first-time application of the amendments coincides with that of IFRS 9.

The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Annual Improvements to IFRS Standards 2015-2017

Cycle Amendments to IFRS 3 Business Combinations, IFRS 11 Joint Arrangements, IAS 12 Income Taxes and IAS 23 Borrowing Costs

The Annual Improvements include amendments to four Standards.

IAS 12 Income Taxes

The amendments clarify that an entity should recognise the income tax consequences of dividends on profit or loss, other comprehensive income or equity according to where the entity originally recognised the transactions that generated the distributable profits. This is the case irrespective of whether different tax rates apply to distributed and undistributed profits.

IAS 23 Borrowing Costs

The amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalisation rate on general borrowings.

IFRS 3 Business Combinations

The amendments to IFRS 3 clarify that when an entity obtains control of a business that is a joint operation, the entity applies the requirements for a business combination achieved on stages, including remeasuring its previously held interest (PHI) on the joint operation at fair value.
The PHI to be remeasured includes any unrecognised assets, liabilities and goodwill relating to the joint operation.

IFRS 11 Joint Arrangements

The amendments to IFRS 11 clarify that when a party that participates in, but does not have joint control of, a joint operation that is a business obtains joint control of such a joint operation, the entity does not remeasure its PHI on the joint operation.

All the amendments are effective for annual periods beginning on or after January 1, 2019 and generally require prospective application. Earlier application is permitted. The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Amendments to IAS 19 Employee Benefits Plan Amendment, Curtailment or Settlement

The amendments clarify that the past service cost (or of the gain or loss on settlement) is calculated by measuring the defined benefit liability (asset) using updated assumptions and comparing benefits offered and plan assets before and after the plan amendment (or curtailment or settlement) but ignoring the effect of the asset ceiling (that may arise when the defined benefit plan is on a surplus position). IAS 19 is now clear that the change on the effect of the asset ceiling that may result from the plan amendment (or curtailment or settlement) is determined on a second step and is recognised on the normal manner on other comprehensive income.

The paragraphs that relate to measuring the current service cost and the net interest on the net defined benefit liability (asset) have also been amended. An entity will now be required to use the updated assumptions from this remeasurement to aetermine current service cost ana net interest for the remainder of the reporting period after the change to the plan, on the case of the net interest, the amendments make it clear that for the period post plan amendment, the net interest is calculated by multiplying the net defined benefit liability (asset) as remeasurea unaer IAS 19.99 with the discount rate used on the remeasurement (also taking into account the effect of contributions and benefit payments on the net defined benefit liability (asset)).

The amendments are applied perspectively. They apply only to plan amendments, curtailments or settlements that occur on or after the beginning of the annual period on which the amendments to IAS 19 are first applied. The amendments to IAS 19 must be applied to annual periods beginning on or after January 1, 2019, but they can be applied earlier if an entity elects to do so.

The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

IFRS 10 Consolidated Financial Statements and IAS 28 (amendments) Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments to IFRS 10 and IAS 28 deal with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. Specifically, the amendments state that gains or losses resulting from the loss of control of a subsidiary that does not contain a business on a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised on the parent's profit or loss only to the extent of the unrelated investors' interests on that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained on any former subsidiary (that has become an associate or a joint venture that is accounted for using the equity method) to fair value are recognised on the former parent's profit or loss only to the extent of the unrelated investors'interests on the new associate or joint venture.

The effective date of the amendments has yet to be set by the IASB; however, earlier application of the amendments is permitted. The management of the Group anticipate that the application of these amendments may have an impact on the Group's consolidated financial statements on future periods should such transactions arise.

The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

IFRIC 23 Uncertainty over Income Tax Treatments

IFRIC 23 sets out how to determine the accounting tax position when there is uncertainty over income tax treatments. The interpretation requires an entity to:

- determine whether uncertain tax positions are assessed separately or as a group; and
- assess whether it is probable that a tax authority will accept an uncertain tax treatment used, or proposed to be used, by an entity on its income tax filings:
- if yes, the entity should determine its accounting tax position consistently with the tax treatment used or planned to be used on its income tax filings.
- if no, the entity should reflect the effect of uncertainty on determining its accounting tax position.

The Interpretation is effective for annual periods beginning on or after January 1, 2019. Entities can apply the Interpretation with either full retrospective application or modified retrospective application without restatement of comparatives retrospectively or prespectively.

The Interpretation is effective for annual periods beginning on or after January 1, 2019. Entities can apply the Interpretation with either full retrospective application or modified retrospective application without restatement of comparatives retrospectively or prespectively.

The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Amendments to IFRS 3 Definition of business

The amendments clarify that to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The definitions of a business and of outputs were narrowed by focusing on goods and services provided to customers and by removing the reference to an ability to reduce costs.

The amendments also remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs and add an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The amendments are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020, and to asset acquisitions that occur on or after the beginning of that period. Earlier application is permitted. The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Amendments to IAS 1 and IAS 8 Definition to Material

The amendments are intended to make the definition of material on IAS 1 easier to understand and are not intended to alter the underlying concept of materiality on IFRS Standards. The concept of 'obscuring' material information with immaterial information has been included as part of the new definition. The threshold for materiality influencing users has been changed from 'could influence' to 'could reasonably be expected to influence'. The definition of material on IAS 8 has been replaced by a reference to the definition of material on IAS 1. In addition, the IASB amended other Standards and the Conceptual Framework that contain a definition of material or refer to the term 'material' to ensure consistency. The amendments are applied prospectively for annual periods beginning on or after January 1, 2020, with earlier application permitted. The management of the Group do not anticipate that the application of the amendments on the future will have an impact on the Group's consolidated financial statements.

Critical Accounting Judgements and Key Sources of Estimation Uncertainty

In the application of the Group's accounting policies the management is required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised on the period on which the estimate is revised if the revision affects only that period or on the period of the revision and future periods if the revision affects both current and future periods.

KEY SOURCES OF ESTIMATION UNCERTAINTY

Business model assessment

Classification and measurement of financial assets depends on the results of the SPPI and the business model test. The Group determines the business model at a level that reflects how groups of financial assets are managed together to achieve a particular business objective (for more details refer to Note 2). The Group monitors financial assets measured at amortised cost or fair value through other comprehensive income that are derecognised prior to their maturity to understand the reason for their disposal and whether the reasons are consistent with the objective of the business for which the asset was held. The Group conducts assessment of whether the business model for which the remaining financial assets are held continues to be appropriate and if it is not appropriate whether there has been a change and so a prospective change to the classification of those assets.

Significant increase of credit risk

As explained on Note 2, expected credit losses are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. IFRS 9 does not define what constitutes a significant increase on credit risk. In assessing whether the credit risk of an asset has significantly increased the Group takes into account the information listed on Note 2.

Probability of default

PD constitutes a key input on measuring ECL. PD is an estimate of the likelihood of default over a given time horizon, the calculation of which includes historical data, assumptions and expectations of future conditions. See Note 35 for more details, including analysis of the sensitivity of the reported ECL to changes on PD resulting from changes on economic drivers.

Loss Given Default

LGD is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, taking into account cash flows from collateral and integral credit enhancements. See Note 2 for more details.

Provision

The companies of the Group are subject to litigation. Such litigation may lead to orders to pay against the entities of the Group. If it is more likely than not that an outflow of resources will occur, a provision will be recognised based on an estimate of the most probable amount necessary to settle the obligation if such amount is reasonably estimable. The Group determines whether there is a possible obligation from past events, evaluates the probability that an outflow will occur and estimates the potential amount of the outflow. As the outcome of litigation is usually uncertain, the judgement is reviewed continuously. See Note 30 for further information.

Impairment of goodwill and other intangible assets

Determining whether goodwill is impaired requires an estimation of the value on use of the cash-generating units to which goodwill has been allocated. The value on use calculation requires the management to estimate the future cash flows expected to arise from the cash-generating unit and a discount rate on order to calculate present value. Where the actual future cash flows are less than expected, a material impairment loss may arise.

Details of the goodwill impairment testing are set out on Note 22.

At the end of each reporting period, the Group reviews the carrying amounts of its intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired. If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately on profit or loss.

Useful lives of intangible assets

The Group annually examines the estimated useful life of its intangible assets. When determining the asset's useful life, the factors taken into account include the anticipated use of the asset, its typical life cycle, technical obsolescence, etc.

Based on the analysis of actual useful lives of intangible assets as at January 1, 2018 the Group adjusted the estimates on relation to remaining useful lives of intangible assets. The amendments were applied to the client base and certain types of software and licences. Should the Group not apply these amendments, amortisation of client base for the year ended December 31, 2018 would be RUB 392,1 mln lower, amortisation of software and licences for the year ended December 31, 2018 would be RUB 58,4 mln higher.

Valuation of financial instruments

For financial instruments not traded on an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include:

- using recent arm's length market transactions;
- reference to the current fair value of another instrument that is substantially the same;
- a discounted cash flow analysis or other valuation models.

An analysis of fair values of financial instruments and further details as to how they are measured are provided on Note 32.

Share-based payments

Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determination of the most appropriate inputs to the valuation model including the expected life of the instrument and volatility and making assumptions about them. The assumptions and models used for estimating fair value for share-based payment transactions are disclosed on Note 10.

Fee and Commission Income

	Year ended December 31, 2018	Year ended December 31, 2017
Money market	6 389,8	5 650,0
Depository and settlement services	4 530,7	4 183,9
Securities market	4 444,0	3 985,0
– bonds	*2 173,5*	*1 982,5*
– equities	*1 932,2*	*1 610,2*
– listing and other services	*338,3*	*392,3*
Foreign exchange	3 990,0	3 827,0
Derivatives	2 318,9	2 012,0
Information services	792,4	769,7
Sale of software and technical services	695,9	630,7
Other	485,4	149,3
Total fee and commission income	**23 647,1**	**21 207,6**

Interest and Other Finance Income

	Year ended December 31, 2018	Year ended December 31, 2017
Gain/(loss) on financial assets at FVTPL		
Interest income	154,0	-
Net loss on financial assets at FVTPL	(8,9)	(4,9)
Total gain/(loss) on financial assets at FVTPL	**145,1**	**(4,9)**
Interest income on financial assets other than at FVTPL		
Interest income on financial assets at FVTOCI	12 336,3	-
Interest income on investments available-for-sale	-	12 391,7
Interest on cash and cash equivalents and due from financial institutions	5 450,8	3 653,4
Total interest income on financial assets other than at FVTPL	**17 787,1**	**16 045,1**
Total interest and other finance income	**17 932,2**	**16 040,2**

Interest Expense

	Year ended December 31, 2018	Year ended December 31, 2017
Interest expense on accounts of clearing participants	271,2	40,3
Interest expense on interbank loans and deposits	155,1	514,4
Interest expense on stress collateral	17,6	166,1
Interest expense on repo agreements and other	2,7	109,0
Total interest expense	**446,5**	**829,8**

Foreign Exchange Gains Less Losses

	Year ended December 31, 2018	Year ended December 31, 2017
Foreign exchange swaps	(1 757,5)	1 065,4
Net other foreign exchange gains/(losses)	70,8	(6,3)
Total foreign exchange gains less losses	**(1 686,7)**	**1 059,1**

The Group enters into foreign exchange swaps for the purposes of short-term investments and liquidity management.

Other Operating Income

	Year ended December 31, 2018	Year ended December 31, 2017
Movement on allowance for ECLs (Note 11)	117,5	-
Other operating income	75,8	46,0
Total other operating income	**193,3**	**46,0**

General and Administrative Expenses

	Year ended December 31, 2018	Year ended December 31, 2017
Amortisation of intangible assets (Note 21)	1 995,6	1 488,2
Depreciation of property and equipment (Note 20)	1 343,9	1 464,3
Equipment and intangible assets maintenance	1 205,5	1 120,1
Professional services	572,6	426,3
Taxes, other than income tax	554,3	540,0
Market makers fees	517,0	522,2
Rent and office maintenance	484,6	475,3
Advertising and marketing costs	376,1	330,8
Registrar and foreign depository services	292,3	292,2
Information services	237,6	187,7
Communication services	104,7	123,3
Business trip expenses	83,7	71,4
Loss on disposal of property, equipment and intangible assets	38,3	60,9
Security expenses	29,7	29,5
Charity	27,5	29,9
Transport expenses	19,0	16,0
Impairment of intangible assets (Note 21)	-	15,0
Impairment of other assets (Note 11)	-	8,8
Other	59,0	77,0
Total general and administrative expenses	**7 941,4**	**7 278,9**

Professional services comprise consulting, audit, legal services and other.

Personnel Expenses

	Year ended December 31, 2018	Year ended December 31, 2017
Employees benefits except for share-based payments	5 250,8	4 932,7
Payroll related taxes	975,7	952,3
Share-based payment expense on equity settled instruments	273,3	242,2
Share-based payment expense on cash settled instruments	12,5	25,7
Total personnel expenses	**6 512,3**	**6 152,9**

Rights to purchase equity instruments granted to some employees give to holders a choice either to only purchase the full number of shares at exercise price or also to sell back shares at the market price for the same ruble value. A majority of the rights vest when the employee continues to be employed by the Group at the vesting date. The maximum contractual term of the contracts is four years. The maximum contractual term of the contracts granted on 2017 is three and a half years. The fair value of the rights is measured at the grant date using a binomial model taking into account the terms and conditions upon which the instruments were granted.

In 2017 the new program of cash settled instruments was introduced. The amount of cash consideration to be received by the employees is linked to the future market price of the Group's shares. A majority of the rights vest when the employee continues to be employed by the Group at the vesting date. The maximum contractual term of the contracts is three and a half years. The fair value of the rights is remeasured at each reporting date using a binomial model.

The following table illustrates the number and weighted average exercise prices (WAEP), and movements on rights to purchase equity settled instruments:

	Number	WAEP
Outstanding at January 1, 2017	**31 133 342**	**74,60**
Granted	19 041 180	113,34
Exercised (Note 27)	(3 117 055)	64,25
Forfeited	(1 483 335)	75,10
Redeemed	(2 649 615)	64,25
Outstanding at January 1, 2018	**42 924 517**	**93,16**
Granted	12 900 000	113,86
Exercised (Note 27)	(2 058 440)	73,64
Forfeited	(2 533 334)	111,81
Redeemed	(1 498 226)	73,64
Outstanding at December 31, 2018	**49 734 517**	**98,97**

WAEP for exercised rights on the table above is calculated based on the contractual exercise price.

235 720 cash settled instruments were granted during the year ended December 31, 2018 (December 31, 2017: 507 530). The weighted average remaining contractual life is 1,02 years (December 31, 2017: 1,32 years).

80 342 cash settled instruments were exercised during the year ended December 31, 2018 with WAEP of RUB 118,86 (December 31, 2017: none).

The number of equity rights exercisable as at December 31, 2018 is 22 941 573 with WAEP of RUB 81,49 (December 31, 2017: 13 083 329 with WAEP of RUB 74,09).

The weighted average fair value of equity rights granted during the year ended December 31, 2018 was RUB 17,50 (December 31, 2017: RUB 20,75). The weighted average fair value of cash settled rights granted during the year ended December 31, 2018 was RUB 69,21 (December 31, 2017: RUB 97,77).

The range of exercise prices and weighted average remaining contractual life of equity rights are as follows:

	December 31, 2018		December 31, 2017	
Exercise price	**Number outstanding**	**Weighted average remaining contractual life**	**Number outstanding**	**Weighted average remaining contractual life**
46,9-62,0	-	-	166 667	-
62,0-77,0	15 000 000	-	17 066 668	0,13
77,0-102,0	4 183 337	0,76	4 000 002	0,40
107,0-122,0	30 551 180	1,07	21 691 180	1,72
	49 734 517	**0,72**	**42 924 517**	**0,96**

The following table lists the inputs to the models used:

	Equity settled		Cash settled	
Assumption	Year ended December 31, 2018	Year ended December 31, 2017	Year ended December 31, 2018	Year ended December 31, 2017
Expected volatility	24,7%	22,4%	25,6%	22,7%
Risk-free interest rate	6,8%	7,8%	7,9%	6,9%
Weighted average share price, RUB	113,65	114,13	96,85	109,23
Dividend yield	6,5%	4,8%	6,8%	5,2%

The volatility assumption is based on implied volatilities of quoted shares of similar stock exchanges.

Equity settled instruments are measured at grant date and cash settled instruments are remeasured at each reporting dates.

Movement on Allowance for Expected Credit Losses

The information on the movement on the allowance for expected credit losses of the Group for the years ended December 31, 2018 and 2017, is provided below.

	Cash and cash equivalents	Due from credit institutions	Financial assets at FVTOCI	Other financial assets	Total
Note	*14*	*16*		*23*	
December 31, 2016	**-**	**-**	**-**	**41,7**	**41,7**
Net charge for the period	-	-	-	8,8	8,8
Write-offs	-	-	-	(27,2)	(27,2)
December 31, 2017	**-**	**-**	**-**	**23,3**	**23,3**
Effect of adoption of IFRS 9 (Note 2)	5,2	23,7	338,6	49,7	417,2
January 1, 2018 (with IFRS 9 effect)	**5,2**	**23,7**	**338,6**	**73,0**	**440,5**
Net (reversal) / charge for the period	(0,5)	12,6	(146,6)	17,0	(117,5)
Write-offs	-	-	-	(5,5)	(5,5)
December 31, 2018	**4,7**	**36,3**	**192,0**	**84,5**	**317,5**

Total net reversal of the allowance for expected credit losses of the Group for the year ended December 31, 2018 is included on other operating income within Consolidated Statement of Profit or Loss (Note 8). Net charge for the year ended December 31, 2017 is included on general and administrative expenses within Consolidated Statement of Profit or Loss (Note 9).

As at December 31 and January 1, 2018, the allowance for expected credit losses of financial assets at fair value through other comprehensive income is included on investments revaluation reserve. The movement of the allowance is reflected within Consolidated Statement of Comprehensive Income.

The allowance for expected credit losses of the Group consists of the loss allowance measured at an amount equal to 12-month expected credit losses for Stage 1 assets, and the loss allowance measured at an amount equal to lifetime expected credit losses for Stage 2 and Stage 3 assets. The composition of the Group's financial assets and correspondent allowances for expected credit losses by stages as at December 31 and January 1, 2018, is provided below.

	Cash and cash equivalents	Due from credit institutions	Financial assets at FVTOCI	Other financial assets	Total
Note	*14*	*16*		*23*	
December 31, 2018					
Stage 1 assets	416 395,9	95 414,1	210 752,4	968,0	723 530,4
Stage 2 assets	-	-	-	4,3	4,3
Stage 3 assets	-	-	-	34,6	34,6
Total financial assets	**416 395,9**	**95 414,1**	**210 752,4**	**1 006,9**	**723 569,3**
Allowance for Stage 1 assets	(4,7)	(36,3)	(192,0)	(49,4)	(282,4)
Allowance for Stage 2 assets	-	-	-	(0,5)	(0,5)
Allowance for Stage 3 assets	-	-	-	(34,6)	(34,6)
Total allowance for expected credit losses	**(4,7)**	**(36,3)**	**(192,0)**	**(84,5)**	**(317,5)**

	Cash and cash equivalents	Due from credit institutions	Financial assets at FVTOCI	Other financial assets	Total
Note	*14*	*16*		*23*	
January 1, 2018					
Stage 1 assets	273 248,6	63 606,9	207 497,1	706,3	545 058,9
Stage 2 assets	-	-	-	14,7	14,7
Stage 3 assets	-	-	-	37,2	37,2
Total financial assets	**273 248,6**	**63 606,9**	**207 497,1**	**758,2**	**545 110,8**
Allowance for Stage 1 assets	(5,2)	(23,7)	(338,6)	(32,8)	(400,3)
Allowance for Stage 2 assets	-	-	-	(3,0)	(3,0)
Allowance for Stage 3 assets	-	-	-	(37,2)	(37,2)
Total allowance for expected credit losses	**(5,2)**	**(23,7)**	**(338,6)**	**(73,0)**	**(440,5)**

The tables below analyze information about the significant changes on the gross carrying amount of other financial assets during the period that contributed to changes on the loss allowance as well as the movement of the loss allowance during the 2018:

	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount at January 1, 2018	**706,3**	**14,7**	**37,2**	**758,2**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	254,2	-	-	254,2
Transfer to stage 1	7,5	(7,5)	-	-
Transfer to stage 3	-	(2,9)	2,9	-
Write-offs	-	-	(5,5)	(5,5)
Gross carrying amount at December 31, 2018	**968,0**	**4,3**	**34,6**	**1 006,9**
Loss allowance at December 31, 2018	**(49,4)**	**(0,5)**	**(34,6)**	**(84,5)**
	Stage 1	**Stage 2**	**Stage 3**	**Total**
Loss allowance at January 1, 2018	**32,8**	**3,0**	**37,2**	**73,0**
Net increase/(decrease) on credit risk	15,1	(0,4)	2,3	17,0
Transfer to stage 1	1,5	(1,5)	-	-
Transfer to stage 3	-	(0,6)	0,6	-
Write-offs	-	-	(5,5)	(5,5)
Loss allowance at December 31, 2018	**49,4**	**0,5**	**34,6**	**84,5**

Other Operating Expenses

Other operating expenses consist of RUB 856,9 mln due to an operational error and RUB 218,3 mln provision on a legal case. Further details are provided below.

A professional participant on the money market defaulted. During the default management procedure a partial release of collateral was triggered due to an operational error. The remaining collateral on the participant's accounts within the Group was insufficient to cover its corresponding liabilities to the Group as a result RUB 856,9 mln were paid out from the Group's funds and the related amount receivable from the participant was written off as bad debt (Note 26). In June 2018 the Group filed a claim to declare that professional participant bankrupt due to non-fulfillment of its liabilities. Bankruptcy proceedings were initiated. The Group implemented a set of measures to preclude the recurrence of such an operational event on the future.

In December 2015, a brokerage company defaulted on its liabilities to the Group that were foreclosed via standard default management procedures explicitly stipulated by the Law "On clearing, clearing activities and the central counterparty" to cover the liabilities to bona fide market and clearing participants. In September 2016, the broker was declared bankrupt. In October 2017, the bankruptcy manager filed a lawsuit with the arbitration court, seeking to declare the deals on foreclosure as void. In March 2018, the court of first appearance ruled to fulfill plaintiffs' demands. The Group responded with an appeal. The CBR filed the similar appeal against the court of first appearance' decision. In July 2018, the court of appeals ruled against the joint complaint of the Group and the CBR, fulfilling plaintiffs' demands to return RUB 873,0 mln to the general mass of bankrupt's estate. At the same time, the court recognized the Group's right to claim the abovementioned amount from the general mass of bankrupt's estate. The Group made a 100% provision and filed a cassation against the court of appeals' decision. In November 2018 the Group's cassation was satisfied. As a result the provision was decreased to 25% of the amount claimed to RUB 218,3 mln based on the examination of circumstances of the case. In January 2019 the plaintiffs applied to the Supreme Court. The Group is confident on its legal positon.

Income Tax

The Group provides for taxes based on the tax accounts maintained and prepared on accordance with the tax regulations of countries where the Group and its subsidiaries operate and which may differ from IFRS.

Deferred taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes. Temporary differences relate mostly to different methods of income and expense recognition, as well as to recorded values of certain assets.

The tax rate used for the reconciliations between tax expense and accounting profit is the corporate tax rate of 20% payable by corporate entities on the Russian Federation on taxable profits under the tax law on that jurisdiction.

The analysis of the temporary differences as at December 31, 2018 and 2017, is presented below:

	December 31, 2018	December 31, 2017
Tax effect from deductible temporary differences:		
Cash, cash equivalents and amounts due from financial institutions	8,1	-
Financial assets at FVTPL	0,3	6,5
Financial assets at FVTOCI	22,1	-
Investments available-for-sale	-	152,7
Property and equipment and intangible assets	21,7	12,2
Other assets	25,8	17,3
Other liabilities	739,0	521,2
Tax loss carried forward	13,4	12,1
Total tax effect from deductible temporary differences	**830,4**	**722,0**
Tax effect from taxable temporary differences:		
Financial assets at FVTPL	(181,3)	(82,7)
Financial assets at FVTOCI	(1 293,1)	-
Investments available-for-sale	-	(8,4)
Property and equipment and intangible assets	(3 039,5)	(3 292,6)
Other assets	(11,8)	(37,0)
Other liabilities	(1,0)	(1,2)
Total tax effect from taxable temporary differences	**(4 526,7)**	**(3 421,9)**
Deferred income tax assets	**125,1**	**243,4**
Deferred income tax liabilities	**(3 821,4)**	**(2 943,3)**

Reconciliation of income tax expense and accounting profit for the year ended December 31, 2018 and 2017, are explained below:

	Year ended December 31, 2018	Year ended December 31, 2017
Profit before income tax	**24 372,5**	**25 107,1**
Tax at the statutory tax rate (20%)	4 874,5	5 021,4
Tax effect of income taxed at rates different from the prime rate	(398,8)	(319,4)
Non-deductible expenses for tax purposes	176,3	149,9
Adjustments on respect of current income tax of previous years	507,3	-
Deferred tax from a previously unrecognised temporary difference of a prior period	(507,1)	-
Income tax expense	**4 652,2**	**4 851,9**
Current income tax expense	2 289,8	3 602,8
Current income tax expense related to previous years	507,3	-
Deferred taxation movement due to origination and reversal of temporary differences	1 856,4	1 255,0
Deferred taxation movement due to tax losses carried forward	(1,3)	(5,9)
Income tax expense	**4 652,2**	**4 851,9**

CASH AND CASH EQUIVALENTS

	December 31, 2018	December 31, 2017
Correspondent accounts and overnight deposits with banks	398 747,5	209 939,5
Balances with the CBR	17 641,7	63 304,2
Cash on hand	5,7	4,9
Receivables on broker and clearing operations	1,0	-
Total cash and cash equivalents	**416 395,9**	**273 248,6**
Less allowance for ECLs (Note 11)	(4,7)	-
Total cash and cash equivalents	**416 391,2**	**273 248,6**

As at December 31, 2018, the Group has balances with seven counterparties, each of which is greater than 10% of equity (December 31, 2017: six counterparties). The total aggregate amount of these balances is RUB 391 448,4 mln or 94% of total cash and cash equivalents as at December 31, 2018 (December 31, 2017: RUB 231 662,4 mln or 85% of total cash and cash equivalents).

Financial Assets at Fair Value through Profit or Loss

	December 31, 2018	December 31, 2017
Eurobonds issued by Russian companies	3 188,5	-
Derivative financial instruments	1 029,4	413,6
Shares issued by Russian companies	120,5	-
Shares issued by foreign companies	12,5	-
Total financial assets at FVTPL	**4 350,9**	**413,6**

The table below shows the analysis of derivatives of the Group as at December 31, 2018 and December 31, 2017:

	Fair value of principal amount or agreed amount		Assets – positive fair value	Liabilities – negative fair value
	Receivables	Payables		
December 31, 2018				
Currency swaps	62 302,5	(61 377,3)	1 029,4	(104,2)
December 31, 2017				
Currency swaps	26 308,5	(25 901,2)	413,6	(6,3)

As at December 31, 2018, the negative fair value of derivative financial instruments on the amount of RUB 104,2 mln is included on other liabilities (Note 26) (December 31, 2017: RUB 6,3 mln).

Due from Financial Institutions

	December 31, 2018	December 31, 2017
Reverse repo receivables from financial institutions	48 382,7	46 935,2
Interbank loans and term deposits	42 728,5	7 345,5
Correspondent accounts and deposits on precious metals	4 301,8	3 315,0
Receivables on broker and clearing operations	1,1	0,6
Mandatory cash balances with the CBR (restricted)	-	6 010,6
Total due from financial institutions	**95 414,1**	**63 606,9**
Less allowance for ECLs (Note 11)	(36,3)	-
Total due from financial institutions	**95 377,8**	**63 606,9**

As at December 31, 2018, the Group has balances with two counterparties, each of which is greater than 10% of equity (December 31, 2017: one counterparty). The amount of this balance is RUB 56 215,7 mln or 59% of the total amount due from financial institutions as at December 31, 2018 (December 31, 2017: RUB 36 802,8 mln or 58% of the total amount due from financial institutions).

As at December 31, 2018 the fair value of bonds pledged under reverse repo was RUB 59 455,3 mln (December 31, 2017: RUB 61 777,9 mln).

Interbank loans and term deposits include restricted amounts on correspondent account with Euroclear Bank S.A./N.V., Brussels, which relate to foreign securities (coupon and principal repayments) owned by the depository client, on the amount of RUB 7 805,5 mln (December 31, 2017: RUB 6 144,1 mln). Balances of market participants include balances due to this client on respect of those securities on the amount of RUB 7 805,5 mln (December 31, 2017: RUB 6 144,1 mln).

Central Counterparty Financial Assets and Liabilities

	December 31, 2018	December 31, 2017
Repo transactions	3 310 008,3	2 428 117,0
Currency transactions	2 011,9	1 966,8
Total CCP financial assets and liabilities	**3 312 020,2**	**2 430 083,8**

CCP financial assets are receivables under currency and repo transactions and CCP financial liabilities are payables under offsetting transactions, which the Group entered with market participants as a CCP.

As at December 31, 2018 the fair value of securities purchased and sold by the Group under repo transactions is RUB 3 706 037,1 mln (December 31, 2017: RUB 2 792 270,8 mln).

As at December 31, 2018 and 2017, none of these assets were past due.

CCP financial assets and liabilities under currency transactions represent fair values of overnight currency deals. Gross claims and liabilities with individual counterparties are offset on accordance with IAS 32. Information about financial assets offset against financial liabilities on the statement of financial position is disclosed on Note 36.

Financial Assets at Fair Value through Other Comprehensive Income

	December 31, 2018	December 31, 2017
Bonds issued by Russian Federation	133 825,1	-
Bonds issued by CBR	10 076,4	-
Bonds issued by foreign companies	25 099,6	-
Bonds issued by Russian companies	24 160,5	-
Bonds issued by Russian banks	17 590,8	-
Total financial assets at FVTOCI	**210 752,4**	**-**

Investments Available-for-Sale

	December 31, 2018	December 31, 2017
Bonds issued by Russian Federation	-	119 453,3
Bonds issued by foreign companies	-	43 529,2
Bonds issued by Russian banks	-	21 674,7
Bonds issued by Russian companies	-	21 286,3
Bonds issued by CBR	-	9 062,5
Shares issued by Russian companies	-	119,3
Shares issued by foreign companies	-	6,9
Total investments available-for-sale	**-**	**215 132,2**

Property and Equipment

	Land	Buildings and other real estate	Furniture and equipment	Construction on progress	Total
Cost					
December 31, 2016	**219,9**	**5 972,2**	**6 295,0**	**51,5**	**12 538,6**
Additions	-	-	485,8	0,3	486,1
Reclassification	-	(8,8)	51,8	(43,0)	-
Disposals	-	(97,2)	(32,8)	-	(130,0)
Effect of movements on exchange rates	(0,6)	(3,1)	(0,6)	-	(4,3)
December 31, 2017	**219,3**	**5 863,1**	**6 799,2**	**8,8**	**12 890,4**
Additions	-	-	645,4	39,5	684,9
Reclassification	-	-	1,3	(1,3)	-
Disposals	-	-	(371,4)	-	(371,4)
Effect of movements on exchange rates	0,5	2,8	0,5	-	3,8
December 31, 2018	**219,8**	**5 865,9**	**7 075,0**	**47,0**	**13 207,7**
Accumulated depreciation					
December 31, 2016	**-**	**1 353,1**	**3 479,1**	**-**	**4 832,2**
Charge for the period	-	119,2	1 345,1	-	1 464,3
Disposals	-	(14,4)	(26,7)	-	(41,1)
Reclassification	-	(4,3)	4,3	-	-
Effect of movements on exchange rates	-	(0,6)	(0,6)	-	(1,2)
December 31, 2017	**-**	**1 453,0**	**4 801,2**	**-**	**6 254,2**
Charge for the period	-	118,1	1 225,8	-	1 343,9
Disposals	-	-	(365,4)	-	(365,4)
Effect of movements on exchange rates	-	0,5	0,6	-	1,1
December 31, 2018	**-**	**1 571,6**	**5 662,2**	**-**	**7 233,8**
Net book value					
December 31, 2017	**219,3**	**4 410,1**	**1 998,0**	**8,8**	**6 636,2**
December 31, 2018	**219,8**	**4 294,3**	**1 412,8**	**47,0**	**5 973,9**

As at December 31, 2018, historical cost of fully depreciated property and equipment amounts to RUB 3 243,2 mln (December 31, 2017: RUB 2 254,2 mln).

Intangible Assets

	Software and licenses	Client base	Intangible assets development	Total
Cost				
December 31, 2016	**3 752,1**	**19 606,7**	**549,6**	**23 908,4**
Additions	984,9	-	469,3	1 454,2
Reclassification	405,0	-	(405,0)	-
Disposals	(225,5)	-	-	(225,5)
Effect of movements on exchange rates	(0,1)	-	-	(0,1)
December 31, 2017	**4 916,4**	**19 606,7**	**613,9**	**25 137,0**
Additions	956,9	-	372,6	1 329,5
Reclassification	189,7	-	(189,7)	-
Disposals	(191,0)	-	(19,6)	(210,6)
Effect of movements on exchange rates	0,1	-	-	0,1
December 31, 2018	**5 872,1**	**19 606,7**	**777,2**	**26 256,0**
Accumulated amortisation and impairment				
December 31, 2016	**1 225,1**	**4 325,4**	**-**	**5 550,5**
Charge for the period	703,9	784,3	-	1 488,2
Impairment (Note 9)	15,0	-	-	15,0
Disposals	(224,3)	-	-	(224,3)
Effect of movements on exchange rates	(0,3)	-	-	(0,3)
December 31, 2017	**1 719,4**	**5 109,7**	**-**	**6 829,1**
Charge for the period	819,2	1 176,4	-	1 995,6
Disposals	(173,2)	-	-	(173,2)
Effect of movements on exchange rates	0,2	-	-	0,2
December 31, 2018	**2 365,6**	**6 286,1**	**-**	**8 651,7**
Net book value				
December 31, 2017	**3 197,0**	**14 497,0**	**613,9**	**18 307,9**
December 31, 2018	**3 506,5**	**13 320,6**	**777,2**	**17 604,3**

Goodwill

As at December 31, 2018 and 2017, the Group's goodwill amounted to RUB 15 971,4 mln.

IMPAIRMENT TEST FOR GOODWILL

Goodwill must be tested annually for impairment, or more frequently when there are indicators that impairment may have occurred. Goodwill is recorded at cost less accumulated impairment losses. Impairment losses recognised on goodwill are not reversed.

Goodwill acquired through business combinations is allocated to the following cash-generating units ("CGU") for impairment testing:

	Trading services	Clearing	Depository	Total
Goodwill	10 774,1	3 738,7	1 458,6	15 971,4

The recoverable amounts of these CGUs have been determined based on value on use calculations, using discounted cash flow projections prepared by Management of the Group covering the seventeen-year period. Discount rate of 13,6% p.a. is applied to cash flows. Value on use calculations for each CGU are based on key assumptions about short and medium term revenue and cost growth and long term economic growth rates (used to determine terminal values).

The values assigned to short and medium term revenue and cost growth assumptions are based on the Group's approved business plan. The assumptions are derived from an assessment of current trends and the Group's long-term strategic objectives.

Based on the results of the impairment tests performed no impairment of the carrying value of the goodwill on any CGU was identified.

Value on use calculations for each CGU are sensitive to changes on discount rates. Management of the Group carried out sensitivity analysis to determine the impacts of changes on this variable on the calculated value on use: change of 150 bps on the discount rate. As at December 31, 2018 the sensitivity analysis revealed the cumulative value on use of the segments 10,7% lower or 13,7% higher than the value on use estimated, which does not lead to any significant change of the results of goodwill impairment testing on any CGU (December 31, 2017: 10,8% lower or 15,4% higher).

Other Assets

	December 31, 2018	December 31, 2017
Other financial assets:		
Receivables on services rendered and other operations	1 006,9	758,2
Less allowance for ECLs (Note 11)	(84,5)	(23,3)
Total other financial assets	**922,4**	**734,9**
Other non-financial assets:		
Precious metals	1 976,8	2 539,0
Prepaid expenses	392,2	293,4
Non-current assets prepaid	141,1	179,2
Taxes receivable other than income tax	64,7	57,5
Other	14,1	14,9
Total other assets	**3 511,3**	**3 818,9**

BALANCES OF MARKET PARTICIPANTS

	December 31, 2018	December 31, 2017
Accounts of clearing participants	521 359,0	408 127,6
Other current and settlement accounts	58 121,3	41 119,4
Stress collateral	14 629,7	5 460,6
Accounts of clearing participants on precious metals	6 278,4	5 854,0
Risk-covering funds	6 091,4	6 298,6
Total balances of market participants	**606 479,8**	**466 860,2**

Accounts of clearing participants include margins deposited by clearing participants. The purpose of margins is to support clearing settlements on the market and to cover risks arising from open positions of market participants, including operations of market participants, where the Group acts as a central counterparty. If an initial margin requirement exceeds the collateral posted by a market participant on the guarantee fund, the participant is required to cover the deficit by posting additional margin for the unsettled trades or to reduce the open position to an appropriate level. The margins is payable to a market participant when it closes its positions. The Group places guarantee fund amounts on current accounts and deposits with reputable banks or repo receivables (Notes 14, 16).

Market participants also pledge traded securities to the guarantee fund as collateral for their obligations. These securities are blocked at the participants' custody accounts on NSD. These securities are not assets of the Group and are not recognised on the Consolidated Statement of the Financial Position.

Stress collateral is an additional individual clearing collateral used on foreign exchange, securities and derivative markets. Stress collateral is calculated based on the volume of risk on transactions with partial collateral concluded by the clearing participants with the Central Counterparty. Requirements for depositing stress collateral arise for clearing participants who have average daily positions on excess of positions of other participants on the relevant market. NCC is obliged to pay an interest to the clearing participants for the right to use funds deposited as stress collateral.

The risk-covering funds comprise contributions deposited by market participants. The purpose of these funds is to provide additional insurance to the market participants on respect of the ability of the Group to guarantee proper settlements of open positions on case of a market participant default. The minimum contribution amount per one participant is determined by the NCC Supervisory Board and it is approved by the Derivatives Market Committee, the Currency Market Committee, the Securities Market Committee and the Securities Lending & REPO Committee. Risk-covering funds amounts are only used to cover the deficit if a margin posted by a trading participant is not sufficient to cover its losses. Cash received from the market participants on the risk-covering funds is placed with top-rated banks (Notes 14, 16).

Distributions payable to holders of securities

Distributions payable to holders of securities comprise dividends and coupon amounts received by the Group from the issuers of securities on behalf of customers of the Group, for which the Group provides depository services.

The normal settlement period for distribution of dividends and coupon amounts to its customers is three days. Amounts of dividends and coupons payable to clients are stated at their contractual values.

Other Liabilities

	December 31, 2018	December 31, 2017
Other financial liabilities		
Payables to employees	2 185,8	2 163,2
Trade and other payables	633,7	427,6
Derivative financial liabilities (Note 15)	104,2	6,3
Tax agent liabilities regarding distributions payable to holders of securities	32,3	211,1
Dividends payable	0,2	0,1
Total other financial liabilities	**2 956,2**	**2 808,3**
Other non-financial liabilities		
Deferred commission income	439,7	533,9
Advances received	239,3	257,5
Provision (Note 12)	218,3	-
Taxes payable, other than income tax	115,4	105,7
Other	-	5,8
Total other liabilities	**3 968,9**	**3 711,2**

The movement of provision during the year ended December 31, 2018 is provided below:

	Year ended December 31, 2018
Beginning of the year	**-**
Net charge for the year (Note 12)	1 075,2
Write-offs (Note 12)	(856,9)
End of the year	**218,3**

Share Capital and Share Premium

The share capital of Moscow exchange comprises ordinary shares with a par value of RUB 1 each:

	Ordinary shares issued and fully paid (number of shares)	Treasury shares (number of shares)
December 31, 2016	**2 278 636 493**	**(33 424 960)**
Cancellation of treasury shares	(2 235 035)	2 235 035
Exercised equity instruments (Note 10)	-	3 117 055
December 31, 2017	**2 276 401 458**	**(28 072 870)**
Exercised equity instruments (Note 10)	-	2 058 440
December 31, 2018	**2 276 401 458**	**(26 014 430)**

Share premium represents an excess of contributions received over the nominal value of shares issued. The number of authorized shares during the years ended December 31, 2018 and 2017, is 12 095 322 151.

As at July 7, 2017 changes to the Charter of Moscow Exchange came into force. Changes included share reduction through the redemption of 2 235 035 treasury shares with nominal value of RUB 1 each. Share capital reduction was approved by the Annual General Shareholders Meeting on April 27, 2017. The treasury shares were acquired as a result of obligatory buy-out during the merge of CJSC MICEX Stock Exchange and LLC ME Technology with the parent company.

During the year ended December 31, 2018 the Group distributed to employees 2 058 440 treasury shares under exercised equity instruments (December 31, 2017: 3 117 055 treasury shares) (Note 10).

Retained Earnings

During the year ended December 31, 2018 the Group declared and paid to the owners of the parent dividends for the year ended December 31, 2017 of RUB 12 320,5 mln. The amount of dividends per share is RUB 5,47 per ordinary share. Taking into account interim dividends for the six-month period ended June 30, 2017, declared and paid to the owners of the parent on the amount of RUB 5 607,4 mln, or RUB 2,49 per ordinary share, the total amount of dividends for the year ended December 31, 2017 declared reached RUB 17 928,0 mln, or RUB 7,96 per ordinary share (for the year ended December 31, 2016: RUB 17 289,7 mln; dividends per share: RUB 7,68).

The Group's distributable reserves are limited to the amount of reserves reported on the statutory financial statements of the Group members. Non-distributable reserves comprise a reserve fund, which is created according to the statutory regulations, to cover risks, including future losses and other unforeseen risks and contingencies, as well as funds of NCC required to comply with regulations of CBR relating to CCP activities.

Earnings per Share

The calculation of earnings per share is based on the profit for the year attributable to shareholders of the Group and the weighted average number of ordinary outstanding during the year, calculated as shown below.

	Year ended December 31, 2018	Year ended December 31, 2017
Net profit attributable to ordinary equity holders of the parent	**19 716,5**	**20 265,7**
Weighted average number of shares	**2 249 496 134**	**2 247 441 093**
Effect of dilutive share options	6 061 693	9 139 254
Weighted average number of shares adjusted for the effect of dilution	**2 255 557 827**	**2 256 580 347**
Basic earnings per share, RUB	8,76	9,02
Diluted earnings per share, RUB	8,74	8,98

Commitments and Contingencies

Operating lease commitments – Where the Group is the lessee, the future minimum lease payments under non-cancellable operating leases of premises, parking slots and cars are as follows:

	December 31, 2018	December 31, 2017
Less than 1 year	175,1	168,1
More than 1 year and no more than 5 years	69,8	231,3
Total operating lease commitments	**244,9**	**399,4**

Legal proceedings – From time to time and on the normal course of business, claims against the Group may be received from customers and counterparties. The Group has made a provision for potential losses on legal cases, which was included on these Consolidated Financial Statements (Note 12).

Operating environment – The Russian economy continued to be negatively impacted by ongoing political tension on the region and continuing international sanctions imposed on several packages by the U.S. and the E.U. on certain Russian officials, businessmen and companies. The above mentioned events have led to reduced access of the Russian businesses to international capital markets, increased inflation, economic recession and other negative economic consequences. The impact of further economic developments on future operations and financial position of the Group is at this stage difficult to determine.

Fiduciary activities – The Group provides depositary services to its customers. As at December 31, 2018 and 2017, the Group had customer securities totaling 123 590 bln items and 124 304 bln items, respectively, on its nominal holder accounts.

Taxation – Major part of the Group's business activity is carried out on the Russian Federation. Russian tax, currency and customs legislation as currently on effect is vaguely drafted and is subject to varying interpretations, selective and inconsistent application and changes, which can occur frequently, at short notice and may apply retrospectively. 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. Recent events within the Russian Federation suggest that the tax authorities may be taking a more assertive position on their interpretation and application of this legislation and assessments. It is therefore possible that transactions and activities of the Group that have not been challenged on the past may be challenged at any time on the future. As a result, significant additional taxes, penalties and interest may be assessed by the relevant authorities. Fiscal periods remain open and subject to review by the tax authorities for a period of three calendar years immediately preceding the year on which the decision to conduct a tax review is taken. Under certain circumstances tax reviews may cover longer periods.

In 2018, amendments were introduced to the Tax Code of the Russian Federation and certain other legislative acts, which provides, among other things, an increase on the general rate of Value Added Tax (VAT) from 18% to 20%. The new rates will apply to goods, work, services, and property rights supplied starting from January 1, 2019.

As at December 31, 2018 management believes that its interpretation of the relevant legislation is appropriate and that the Group's tax, currency and customs positions will be sustained.

Transactions with Related Parties

Intragroup transactions have been eliminated on consolidation and are not disclosed on this note. Details of transactions between the Group and other related parties are disclosed below.

Transactions with key management
Key management personnel comprises members of the Executive Board and the Supervisory Board. The total remuneration paid to key management personnel includes short-term benefits (salary, bonuses, payroll related taxes, insurance, health care, etc.), long-term benefits and share-based payment expense.

Included on the Consolidated Statement of Financial Position are the following amounts that arose on transactions with key management personnel:

	December 31, 2018	December 31, 2017
Other liabilities	499,9	501,6
Share-based payments	427,8	309,0

Included on the Consolidated Statement of Profit or Loss are the following amounts that arose due to transactions with key management personnel:

	Year ended December 31, 2018	Year ended December 31, 2017
Short-term employee benefits	509,8	435,2
Share-based payment expense on equity settled instruments	111,4	108,9
Long-term employee benefits	98,5	91,7
Total remuneration of key management personnel	**719,7**	**635,8**

Transactions with government-related entities
As at December 31, 2018 the Russian Federation exercises significant influence over Moscow Exchange.

In the ordinary course of business the Group provides trading, clearing and depository services to government-related entities, places funds with government-related banks and bonds issued by the Russian Federation and government-related entities. According to p. 26 (b) of IAS 24 the Group discloses the following significant outstanding balances and financial results on operations with government-related entities as at December 31, 2018 and 2017, and for the years ended December 31, 2018 and 2017:

	December 31, 2018	December 31, 2017
ASSETS		
Cash and cash equivalents	141 543,9	185 947,8
Due from financial institutions	4 098,9	7 190,8
Financial assets at FVTOCI	187 486,7	-
Investments available-for-sale	-	158 324,9
Other assets	396,6	214,3
LIABILITIES		
Balances of market participants	272 766,2	174 570,7
Distributions payable to holders of securities	22 210,6	1 551,0
Other liabilities	195,4	1,8

	Year ended December 31, 2018	Year ended December 31, 2017
Fee and commission income	8 087,1	6 823,1
Interest and other finance income	12 330,4	10 630,1
Interest expense	(223,3)	(687,7)
Net gain on financial assets at fair value through other comprehensive income	242,3	-
Net gain on financial assets available-for-sale	-	706,0
Other operating income	24,5	-
Administrative and other expenses	(276,2)	(166,9)

As at December 31, 2018 operations with government-related entities within central counterparty financial assets and liabilities amounted to 29,8% of total balance. (December 31, 2017: 11,4%).

Fair Value Measurements

The Group performs a fair value assessment of its financial assets and liabilities, as required by IFRS 13 Fair Value Measurement. Fair value is the price that would be received to sell an asset or paid to transfer a liability on an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either on the principal market for the asset or liability, or on the absence of a principal market, on the most advantageous market for the asset or liability.

The Group measures fair values for financial assets recorded on the statement of financial position at fair value using the following fair value hierarchy that reflects the significance of the inputs used on making the measurements:

- Level 1: Quoted market prices on an active market (that are unadjusted) for identical assets or liabilities.
- Level 2: Valuation techniques (for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable).
- Level 3: Valuation techniques (for which the lowest level input that is significant to the fair value measurement is unobservable).

The foreign currency forward contracts are measured based on observable spot exchange rates and the yield curves of the respective currencies.

The fair value of the unquoted debt securities has been determined using a discounted cash flow model, by reference to quoted market prices for similar instruments.

The fair value of unquoted equity instruments has been determined based on market approach using price/net assets ratio for similar companies.

The tables below show financial assets and liabilities measured at fair value at December 31, 2018 and 2017, by the level on the fair value hierarchy into which the fair value measurement is categorised:

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss	3 188,5	1 029,4	133,0	**4 350,9**
CCP financial assets and liabilities (currency transactions)	2 011,9	-	-	**2 011,9**
Financial assets at FVTOCI	194 915,1	15 837,3	-	**210 752,4**
Derivative financial liabilities	-	(104,2)	-	**(104,2)**

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL	-	413,6	-	**413,6**
CCP financial assets and liabilities (currency transactions)	1 966,8	-	-	**1 966,8**
Investments available-for-sale	189 324,7	25 681,3	126,2	**215 132,2**
Derivative financial liabilities	-	(6,3)	-	**(6,3)**

The fair value of cash and cash equivalents, due from financial institutions, other financial assets, balances of market participants and other financial liabilities as of December 31, 2018 and 2017, refer to level 2 hierarchy of fair value.

Management of the Group considers that the fair value of financial assets and liabilities not carried at fair value on Consolidated Statement of Financial Position approximates their carrying value.

TRANSFERS BETWEEN LEVEL 1 AND LEVEL 2

For assets and liabilities that are recognised at fair value on a recurring basis, the Group determines whether transfers have occurred between levels on the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The following table shows total amount of transfers of financial assets between level 1 and level 2. Transfers from level 2 to level 1 (from level 1 to level 2) occurred due to fact that markets for certain financial assets became (ceased to be) active during the period.

	Transfers between Level 1 and Level 2	
	Year ended December 31, 2018	Year ended December 31, 2017
From Level 1 to Level 2		
Financial assets at FVTOCI	7 008,6	-
Investments available-for-sale	-	3 757,6
From Level 2 to Level 1		
Financial assets at FVTOCI	5 151,1	-
Investments available-for-sale	-	898,4

Capital Management

The Group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Supervisory Board monitors the return on capital, which the Group defines as net profit divided by total equity, excluding non-controlling interests. The Supervisory Board also monitors the level of dividends to ordinary shareholders.

The capital structure of the Group consists of the shareholder's equity, which includes capital issued, reserves and retained earnings. The allocation of capital between specific operations and activities is, to a large extent, driven by optimization of the return achieved on the capital allocated. Although maximization of return on risk-adjusted capital is the principal basis used on determining how capital is allocated within the Group to particular operations or activities, it is not the sole basis used for decision making. Account is also taken of synergies with other operations and activities, the availability of management and other resources and the fit of the activity with the longer term strategic objectives. The policies on respect of capital management and allocation are regularly reviewed by the Supervisory Board through approval and review within annual budgets. pital

The Group entities are subject to capital requirements established by the CBR on respect of the minimum amount of own funds for each entity depending on the nature of their activities. NSD and NCC as credit institutions have to maintain a ratio of capital to risk weighted assets (statutory capital ratio N1) above the prescribed minimum level, which is 12% for NSD and 100% for NCC as a central counterparty.

Regulatory capital ratios for the major Group companies were as follows:

	Own funds		**Own funds requirements**		**Capital adequacy ratio**	
	December 31, 2018	**December 31, 2017**	**December 31, 2018**	**December 31, 2017**	**December 31, 2018**	**December 31, 2017**
Moscow Exchange	48 490,1	51 247,9	100,0	100,0	-	-
NCC	65 700,9	45 903,5	100,0	300,0	153,2	18,42
NSD	8 927,5	8 945,3	4 000,0	4 000,0	27,94	28,54
NAMEX	179,2	178,6	100,0	100,0	-	-

The Group companies had complied on full with all its externally imposed capital requirements at all times.

Operating Segments

The Group distinguishes the following operating segments for management purposes depending on the types of products and services:

Operating segment **"Trading services"** includes the Group's trading services on foreign exchange, securities, derivatives and money markets, listing and other trading services.

In the **Foreign Exchange Market** of Moscow Exchange spot and swap transactions are performed with different maturities on the following currencies: USD, EUR, CNY, HKD, GBP, CHF, TRY, UAH, KZT and BYR. Deliverable forward contracts for currency pairs are also traded on the foreign exchange market, and transactions with precious metals are performed (gold and silver).

In the **Money Market** Moscow Exchange provides repo services with shares and bonds of the following types: repo with the CCP, including repo with General Collateral Certificates with CCP (GCC-repo), inter-dealer repo, direct repo with the CBR. Participants can also perform depository-credit operations, on particular, funds placement auctions on bank deposits.

In the **Securities Market** of Moscow Exchange primary and secondary trades on shares, Russian government bonds (OFZ), municipal and corporate bonds, foreign state and corporate eurobonds, depository receipts, fund shares, ETFs are performed.

In the **Derivatives Market** of Moscow Exchange the following derivative instruments are traded: futures contracts on indices, Russian and foreign shares, Russian government bonds (OFZ) and eurobonds Russia-30, currency pairs, interest rates, precious metals, crude oil and sugar, and option contracts on futures.

Listing services – inclusion and maintenance of securities on the List of securities admitted to on-exchange trading.

Operating segment **"Clearing"** includes mainly CCP clearing services and other clearing services.

The CCP guarantees stability on the serviced market segments through the risk-management system implementation, and provides clearing services to the market participants. The CCP guarantees that all obligations to all non-defaulting parties of the contracts signed with the CCP, regardless of whether obligations to the CCP are met or not, are fulfilled.

Operating segment **"Depository"** includes depository and settlement services provided to participants on the on-exchange and OTC markets, OTC transaction registration services (repository services), collateral management services and information services.

Operating segment **"Other services"** includes the Group's results from information products, software and technical services provision and unallocated income and expense.

Software, technical and information services include a wide range of professional instruments used for access to the Exchange markets, electronic trade based on modern exchange trade technologies, real time market data, trading results data and indices.

Less than 1% of the Group's income from external clients is earned outside of the Russian Federation. Less than 1% of the Group's non-current assets are situated outside of the Russian Federation. The business of the Group on the territory of the Republic of Kazakhstan does not have any significant influence on the financial statements of the Group. Therefore, it is not distinguished as a separate operating segment.

Financial results of the operating segments are defined before the income tax expense. Therefore, the income tax is not allocated to operating segments.

Segment reports and the segment financial results provided to Management of the Group for analysis are prepared according to the International Financial Reporting Standards and are adjusted for intersegment transfers. Management of the Group evaluates the segment financial results, using the segment total income and operating profit figures, taking into account differences on products and services of different segments.

The information on income and expenses of the Group broken down into operating segments for the years ended December, 2018 and 2017, is provided below.

	Year ended December 31, 2018				
	Trading services	Clearing	Depository	Other services	Total
INCOME					
Commission income	9 338,3	8 174,1	4 722,4	1 412,3	23 647,1
Net interest and other finance income*	6 020,7	7 836,4	2 203,9	-	16 061,0
Other operating income	54,3	70,7	19,9	48,4	193,3
Total income	**15 413,3**	**16 081,2**	**6 946,2**	**1 460,7**	**39 901,4**
EXPENSES					
Personnel expenses	(3 115,1)	(993,8)	(1 937,0)	(466,4)	(6 512,3)
General and administrative expenses,	(4 208,2)	(910,6)	(2 265,5)	(557,1)	(7 941,4)
Incl. depreciation and amortisation	*(1 722,3)*	*(401,3)*	*(1 102,0)*	*(113,9)*	*(3 339,5)*
Total expenses before other operating expenses	**(7 323,3)**	**(1 904,4)**	**(4 202,5)**	**(1 023,5)**	**(14 453,7)**
Total profit before other operating expenses and tax	**8 090,0**	**14 176,8**	**2 743,7**	**437,2**	**25 447,7**
Other operating expenses	-	(1 075,2)	-	-	(1 075,2)
Total profit before tax	**8 090,0**	**13 101,6**	**2 743,7**	**437,2**	**24 372,5**

* Including net gain on financial assets at FVTOCI and net financial result from foreign exchange.

	Year ended December 31, 2017				
	Trading services	Clearing	Depository	Other services	Total
INCOME					
Commission income	8 705,0	6 881,6	4 278,2	1 342,8	21 207,6
Net interest and other finance income**	6 027,7	9 144,9	2 112,7	-	17 285,3
Other operating income	-	-	-	46,0	46,0
Total income	**14 732,7**	**16 026,5**	**6 390,9**	**1 388,8**	**38 538,9**
EXPENSES					
Personnel expenses	(2 859,6)	(966,7)	(1 883,2)	(443,4)	(6 152,9)
General and administrative expenses,	(3 826,3)	(874,7)	(2 168,5)	(409,4)	(7 278,9)
Incl. depreciation and amortisation	*(1 532,1)*	*(352,6)*	*(959,1)*	*(108,7)*	*(2 952,5)*
Total expenses	**(6 685,9)**	**(1 841,4)**	**(4 051,7)**	**(852,8)**	**(13 431,8)**
Total profit before tax	**8 046,8**	**14 185,1**	**2 339,2**	**536,0**	**25 107,1**

** Including net gain on investments available-for sale and net financial result from foreign exchange.

Risk Management Policies

Risk management is an integral part of the Group's activities. Moscow Exchange Group distinguishes the following significant risks: credit, liquidity, market, operational. Risk management core objectives include identification of sources of risks, measurement of risk levels, development of risk management policies and implementation of risk controls, including setting limits and further compliance with them.

There have been no changes on the risk management department since year-end or on any risk management policies, except those related to changes due to adoption of IFRS 9.

A description of the Group's risk management policies on relation to each significant risk is as follows.

CREDIT RISK

The Group uses credit risk risk management approaches under requirements of the Russian regulators, based on the best international practices and standards. The Group's assets are exposed to credit risk, which is defined as the risk of losses resulting from a default or improper performance of their obligations to the Group by its counterparties.

The goal of credit risk management is to timely define and efficiently evaluate the level of risk necessary to ensure sustainable growth determined by the Group's development strategy.

The objectives of the Group on credit risk management:

- implement a systemic and enhanced approach to optimize the structure of the assets on order to limit credit risk level;
- enhance the competitive advantages of the Group through implementation of more precise risk measures;
- maintain stability during the introduction of new complex products and services.

The Group controls credit risk by setting limits on a counterparty and groups of related counterparties. Credit risk limits are set on the basis of a comprehensive and in-depth evaluation of the counterparties financial conditions, analysis of the macroeconomic environment of counterparties' activities, the level of information transparency, business reputation and other financial and non-financial factors. The Group has developed and constantly improves an internal ratings system, providing a prudent assessment of its counterparties and the level of accepted credit risk.

Credit risk limits are approved by authorized bodies. Credit risk limits are monitored and reviewed on a regular basis. Also the Group constantly monitors the concentration of credit risk on compliance with applicable prudential requirements.

To reduce credit risk the Group applies specific requirements to the financial conditions of its counterparties and to the types and quality of collateral accepted by the Group. Accepted collateral includes liquid securities and cash contributions on Rubles and foreign currencies. Eligible types of collateral depend on the market and the type of exposure. To mitigate credit risk from its CCP activities the Group has introduced a multi-level default waterfall structure on compliance with the highest international standards and consisting of various lines of defence applicable on case of a clearing participant default.

As explained on Note 2, the Group monitors all financial assets that are subject to impairment requirements to assess whether there has been a significant increase on credit risk since initial recognition. If there has been a significant increase on credit risk the Group will measure the loss allowance based on lifetime rather than 12-month ECL.

The Group uses forward-looking information that is available without undue cost or effort on its assessment of significant increase of credit risk as well as on its measurement of ECL. The Group employs experts who use external and internal information to generate a 'base case' scenario of future forecast of relevant economic variables. The external information used includes economic data and forecasts published by governmental bodies and monetary authorities.

The base case scenario is the single most-likely outcome and consists of information used by the Group for strategic planning and budgeting. The Group has identified and documented key drivers of credit risk and credit losses for each portfolio of financial instruments and, using a statistical analysis of historical data, has estimated relationships between macro-economic variables and credit risk and credit losses.

The table below summarizes the principal macroeconomic indicators included on the economic scenarios used at December 31, 2018 for the years 2019-2021, for Russia which is the country where the Group operates and therefore is the country that has a material impact on ECLs.

	2019	2020	2021
GDP growth	2,1%	2,0%	3,1%
Consumer price index	4,0%	3,8%	4,0%
Average nominal wage growth	4,1%	3,9%	4,1%
Money supply growth	9,0%	8,6%	9,0%
USD/RUB rate	64,70	63,84	63,98

Predicted relationships between the key indicators and default and loss rates on various portfolios of financial assets have been developed based on analyzing historical data over the past 5 years.

The Group has performed a sensitivity analysis on how ECL on the main portfolios will change if the key assumptions used to calculate ECL change by a certain percentage. The table below outlines the total ECL per portfolio as at December 31, 2018 if the assumptions used to measure ECL remain as expected (amount as presented on the statement of financial position), as well as if each of the key assumptions used change by plus or minus a certain percentage. The changes are applied on isolation for illustrative purposes, on order to develop the estimate of expected credit losses. In reality there will be interdependencies between the various economic inputs and the exposure to sensitivity will vary across the economic scenarios.

	As expected	Average PD	ECL Cum
	-3,0%	1,35%	348,9
GDP	-	1,23%	317,5
	+3,0%	1,11%	286,1
	-3,0%	1,30%	335,1
Consumer price index	-	1,23%	317,5
	+3,0%	1,16%	299,9
	-3,0%	1,27%	327,7
Average nominal wage	-	1,23%	317,5
	+3,0%	1,19%	307,3
	-5,0%	1,17%	303,1
Money supply	-	1,23%	317,5
	+5,0%	1,29%	331,9
	-15,0%	1,17%	302,8
USD/RUB rate	-	1,23%	317,5
	+15,0%	1,29%	332,2

As at December 31, 2018 and 2017, the Group has no modified financial assets as a result of the Group's forbearance activities and no amounts outstanding on financial assets that were written off during the reporting period and are still subject to enforcement activity.

MAXIMUM CREDIT RISK EXPOSURE

The Group's maximum exposure to credit risk equals to the carrying value of assets that bear credit risk.

As at December 31, 2018 included into other assets are overdue receivables of RUB 62,7 mln (December 31, 2017: RUB 23,3 mln).

Financial assets are classified according to the current credit ratings issued by international rating agencies (Fitch Ratings, Standard & Poor's and Moody's Investor Service). The highest possible rating is AAA. Investment grade financial assets have ratings from AAA to BBB-. Financial assets which have ratings lower than BBB- are classed as speculative grade.

As at December 31, 2018 and 2017, balances with the CBR are classified at the sovereign credit rating level of the Russian Federation.

The following table details the credit ratings of the financial assets held by the Group as at December 31, 201 8 and 2017. Table below does not include equity instruments.

	AA	A	BBB	less BBB-	Not rated	Total
December 31, 2018						
Cash and cash equivalents	118 130,3	151 869,9	32 500,4	111 864,6	2 025,0	**416 390,2**
Financial assets at FVTPL	1 018,5	-	3 188,5	0,2	10,7	**4 217,9**
Due from financial institutions	8 294,6	-	9 067,2	73 750,5	-	**91 112,3**
CCP financial assets	-	5 317,9	32 709,7	2 721 694,3	552 298,3	**3 312 020,2**
Financial assets at FVTOCI	-	465,6	15 160,9	185 458,2	9 667,7	**210 752,4**
Other financial assets	22,4	1,9	47,9	417,5	517,2	**1 006,9**
December 31, 2017						
Cash and cash equivalents	40 858,3	31 655,8	86 358,8	114 232,4	138,4	**273 243,7**
Financial assets at FVTPL	404,3	-	-	-	9,3	**413,6**
Due from financial institutions	793,0	-	1 201,4	58 297,5	-	**60 291,9**
CCP financial assets	-	60,1	6 995,9	2 038 136,7	384 891,1	**2 430 083,8**
Investments available-for-sale	-	473,7	14 366,4	200 165,9	-	**215 006,0**
Other financial assets	24,2	2,1	30,6	250,7	427,3	**734,9**

GEOGRAPHICAL CONCENTRATION

The analysis of the geographical concentration of the financial assets and liabilities of the Group as at December 31, 2018 and 2017, is presented below:

				December 31, 2018
	Russia	**OECD**	**Other**	**Total**
FINANCIAL ASSETS				
Cash and cash equivalents	81 593,1	334 364,1	438,7	416 395,9
Financial assets at FVTPL	370,9	3 733,4	246,6	4 350,9
Due from financial institutions	82 810,7	8 294,6	7,0	91 112,3
CCP financial assets	3 312 012,7	-	7,5	3 312 020,2
Financial assets at FVTOCI	185 652,8	21 506,8	3 592,8	210 752,4
Other financial assets	869,3	105,8	31,8	1 006,9
Total financial assets	**3 663 309,5**	**368 004,7**	**4 324,4**	**4 035 638,6**
FINANCIAL LIABILITIES				
Balances of market participants	596 907,1	1 364,2	1 930,1	600 201,4
Overnight bank loans	5 003,1	-	-	5 003,1
CCP financial liabilities	3 312 012,7	-	7,5	3 312 020,2
Distributions payable to holders of securities	8 311,3	16 277,9	86,8	24 676,0
Margin account	-	979,6	-	979,6
Other financial liabilities	2 703,4	241,1	11,7	2 956,2
Total financial liabilities	**3 924 937,6**	**18 862,8**	**2 036,1**	**3 945 836,5**

				December 31, 2017
	Russia	**OECD**	**Other**	**Total**
FINANCIAL ASSETS				
Cash and cash equivalents	85 068,8	187 920,8	259,0	273 248,6
Financial assets at FVTPL	9,3	404,3	-	413,6
Due from financial institutions	49 631,4	10 638,6	21,9	60 291,9
CCP financial assets	2 430 083,8	-	-	2 430 083,8
Investments avaliable-for-sale	171 594,6	43 533,6	4,0	215 132,2
Other financial assets	582,8	84,9	67,2	734,9
Total financial assets	**2 736 970,7**	**242 582,2**	**352,1**	**2 979 905,0**
FINANCIAL LIABILITIES				
Balances of market participants	458 416,6	1 315,5	1 274,1	461 006,2
CCP financial liabilities	2 430 083,8	-	-	2 430 083,8
Distributions payable to holders of securities	2 453,0	54,8	-	2 507,8
Margin account	-	384,6	-	384,6
Other financial liabilities	2 679,5	122,0	6,8	2 808,3
Total financial liabilities	**2 893 632,9**	**1 876,9**	**1 280,9**	**2 896 790,7**

As at December 31, 2018, the balances with OECD counterparties include the following balances with OECD subsidiaries of Russian companies:
- Cash and cash equivalents on the amount of RUB 64 599,5 mln (December 31, 2017: RUB 95 848,5 mln);
- Financial assets at fair value through profit or loss on the amount of RUB 3 188,5 mln (December 31, 2017: none);
- Financial assets at fair value through other comprehensive income on the amount of RUB 21 506,8 mln (December 31, 2017: investments available-for-sale on the amount of RUB 43 529,2 mln);
- Balances of market participants on the amount of RUB 502,8 mln (December 31, 2017: RUB 500,7 mln);
- Distributions payable to holders of securities on the amount of RUB 14 674,4 mln (December 31, 2017: RUB 49,6 mln).

LIQUIDITY RISK

Liquidity risk is the risk of facing the situation where available funds are insufficient to meet current financial liabilities. The main purpose of liquidity management is to ensure Group's ability to perform its obligations not only under normal market conditions but also on cases of unforeseen emergencies without suffering unacceptable losses or risk of damaging its business reputation.

Group's liquidity management procedures cover various forms of liquidity risk:
- operating liquidity risk arising from the inability to timely meet its current obligations due to the existing structure of current cash credits and debits (operating analysis and control of liquidity);
- risk of mismatch between the amounts and dates of repayment of claims and obligations – analysis and assessment of prospective liquidity (GAP analysis);
- risk of unforeseen claims on liquidity, i.e. the consequences of the risk that unforeseen future events may claim more resources than allocated for this purpose (stress testing).

Liquidity risk management plays an important role on the whole risk management system and includes such procedures as: forecasting/monitoring payment flow and liquidity ratios, planning measures to recover the required liquidity level considering unfavourable and crisis situations, ensuring an optimal structure of assets on accordance with the resource base, taking into account the maturities of fund sources and their volumes when allocating assets to financial instruments.

The maturities of assets and liabilities and the ability to replace, at an acceptable cost, interest-bearing liabilities as they mature, are important factors on assessing the liquidity of the Group and its exposure to changes on interest and exchange rates.

Management of the Group expects that the cash flows from certain financial assets will be different from their contractual terms either because the Group has the discretionary ability to manage the cash flows or because past experience indicates that cash flows will differ from contractual terms. In the tables below the financial assets and liabilities are presented on a discounted basis and are based on their expected cash flows.

The presentation below is based upon the information provided internally to key management personnel of the Group.

	Up to 1 month	1 to 3 months	3 months to 1 year	More than 1 year	Maturity undefined	Total
December 31, 2018						
FINANCIAL ASSETS						
Cash and cash equivalents	416 395,9	-	-	-	-	**416 395,9**
Financial assets at FVTPL	548,9	484,6	-	3 188,5	128,9	**4 350,9**
Due from financial institutions	16 498,3	28 308,3	38 011,1	-	8 294,6	**91 112,3**
CCP financial assets	3 215 967,8	96 052,4	-	-	-	**3 312 020,2**
Financial assets at FVTOCI	198 633,7	-	1 084,5	11 034,2	-	**210 752,4**
Other financial assets	705,1	233,1	6,0	-	62,7	**1 006,9**
Total financial assets	**3 848 749,6**	**125 078,4**	**39 101,6**	**14 222,7**	**8 486,2**	**4 035 638,6**
FINANCIAL LIABILITIES						
Balances of market participants	591 906,8	-	-	-	8 294,6	**600 201,4**
Overnight bank loans	5 003,1	-	-	-	-	**5 003,1**
CCP financial liabilities	3 215 967,8	96 052,4	-	-	-	**3 312 020,2**
Distributions payable to holders of securities	24 676,0	-	-	-	-	**24 676,0**
Margin account	-	979,6	-	-	-	**979,6**
Other financial liabilities	445,8	354,8	1 964,4	191,2	-	**2 956,2**
Total financial liabilities	**3 837 999,5**	**97 386,8**	**1 964,4**	**191,2**	**8 294,6**	**3 945 836,5**
Liquidity gap	**10 750,1**	**27 691,6**	**37 137,2**	**14 031,5**	**191,6**	
Cumulative liquidity gap	**10 750,1**	**38 441,8**	**75 579,0**	**89 610,4**	**89 802,0**	
December 31, 2017						
FINANCIAL ASSETS						
Cash and cash equivalents	273 248,6	-	-	-	-	**273 248,6**
Financial assets at FVTPL	413,6	-	-	-	-	**413,6**
Due from financial institutions	7 203,7	31 083,5	15 860,6	-	6 144,1	**60 291,9**
CCP financial assets	2 110 096,1	103 121,7	216 866,0	-	-	**2 430 083,8**
Investments available-for-sale	189 057,9	7 035,7	14 169,1	4 743,3	126,2	**215 132,2**
Other financial assets	569,1	118,7	47,1	-	-	**734,9**
Total financial assets	**2 580 589,0**	**141 359,6**	**246 942,8**	**4 743,3**	**6 270,3**	**2 979 905,0**
FINANCIAL LIABILITIES						
Balances of market participants	454 862,1	-	-	-	6 144,1	**461 006,2**
CCP financial liabilities	2 110 096,1	103 121,7	216 866,0	-	-	**2 430 083,8**
Distributions payable to holders of securities	2 507,8	-	-	-	-	**2 507,8**
Margin account	384,6	-	-	-	-	**384,6**
Other financial liabilities	729,6	83,5	808,9	1 186,3	-	**2 808,3**
Total financial liabilities	**2 568 580,2**	**103 205,2**	**217 674,9**	**1 186,3**	**6 144,1**	**2 896 790,7**
Liquidity gap	**12 008,8**	**38 154,4**	**29 267,9**	**3 557,0**	**126,2**	
Cumulative liquidity gap	**12 008,8**	**50 163,2**	**79 431,1**	**82 988,1**	**83 114,3**	

Undiscounted cash flows on financial liabilities are approximately equal to cash flows presented on the analysis of liquidity risk above.

The Group presents securities included on CBR Lombard list as matured on one month.

MARKET RISK

Market risk is the risk of losses due to changes on market variables such as interest rates, foreign exchange rates, and prices of financial instruments, as well as due to the low liquidity of the market for the purpose of the liquidation/restructuring of the market position of the defaulted clearing participant. The key components of market risk are interest and currency risks.

INTEREST RATE RISK

Interest rate risk is the risk of changes on interest income or the financial instruments price due to the interest rate changes.

The Group's result is exposed to the effects of fluctuations on the prevailing levels of market interest rates on its financial positions and cash flows. Interest margin may increase, decrease or lead to losses as a result of unexpected movements.

Management of the relevant Group entities is responsible for asset-liability management regarding relevant individual Group entities.

Designated functional units within individual Group entities and at the Group level are responsible for interest rate risk management.

In order to measure the impact of interest rate risk on the fair value of financial instruments the Group conducts periodic assessments of potential losses, which may be triggered by negative changes on market environment. The Risk Management Department conducts periodic monitoring of the current financial results of the Group and its entities, assesses the sensitivity of the impact of interest rate risk on portfolio fair value and income.

The majority of the Group's transactions is represented by fixed income instruments, and hence the contractual maturity dates are also the dates of changes on interest rates.

The impact of changes on fair value of financial assets on the income, losses and equity is conducted based on the interest rates existing as at December 31, 2018 and 2017, and reasonably possible changes of 150 bps. Corresponding negative and positive results shown on the yield curve are as follows:

	Year ended December 31, 2018		Year ended December 31, 2017	
	Net profit	**Equity**	**Net profit**	**Equity**
150 bp parallel rise	(82,4)	(6 772,8)	-	(8 004,8)
150 bp parallel fall	85,3	6 712,3	-	7 815,7

CURRENCY RISK

Currency risk is the risk of changes on financial instruments value due to the exchange rates fluctuations. The financial state and cash flows of the Group are subject to the influence of such fluctuations. The main source of currency risk are open foreign currency positions.

NCC being part of the Group is a CCP on the of FX market. NCC limits currency risk on FX market through the application of the following instruments: mechanism of currency rates restrictions within trading session, trading limits system, margining system, mechanism of open currency positions assurance, DVP principle, special swap facilities.

NCC defines currency risk on the course of clearing arising from currency pairs volatility. In this regard for market risk management NCC monitors the conditions of internal and external FX markets and sets limits on intraday rate fluctuations within trading sessions on accordance with current market environment.

The Group's exposure to foreign currency exchange rate risk is presented on the tables below:

	RUB	USD	EUR	Other currencies	December 31, 2018, Total
FINANCIAL ASSETS					
Cash and cash equivalents	38 381,1	121 623,3	245 899,9	10 491,6	**416 395,9**
Financial assets at FVTPL	117,8	3 188,5	11,1	4,1	**3 321,5**
Due from financial institutions	35 314,1	55 791,2	-	7,0	**91 112,3**
CCP financial assets	2 620 844,8	601 664,9	89 510,5	-	**3 312 020,2**
Financial assets at FVTOCI	112 637,3	64 427,9	33 687,2	-	**210 752,4**
Other financial assets	927,7	66,7	6,5	6,0	**1 006,9**
Total financial assets	**2 808 222,8**	**846 762,5**	**369 115,2**	**10 508,7**	**4 034 609,2**
FINANCIAL LIABILITIES					
Balances of market participants	81 691,9	193 004,7	315 073,0	10 431,8	**600 201,4**
Overnight bank loans	5 003,1	-	-	-	**5 003,1**
CCP financial liabilities	2 620 844,8	601 664,9	89 510,5	-	**3 312 020,2**
Distributions payable to holders of securities	8 309,4	16 303,8	61,2	1,6	**24 676,0**
Margin account	-	979,6	-	-	**979,6**
Other financial liabilities	2 651,5	54,3	110,9	35,3	**2 852,0**
Total financial liabilities	**2 718 500,7**	**812 007,3**	**404 755,6**	**10 468,7**	**3 945 732,3**
Derivatives	**525,1**	**(35 364,3)**	**35 764,4**	**0,1**	**925,2**
Open position	**90 247,2**	**(609,1)**	**124,0**	**40,1**	

	RUB	USD	EUR	Other currencies	December 31, 2017, Total
FINANCIAL ASSETS					
Cash and cash equivalents	82 764,9	40 506,8	122 736,9	27 240,0	**273 248,6**
Due from financial institutions	6 839,0	52 264,0	-	1 188,9	**60 291,9**
CCP financial assets	2 029 680,1	382 205,3	18 198,4	-	**2 430 083,8**
Investments available-for-sale	123 471,4	60 927,7	30 730,7	2,4	**215 132,2**
Other financial assets	625,0	56,2	5,4	48,3	**734,9**
Total financial assets	**2 243 380,4**	**535 960,0**	**171 671,4**	**28 479,6**	**2 979 491,4**
FINANCIAL LIABILITIES					
Balances of market participants	121 812,2	138 070,1	173 940,8	27 183,1	**461 006,2**
CCP financial liabilities	2 029 680,1	382 205,3	18 198,4	-	**2 430 083,8**
Distributions payable to holders of securities	2 445,8	61,0	1,0	-	**2 507,8**
Margin account	-	384,6	-	-	**384,6**
Other financial liabilities	2 649,5	35,2	96,1	21,2	**2 802,0**
Total financial liabilities	**2 156 587,6**	**520 756,2**	**192 236,3**	**27 204,3**	**2 896 784,4**
Derivatives	**(4 379,4)**	**(15 879,5)**	**21 890,0**	**(1 223,8)**	**407,3**
Open position	**82 413,4**	**(675,7)**	**1 325,1**	**51,5**	

The following exchange rates are applied during the period:

	December 31, 2018		December 31, 2017	
	USD	**EUR**	**USD**	**EUR**
Minimum	55,6717	67,8841	55,8453	59,6124
Maximum	69,9744	81,3942	60,7503	71,9527
Average	62,9264	74,1330	58,3077	66,0215
Year-end	69,4706	79,4605	57,6002	68,8668

In addition to projecting and analysing its earnings and debt profile by currency, the Group reviews sensitivities to movements on exchange rates which are appropriate to market conditions. The Group has considered movements on the Euro and the US Dollar over the year ended December 31, 2018 and 2017, and has concluded that the following movements on rates are reasonable levels to measure the risk to the Group:

	December 31, 2018	December 31, 2017
Movement on USD/RUB rate	15%	6%
Movement on EUR/RUB rate	20%	16%

The impact of these movements on post-tax profit for the years ended December 31, 2018 and 2017, and equity as at December 31, 2018 and 2017, is set out on the table below:

	December 31, 2018		December 31, 2017	
	USD	**EUR**	**USD**	**EUR**
	15%	20%	6%	16%
Ruble appreciation	73,1	(19,8)	32,4	(169,6)
Ruble depreciation	(73,1)	19,8	(32,4)	169,6

OPERATIONAL RISK

Operational risk is the risk of direct or indirect losses arising from a wide variety of risk events associated with the internal processes, personnel, technology and infrastructure, and from external factors (other than credit, market and liquidity risks) such as those arising from legal and regulatory requirements and generally accepted standards of corporate behaviour or IT failure.

The Supervisory Board has overall responsibility for the oversight of operational risk management, reviewing risk management policies and procedures. The risk assessment, reporting and control procedures vary by exposure type, but share a common methodology developed and updated periodically by the risk management personnel.

Both external and internal risk factors are identified and managed throughout the business units within their functional duties. The primary responsibility for the implementation of controls to address operational risk is assigned to management within each business unit.

Operational risk management includes reputational, compliance and legal risks governance as well.

Moreover, strategic risk (risk of non-achievement of strategic goals within certain deadline or resources) is also monitored and managed under the operational risk management framework.

LEGAL RISK

Legal risk is associated with losses due to breaches of contractual obligations, trial, criminal and administrative liability of the group entities and/or their management on the performance of their official duties. Losses attributed to legal risk are recorded on risk events database along with operational risk losses.

Legal risk management procedures include:
- monitoring of legislation and internal procedures for compliance with the up-to-date requirements on a regular basis;
- setting quantitative and volume limits for legal claims and control over limits set;

- analysis of legal basis for all new products and services;
- update of internal regulations on order to prevent fines.

COMPLIANCE RISK

Compliance risk is the risk of losses resulting from Group activities being inconsistent with the law, the Charter and internal regulations. Compliance risk is solely managed by Internal Control department that takes the following actions on order to prevent losses due to compliance risk realization:

- legislation monitoring;
- interaction with the regulatory authorities regarding the specifics of upcoming regulation;
- compliance risk identification on existing and planned internal procedures;
- best-practice analysis of internal control measures.

REPUTATIONAL RISK

Reputational risk is the risk of losses due to the negative public view on the operational (technical) stability of the Group, its service quality and business on general. In order to avoid such losses the Group constantly monitor its appearance on media along with internal processes using the methodology of assessment the impact of each event. The major source of reputational risk is realization of operational risk, specifically when it becomes public. Thus, all actions taken to prevent the Group from operational risk at the same time help to decrease the level of reputational risk.

Offsetting of Financial Instruments

Gross claims and liabilities with individual counterparties under CCP currency transactions are offset on accordance with IAS 32.

Direct and reverse repo transactions of CCP with individual counterparties are subject to clearing rules that create a contingent right of set-off that does not qualify for offsetting. Clearing participants are required to deposit collateral on the form of cash or securities for current deals and make contribution to a risk-covering fund, as described on Note 35. Clearing rules give the Group right to use these amounts under certain conditions (e.g. on case of default). However, offsetting criteria is not met as there is no intention either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Reverse repo transactions with financial institutions are subject to master agreement that gives the Group right to settle amounts relating to these transactions on a net basis under certain conditions (e.g. on case of default), but offsetting criteria is not met as there is no enforceable right to set off on the normal course of business.

The table below shows financial assets and liabilities offset on the statement of financial position, as well as the effect of clearing agreements that do not result on an offset on the statement of financial position:

				Related amounts not set off on the statement of the financial position		
	Gross claims	**Gross liabilities**	**Net amount presented on financial statements**	**Financial instruments**	**Cash collateral received**	**Net amount**
December 31, 2018						
Due from financial institutions						
(reverse repo receivables from financial institutions)	48 382,7	-	48 382,7	(48 382,7)	-	-
CCP financial assets (repo transactions)	3 310 008,3	-	3 310 008,3	(3 310 008,3)	-	-
CCP financial assets (currency transactions)	2 806,2	(794,3)	2 011,9	-	(2 011,9)	-
CCP financial liabilities (repo transactions)	-	(3 310 008,3)	(3 310 008,3)	3 310 008,3	-	-
CCP financial liabilities (currency transactions)	794,3	(2 806,2)	(2 011,9)	2 011,9	-	-
Margin account under reverse repo	-	(979,6)	(979,6)	-	-	(979,6)
December 31, 2017						
Due from financial institutions						
(reverse repo receivables from financial institutions)	46 935,2	-	46 935,2	(46 935,2)	-	-
CCP financial assets (repo transactions)	2 428 117,0	-	2 428 117,0	(2 428 117,0)	-	-
CCP financial assets (currency transactions)	3 234,3	(1 267,5)	1 966,8	-	(1 966,8)	-
CCP financial liabilities (repo transactions)	-	(2 428 117,0)	(2 428 117,0)	2 428 117,0	-	-
CCP financial liabilities (currency transactions)	984,7	(2 951,5)	(1 966,8)	-	-	(1 966,8)
Margin account under reverse repo	-	(384,6)	(384,6)	-	-	(384,6)

Events after the Reporting Date

As at July 20, 2019 the new capital adequacy requirements for stock exchanges come into force on accordance with 4824-U "About the scale and methodology of stock exchange's capital adequacy ratio calculation". The ratio is to be calculated as the relation of difference of own funds, stock exchange's investments and its off-balance sheet liabilities to the quarterly amount of operational expenses, and its minimal required value is 100%. According to the preliminary assessment the Group is on compliance with the new capital adequacy requirements.

In January 2019 the Group acquired 3,37% share on Kazakhstan Stock Exchange JSC (KASE). As at October 10, 2018 the Group and KASE signed a strategic partnership agreement. Under the agreement, the Group is to acquire up to 20% share capital of KASE. The main aims of the partnership between the exchanges are: facilitation of mutual access to both countries markets for professional market participants and investors, delivering the Group's trading and clearing IT solutions to enhance infrastructure reliability and improve efficiency of KASE's markets and establishing the CCP, support KASE to hold an IPO.

In the first quarter of 2019 events occurred to the Group's subsidiary operating as a Commodity Delivery Operator impeding the inspection of commodities stored on some certified grain warehouses. The risks of a possible damage or shortfall of commodities are fully insured.

In the first quarter 2019 the Group's management promptly detected several incorrectly processed administrative payments not connected with the Group's trading and clearing activities. Management immediately introduced a set of necessary measures to resolve the situation and improved control procedures to avoid similar mistakes on the future. Management estimates that the final impact on the Group's 2019 financial results will be immaterial.

Retail investors represent an important source of financial resources for the economy. The online Marketplace for financial products will facilitate relations between retail investors and financial service providers and accelerate the involvement of individuals in the financial sector. Moscow Exchange seeks to attract long-term investors who will have the opportunity to access both traditional banking products and exchange-traded instruments via a single window

Anna Kuznetsova,
Managing Director
of the Equities and Bond Market

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Information on major transactions and related party transactions

MAJOR TRANSACTIONS

In 2018, the Exchange executed no transactions recognized as major transactions in accordance with Federal Law No. 208-FZ on Joint-Stock Companies dated 26 December 1995.

The Charter of Moscow Exchange does not define any other transactions that are subject to the major transactions approval procedure.

RELATED PARTY TRANSACTIONS

In the 2018 reporting year, the Exchange performed transactions that were recognized as related party transactions in accordance with Federal Law No. 208-FZ on Joint-Stock Companies dated 26 December 1995, and were subject to approval in accordance with Chapter XI thereof.

Information on such transactions is stated in the Report on the Moscow Exchange's Interested Party Transactions for 2018 (the "Report"), approved on 20 March 2019 by the Supervisory Board of the Exchange (Minutes No. 17). The Report is available on the website of MOEX: **http://moex.com/s1457 .**

Organisational chart of Moscow Exchange

CHAIRMAN OF THE EXECUTIVE BOARD (CEO)

CFO, Member of the Executive Board

- IR
- Finance
- Tax
- Accounting
- Procurement

COO, Member of the Executive Board

- Trading & Clearing Systems Development
- Integration Services Development
- Trading & Supporting Systems Maintenance
- Information & Analytics Systems and Data Warehouses
- Operations
- Corporate Systems
- Department of Operations
- Administration
- Document Flow Management
- Financial & Customized Trading Systems Development and Maintenance
- Technical Support

Managing Director of the Equity & Bond Market, Member of the Executive Board

- Bond Market
- Equity Market
- Service Development
- Investment & Innovations
- Listing
- Indices
- Marketplace

Managing Director of the Money and Derivatives Markets, Member of the Executive Board

- Derivatives Market
- Money Market
- FX Market
- Commodities Market
- Regional Development
- Product Marketing & Development
- Market Data + Services
- Client Support
- Standartised OTC Derivatives Market
- Project Management

Business Development

- Relations with key accounts and issuers
- GR
- Strategy
- Corporate Communications
- Internal Control
- Legal Services
- Corporate Governance
- Human Resources
- Security
- Operational Risks, Information Security & Business Continuity

SUPERVISORY BOARD

- Internal Audit

Supply chain

PROCUREMENT POLICY

The Group's procurement process is centralized and governed by the Regulations on Moscow Exchange Procurement Activities as well as procedures that dictate procurement interaction between Moscow Exchange and other Group companies.

STRATEGIC PROCUREMENT PRIORITIES

The existing procurement framework helps to make fair choices among the most technologically advanced offers, ensure appropriate transparency in relation to suppliers and promote competition.

The priorities of Moscow Exchange's supply chain management strategy are:

- transparency concerning procurement: any supplier can complete the supplier form on Moscow Exchange's website (http://moex.com/s273); auctions are held on the B2B electronic trading platform;
- equality, fairness, no discrimination or unreasonable restrictions on competition among procurement participants: price negotiations are held only with short-listed bidders with proposals of similar quality;
- no additional competitive commercial stage is allowed after the announcement of the final request for proposals. An exception can be made if the initiator of the tender changes the terms of reference, or if procurement is consolidated, which is considered a new procurement. However, additional commercial negotiations can only be held with the winner;
- consolidation of volumes and awarding of long-term contracts to maximize economic effect;
- aiming to expand the competitive environment by attracting alternative suppliers.

In accordance with the priorities of the strategy, all suppliers – regardless of the size of the business and the country of registration – have equal rights to participate if they comply with the transparent, justified qualification criteria.

Ensuring the effectiveness of procurement

In order to ensure effective procurement, proposals are benchmarked against the cost of service in the previous period, or the best bid is selected from a short list of proposals of similar quality. Costs are benchmarked against the market, and any changes are analyzed. Depending on the scope, transactions are approved at the level of the procurement unit, Procurement Commission, Executive Board or Supervisory Board. For each transaction, regardless of its value, procurement records are kept and approved, indicating savings achieved and methods used to measure savings. The Security Department assesses counterparty risks for all suppliers. Audit data are valid for up to one year. Based on audit results, contracts are not awarded to suppliers with a high level of risk. Assessment covers only economic risks.

Procurement volumes

	Total	Tenders	Auctions	Procurementfrom a singlesupplier(contractor,provider)	Other procurement methods	
		Open	Open, electronic		Closed	Open, electronic
Total number of tenders, other procurement methods (lots) and purchases from a sole supplier (contractor, provider)	385	0	0	174 (incl. contracts supplementary to existing ones)	130	81 (incl. orders under framework agreements executed through the ETP)
Number of awarded contracts	597	No relevant statistics are collected. The number of contracts does not match the number of procurement events (purchases) as several contracts may be awarded within one event due to scaling up to the group of companies.				
The number of contracts terminated by the parties	33					

Economic effect of tenders

	Total initial (maximum) amountof tender contracts (lots), otherprocurement methods and theamount of contracts (RUB mln) entered into with a sole supplier (contractor,provider)	Total amount of awarded contracts (RUB mln)	Savings	
			RUB mln	%
2016	5,712.3	4,978.4	733.9	12.8%
2017	2,745.9	2,323.4	422.5	15.4%
2018	4,372.0	3,840.0	532.0	12.2%

ESG Components

GOVERNANCE

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Indicator	GRI Standards	Page
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Approach to disclosing key financial and tax information	201-1	140-205
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Indicator	GRI Standards	Page
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Water consumption		80
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Indirect greenhouse gas emissions	102-13	Not relevant
Air pollutant emissions	305-7	Not relevant
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Waste generation	102-56	79
External assurance for environmental indicators	102-56	Not conducted
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Anti-corruption policy

Moscow Exchange adheres to high anti-corruption and bribery standards. Bribery and corruption risk management is based on key principles defined in the Moscow Exchange Anti-Corruption Policy adopted in 2015. These principles include prohibition of any actions related to corruption and bribery, investigating situations with signs of, or suggesting corruption risk, an analysis of risk related to counterparty exposures and staff training.

The MOEX Anti-Corruption Policy outlines the following:

- the prohibition of giving/taking anything of value (including gifts) in attempt to facilitate decision-making;
- the prohibition of making deals with third persons acting on behalf of, or for Exchange;
- a collegial body must be in place to make decisions on entering into contracts;
- anti-corruption clauses must be inserted into contracts;
- counterparty due diligence;
- employees should be enabled to declare (also anonymously) the likelihood of corruption risk

Report on Moscow Exchange Compliance with the Principles and Recommendations of the Corporate Governance Code

This Report on Compliance with the Principles and Recommendations of the Corporate Governance Code was reviewed by the Supervisory Board of Moscow Exchange at the meeting held on the Supervisory Board meeting on 22 March 2019 (Minutes No. 17).

The Supervisory Board confirms that the data quoted herein contain comprehensive and reliable information on the Company compliance with the principles and recommendations of the Corporate Governance Code for the 2018 reporting year.

The Annual Report sections describe the most significant aspects of the corporate governance model and practices at Moscow Exchange, as well as the approach to assessing compliance with the corporate governance principles legitimized in the Corporate Conduct Code.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
1.1	**The company shall ensure equal and fair treatment of all shareholders when they exercise their right to participate in the company's governance.**			
1.1.1	The company creates the most favorable conditions for its shareholders to participate in the general meetings of shareholders and develop informed positions on issues on its agenda, as well as provide them with the opportunity to coordinate their actions and express their opinions on issues being discussed.	1. the Company's internal document approved by the General Meeting of Shareholders and governing the procedures for holding the General Meeting is in the public domain. 2. the Company provides an easy-to-access way to communicate with the community, such as a "hotline", an email address or Internet forum that enables shareholders to express their opinion and to put forward issues to the agenda pending preparation for the General Meeting. These actions were taken by the Company the day before each general meeting held in the reporting period.	✓ complied with partially complied with not complied with	
1.1.2	Procedures for notification of the general meeting and provision of materials for it should enable shareholders to get properly prepared for participation therein.	1. the notice of the General Meeting of Shareholders was posted (published) on the company's website at least 30 days prior to the General Meeting date. 2. the notice of the meeting specifies the venue of the meeting and the documents required to get access to the premises. 3. Access to the information on the person who proposed the agenda items and the one who nominated candidates to the Board of Directors and the Internal Audit Committee of the Company was provided to shareholders.	✓ complied with partially complied with not complied with	
1.1.3	During the preparation for and convening of the general meeting, shareholders should be able to freely and in a timely manner receive information about the meeting and materials related to it, pose questions to members of the company's executive bodies and board of directors, and to communicate with each other.	1. Shareholders were able to ask members of the executive bodies and members of the Company's Board of Directors before and during the Annual General Meeting that took place during the reporting period. 2. the viewpoints of the Board of Directors (including any special opinions included into the minutes) on each agenda item of the General Meetings conducted during the reporting period were included into the materials of the General Meeting of Shareholders. 3. the Company provided shareholders with the appropriate entitlement with the access to the list of persons eligible to attend the General Meeting, starting from the date of its receipt by the Company, in all cases of holding the General Meetings in the reporting period.	✓ complied with partially complied with not complied with	
1.1.4	There should be no unjustified difficulty in preventing shareholders from exercising their right to demand that a general meeting be convened, nominate candidates to the company's governing bodies, and to place proposals on its agenda.	1. in the reporting period, shareholders were entitled, within not less than 60 days from the end of the respective calendar year, to put forward proposals to be included into the agenda of the Annual General Meeting. 2. in the reporting period, the Company did not refuse to accept proposals to the agenda or candidates to the Company's bodies due to misprints and other insignificant defects in shareholder proposal.	✓ complied with partially complied with not complied with	
1.1.5	Each shareholder should be able to freely exercise his right to vote in a straightforward and convenient way.	1. the Company's internal document (internal policy) contains the provisions, whereby each participant in the General Meeting may, before completion of the respective meeting, to require a copy of the ballot completed by the shareholder and certified by the tallying commission.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
1.1.6	Procedures for holding a general meeting set by the company should provide equal opportunity to all persons present at the general meeting to express their opinions and ask questions that might be of interest to them.	1. When General Meetings of Shareholders were held in the reporting period in the form of an in-person meeting (joint presence of shareholders), sufficient time was allowed for reports on agenda items and to discuss these issues. 2. Nominees to the Company's management team and oversight bodies were available to answer shareholders' questions at the meeting at which they were voted upon. 3. the Board of Directors reviewed the use of telecommunications tools to provide shareholders with remote access to participate in the General Meetings in the reporting period, when making decisions related to preparation and holding of the General Shareholders' Meetings.	✓complied with partially complied with not complied with	
1.2	**Shareholders are provided with an equitable and fair opportunity to participate in the company's profits through the distribution of dividends.**			
1.2.1	The company should develop and put in place a transparent and clear mechanism for determining the amount of dividends and their payment.	1. the dividend policy of the Company was developed, approved by the Board of Directors, and disclosed. 2. If the Company's dividend policy uses the Company's reporting measures to determine the amount of dividends, the relevant dividend policy provisions incorporate the consolidated measures of financial statements.	✓complied with partially complied with not complied with	
1.2.2	The company should not make a decision on the payment of dividends, if such decision, without formally violating limits set by law, is unjustified from the economic point of view and might lead to the formation of inaccurate assumptions about the company's activity.	1. the Company's dividend policy clearly explains under what financial/economic circumstances the Company would not [ay dividends.	✓complied with partially complied with not complied with	
1.2.3	The company should not allow deterioration of dividend rights of its existing shareholders.	1. in the reporting period, the Company did not take steps that impaired existing shareholders' dividend rights.	✓complied with partially complied with not complied with	
1.2.4	The company should strive to rule out any ways through which its shareholders can obtain any profit or gain at the company's expense other than dividends and distributions of its liquidation value.	1. To eliminate other methods for shareholders to generate profit (income) at the Company's expense, other than dividends and the liquidation value, the Company's internal documents establish the controls that ensure timely identification and procedure for approval of the transactions with the persons affiliated (related) with substantial shareholders (the persons entitled to dispose of the votes attached to voting shares), where the law does not formally recognize such transactions as related party transactions.	✓complied with partially complied with not complied with	
1.3	**The system and practices of corporate governance should ensure equal terms and conditions for all shareholders owning shares of the same class (category) in a company, including minority and foreign shareholders, as well as their equal treatment by the company.**			
1.3.1	The company should create conditions which would enable its governing bodies and controlling persons to treat each shareholder fairly, in particular, ruling out the possibility of any abuse of minority shareholders by major shareholders.	1. During the reporting period, the procedures for management of potential conflicts of interests among the existing shareholders are efficient, and the Board of Directors paid enough attention to conflicts among shareholders, if any.	✓complied with partially complied with not complied with	
1.3.2	The company should not perform any acts which will or may result in artificial reallocation of corporate control.	1. Quasi-treasury shares are not available or were not used in the voting during the reporting period.	✓complied with partially complied with not complied with	
1.4	**Shareholders should be provided with reliable and efficient means of recording their rights in shares as well as with the opportunity to freely dispose of such shares in a non-onerous manner.**			
1.4	Shareholders should be provided with reliable and efficient means of recording their rights in shares as well as with the opportunity to freely dispose of such shares in a non-onerous manner.	1. Quality and reliability of the business pursued by the Company's registrar to keep the register of the securities' holders meets the Company's and its shareholders' needs.	✓complied with partially complied with not complied with	
2.1	**The Board of Directors shall be in charge of strategic oversight of the company, determine major principles of and approaches to creation of a risk management and internal control system within the company, monitor the activity of the company's executive bodies, and carry out other key functions.**			
2.1.1	The board of directors should be responsible for decisions to appoint and remove members of executive bodies, including in connection with their failure to properly perform their duties. the board of directors should also ensure that the company's executive bodies act in accordance with an approved development strategy and main business goals of the company.	1. the Board of Directors has the powers stipulated in the Articles of Association to appoint, dismiss, and determine conditions of the contracts, with respect to members of executive bodies. 2. the Board of Directors reviewed the report(s) of the sole executive body and members of the collegial executive body regarding fulfillment of the Company's strategy.	✓complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.1.2	The board of directors should establish basic long-term targets of the company's activity, evaluate and approve its key performance indicators and principal business goals, as well as evaluate and approve its strategy and business plans in respect of its principal areas of operations.	1. During the reporting period, meetings of the Board of Directors reviewed the progress of execution and updating the strategy, approval of the Company's financial and business plan (budget), and the review of the criteria and measures (including intermediate) to implement the Company's strategy and business plans.	✓complied with partially complied with not complied with	
2.1.3	The board of directors should determine principles of and approaches to creation of the company's risk management and internal control systems.	1. the Board of Directors determines the principles and approaches to the company's risk management and internal control systems. 2. the Board of Directors assessed the company's risk management and internal control systems during the reporting period.	✓complied with partially complied with not complied with	
2.1.4	The board of directors should determine the company's policy on remuneration due to and/or reimbursement of costs incurred by its board members, members of its executive bodies and other key managers.	1. the Company has developed and implemented the policy(-ies) approved by the Board of Directors on remuneration and reimbursement of costs incurred by the members of the Board of Directors, the Company's executive bodies and other key managers of the Company. 2. the meetings of the Board of Directors reviewed issues related to the above policy (-ies) during the reporting period.	✓ complied with partially complied with not complied with	
2.1.5	The board of directors should play a key role in prevention, detection and resolution of internal conflicts between the company's bodies, shareholders and employees.	1. the Board of Directors plays a key part in prevention, detection and resolution of internal conflicts. 2. the Company has established the system to identify the transactions related to the conflict of interests and the system aimed at resolving such conflicts	complied with ✓partially complied with not complied with	1. Complied with. 2. Partly complied with. The Company established the system to identify the transactions related to the conflict of interests arising in executing transactions and in the activities of the Company in relation to any employees and members of executive governance bodies, as well as the system of efforts aimed at settlement of such conflicts. the Supervisory Board approved the relevant internal document that aims to prevent, identify and settle such conflicts of interest, and in particular sets out the rules to be followed in pursuing any transactions that may result in a conflict. In addition, the head of the Company's structural unit with the corporate secretary's functions exercises a number of powers in relation to preventing and settling corporate conflicts. The reason that the Exchange did not fully comply with this principle in the reporting year is that the internal document on preventing conflicts of interest among governance bodies and shareholders determining, among other things, a system for the identification of transactions related to conflicts of interests, and a system of measures aimed at settling such conflicts (in addition to existing ones), was approved Supervisory Board for review in 2018.
2.1.6	The board of directors should play a key role in ensuring that the company is transparent, discloses information in full and in a timely manner, and provides its shareholders with unhindered access to its documents.	1. the Board of Directors approved the Regulations on information policy. 2. the Company determined the persons in charge of implementation of the information policy.	✓complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.1.7	The board of directors should monitor the company's corporate governance practices and play a key role in material corporate events.	1. During the reporting period, the Board of Directors reviewed the corporate governance practices of the Company.	complied with ✓ partially complied with not complied with	The issue of the company's corporate governance practice was on the agenda for the last meeting of the Supervisory Board in 2018, i.e. on 13 December 2018. However, given the other higher-priority issues on the agenda and time limits provided for a qualitative discussion of the given issue, it was decided to postpone consideration of the issue. As a separate matter, in 2018 the Supervisory Board also considered the report on compliance with the Bank of Russia Corporate Governance Code recommendations. Delivered analysis and assessment is an essential tool for corporate governance practice improvement. in particular, to implement certain corporate governance principles, in 2018 the Company amended the Corporate Governance Code. the new version of the Company's Corporate Governance Code was considered by the Audit Committee in December 2018 and approved by the Supervisory Board on 15 February 2019. The issue "On the company's corporate governance practice" will be discussed at the a meeting in presentia in 2019. To comply with this principle, it is expected that the Supervisory Board will be further discussing the issue during a year, rather than at the year-end, so to ensure better planning of changes in the Company's corporate governance practice.
2.2	**The Board of Directors should be accountable to the company's shareholders.**			
2.2.1	Information about the board of directors' work should be disclosed and provided to shareholders.	1. the Company's annual report for the reporting period includes information on the attendance rate of meetings of the Board of Directors and its committees by individual directors. 2. the annual report contains information on the principal findings of the Board of Directors' performance assessment in the reporting period.	✓ complied with partially complied with not complied with	
2.2.2	The chairman of the board of directors must be available to communicate with the company's shareholders.	1. the Company has a transparent procedure that enables shareholders to submit their questions and their views to the Chairman of the Board of Directors.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.3	**The board of directors should be an efficient and professional governing body of the company able to make objective and independent judgments and pass resolutions in the best interests of the company and its shareholders.**			
2.3.1	Only persons with impeccable business and personal reputation should be elected to the board of directors; such persons should also have knowledge, skills, and experience necessary to make decisions that fall within the jurisdiction of the board of directors and to perform its functions efficiently.	1. the procedure for assessing the efficiency of operations of the Board of Directors adopted in the Company comprises, in particular, the assessment of professional qualifications of members of the Board of Directors. 2. in the reporting period, the Board of Directors (or its Nominating Committee) assessed the nominees to the Board of Directors in terms of the required experience, expertise, goodwill, lack of the conflict of interests, etc.	✓ complied with partially complied with not complied with	
2.3.2	Board members should be elected pursuant to a transparent procedure enabling shareholders to obtain information about respective candidates sufficient for them to understand the candidates' personal and professional qualities.	1. in all instances when the General Meeting of Shareholders, the agenda of which included election of the Board of Directors, was held in the reporting period, the Company provided shareholders with the life record data for all the nominees to the Board of Directors, scores assigned to such nominees by the Board of Directors (or its Nominating Committee) and information on conformity of the nominees to the independence criteria, according to the recommendations in paragraphs 102 to 107 of the Code and the nominees' written consent to be elected to the Board of Directors.	✓ complied with partially complied with not complied with	
2.3.3	The composition of the board of directors should be balanced, in particular, in terms of qualifications, expertise, and business skills of its members. the board of directors should enjoy the confidence of the shareholders.	1. As part of the assessment of the Board of Directors in the reporting period, the Board of Directors reviewed its own needs in terms of professional qualifications, experience and business skills.	✓ complied with partially complied with not complied with	
2.3.4	The membership of the board of directors of the company must enable the board to organize its activities in a most efficient way, in particular, to create committees of the board of directors, as well as to enable substantial minority shareholders of the company to elect a candidate to the board of directors for whom they would vote.	1. As part of the assessment of the Board of Directors held in the reporting period, the Board of Directors reviewed the conformity of the number of members of the Board of Directors to the Company's needs and the shareholders' interests.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.4	**The Board of Directors should include a sufficient number of independent directors.**			
2.4.1	An independent director should mean any person who has the required professional skills and expertise and is sufficiently able to have his/her own position and make objective and bona fide judgments, free from the influence of the company's executive bodies, any individual group of its shareholders or other stakeholders. It should be noted that, under normal circumstances, a candidate (or an elected director) may not be deemed to be independent, if he/she is associated with the company, any of its substantial shareholders, material trading partners or competitors, or the government.	1. During the reporting period, all independent members of the Board of Directors met the independence criteria specified in recommendations 102 to 107 of the Code or were recognized as such by resolution of the Board of Directors.	✓ complied with partially complied with not complied with	
2.4.2	It is recommended to evaluate whether candidates nominated to the board of directors meet the independence criteria as well as to review, on a regular basis, whether or not independent board members meet the independence criteria. When carrying out such evaluation, substance should take precedence over form.	1. in the reporting period, the Board of Directors (or the Nominating Committee of the Board of Directors) formed an opinion about the independence of each nominee to the Board of Directors and submitted the relevant opinion to shareholders. 2. in the reporting period, the Board of Directors (or the Nominating Committee of the Board of Directors) reviewed the independence of the existing members of the Board of Directors, as indicated by the Company in the annual report as independent directors, at least once. 3. the Company has drafted procedures that determine the necessary actions to be taken by a member of the Board of Directors, if he/she loses his/her independence, including the obligations to notify in a timely manner the Board of Directors accordingly.	✓ complied with partially complied with not complied with	
2.4.3	Independent directors should account for at least one third of all directors elected to the board of directors.	1. Independent directors shall account for at least one third of the Board of Directors.	✓ complied with partially complied with not complied with	
2.4.4	Independent directors should play a key role in prevention of internal conflicts in the company and performance by the latter of material corporate actions.	1. Independent directors (who do not have any conflict of interests) preliminarily estimate the substantial corporate actions related to a potential conflict of interests, and the findings of such assessment are submitted to the Board of Directors.	✓ complied with partially complied with not complied with	In the reporting year, the Company did not record any material corporate actions related to a potential conflict of interest.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.5	**The Chairman of the Board of Directors should help the Board carry out the functions imposed on it in a most efficient manner.**			
2.5.1	It is recommended to either elect an independent director to the position of the chairman of the board of directors or identify the senior independent director among the company's independent directors who would coordinate work of the independent directors and liaise with the chairman of the board of directors.	1. the Chairman of the Board of Directors is an independent director or a senior independent director is identified among independent directors <3> . 2. Role, rights and duties of the Chairman of the Board of Directors (and, if applicable, the senior independent director) are duly determined in the Company's internal documents.	complied with ✓ partially complied with not complied with	Oleg Viyugin, an independent director, was elected the Chairman of the Supervisory Board elected by the AGM in 2018. He then ceased to be qualified as an independent director. However, considering the formal nature of that non-compliance, as well as his expertise and competence, he was recognized as an independent director of the Board (please refer to notes to paragraph 2.8.2). Contrary to the situation when a non-executive director is elected the chairman and a senior independent director is elected to coordinate the work of the Supervisory Board, electing an independent director to the position of the chairman ensures more effective performance of the Supervisory Board, including engagement with other independent directors. In the period to the date of the ADM in 2018, the Chairman of the Board was a non-executive director, that required a Senior Independent Director to be appointed out of the independent directors.
2.5.2	The board chairman should ensure that board meetings are held in a constructive atmosphere and that any items on the meeting agenda are discussed freely. the chairman should also monitor fulfillment of decisions made by the board of directors.	1. Performance of the Chairman of the Board of Directors was assessed as part of the Board of Directors efficiency assessment procedure in the reporting period.	✓ complied with partially complied with not complied with	
2.5.3	The chairman of the board of directors should take any and all measures as may be required to provide board members in a timely fashion with information required to make decisions on issues on the agenda.	1. the duty of the Chairman of the Board of Directors to take efforts to ensure timely filing of documents to members of the Board of Directors on agenda items of the meeting of the Board of Directors is legitimized in the Company's internal documents.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.6	**Board members must act reasonably and in good faith in the best interests of the company and its shareholders, being sufficiently informed, with due care and diligence.**			
2.6.1	Acting reasonably and in good faith means that board members should make decisions considering all available information, in the absence of a conflict of interest, treating shareholders of the company equally, and assuming normal business risks.	1. the Company's internal documents establish that a member of the Board of Directors is obliged to notify the Board of Directors if he/she has a conflict of interest with respect to any agenda item of the meeting of the Board of Directors or a committee of the Board of Directors, before the start of the discussion of the relevant agenda item. 2. the Company's internal documents envisage that a member of the Board of Directors should refrain from voting on any item where he/she has a conflict of interest. 3. the Company establishes the procedure that enables the Board of Directors to obtain professional advice on issues falling within its competence, at the Company's expense.	✓complied with partially complied with not complied with	
2.6.2	Rights and duties of board members should be clearly stated and documented in the company's internal documents.	1. the Company adopted and published the internal document that clearly determines rights and duties of members of the Board of Directors.	✓complied with partially complied with not complied with	
2.6.3	Board members should have sufficient time to perform their duties.	1. Individual attendance of meetings of the Board and committees as well as the time spent on preparation for participation in the meetings was taken into account as part of the assessment procedure of the Board of Directors in the reporting period. 2. According to the Company's internal documents, members of the Board of Directors are obliged to notify the Board of Directors of their intention to join management bodies of other companies (except for the Company's affiliates and dependent companies) and upon such actual appointments.	✓complied with partially complied with not complied with	
2.6.4	All board members should have an equal opportunity to access the company's documents and information. Newly elected board members should be provided with sufficient information about the company and work of its board of directors as soon as practicable.	1. According to the Company's internal documents, members of the Board of Directors are free to gain access to documents and to make requests pertaining to the Company and its affiliates, and the Company's executive bodies are obliged to provide the relevant information and documents. 2. the Company has a formalized program of introductory events for newly elected members of the Board of Directors.	✓complied with partially complied with not complied with	
2.7	**Meetings of the Board of Directors, preparation for them, and participation of Board members therein should ensure efficient work of the Board.**			
2.7.1	It is recommended to hold meetings of the board of directors as needed, with due account of the company's scope of activities and its current goals at the time.	1. the Board of Directors held at least six meetings in the reporting year.	✓complied with partially complied with not complied with	
2.7.2	It is recommended to develop a procedure for preparing for and holding meetings of the board of directors and set it out in the company's internal documents. the procedure should enable shareholders to become properly prepared for such meetings.	1. the Company approved the internal document that governs the procedure for preparation for and holding of meetings of the Board of Directors, which, in particular, stipulates that the notice of the meeting should normally be made at least five (5) days prior to the meeting.	✓complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.7.3	The form of a meeting of the board of directors should be determined with due consideration of importance of issues on the agenda of the meeting. the most important issues should be decided at the meetings held in person.	1. the Articles of Association or the internal document of the Company envisage that the most significant issues (according to the list in Recommendation 168 of the Code) should be considered at in-person meetings of the Board.	complied with ✓partially complied with not complied with	According to the Charter, the issues listed in Recommendation 168 of the Code (except for material related party transactions and placing the issue of delegating the CEO's powers to the asset management company before the AGM for consideration) are decided at the meetings held in person. It is not expected that issues of material related party transactions will be included on the said list, since the Company's Code of Corporate Governance does not classify related party transactions as transactions material for the Company. The Company has set materiality thresholds in terms of amount and subject of a transaction, regardless of parties to the transaction. Placing the issue of delegating the sole executive body's powers to the asset management company before the AGM is not within the Supervisory Board competence, since, in pursuance with the Federal Law on Organized Trading, (1) the Company's sole executive body is elected by the Supervisory Board, and (2) the Organizer of Trading is no authorized to delegate the powers of the sole executive body to other entity (asset manager, asset management company).

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.7.4	Decisions on most important issues relating to the company's business should be made at a meeting of the board of directors by a qualified majority vote or by a majority vote of all elected board members.	1. the Articles of Association of the Company envisage that resolutions on the most critical issues set forth in Recommendation 170 of the Code, shall be adopted at the meeting of the Board of Directors, by a qualified, at least three fourths majority of votes, or by a majority of votes of all elected members of the Board of Directors.	complied with ✓partially complied with not complied with	Most issues listed in Recommendation 170 of the Code, are included on the list of issues that should be decided by a three fourths majority vote of directors participating in the meeting, or by the majority of all votes. The list does not include approval of (1) priority activities, (2) business plan, (3) placing amendments to the Charter before the AGM and approval of major transactions, (4) review of material aspects of controlled entities' activities. The main reason that the Exchange does not fully comply with this principle is in progressive implementation of the Corporate Governance Code recommendations. In 2018, the Audit Committee considered it advisable to add issues in (2), (3) and (4) on the relevant list. The new version of the Company's Charter with amendments described above is supposed to be considered at the AGM in 2019. The issue of priorities approval is not to be added on the list, since priorities are normally described in the strategy approved by a three fourths majority vote of all Supervisory Board members attending the meeting. The Company believes that a preliminary and thorough discussion of most issues including those specified above, by ad-hoc committees allows the Supervisory Board to make decisions unanimously and helps reduce risks related to non-compliance with the principle specified above.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.8	**The Board of Directors should form committees for preliminary consideration of the most important aspects of the company's business.**			
2.8.1	For the purpose of preliminary consideration of any matters of control over the company's financial and business activities, it is recommended to form an audit committee comprised of independent directors.	1. the Board of Directors established an Audit Committee comprising independent directors only. 2. the Company's internal documents determine the objectives for the Audit Committee, including, in particular, any objectives contained in Recommendation 172 of the Code. 3. at least one member of the Audit Committee, which is an independent director, has experience and expertise in drafting, reviewing, assessment and audit of financial statements (accounts). 4. Meetings of the Audit Committee were held at least quarterly during the reporting period.	✓ complied with partially complied with not complied with	
2.8.2	For the purpose of preliminary consideration of any matters of development of efficient and transparent remuneration practices, it is recommended to form a remuneration committee comprised of independent directors and chaired by an independent director who should not concurrently be the board chairman.	1. the Board of Directors set up the Remuneration Committee consisting of independent directors only. 2. the Chairman of the Remuneration Committee is an independent director, other than Chairman of the Board of Directors. 3. the Company's internal documents determine the objectives of the Remuneration Committee, including those contained in Recommendation 180 of the Code.	complied with ✓ partially complied with not complied with	1. Partly compiled with The Nomination and Remuneration Committee of the Supervisory Board performs the functions listed in Recommendation 180 of the Code. The following cases of non-compliance with the independence criteria were identified in the regular revision of the Committee: 1. Y. Denisov, member of the Committee valid in Q1 2018, did not comply fully with the independence criteria. Termination of his appointment as a member of the Committee on the ground of his non-independent status was not initiated as his knowledge and expertise in the area of the financial market as well as a strong background in HR helped achieve thorough and comprehensive consideration of issues and improve the Committee's efficiency. He was not elected to the next Committee. 2. M. Bratanov and O. Viyugin, current members of the Committee, did not comply due to their relation to not-for-profit self-regulatory financial organizations (NFA and NAUFOR, respectively) which are significant counterparties according to the Code. the significant counterparty status was given to the organizations due to their small book values and the Company's sponsorship to them exceeding 2% of the book value; the sponsorship amount was not significant for the Company. M. Bratanov and O. Viyugin did not participate in voting on sponsorship for NFA and NAUFOR. Hence, their relation to the organizations is formal and does not influence their ability to make independent, reasonable and good decisions. Considering the foregoing, expertise and competence of the members and their contribution to good and thorough discussion of issues, the Supervisory Board decided to recognize them as independent directors. With the sufficient numbers of independent directors elected at the AGM in 2019, and they having the required experience and competence, the Company is striving to ensure that the Committee consists of independent directors only. 2. Partly compiled with. During certain periods of the reporting year, the Chairman of the Committee was not an independent director (see comments to paragraph 1 above). 3. Complied with
2.8.3	For the purpose of preliminary consideration of any matters relating to human resources planning (making plans regarding successor directors), professional composition and efficiency of the board of directors, it is recommended to form a nominating committee (a committee on nominations, appointments and human resources) with a majority of its members being independent directors.	1. the Board of Directors established the Nominating Committee (or its objectives specified in Recommendation 186 of the Code are implemented as part of another committee <4>), a majority of which are independent directors. 2. the Company's internal documents determine the objectives of the Nominating Committee (or the relevant committee with a combined functionality), including those contained in Recommendation 186 of the Code.	✓ complied with partially complied with not complied with	The tasks set out in para 186 of the Bank of Russia Corporate Governance Code are carried out by the Nomination and Remuneration Committee.
2.8.4	Taking account of its scope of activities and levels of related risks, the company should form other committees of its board of directors, in particular, a strategy committee, a corporate governance committee, an ethics committee, a risk management committee, a budget committee, a committee on health, security and environment, etc.	1. in the reporting period, the Company's Board of Directors reviewed the conformity of membership in its committees to the objectives assigned to the Board of Directors and to the Company's operating goals. Additional committees were either established or were not recognized as necessary.	✓ complied with partially complied with not complied with	<5> The Company has six committees of the Supervisory Board (namely, the Nomination and Remuneration Committee, Audit Committee, Budget Committee Risk Management Committee, Strategic Planning Committee and the Technical Policy Committee). Additional committees were not recognized as necessary.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
2.8.5	The composition of the committees should be determined in such a way that it would allow a comprehensive discussion of issues being considered on a preliminary basis with due account of a variety of viewpoints.	1. Committees of the Board of Directors are headed by independent directors. 2. the Company's internal documents (policies) contain the provisions whereby persons not included on the Audit Committee, the Nominating Committee and the Remunerations Committee, may attend meetings of the committees upon invitation of the Chairman of the respective committee only.	complied with ✓partially complied with not complied with	1. Partly complied with. The Company has six committees of the Supervisory Board (namely, the Nomination and Remuneration Committee, Audit Committee, Budget Committee Risk Management Committee, Strategic Planning Committee and the Technical Policy Committee). According to resolution of the Supervisory Board, four out of six committees are chaired by independent directors. During a certain period of the reporting year, the Chairman of one of the Committees was no longer compliant with the independence criteria. However, given his expertise and experience, the Supervisory Board recognized him an independent director (see comments to clause 2.8.2). The Supervisory Board was taking decisions on the lineup of the committees and their chairmen depending on whether the directors have sufficient time to perform their duties within the committees, and to ensure comprehensive discussions permitting for a diversity of views. The main reason that the Company does not fully comply with this recommendation is that it elects directors most competent in the relevant areas to chair its Committees, but not all of them fully comply with independence criteria formalities. With the sufficient numbers of independent directors elected at the AGM in 2019, and they having the required experience and competence, the Company is striving to ensure that the Committee consists of independent directors only. 2. Complied with.
2.8.6	The chairmen of the committees should inform the board of directors and its chairman of the work of their committees on a regular basis.	1. During the reporting period, chairmen of the committees reported on the committees' operations to the Board of Directors on a regular basis.	✓complied with partially complied with not complied with	
2.9	**The Board of Directors should evaluate of the quality of its work and that of its committees and Board members.**			
2.9.1	Evaluation of quality of the board of directors' work should be aimed at determining how efficiently the board of directors, its committees and board members work and whether their work meets the company's needs, as well as at making their work more intensive and identifying areas of improvement.	1. Self-assessment or external assessment of the Board of Directors' performance conducted in the reporting period included the assessment of operations of the committees, individual members of the Board of Directors and the entire Board of Directors. 2. the findings of self-assessment or external assessment of the Board of Directors in the reporting period were reviewed at the in-person meeting of the Board of Directors.	complied with ✓partially complied with not complied with	1. Complied with. 2. Not complied with. Self-assessment results were delivered as part of the company's corporate governance practice issue, which was on the agenda for the last meeting of the Supervisory Board in 2018, i.e. on 13 December 2018. However, given the other higher-priority issues on the agenda and time limits provided for a qualitative discussion of the given issue, it was decided to postpone consideration of the issue. This issue will be discussed by the Board at its meeting in presentia in 2019. To comply with this principle, it is expected that the Supervisory Board will be further discussing the issue during a year, rather than at the year-end, so to ensure better planning of changes in the Company's corporate governance practice.
2.9.2	Quality of work of the board of directors, its committees and board members should be evaluated on a regular basis, at least once a year. To carry out an independent evaluation of the quality of the board of directors' work, it is recommended to retain a third party entity (consultant) on a regular basis, at least once every three years.	1. for independent quality assessment of the Board of Directors' performance, an external company (advisor) was engaged by the Company at least once in three recent reporting periods	✓complied with partially complied with not complied with	
3.1	**The company's corporate secretary shall be responsible for efficient interaction with its shareholders, coordination of the company's actions designed to protect the rights and interests of its shareholders, and support efficient work of its Board of Directors.**			
3.1.1	The corporate secretary should have knowledge, experience, and qualifications sufficient for performance of his/her duties, as well as an impeccable reputation and should enjoy the trust of shareholders.	1. the Company adopted and disclosed the internal document – Regulations on the Corporate Secretary. 2. the Company's website and annual report discloses background information on the Corporate Secretary with the same level of detail as for members of the Board of Directors and the executive management of the Company.	✓complied with partially complied with not complied with	
3.1.2	The corporate secretary should be sufficiently independent of the company's executive bodies and be vested with powers and resources required to perform his/her tasks.	1. the Board of Directors approved the appointment, dismissal and additional remuneration of the Corporate Secretary.	✓complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
4.1	**The level of remuneration paid by the company should be sufficient to enable it to attract, motivate, and retain persons having the required skills and qualifications. Remuneration due to board members, the executive bodies, and other key managers of the company should be paid in accordance with a remuneration policy approved by the company.**			
4.1.1	It is recommended that the level of remuneration paid by the company to its board members, executive bodies, and other key managers should be sufficient to motivate them to work efficiently and enable the company to attract and retain knowledgeable, skilled, and duly qualified persons. the company should avoid setting the level of remuneration any higher than necessary, as well as an excessively large gap between the level of remuneration of any of the above persons and that of the company's employees.	1. the Company adopted the internal document(s), the remuneration policy(-ies) for members of the Board of Directors, the executive bodies and other key managers, which clearly describe approaches to remuneration of these persons.	✓complied with partially complied with not complied with	
4.1.2	The company's remuneration policy should be developed by its remuneration committee and approved by the board of directors. with the help of its remuneration committee, the board of directors should monitor implementation of and compliance with the remuneration policy by the company and, should this be necessary, review and amend the same.	1. in the reporting period, the Remuneration Committee reviewed the remuneration policy(-ies) and the practice of its/their implementation and, if necessary, submitted the relevant recommendations to the Board of Directors.	✓complied with partially complied with not complied with	
4.1.3	The company's remuneration policy should provide for transparent mechanisms to be used to determine the amount of remuneration due to members of the board of directors, the executive bodies, and other key managers of the company, as well as to regulate any and all types of payments, benefits, and privileges provided to any of the above persons.	1. the Company's remuneration policy(-ies) contain(s) transparent arrangements on determining the amount of the remuneration of members of the Board of Directors, executive bodies and other key managers of the Company and govern(s) all types of fees, benefits and advantages provided to these persons.	✓complied with partially complied with not complied with	
4.1.4	The company is recommended to develop a policy on reimbursement of expenses which would contain a list of reimbursable expenses and specify service levels provided to members of the board of directors, the executive bodies, and other key managers of the company. Such policy can form part of the company's policy on compensation.	1. the remuneration policy(-ies) or other internal documents of the Company establish(-es) the rules on reimbursement of costs to the members of the Board of Directors, executive bodies and other key employees of the Company.	✓complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
4.2	**The system of remuneration of board members should ensure harmonization of financial interests of the directors with long-term financial interests of the shareholders.**			
4.2.1	A fixed annual fee shall be a preferred form of monetary remuneration for board members. It is not advisable to pay a fee for participation in individual meetings of the board of directors or its committees. It is not advisable to use any form of short-term incentives or additional financial incentives in respect of board members.	1. Fixed annual remuneration was the only monetary form of remuneration for the members of the Board of Directors for work within the Board of Directors during the reporting period.	✓complied with partially complied with not complied with	
4.2.2	Long-term ownership of shares in the company contributes most to aligning financial interests of board members with long-term interests of the company's shareholders. However, it is not recommended to make the right to dispose of shares dependent on the achievement by the company of certain performance results; nor should board members take part in the company's option plans.	1. If the Company's internal document(s), the remuneration policy(-ies), envisage(s) granting of shares to members of the Board of Directors, clear rules for holding shares by members of the Board of Directors, intended to encourage long-term ownership of such shares, should be available and disclosed.	✓complied with partially complied with not complied with	Company's internal documents do not provide for the provision of shares to Supervisory Board members.
4.2.3	It is not recommended to provide for any additional allowance or compensation in the event of early dismissal of board members in connection with a change of control over the company or other circumstances.	1. the Company does not envisage any additional benefits or compensations in case of early termination of powers of the members of the Board of Directors in connection with change of control over the Company or other circumstances.	✓complied with partially complied with not complied with	
4.3	**The system of remuneration due to members of the executive bodies and other key managers of the company should provide that their remuneration is dependent on the company's performance and their personal contributions to the achievement thereof.**			
4.3.1	Remuneration due to members of the executive bodies and other key managers of the company should be set in such a way as to procure a reasonable and justified ratio between its fixed portion and its variable portion that is dependent on the company's results and employees' personal (individual) contributions to the achievement thereof.	1. During the reporting period, the annual performance indicators approved by the Board of Directors were used to determine the amount of variable remuneration of members of executive bodies and other key managers of the Company. 2. During the most recent assessment of the remuneration system for the members of executive bodies and other key managers of the Company, the Board of Directors (the Remuneration Committee) ensured the Company applied an efficient ratio of the fixed remuneration portion to the variable one. 3. the Company has the procedure for refunding to the Company bonuses unlawfully obtained by the members of executive bodies and other key managers of the Company.	complied with ✓partially complied with not complied with	1. Complied with. 2. Partly complied with In the reporting year, there were neither assessment of the remuneration payable to executive body members, No dedicated discussion of a ratio between its fixed portion and its variable portion, since those activities were carried out in 2017. In addition to that, in 2018 the Nomination and Remuneration Committee evaluated a ratio between a fixed portion of remuneration and its variable portion more than once: (1) when setting or changing size of remuneration payable to a member of the Executive Board, (2) when discussing changes in the long-term incentive program. the total size of remuneration due to a member of the Executive Board, inclusive of

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
				a ratio between a fixed portion of remuneration and its variable portion, was also assessed against remuneration payable by peer companies, based on overviews (studies) procured from the leading consulting firms (inclusive of international ones). The Nomination and Remuneration Committee is expected to consider the remuneration system assessment and effectiveness of a ratio between its fixed and variable portions in 2019. 3. Not complied with. The Company does not have in place any procedure whereby any bonus payment unreasonably received by executive body members and other key managers would be restituted to the Company. Such restitution is conducted in accordance with the applicable laws of the Russian Federation. Restitution of unlawfully obtained bonuses to the Company is only possible in court or through a damage restitution procedure. the restitution procedure is set in Chapter 37 and Chapter 39 of the Russian Federation Labor Code, therefore, it is not required to additionally secure this procedure in internal documents of the Company. in case of restitution under the Russian Labor Code, an employee is charged the average monthly salary, with the remaining part collected through court action. In case a wrongful bonus payment is to be returned to the Company and an insufficient amount of the average monthly salary plus the bonus (including deferred parts thereof), the Company will file the action with a court. Seeking to mitigate risks and develop individual accountability concept, the Policy of Remuneration and Compensation of the Company ensures a possibility for the Supervisory Board to take a decision on reducing or cancelling bonus payouts (inclusive of its deferred parts), also in the follow-up of audits by internal/external auditors and regulatory authorities, which allows for the Company to restitute bonus amounts unlawfully obtained by members of the executive bodies. Considering the foregoing, the Company will plan to adhere to the recommendation after the relevant amendments are made to legislation.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
4.3.2	Companies whose shares are admitted to trading on organized markets are recommended to put in place a long-term incentive program for the company's executive bodies and other key managers involving the company's shares (or options or other derivative financial instruments the underlying assets for which are the company's shares).	1. the Company introduced the long-term incentive program for members of executive bodies and other key managers of the Company using shares in the Company (financial instruments based on the shares in the Company). 2. the long-term incentive program for the members of executive bodies and other key managers of the Company implies that the right to sell the shares and other financial instruments used in such programs will not arise until three years from their provision; provided that the right to sell the same is conditional upon achievement of certain performance indicators of the Company.	complied with ✓ partially complied with not complied with	1. Complied with. 2. Partly compiled with. Under the executive long-term incentive plan, the right to dispose of the plan shares vests in stages: in one/two/three years, subject to continued employment. When introducing the program, the Supervisory Board discussed the terms during which the rights under the program may be exercised, and found it expedient to identify opportunities for the rights under the program to be exercised in the stages specified, so to retain and motivate the key staff. The right to dispose shares subjects to the Moscow Exchange Group breakeven in the year preceding to such right. Besides the breakeven indicator, the Program also stipulates for setting of long-term KPIs, which may affect the terms and conditions of the shares disposal rights. the resolution on setting such long-term KPIs and their details shall be taken by the Supervisory Board of the Company upon the recommendation of relevant Committee of the Supervisory Board. During the reporting year, the Nomination and Remuneration Committee was considering the terms and conditions of the long-term incentive program, including the links between achieving certain targets and the right to sell shares under the program. After discussions are completed and recommendations are finalized by the Committee, the Supervisory Board will discuss the terms and conditions of the long-term incentive program at the meeting in 2019. the new long-term incentive program will be adopted and then introduced in late 2019/early 2020.
4.3.3	The amount of severance pay (so-called "golden parachute") payable by the company in the event of early dismissal of a member of the executive body or other key manager at the initiative of the company, provided that there have been no bad faith actions on the part of such person, should not exceed two times the fixed portion of his/her annual remuneration.	1. the amount of compensation (golden parachute) paid by the Company in case of early termination of powers to the members of executive bodies or key managers at the Company's initiative and in the absence of unfair actions on their part, did not exceed double the fixed portion of the annual remuneration in the reporting period.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
5.1	**The company should have in place an efficient risk management and internal control system designed to provide reasonable confidence that the company's goals will be achieved.**			
5.1.1	The board of directors should determine the principles of and approaches to creation of the risk management and internal control system in the company.	1. Functions of various management bodies and business units of the Company in the risk management and internal control system are clearly determined in internal documents/ the Company's relevant policy is approved by the Board of Directors.	✓ complied with partially complied with not complied with	
5.1.2	The company's executive bodies should ensure the establishment and continuing operation of the efficient risk management and internal control system in the company.	1. the Company's executive bodies ensured allocation of the functions and powers as concern risk management and internal control among their subordinate managers (heads) of business units and divisions.	✓ complied with partially complied with not complied with	
5.1.3	The company's risk management and internal control system should enable one to obtain an objective, fair and clear view of the current condition and prospects of the company, integrity and transparency of its accounts and reports, and reasonableness and acceptability of risks being assumed by the company.	1. the Company approved the anti-bribery policy. 2. the Company established an affordable method to notify the Board of Directors or the Board of Directors Audit Committee on actual violations of the laws, internal procedures, and the Company's ethics code.	✓ complied with partially complied with not complied with	
5.1.4	The board of directors is recommended to take required and sufficient measures to procure that the existing risk management and internal control system of the company is consistent with the principles of and approaches to its creation as set forth by the board of directors and that it operates efficiently.	1. in the reporting year, the Board of Directors and the Board of Directors Audit Committee assessed efficiency of the risk management and internal control system of the Company. Information on the key findings of such an assessment is included in the Company's annual report.	✓ complied with partially complied with not complied with	
5.2	**To independently evaluate, on a regular basis, reliability and efficiency of the risk management and internal control system and corporate governance practices, the company should arrange for internal audits.**			
5.2.1	It is recommended that internal audits be carried out by a separate structural division (internal audit department) to be created by the company or through retaining an independent third-party entity. To ensure the independence of the internal audit department, it should have separate lines of functional and administrative reporting. Functionally, the internal audit department should report to the board of directors, while from the administrative standpoint, it should report directly to the company's one-person executive body.	1. for the purposes of internal audit, the Company established a separate business unit for internal audit, which functionally reports to the Board of Directors or the Audit Committee, or engaged an independent external company with the same principle of reporting.	✓ complied with partially complied with not complied with	
5.2.2	When carrying out an internal audit, it is recommended to evaluate efficiency of the internal control system and the risk management system, as well as to evaluate corporate governance and apply generally accepted standards of internal auditing.	1. in the reporting period, as part of internal audit, the efficiency of the internal control and risk management system was assessed. 2. the Company uses common approaches to internal control and risk management.	✓ complied with partially complied with not complied with	
6.1	**The company and its activities should be transparent to its shareholders, investors and other stakeholders.**			
6.1.1	The company should develop and implement an information policy enabling the company to efficiently exchange information with its shareholders, investors, and other stakeholders.	1. the Company's Board of Directors approved the Company's information policy developed with the view to the Code's recommendations. 2. the Board of Directors (or one of its committees) reviewed the issues related to the Company's compliance with its information policy at least once in the reporting period.	✓ complied with partially complied with not complied with	
6.1.2	The company should disclose information on its corporate governance system and practices, including detailed information on compliance with the principles and recommendations of this Code.	1. the Company discloses the corporate governance system in the Company and general corporate governance principles applied in the Company, in particular, with regard to the Company's website. 2. the Company discloses the composition of executive bodies and the Board of Directors, independence of members of the Board and their membership in committees of the Board of Directors (as defined in the Code). 3. If there is a person who controls the Company, the Company publishes the memorandum of the controlling person concerning such person's plans for corporate governance in the Company.	✓ complied with partially complied with not complied with	1. Complied with 2. Complied with 3. The are no persons controlling the Company.

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
6.2	**The company should disclose, on a timely basis, full, updated and reliable information about itself so as to enable its shareholders and investors to make informed decisions.**			
6.2.1	The company should disclose information in accordance with the principles of regularity, consistency and timeliness, as well as accessibility, reliability, completeness and comparability of disclosed data.	1. the Company's information policy determines the approaches to and criteria for determining the information that may materially influence the Company's value, the value of its securities and the procedures that ensure timely disclosures of such information. 2. If the Company's securities are traded on foreign organized markets, material information is disclosed in the Russian Federation and on such markets simultaneously and equivalently in the reporting year. 3. If foreign shareholders hold a significant number of shares in the Company, then, in the reporting period, disclosures were carried out not only in Russian but also in one of the most common foreign languages.	✓ complied with partially complied with not complied with	1. Complied with. 2. Not applicable as the Company securities do not trade on foreign regulated markets. 3. Complied with.
6.2.2	The company is advised against using a formalistic approach to information disclosure; it should disclose material information on its activities, even if disclosure of such information is not required by law.	1. in the reporting period, the Company disclosed annual and half-year IFRS financial statements. the Company's annual report for the reporting period includes annual IFRS financial statements with the auditor's opinion. 2. the Company discloses comprehensive information on the Company's capital structure, according to Recommendation 290 of the Code in the annual report and the Company's website.	✓ complied with partially complied with not complied with	
6.2.3	The company's annual report, as one of the most important tools of exchange of information with its shareholders and other stakeholders, should contain information enabling one to evaluate the company's performance for the year.	1. the Company's annual report contains information on the key dimensions of the Company's operations and its financial performance 2. the Company's annual report contains information on environmental and social dimensions of the Company's business.	✓ complied with partially complied with not complied with	
6.3	**The company should provide information and documents requested by its shareholders in accordance with the principle of equal and unhindered accessibility.**			
6.3.1	Exercise by the shareholders of their right to access the company's documents and information should not be unreasonably burdensome.	1. the Company's information policy establishes an easy procedure for providing shareholders with access to the information, in particular, information on the legal entities dependent on the Company, at the shareholders' request.	✓ complied with partially complied with not complied with	
6.3.2	When providing information to its shareholders, the company should maintain a reasonable balance between the interests of individual shareholders and its own interests related to the fact that the company is interested in ensuring that sensitive business information that might have a material impact on its competitiveness remains confidential.	1. in the reporting period, the Company did not deny satisfaction of any shareholders' requests for information or such denials were reasonable. 2. in cases determined in the Company's information policy, shareholders are warned of the confidential nature of the information and undertake to keep it confidential.	✓ complied with partially complied with not complied with	
7.1	**Any actions which will or may materially affect the company's share capital structure and its financial position and, accordingly, the position of its shareholders ("material corporate actions") should be taken on fair terms and conditions ensuring that the rights and interests of shareholders as well as other stakeholders are observed.**			
7.1.1	Material corporate actions shall be deemed to include reorganization of the company, acquisition of 30 or more percent of its voting shares (a takeover), entering by the company into any material transactions, increasing or decreasing its share capital, listing and delisting of its shares, as well as other actions that might result in material changes in rights of its shareholders or violation of their interests. It is recommended to include in the company's articles of association a list of (criteria for identifying) transactions or other actions falling within the category of material corporate actions and provide therein that decisions on any such actions should fall within the jurisdiction of the company's board of directors.	1. the Company's Articles of Association determine the list of actions and other efforts that constitute material corporate actions, and their determination criteria. Decision-making on material corporate actions falls within the competence of the Board of Directors. Where taking of these corporate actions is directly referred by law to the competence of the General Meeting of Shareholders, the Board of Directors makes the relevant recommendations to the shareholders.	complied with ✓ partially complied with not complied with	1. Partly complied with. The list of material corporate actions is not indicated in the Charter, but in the Company Corporate Governance Code. As part of its review of the issue of the Bank of Russia CGC implementation, the Audit Committee found it appropriate to provide, in the Company Charter, a reference to the Corporate Governance Code that contains the List of Material Corporate Actions. At present, the Company has no intention to include the list of transactions and actions that constitute material corporate actions for the Company. The applicable law and the Company Charter reserve decisions on material actions for the Supervisory Board or the shareholders meeting. in connection with any matters brought before the shareholders meeting, including those related to material corporate actions, the Supervisory Board provides relevant recommendations to shareholders. 2. Partly complied with The list of material corporate actions in the Company Corporate Governance Code covers, among other things, the matters of Company's reorganization, acquisition of 30 percent or more of Company's voting shares (takeover), execution of material transactions, charter capital increase or reduction, share listing and de-listing.
7.1.2	The board of directors should play a key role in passing resolutions or making recommendations relating to material corporate actions; for that purpose, it should rely on opinions of the company's independent directors.	1. the Company has established a procedure whereby independent directors announce their opinions on material corporate actions before their approval.	✓ complied with partially complied with not complied with	

#	Corporate governance principles	Criteria by which compliance with corporate governance principle is assessed	Status of compliance with the corporate governance principle	Explanations of deviation from the corporate governance principle
7.1.3	When taking any material corporate actions which would affect rights or legitimate interests of the company's shareholders, equal terms and conditions should be ensured for all shareholders; if statutory mechanisms designed to protect the shareholder rights prove to be insufficient for that purpose, additional measures should be taken with a view to protecting the rights and legitimate interests of the company's shareholders. in such instances, the company should not only seek to comply with the formal requirements of law but should also be guided by the principles of corporate governance set out in this Code.	1. the Company's Articles of Association, taking into account the particular features of its operations, established lower minimum criteria for classifying the Company's transactions as major corporate actions than envisaged in law. 2. During the reporting period, all material corporate actions underwent approval before their implementation.	✓ complied with partially complied with not complied with	
7.2	**The company should have in place a procedure for taking any material corporate actions such that shareholders receive full information about such actions in in a timely manner and have the ability to influence them, and that would also guarantee that shareholder rights are observed and duly protected in the course of taking such actions.**			
7.2.1	When disclosing information about material corporate actions, it is recommended to give explanations concerning reasons for, conditions and consequences of such actions.	1. in the reporting period, the Company disclosed information on the Company's material corporate actions in a timely manner and in detail, including reasons for the timing of taking such actions.	complied with ✓ partially complied with not complied with	Grounds for, terms and conditions of, and outcomes for the Exchange and its shareholders from intended material corporate actions, are normally described in materials provided to shareholders for decision-making. in the reporting year, the Company did not record any material corporate actions where a resolution on taking/approving such actions should be taken by shareholders. The Company was timely disclosing information on the material corporate actions where a resolution on taking/approving such actions should be taken by the Supervisory Board by publishing an announcement of the Supervisory Board meeting and its agenda. The main reason that the Company does not fully comply with this principle to the extent of amount of details in disclosure is in progressive implementation of the Corporate Governance Code recommendations. In 2018, the issue of the said principle implementation was considered by the Audit Committee, which adopted the approach described below. the Company seeks for a reasonable balance between interests of its shareholders, investors and own interests of the Company, and therefore, decisions on the scope of disclosure relating to material corporate actions where a resolution on taking/approving such actions are taken by the Supervisory Board will be taken by the Company's management at their own discretion on a case-by-case basis.
7.2.2	Rules and procedures in relation to material corporate actions taken by the company should be set out in its internal documents.	1. the Company's internal documents envisage the procedure for engaging an independent appraiser to evaluate the assets disposed of or purchased under a major transaction or a related-party transaction. 2. the Company's internal documents envisage the procedure for engaging an independent appraiser in evaluating the purchase and redemption price of shares in the Company. 3. the Company's internal documents envisage an expanded list of reasons for the members of the Company's Board of Directors and other persons envisaged in the law to be recognized as interested in the Company's transactions.	complied with ✓ partially complied with not complied with	1. 1. Partially complied with In the reporting year, the internal documents of the Company did not require that the Company engage an independent appraiser in evaluating the assets disposed of or purchased under a major transaction or a related-party transaction, and in evaluating the purchase price for the shares in the Company (in redemption requested by shareholders, an appraiser is engaged under the law). The reason for that is that during recent years the Company did not record any major transactions, since it is aware that major transactions may substantially affect its financial performance. In 2018, as part of the corporate governance practice improvement framework, the Audit Committee approved the draft Corporate Governance Code, allowing for the engagement of an appraiser when purchasing or selling assets under major transactions (the new version of the Corporate Governance Code was approved by the Supervisory Board in February 2019). The Company's internal documents do not provide for an independent appraiser to be engaged in assessing assets sold or purchased under related-party transactions (as separate grounds). However, the new Corporate Governance Code provides for the engagement of an appraiser for the real estate or non-core assets valuation when the value of such assets exceeds RUB 600 mln, whether there is a related-party in the transaction or not. the Company believes that this approach aims to reduce the risk of non-compliance with the Corporate Governance Code's principle described above. 2. Partly compiled with Company's internal documents do not include the involvement of an independent appraiser in evaluating in evaluating the purchase price for the shares in the Company. in redemption requested by shareholders, an appraiser is engaged under the law).

DISCLAIMER

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This document includes forward-looking statements. All statements other than statements of historical fact included in this document, including, without limitation, those regarding our financial position, business strategy, management plans and objectives for future operations are forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors that could cause our actual results, performance, achievements or industry results to be materially different from those expressed or implied by these forward-looking statements. These forward-looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we expect to operate in the future. Important factors that could cause our actual results, performance, achievements or industry results to differ materially from those in these forward-looking statements include, among others:

- the perception of market services offered by the Company and its subsidiaries;
- the volatility of (a) the Russian economy and the securities market and of (b) the highly competitive sectors in which the Company and its subsidiaries operate;
- changes in (a) domestic and international legislation and tax regulation and (b) state policies related to financial markets and securities markets;
- increased competition from new players in the Russian market;
- the ability to keep pace with rapid changes in science and technology, including the ability to use advanced features that are popular with the Company's customers, as well as with those of its subsidiaries;
- the ability to maintain continuity of the process of introducing new competitive products and services, while maintaining competitiveness;
- the ability to attract new customers in both domestic and international markets; and
- the ability to expand our product offer in international markets.

Forward-looking statements are only valid as of the date of the publication of this document, and we expressly disclaim any obligation or undertaking to release any update of, or revisions to, any forward-looking statements in this document as a result of any change in our expectations or any change in the events, conditions or circumstances on which these forward-looking statements are based.

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SCOPE OF THE REPORT

This Annual Report reviews the consolidated performance of PJSC Moscow Exchange MICEX-RTS (hereinafter "Moscow Exchange", or "the Group") and its subsidiaries, including JSC National Mercantile Exchange, NCO CJSC National Settlement Depository, and JSC Bank National Clearing Centre.

COMPLIANCE

Information in this report has been consolidated in accordance with Bank of Russia Instruction No 454-P of 30 December 2014, the Corporate Governance Code of 21 March 2014 and the G4 Sustainability Reporting Guidelines.