MOSCOW EXCHANGE

Trust Responsibility Innovation

Annual Report | 2019

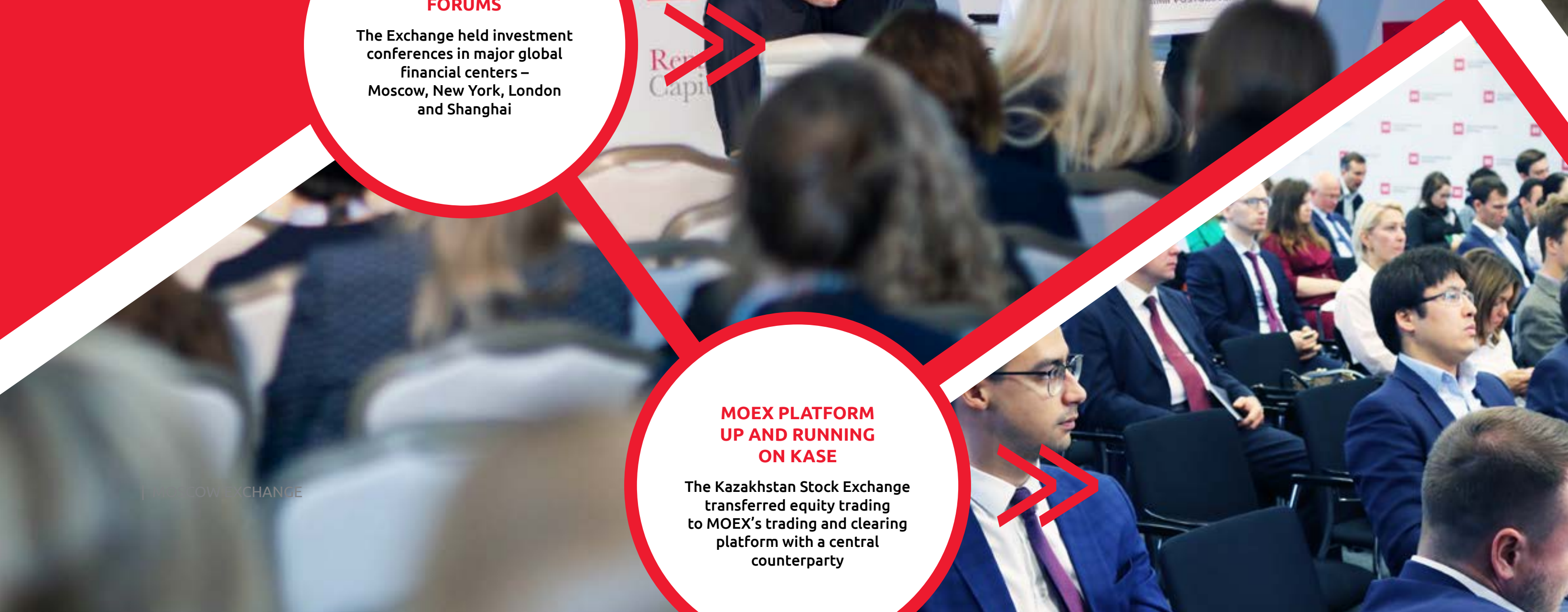
Main Events of 2019

MOEX AT FINOPOLIS

Moscow Exchange presented a demo of Marketplace, which allows customers to buy financial products remotely

MOSCOW EXCHANGE FORUMS

The Exchange held investment conferences in major global financial centers – Moscow, New York, London and Shanghai



MOEX PLATFORM UP AND RUNNING ON KASE

The Kazakhstan Stock Exchange transferred equity trading to MOEX's trading and clearing platform with a central counterparty

TINKOFF BANK GDRs

The Exchange launched trading in Tinkoff Bank securities

GREEN BONDS

The Exchange launched the Sustainability Sector to finance environmental and social projects

MOSCOW EXCHANGE AT SPIEF 2019

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

FIRST STRUCTURED BONDS

Russian-law structured bonds were placed on MOEX for the first time

CLEARING MEMBERSHIP WITH SHANGHAI GOLD EXCHANGE

Clearing member status will allow Moscow Exchange to establish a trading and clearing link to Shanghai Gold Exchange

2024 STRATEGY

MOEX adopted a new corporate strategy covering the period through 2024. The main aim of the strategy is to achieve a balance between infrastructure reliability and growth

MOEX RANKED AMONG WORLD'S BEST EMPLOYERS

MOEX was included in the Forbes Global 500 list of best employers worldwide for the third year in a row

ETFs ON MOEX

At the end of 2019, eight companies had introduced 35 exchange-traded funds tracking benchmarks of eight countries on MOEX

RINGING THE BELL FOR GENDER EQUALITY

For the second year, MOEX participated in the global initiative Ring the Bell for Gender Equality

1,000,000 INDIVIDUAL INVESTMENT ACCOUNTS ON MOEX

As of August, private investors had opened million Individual Investment Accounts (IIA). MOEX and NAUFOR awarded journalists for the best article on investing via IIAs

MOU WITH CHINA FOREIGN EXCHANGE TRADE SYSTEM (CFETS)

Collaboration between MOEX and CFETS will boost liquidity in the RMB/RUB currency pair on the two trading platforms

BEST PRIVATE INVESTOR 2019

The Best Private Investor competition highlights opportunities available to retail investors interested in trading on the stock market. In 2019, nearly 7,000 private investors participated in the contest

ENDORSEMENT

This report has been preliminary approved by the Moscow Exchange Supervisory Board on 27 March 2020 (Minutes No. 22)

MOSCOW EXCHANGE

Annual Report 2019

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Moscow Exchange in brief

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

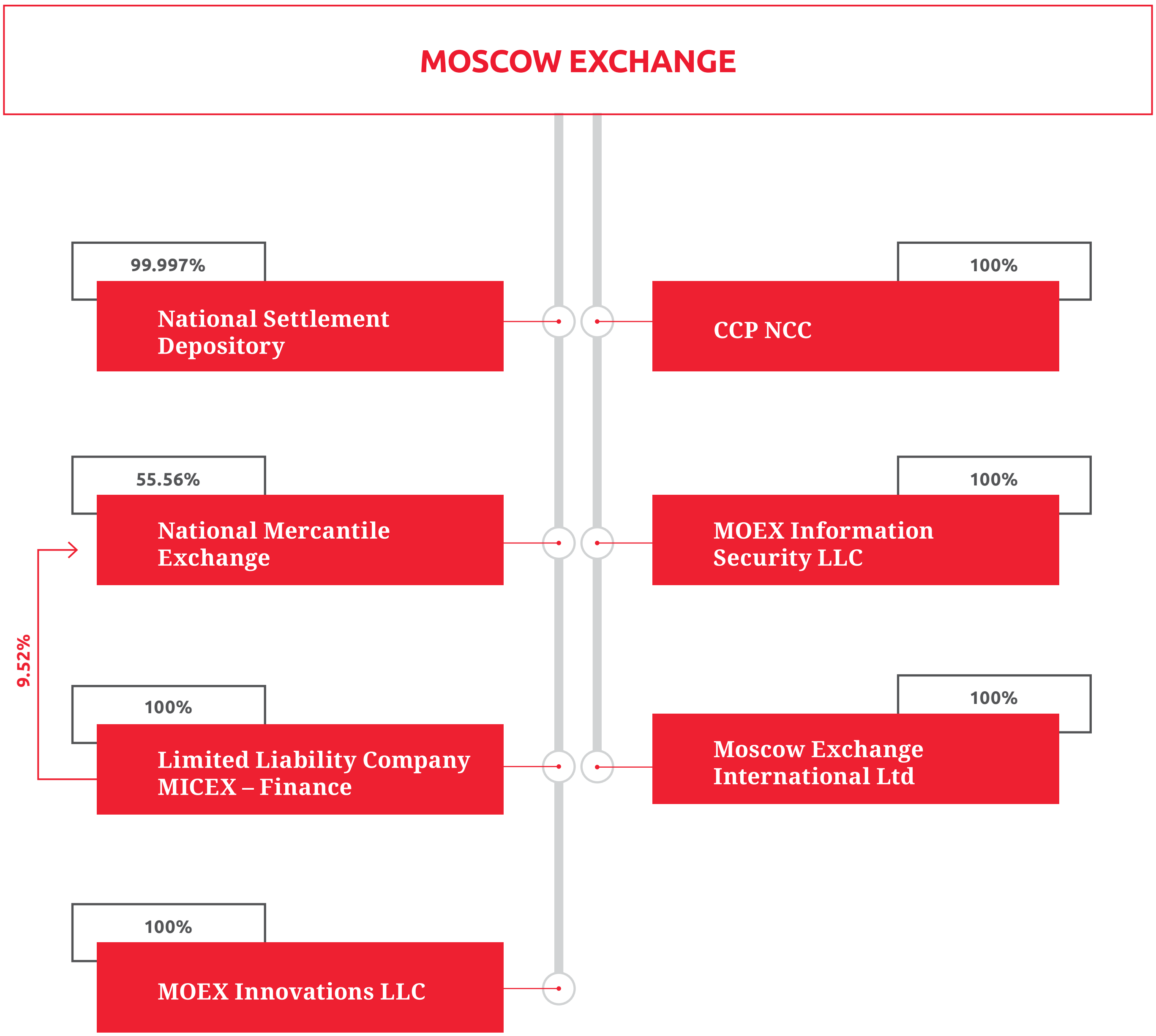
The Group is comprised of:

- PJSC Moscow Exchange MICEX-RTS, which operates the Equity & Bond Market, Money Market, Derivatives Market as well as FX 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 equity, bond, foreign exchange and money markets in Russia; and RTS Group, which 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 2019, the company's market capitalization was RUB 245.53 billion, and the free float was 62.8%.

Moscow Exchange Group structure



Business model

CLIENTS → MARKETS

MARKET DATA

29,300 Legal entities

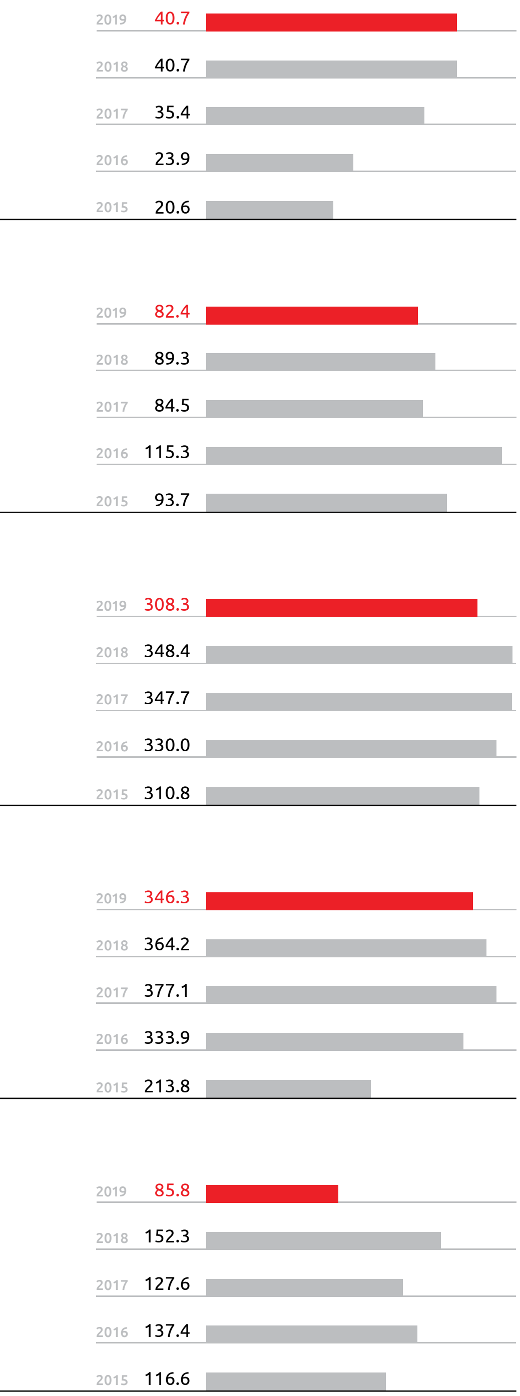
1,778 Professional brokerage companies

3.9 mln Retail investors

CLIENT SERVICES

Market	Instruments	Market data
EQUITY & BOND MARKET	▸ Russian and foreign shares ▸ Sovereign bonds (OFZ) ▸ Bank of Russia bonds ▸ Regional and corporate bonds ▸ Sovereign and corporate Eurobonds ▸ Mutual funds and Russian-law ETFs ▸ Exchange-traded funds (ETFs) ▸ Depository receipts ▸ Mortgage participation certificates	Trading Volumes, RUB trln
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, zinc, nickel)	Trading Volumes, RUB trln
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 ▸ USD – JPY	Trading Volumes, RUB trln
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
COMMODITIES MARKET	▸ Gold ▸ Silver ▸ Wheat	Trading Volumes, RUB bln

OPERATING INCOME



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

Equity Market

2019 ▲17.2%
2018 ▲20.0%
2017 ▲1.3%

Bond Market

2019 ▲17.4%
2018 ▲9.6%
2017 ▲33.7%

2019 ▲23.0%
2018 ▲15.3%
2017 ▼2.0%

2019 ▼11.1%
2018 ▲4.3%
2017 ▼11.9%

2019 ▲9.2%
2018 ▲13.1%
2017 ▲16.8%

Post-trading Services

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

Depository and settlement services

2019 ▲15.4%
2018 ▲8.3%
2017 ▲17.4%

26,181.4 RUB mln
Fee & commission income

16,713.0 RUB mln
Interest income

335.1 RUB mln
Other operating income

43,229.5 RUB mln
Total

Statement from the Chairman of the Supervisory Board

Oleg Viyugin

Chairman of the Supervisory Board

DEAR SHAREHOLDERS,

I am pleased to present to you the report of the Supervisory Board on Moscow Exchange Group's achievements across priority areas in 2019.

Last year was a year of significant change and important innovations at Moscow Exchange. The company successfully delivered on the key priorities set by the Supervisory Board, including: maintaining uninterrupted availability and reliability of MOEX's services, development of the risk management system, automation of business processes, attracting retail investors and growing fee and commission income while also optimizing costs. Fee and commission income increased by 11% in 2019. The number of retail investors registered on the Exchange doubled during the year. Current expenses grew slower than fee and commission income, and were in line with guidance.

In 2019, the Exchange completed delivery against its 2015–2020 strategy ahead of schedule. The most important project rolled out under this strategy was the Unified Collateral Pool, which allows market participants to create a single trading and clearing account with unified collateral requirements, settlement netting and cross-margining across all markets. Other key elements of the Russian financial market infrastructure were modernized in line with international standards: listing and corporate governance rules were reformed, and sponsored market access (SMA) was introduced on the equities, foreign exchange and derivatives markets. The Exchange expanded its product line with the launch of repo transactions with general collateral certificates (which became the fastest growing segment of the Money Market for a short time) and exchange-traded mutual funds, a product that quickly became popular with retail investors. Trading in new currency pairs and deliverable futures was also launched.

In addition, the Exchange expanded its client base, with non-financial companies gaining direct access to trading. The Exchange also entered new markets: an OTC platform for the debt market was created, providing market participants with access to global currency liquidity.

> Last year was a year of significant change and important innovations at Moscow Exchange.

On the back of the early implementation of the 2015–2020 strategy, the Supervisory Board initiated work on a new five-year Group strategy through 2024. The new strategy was adopted in the fall of 2019, and is in line with modern technological trends while addressing specific challenges facing the Exchange and taking into account the interests of all stakeholders. For our clients, we will continue to be a reliable infrastructure partner, helping them to promote their services through new digital market access channels. We will continue to create value for our shareholders, and our employees will continue to work in an environment founded on trust and responsibility.

The new strategy aims both to increase the flexibility of existing exchange services and to develop new digital channels for financial institutions to distribute services to individuals and companies. Under the new strategy, the Group plans to increase availability and hours of trading, expand the range of available products and services, and maintain MOEX's customer offering at the level of the leading international exchange platforms.

Particular attention will be paid to working with investors and issuers seeking to raise funds via securities issuance on the capital markets, as well as diversifying the product line and doing more with market data. Another area of focus will be accelerating business processes, reducing the time to market for new products, and maintaining superior reliability and cyber resistance of key systems.

The implementation of the new strategy has been entrusted to the new CEO and Chairman of the Executive Board, Yury Denisov, who was appointed in May 2019. Yury has served for a decade on the Supervisory Boards of the Exchange and NCC. He was a key member of the team that prepared the new strategy and has deep knowledge of financial markets and understanding of the Exchange's operations.

In 2019, the Exchange also adopted a new dividend policy, which ensures greater predictability and stability of dividend payments to shareholders. It takes into account the Group's long-term development and financial stability, as well as the importance of strengthening MOEX's investment case. The company plans to direct all free cash flow to dividends, while the minimum level of dividend payments was increased from 55% to 60% of net profit.

The new strategy necessitates an expansion of expertise and skill sets, including at the Supervisory Board level. As a number of independent directors who contributed to the Board's work in recent years have left the Board, we proposed to renew Board membership by adding leading experts in information technology, financial infrastructure, marketplaces and digital products. Importantly, two-thirds of the candidates for the new Supervisory Board are independent, underscoring the Exchange's commitment to maximum transparency for shareholders and investors.

I would like to say thank you to all members of the Supervisory Board for their excellent work and significant contribution to the development of the Exchange over the last year. Special thanks are due to the four directors who will step down from the Board in the next corporate year: Ilya Bakhturin, Mikhail Bratanov, Yury Denisov and Rainer Riess. All of them have made an invaluable contribution to the company's development. Yury Denisov leaves the Supervisory Board after becoming CEO of the Exchange last year.

Finally, I would like to express my gratitude to the shareholders and customers of Moscow Exchange for their trust, support and close cooperation as we continue to improve market infrastructure and develop Russia's financial markets. As we look ahead, the Supervisory Board will continue to work closely with MOEX management to support the long-term sustainable development of the Exchange.

Statement from the Chief Executive Officer

Yury Denisov

Chief Executive Officer

DEAR SHAREHOLDERS AND PARTNERS,

I am pleased to present Moscow Exchange's Annual Report for 2019. During the year, we achieved record levels of fee and commission income in almost all markets due to increased customer activity, including among individual investors. These higher levels of activity were a result of favorable conditions in a number of the Exchange's markets, as well as due to expansion of the range of products offered by MOEX and new services becoming available to market participants and their customers.

Moscow Exchange's offer to customers is unique. We provide the opportunity to trade various financial instruments and currencies, and to hedge risks within a single infrastructure and using a single collateral pool for funding operations. We also remove counterparty risk – trading members do not need to worry about whether the other party to a transaction will deliver an asset and whether settlement will occur.

A significant event in 2019 was the approval of a new strategy for Moscow Exchange Group through 2024. The new strategy is designed to bring trust, efficiency and innovation to the financial markets, and to help companies and individuals achieve their financial goals. We see new technologies as a major challenge for the exchanges industry as they test the role of traditional financial intermediaries. We understand this challenge, and have sought to address it in our new strategy. Moscow Exchange will continue to develop marketplaces and to register and settle OTC transactions – in other words, we will provide services that support direct trading between and among our customers.

In 2019, 1.9 million Russians opened brokerage accounts. This is almost as many as in all previous years combined. As of the end of the year, the number of individuals with brokerage accounts reached 3.9 million. This increase in public interest in exchange-traded instruments is the result of many years of work by the Exchange, the financial community and the regulator to develop the domestic investor base by creating and promoting special products for individual investors, offering tax incentives, developing digital technologies and remote identification systems, and through investor education and training events.

> During the year, we achieved record levels of fee and commission income in almost all markets due to increased customer activity, including among individual investors.

An important task for the Exchange is to provide Russian companies with access to the capital markets. In 2019, Russian corporate issuers raised RUB 3.2 through bond placements on MOEX to grow their businesses, and the Russian budget received RUB 2.1 trln from issues of treasury bonds. MOEX's Growth Sector for SMEs is continuing to operate successfully, and offers smaller companies the opportunity to access state support measures as part of the national SMEs project. At the end of the year, securities of 36 issuers were traded in the Growth Sector.

We also launched a new securities sector during the year. The Sustainability Sector is designed to help companies that are implementing environmental and social projects to raise financing.

The Exchange's advanced IT technologies ensure that trading and settlement infrastructure functions smoothly, with a high level of fault tolerance. System availability was 99.99% in 2019.

The Exchange devotes significant attention to popularizing the Russian market and attracting foreign investors. One priority in this area is the annual Exchange Forums, which are held in major financial centers around the world – Moscow, London, New York and Shanghai. The Exchange also collaborates with leading international platforms in order to learn from best global practices and grow its business. In 2019, memorandums of understanding were signed with the Zhengzhou Commodity Exchange, Shanghai Gold Exchange, China Foreign Exchange Trade System and the Bombay Stock Exchange.

The Exchange is developing a strategic partnership with the Kazakhstan Stock Exchange, which will contribute to the creation of a single financial market for countries of the Eurasian Economic Union. The main focus of the collaboration is to create a single technological platform operating across the Russian and Kazakh markets.

In 2019, Moscow Exchange joined the UN's global Sustainable Stock Exchanges initiative, which brings together more than 90 exchanges from around the world. As part of the initiative, stock exchanges develop solutions to boost investments in creating a sustainable future and disseminating responsible business practices in financial markets.

We are strong believers in the principle of equal opportunities for everyone, irrespective of gender, ethnicity, social background or any other characteristics. Every year in early March, the Exchange holds a market opening ceremony dedicated to gender equality as part of the global Ring the Bell for Gender Equality initiative organized by leading exchanges around the world.

The success of our business is predicated on our HR strategy, which is built on best global practices. We are constantly improving our incentive programs, and investing in the development of a culture that facilitates efficient work and creates a comfortable environment for all our colleagues. All of this helps the Exchange's employees to continue pushing forward the development of financial market infrastructure both within Russia and internationally.

An important area for the Exchange's social responsibility program is charitable activity. We help people in need, support educational projects, and work only with charitable foundations that have a proven reputation. In 2019, we allocated more than RUB 24 mln for charitable purposes.

We value everyone – clients, partners, employees, investors, issuers, shareholders, government agencies, professional communities and the media – who helps us to develop trading infrastructure and make it more accessible to market participants. I would like to thank you for your support, help and cooperation!

The new strategy aims to both improve the flexibility of the Exchange's existing services and develop new digital sales channels that will allow us to offer the services of financial institutions to individuals and companies.

Oleg Viyugin,
Chairman of the Supervisory Board

Strategic report

Industry overview

OVERVIEW OF THE EXCHANGE INDUSTRY

Exchanges are organised markets designed to facilitate centralised trading of financial instruments, including stocks and bonds, currencies, commodities and derivatives. Exchanges typically generate their core revenue by collecting fees from issuers for admitting their securities to trading; collecting fees from financial intermediaries who deal directly in the financial instruments traded on the exchange; and by selling market data and technological solutions and services.

In many countries, depository, clearing and settlement services are provided by separate independent organisations. However, in recent years there has been 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 from clearing and depository services, as well as net interest income from placing customer funds held on the group's balance sheet.

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

Global trends

Key trends observed in previous years continued in 2019. Exchanges expanded the range of instruments available to their members, primarily derivatives; launched new types of mini-futures and derivatives with non-standard terms of performance; and developed a range of fixed-term contracts for commodities. The popularity of passive investments grew, with passively managed funds in the US overtaking active funds by assets under management. Investments into exchange-traded funds (ETFs) continued to increase. However, concerns have been raised regarding the risks involved in passive investments, as higher volumes of securities held in fund portfolios undermines core liquidity and increases the volatility of basic assets.

In 2019, stock exchanges continued to pursue cooperation with one another and the globalization of access to markets. London Stock Exchange and Shanghai Stock Exchange started to cooperate on the Shanghai-London Stock Connect project, while China and Japan launched the Japan-China ETF Connectivity project to promote cross-listing of exchange-traded funds. Deutsche Börse opened its stock market to external clearing; EuroCCP continues to provide clearing services to Frankfurt Stock Exchange based on an interoperability model. Euronext acquired Norwegian exchange Oslo Borse, while London Stock Exchange (LSE) announced the acquisition of analytics company Refinitiv (and also rejected an offer from HKEx), and SIX Swiss Exchange announced its intention to buy Spain's BME exchange.

The exchange industry continued developing artificial intelligence technologies and big data analytics. In particular, the Australian Securities Exchange (ASX) is using AI as an auxiliary tool to identify significant events requiring disclosure, while NASDAQ has introduced artificial intelligence and cloud services to monitor the stock market.

A number of exchanges undertook projects to create OTC platforms. B3 Brazilian Exchange launched the NoMe platform for registering collateral and other encumbrances on assets put up as collateral for exchange and OTC transactions. Intercontinental Exchange launched ETF Hub, a platform for issuing and redeeming exchange-traded funds, around which an ecosystem will be formed bringing together issuers, investors, market makers and custodians. Thai Exchange launched Thailand's first virtual platform to promote start-ups, SMEs and socially oriented companies.

In recent years, climate change, inequality and cybersecurity have become increasingly important topics. Investors around the world are starting to integrate environmental, social and governance (ESG) factors into their investment decision-making processes to improve risk management and seek sustainable long-term returns on investment, and are increasingly paying attention to companies that use ESG best practices. In response to investor demand, global exchanges are increasingly introducing ESG principles into their activities:

- 94 exchanges have joined the UN Sustainable Stock Exchanges (SSE) global initiative, which aims to promote sustainable development practices and responsible business conduct on financial markets;
- Exchanges are creating special sectors for securities of companies that support the green economy;
- New indices have appeared based on ESG principles: in 2019, FTSE launched the global government bond index, weighted by a country's preparedness for and immunity to climate change risk;
- Markets for ESG derivatives are developing, including ETFs, futures and index options (Eurex, NASDAQ);
- Some exchanges are publishing ESG reports about their adherence to ESG principles and how they observe them in their strategy, and include ESG elements in recommendations and requirements for issuers.

Moscow Exchange's competitors

MOEX's main competitors are London Stock Exchange (LSE), the New York Stock Exchange (NYSE), NASDAQ, EBS FX Platform (ICAP Group), 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 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 is MOEX's primary competitor in USD/RUB futures and options.

Deutsche Börse is one of the largest exchange groups in Europe and worldwide. Deutsche Börse is 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 Börse.

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

MOSCOW EXCHANGE IN THE GLOBAL CONTEXT

No	Exchange	Country	Trading volume (USD bln)	Including repo
1	BME	Spain	5,006	√
2	**Moscow Exchange**	**Russia**	**2,861**	**√**
3	Johannesburg SE	South African Republic	2,409	√
4	Korea Exchange	Korea	1,836	×
5	Oslo Bors	Norway	943	√
6	Shanghai SE	China	831	×
7	Indonesia SE	Indonesia	335	×
8	Colombia SE	Colombia	293	×
9	Nasdaq Nordic	USA	281	×
10	LSE Group	UK	255	×

No. 2

exchange for bonds (11M2019)[1]

No	Exchange	Country	Trading volume (contracts, mln)
1	NSE India	India	5,977
2	CME Group	USA	4,830
3	B3	Brazil	3,462
4	Deutsche Boerse	Germany	1,928
5	CBOE	USA	1,647
6	Korea Exchange	Korea	1,539
7	**Moscow Exchange**	**Russia**	**1,455**
8	Shanghai Fut. Exchange	China	1,412
9	Nasdaq – US	USA	1,309
10	Dalian Commodity Exchange	China	1,181

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exchange for derivatives (2019)[2]

[1] Bond market data may be incomparable across the marketplaces due to difference in methods. Data on Indonesia SE is exclusive of trading volumes in July, August and November 2019 as they are not available.
[2] Data on Dalian Commodity Exchange is exclusive of trading volumes in February and September 2019 as they are not available.

No	Exchange	Country	Market capitalization (USD bln)	Number of issuers	Trading volume (USD bln)
1	Nasdaq – US	USA	13,002	3,140	15,910
2	ICE&NYSE	USA	23,328	2,143	12,248
3	Shenzhen SE	China	3,410	2,205	11,458
4	Shanghai SE	China	5,106	1,572	7,934
5	Japan Exchange	Japan	6,191	3,708	5,085
6	LSE Group	UK	4,183	2,410	1,995
7	Korea Exchange	Korea	1,485	2,283	1,927
8	HKEx	Hong Kong	4,899	2,449	1,866
9	Euronext	EU	4 702	1,220	1,736
…	…	…	…	…	…
27	**Moscow Exchange**	**Russia**	**792**	**217**	**180**

No. 27

exchange for equities (2019)[1]

No	Exchange	Country	Capitalization (USD bln)
1	CME	USA	76.5
2	ICE&NYSE	USA	51.7
3	HKEx	Hong Kong	43.3
4	LSE Group	UK	37.0
5	Deutsche Boerse	Germany	31.5
6	B3	Brazil	23.9
7	Nasdaq OMX	USA	19.1
8	CBOE	USA	13.7
9	ASX	Australia	11.2
10	Japan Exchange	Japan	9.8
11	SGX	Singapore	6.7
12	Euronext	EU	6.2
13	TMX Group	Canada	5.3
14	**Moscow Exchange**	**Russia**	**4.1**

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publicly traded exchange by market capitalization[2]

[1] The largest equity exchanges by equity trading volume (EOB only). The data do not include CBOE Global Markets (as figures on its market cap and number of companies on the market are not available). Data for 2019, except on NYSE (for 10M2019) and Euronext (data for October 2019 are not available).
[2] Market capitalization of public exchanges as of 5 February 2020, according to Bloomberg.

Mission and corporate values

MISSION

Moscow Exchange Group’s mission is to bring trust, efficiency and innovation to the financial markets, and to help companies and citizens achieve their goals of tomorrow. The Group’s vision is to be the leading platform for the Russian financial markets, providing reliable access to all traded asset classes and to meet a wide range of clients’ financial needs.

The goals and tasks set out in the Group’s strategy support the company’s corporate values.

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 work in partnership with our customers

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

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 value transparency and integrity

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

Results of Strategy 2015–2020

STRATEGY AREA	DIVERSIFICATION	OPTIMIZATION
STRATEGIC OBJECTIVE	***Substantial increase of income from classic infrastructure trading services, creation of new trading markets.***	***Improving operational efficiency and streamlining of the Group's business processes***
INITIATIVES IMPLEMENTED	record growth in trading volumes of repo transactions with the CCP	moving to a new data processing center
	launch and active development of repo operations with GCC	introduction of batch client registration
	implementation of M-Deposits project	implementation of tariff reform
	launch of grain and sugar exchange trading	introduction of a new budgeting system
	direct access to the FX and Money Markets for non-financial companies	front office reorganization
	innovation and development of the investment market	integration and optimization of internal IT system architecture
	launch of new currency pairs and currency pair futures	development of API interfaces with market participants
	launch of opening auction	
	launch of trading of exchange-traded funds, deliverable futures	
	start of currency fixing calculation	
	giving participants access to global currency liquidity	
	conclusion of a strategic partnership agreement with KASE	

MARKET DEVELOPMENT

Development of a local investor base and assistance in the development of major Russian financial markets.

- simplification of bond issuing procedures
- introduction of on-exchange book-building
- launch of one-day bonds
- creation of OTC platform for the debt market
- implementation of investment Marketplace
- educational events for retail investors

INTEGRATION

Creation of an advanced integrated management system for risks, collateral pool and settlements, uniting all markets of the Group

- implementation of the Unified Collateral Pool Project, giving participants:
  - use of a single trading and clearing account for collateral accounting on all markets
  - unification of assets accepted as collateral
  - full netting in settlements
  - cross margining between markets

STANDARDIZATION

Completion of modernization of key infrastructure elements of the Russian financial market in accordance with developing international standards.

- introduction of International Clearing Membership (ICM)
- introduction of Sponsored Market Access (SMA) for Equity and Bond Market, FX Market and Derivatives Market
- listing and corporate governance reform
- launch of e-voting service
- compliance with IOSCO principles for indices and fixings
- price center development
- creating a single disclosure window

2024 Group strategy

In October 2019, the Supervisory Board of Moscow Exchange approved a new Group development strategy through 2024.

The new strategy is based on five key priorities, two of which relate to areas of responsibility, and three to areas of development. The priority areas are two areas of responsibility: deepening major markets and engendering a culture of trust and responsibility.

The Exchange remains the leading center for pricing Russian assets and the main capital-raising platform for Russian companies. In this area, the Exchange will continue to expand accessibility, trading hours and its range of products and services, and will maintain its offer at the level of other leading international exchange platforms. MOEX will focus in particular on working with investors and issuers, to encourage companies to access capital markets through share and bond placements, as well as diversifying the range of instruments available in the derivatives market, and working with market data.

In developing a culture of trust and responsibility, the Exchange will focus on accelerating business processes, reducing the time to launch new products and increasing the cyber resistance of key systems. To reach the next level in this area, the Group will focus on developing talents and leaders by delegating authority on a wide range of business development issues.

Further business growth will be supported by initiatives in three areas of development: market access, balance management and financial platform. These are an organic continuation of the previous strategy, based on the strengths of the Group's business model and the key competencies of its employees.

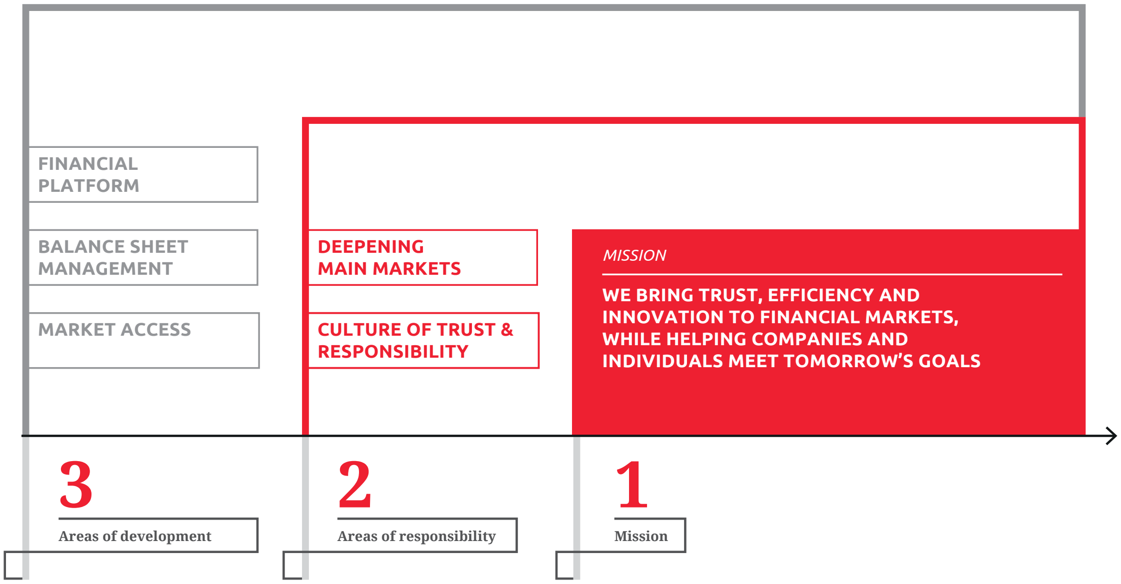
The Exchange will give professional participants and consumers access to a wide range of investment and savings products with the focus on creating services that will provide banks and brokers with new opportunities to promote their services, and individuals with interfaces to access the financial market in a single information field. This will double the base of private investors over the medium term.

In terms of balance management, the Group will provide professional participants and corporations with flexible services for finding liquidity, executing orders and post-trading in a single interface. This will increase the user base and liquidity in the Money, FX and Derivatives Markets, including the Standardized Derivatives Market.

Development of a financial platform means extending the capabilities of the Exchange's accounting infrastructure to a wider range of financial assets. Initiatives in this area will lead to the expansion of the NSD's service offer for savings instruments and information assets.

Consistent implementation of the strategy across these five key priorities will allow the Exchange to achieve a significant increase of its client base, contribute to the further development of the market, expand availability of financial services for private investors and issuers and stimulate the use of best practices, while maintaining high efficiency and profitability of the business model.

MISSION, AREAS OF RESPONSIBILITY AND AREAS OF DEVELOPMENT



Strategic risk management

Strategic focus	Financial risks	Non-financial risks
Financial platform	Project launch dates may depend on the adoption of appropriate regulatory standards. There is a risk of changes in the dates when standards come into force, which may affect project revenues.	When introducing new technologies during the implementation of new initiatives, the following may increase: • personnel risks given that current employees may not have the relevant skillsets; • operational risks associated with the introduction of new products and processes in existing infrastructure. The Exchange will also need to improve its compliance system to work with new partners and customers as part of development initiatives.
Balance sheet management	Launching projects from scratch, including in new segments for the Exchange, may result in underestimated expenditures in business planning.	
Market access	Price competition in new areas may increase, which may lead to a decrease in demand for services provided as part of new initiatives.	
Development of key markets	Some products launched by the Exchange to develop its key markets, including those launched based on studies of international experience, may appear to be not in demand in the local market.	Attracting new investors may lead to increased operational risks associated with the introduction of new products and processes in existing infrastructure, as well as with the absence or insufficiency of the necessary financial and human resources, materials and equipment.
Culture of trust and responsibility	Lack of involvement and responsibility of employees may lead to financial losses as a result of project delays and operational errors in the normal course of business.	

Key projects 2019

The Exchange provides a variety of opportunities for domestic companies to raise capital, reliable infrastructure for trading across various asset classes, settlement via a central counterparty and effective liquidity management mechanisms. The Exchange is constantly working to improve technologies, develop new products and services, expand the range of instruments, attract new categories of market participants and develop new markets.

PRODUCTS AND SERVICES FOR INDIVIDUALS

An active influx of retail investors into the financial market has been the trend of recent years. Together with the regulator and market participants, the Exchange has worked to create and promote specialized products for individuals.

2019 saw the active development of exchange-traded mutual investment funds (BPIFs) following adoption of the relevant legislative framework in 2018. Over the course of 2019, 17 BPIFs were formed.

BPIF is the equivalent of an exchange-traded fund (ETF) issued under Russian law. Exchange-traded funds are primarily aimed at retail investors, and they significantly simplify the process of portfolio investment as they track a basket of stocks. ETFs also allow investors to purchase the entire market or an entire sector with 'one click', incurring minimal costs.

BPIFs and ETFs allow investing in foreign markets: at the end of 2019, 35 exchange-traded funds distributed by eight companies tracking benchmarks of eight countries were listed on Moscow Exchange.

In 2019, the National Association of Securities Market Participants (NAUFOR) awarded the Bank of Russia and Moscow Exchange with the 'Stock Market Elite' prize in the 'National Stock Market Development Project' category for creating conditions for launching BPIFs in Russia.

Specialized events, training seminars and competitions are held to increase the financial literacy of the population and increase understanding of how the Exchange's operates and traded instruments.

The Moscow Exchange School online platform doubled the number of trainee retail investors as it works to improve the financial literacy of the population. In 2019, about 700 training webinars were held where retail investors gained knowledge and skills in managing their personal finances. About 74,000 people participated in these events.

The Exchange annually organizes competitions for private investors to demonstrate the opportunities and potential profitability of trading. The 'Best Private Investor' contest has been held since 2003 and is the world's largest exchange competition for traders. In 2019, 6,500 investors participated in the competition, their total trade turnover amounted to 1.1 trillion rubles. Total prize money awarded was 8.3 million rubles.

35 ETFs
created as of the end of 2019

Since 2015, the Invest Trial competition for beginners has also been held, allowing participants to gain investment experience using demo mode (without risking their own funds) and get a real cash prize. In 2019, over 13,000 investors took part in the competition, and more than 1,100 were awarded prizes. Under the competition results, participants opened more than 3,000 brokerage accounts. Total prize money awarded was 8 million rubles.

In 2019, a showcase of collective investment and trust management products was launched. The showcase was developed by the Exchange in partnership with leading Russian asset management companies. With the help of a showcase, private investors can choose and invest in mutual funds or trust management strategies. At the end of 2019, 85 mutual funds and eight trust management strategies offered by nine asset management companies were represented in the showcase, which manage about 60% of all assets of the trust management industry.

3.9 mln individuals
held brokerage accounts

Tax incentives, digital technologies and remote identification services were introduced in the Russian financial market and provide the opportunity to open a brokerage account without leaving your home, thus contributing to growth of private interest in investment services. In August 2019, the online customer registration service, which allows users to start operations with exchange-traded instruments a few minutes after opening an account on a broker or bank's website, became available on all Exchange markets.

+73%
increase of number of active individual accounts on the Equity Market

At the end of 2019, the number of individuals with brokerage accounts reached 3.9 million, up two-fold versus the end of 2018. The number of active accounts of individuals (where at least one transaction was completed in the past year) increased by 73% to 791,000.

18.2%
share of primary market for corporate bonds accounted for by retail investors in 2019

In 2019 individuals accounted for 34% of equities trading volumes, 7% of bond volumes, 42% of derivatives volumes and 8% of foreign exchange spot.

Private investors are active participants in the debt market: in 2019, they accounted for 18.2% of the primary market for corporate bonds and 10.6% of secondary trading.

34%
share of Equity Market accounted for by retail investors

BOND MARKET DEVELOPMENT

Development of the debt market is an important objective for the Exchange and the entire professional community, as it can reduce borrowing costs for real sector enterprises, attract 'long money' into the economy and expand the availability of loans for small businesses. In addition, in the context of lower interest rates, bonds are an alternative to bank deposits for the wider population.

In 2019, several important innovations were rolled out on the debt market. The minimum lot on Eurobonds traded on the Exchange was reduced to US$1,000 in order to make them more accessible, primarily for retail investors. This increased trading volumes in Eurobonds more than two-fold.

In the fall, the first stage of the transition to the T+1 trading mode with partial collateral for corporate bonds took place. 294 securities were transferred, and the remaining corporate bonds are planned to be transferred to T+1 mode in the first half of 2020.

A new securities sector has been created, the Sustainability Sector, for financing projects in the fields of ecology, environmental protection and socially significant initiatives. The first issue of structured bonds registered under Russian law took place.

After more than eight years, the Ministry of Finance of the Republic of Belarus returned to the Russian bond market with two three-year bond issues denominated in Russian rubles.

The development of the OTC system of the debt market continued: in 2019, participants were able to clear OTC transactions with a central counterparty settling in rubles, US dollars and euros with bonds, including those not listed on the Exchange. This made it possible to expand the list of available instruments in the OTC system, including to Eurobonds.

All these measures contributed to growth in the volume of primary placements in the debt market: the volume of corporate bond placement in 2019 increased by 36% to 3.2 trillion rubles, and federal loan bonds (FLB) doubled to 2.1 trillion rubles.

294 corporate bonds
transferred to T+1

+36%
growth of corporate bond placements

2 times
growth in OFZ primary market

STIMULATING LIQUIDITY IN THE FX MARKET

In 2019, due to a sharp decrease in volatility in the foreign exchange market, the Exchange developed a set of foreign exchange market solutions focused on various categories of participants to increase trading volumes and maintain the share of the exchange market in the total volume of conversion operations.

In particular, the new technologies SpeedBump and Request for Stream (RFS) were implemented, facilitating execution of transactions with foreign currency in large volumes at the best prices with minimal costs.

The SpeedBump technology uses a random program delay of orders. The RFS over-the-counter service facilitates execution of large transactions (from US$5 million). of the main currency pairs traded on the Exchange, with minimal spreads due to micro-auctions with a wide range of liquidity providers. In the new modes, asymmetric rating was introduced, which allows liquidity consumers to enter into transactions with a zero turnover commission.

The project to provide access to global currency liquidity using the exchange's infrastructure and foreign exchange market interfaces with the conclusion of transactions on world currency quotes transmitted from major international banks being liquidity providers continued to develop. Participants can make over-the-counter transactions with the currency pairs Euro – US dollar, Pound sterling – US dollar, US dollar – Chinese yuan, US dollar – Turkish lira and US dollar – Japanese yen.

MONEY MARKET DEVELOPMENT

The key segment of the Russian Money Market in recent years has been the GCC repo (repo in general collateral certificates), which combines the reliability of the central counterparty and flexibility of collateral management, where the most representative ruble rate is formed. Over 200 participants are connected to the GCC-repo market, including banks, brokers, asset management companies, insurance companies and non-financial companies.

In 2019, based on the CCP-cleared repo transactions in GCC, MOEX launched a new benchmark tracking the value of secured money, the Russian Secured Funding Average Rate (RUSFAR). RUSFAR is calculated in both Russian rubles and US dollars and is calculated for all key terms – from one day to three months, which allows to build a curve for the value of secured money. At the same time, participants received an opportunity to develop instruments with a floating interest rate for long periods (deposits, loans). In addition, futures trading started on the Derivatives Market, and trading in interest-rate swaps on RUSFAR started on the standardized derivatives market.

During the year, the company continued to work actively to expand the capabilities of market participants and attract new categories of customers. Since 2017, the Exchange has been developing the project to provide direct access to the FX and Money Markets to Russian legal entities that are not credit institutions or professional securities market participants. In 2019, for the first time, asset management companies got direct access to the deposit market with the CCP. In total in 2019, 34 companies joined as new participants of the CCP deposit market, bring the total number to 121.

The Federal Treasury also became a participant in the CCP deposit market, providing all participants of the Russian money market with access to a new source of large liquidity on the market auction basis.

121 companies
the number of participants in the deposit market with the CCP

+34 companies
joined the deposit market with the CCP in 2019

In 2019, Moscow Exchange actively developed its business across all major lines and with all clients. A record 1.9 million individuals joined the Exchange in 2019, nearly as many newcomers as in all previous years combined. We consolidated our position as the leading marketplace for Russian companies to raise capital: in 2019, Russian corporates raised RUB 3.6 mln via securities offerings on MOEX. The Exchange continues to roll out new products and services, which strengthened relationships with existing clients and expanded our client base by adding new categories of investors.

Igor Marich,
Managing Director

Performance Review

Financial results review

2019 was another very successful year for the Exchange. MOEX delivered record double-digit growth of fee and commission income, which accounted for almost two-thirds of total operating income for the first time since the Company went public. The three largest contributors to F&C income were the Derivatives Market, Bond Market and Equity Market. Operating income increased by 8.3%, while operating expenses added just 6.8%, below the Exchange's guidance of 8.0-10.0%. Adjusted EBITDA grew 8.6% YoY, with an adjusted EBITDA margin of 72.0%. Capex came in at RUB2.2 bln, in the middle of the RUB 2.0-2.5 bln guidance range. As-reported net profit climbed to RUB 20.2 bln.

Financial highlights

(RUB mln)

	2015	2016	2017	2018	2019	Change 2019/2018
Operating income	45,990.0	43,567.2	38,538.9	39,901.4	43,229.5	8.3%
Fee & commission income	17,784.0	19,797.6	21,207.6	23,647.1	26,181.4	10.7%
Net interest and other finance income	28,084.9	23,695.0	17,285.3	16,061.0	16,713.0	4.1%
Other operating income	121.1	74.6	46.0	193.3	335.1	73.4%
Operating expenses (exlc. other operating expenses)	(11,271.9)	(12,259.4)	(13,431.8)	(14,453.7)	(15,435.3)	6.8%
Operating Profit (before other operating expenses)	34,718.1	31,307.8	25,107.1	25,447.7	27,794.2	9.2%
EBITDA (before other operating expenses)	36,519.0	33,602.1	28,059.6	27,712.0	28,726.7	3.7%
EBITDA margin, %	79.4	77.1	72.8	69.5	66.5	–3 p.p.
Other operating expenses	–	–	–	(1,075.2)	(2,614.8)	–
Net profit	27,852.1	25,182.6	20,255.2	19,720.3	20,200.6	2.4%
Basic earnings per share, RUB	12.51	11.22	9.02	8.76	8.96	2.3%

INCOME

Fee and commission income

In 2019, most major fee and commission income lines increased. Fee and commission income remained well diversified, with MOEX's largest market, the Money Market, accounting for 27% of the total. The three fastest growing markets in 2019 were Derivatives (+23.0%), Bonds (+17.4%) and Equities (+17.2%), helping to strengthen the overall effective fee. The three largest contributors to the F&C line in absolute terms YoY were Depositary & Settlement Services (+RUB 696.1 mln), Money Market (+RUB 589.7 mln) and Derivatives Market (+RUB 533.7 mln).

Fee and commission income structure
(RUB mln)

	2018	2019	Change 2019/2018 (RUB mln)	Change 2019/2018 (%)
Money Market	6,389.8	6,979.5	589.7	9.2
Settlement and Depository Services	4,530.7	5,226.8	696.1	15.4
FX Market	3,990.0	3,547.4	–442.6	–11.1
Derivatives Market	2,318.9	2,852.6	533.7	23.0
IT services, listing fees and other fees and commissions[1]	2,312.0	2,759.7	447.7	19.4
Bond Market	2,173.5	2,551.4	377.9	17.4
Equity Market	1,932.2	2,264.0	331.8	17.2

Money Market

Trading volumes declined by 4.9% YoY, while fee income grew by 9.2% YoY. Trading volumes contracted due to a decrease in a lower valued-added segment – the interdealer repo market (–26.6% YoY) – and an overall decrease in CCP repo (excluding GCC) market activity (-4.9% YoY). The increase of the effective fee was due to the greater share of high value-added GCC repo, a UCP-linked fee rate change and an extension of repo terms on a full-year basis.

FX Market

Trading volumes decreased by 11.5% YoY. At the same time, the EUR/USD currency pair became more popular on both the spot (+25.4% YoY) and swap (+33.5%) markets. The slight increase in the effective fee was due to UCP-linked fee rate change, offset by a growing percentage of swap transactions on the market.

Derivatives Market

Derivatives delivered 23.0% YoY growth of fee and commission income. However, trading volumes decreased by 7.7% YoY, with FX derivatives showing a visible contraction (-23.7% YoY). Commodity futures volumes (+31.6% YoY) helped to mitigate the effect of this decline. This mix improvement, together with the UCP-linked fee rate increase helped achieve record annual fee income of RUB 2.85 bln.

Equity Market

The total capitalization of the Equities Market at the end of 2019 was RUB 49.02 trln (USD 791.52 bln). Fee and commission income from the Equities Market grew by 17.2% YoY on the back of a 14.9% YoY increase in trading volumes.

[1] The amount of fees and commissions for the sale of software and technical services, information services, listing services and other fee income.

Bond Market

Fee income from the Bond Market increased 17.4% YoY amid more modest growth (+5.4% YoY) of trading volumes (excluding overnight bonds). The effective fee in the Bond Market was supported by a higher proportion of corporate bonds in the primary market.

IT services, listing fees and other fees and commissions

Listing and other services doubled thanks to an increase in market activity. Sales of software and technological services added 29.6% YoY on the back of tariff unification and migration of KASE to MOEX's trading and settlement platform. Information services increased by 8.5% YoY. Other fee income, a line that includes the contribution from the Grain Market, declined by 33.3% YoY.

Net interest and other finance income

Realized revaluation gains on the investment portfolio supported NII performance for the year (+4.1%).
Core NII slightly declined (-3.7%) due to the expansionary monetary policy of the Russian Central Bank and the Federal Reserve.

EXPENSES

Expense structure
(RUB mln)

	2018	2019	Change 2019/2018 (RUB mln)	Change 2019/2018 (%)
General and administrative expenses	**7,941.4**	**8,321.4**	**380**	**4.8**
Depreciation of property and equipment	1,343.9	1,200.5	–143.4	–10.7
Amortization of intangible assets	1,995.6	2,346.8	351.2	17.6
Equipment and intangible assets maintenance	1,205.5	1,381.4	175.9	14.6
Professional services	572.6	538.4	–34.2	–6.0
Taxes (other than income tax)	554.3	603.9	49.6	8.9
Market maker fees	517.0	674.6	157.6	30.5
Other administrative and other expenses	257.2	224.7	–32.5	–12.6
Registrar and foreign depository services	292.3	312.6	20.3	6.9
Rent and office maintenance	484.6	318.4	–166.2	–34.3
Communication services	104.7	82.8	–21.9	–20.9
Information services	237.6	307.3	69.7	29.3
Advertising costs	376.1	330.0	–46.1	–12.3
Personnel expenses	**6,512.3**	**7,113.9**	**601.6**	**9.2**
Employees benefits except for share-based payments	5,250.8	5,890.1	639.3	12.2
Payroll related taxes	975.7	1,128.8	153.1	15.7
Share-based payment expense on equity settled instruments	273.3	71.0	–202.3	–74.0
Share-based payment expense on cash settled instruments	12.5	24.0	11.5	92.0

Opex for 2019 added 6.8% YoY, below the guidance range of 8.0–10.0%. Adjusted for pass-through grain expenses, opex increased by 8.0% YoY. The increase was mainly driven by a rise of personnel expenses following salary updates and an increase in the number of employees. Amortization of intangible assets increased by 17.6% due to amortization of obsolete software. The guidance range for opex in 2020 is 6.5–9.5%.

Capital expenditures

Capex for the year was RUB 2.20 bln, all of which went toward purchases of equipment and software as well as software development.

Cash and cash equivalents

The cash position[1] at the end of 2019 was RUB 92.96 bln. The company had no debt as of the end of the year.

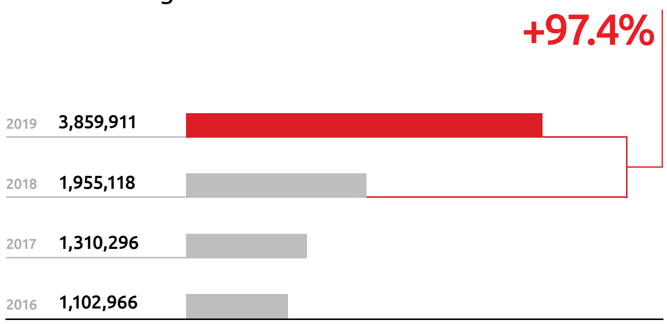
[1] Cash position is calculated as the sum of Cash and cash equivalents, Financial assets at fair value through profit and loss, Due from financial institutions, Financial assets at fair value though other comprehensive income, Current tax prepayments and Other financial assets less Balances of market participants, Overnight bank loans, Distributions payable to holders of securities, Margin account, Liabilities related to assets held for sale, Current tax payables and Other financial liabilities.

Moscow Exchange's markets

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 a leading venue for issuance and trading of shares and depositary receipts; government, regional and corporate bonds; Bank of Russia bonds; sovereign and corporate Eurobonds; investment units of mutual funds (PIFs) and exchange-traded mutual funds (BPIFs); mortgage participation certificates; and shares of exchange-traded funds (ETFs).

Number of private investors with brokerage accounts



Equity Market

	2016	2017	2018	2019	Change 2019/2018 (%)
Equity Market trading volumes, RUB billion	**9,277**	**9,185**	**10,830**	**12,443**	**14.9**

Bond Market

	2016	2017	2018	2019	Change 2019/2018 (%)
Bond Market trading volumes, RUB billion	**14,616**	**26,228**	**29,841**	**28,219**	**–5.4**
Secondary trading, RUB billion	**9,589**	**10,979**	**10,219**	**10,631**	**4.0**
Sovereign bonds (OFZ)	4,961	6,470	6,538	6,781	3.7
Bank of Russia bonds (OBR)		101	537	411	–23.5
Municipal bonds	398	337	274	176	–35.6
Corporate bonds	4,135	3,928	2,767	3,109	12.3
Other	95	143	102	155	51.7
Primary market and bond redemptions, RUB billion	**5,027**	**15,250**	**19,622**	**17,588**	**–10.4**
Sovereign bonds (OFZ)	1,123	1,715	1,034	2,061	99.3
Bank of Russia bonds (OBR)		502	7,017	6,062	–13.6
Municipal bonds	159	214	86	112	30.2
Corporate bonds	2,342	3,148	2,850	3,483	22.2
One-day bonds	1,401	9,665	8,625	5,859	–32.1
Other	2	6	10	14	39.2

Trading volumes and new issuance

In 2019, total trading volumes on the Equity and Bond Market amounted to RUB 40.7 trln, in line with 2018 volumes. Trading volumes on the Equity Market increased by 14.9% to RUB 12.4 trln, reaching a record high for the past eight years. Bond Market trading volumes totaled RUB 28.2 trln, a 5.4% decrease versus 2018.

In 2019 the volume of bond placements decreased by 10.4% to RUB 17.6 trln due to a decrease in the volume of placements of overnight bonds (RUB 5.9 trln in 2019 compared to RUB 8.6 trln in 2018) and a decrease of 14% to RUB 6.1 trln of the Bank of Russia bond issue volumes. Corporate bond placements increased by 35.8% to RUB 3.2 trln and Russian government bond (OFZ) placements doubled to RUB 2.1 trln.

RUB 3.2 trln
corporate bond placements

OFZ placements were boosted by high demand from Russian and foreign investors amid a lower interest rate and investment risk environment.

In 2019, 59 first-time bond issuers placed a total of RUB 81.1 bln. Placements by 22 issuers that had not issued a bond in the previous three years raised a total of RUB 200 bln.

The increase in trading volumes on the Equity Market was primarily driven by market growth and increased client activity. In 2019, the MOEX Russia Index grew by 28.6%, the RTS Index was up by 44.9%. In November, the MOEX Index reached an all-time high, exceeding 3,000 points.

Attracting retail investors

2019 was a record year in terms of attracting individuals to the Equity and Bond Market. During the year, 1.9 mln new retail investors entered the market, with the total number of retail investors reaching 3.9 mln by year-end.

Most of the total amount falls on individual investment accounts (IIA): at the end of 2019, their number reached 1.6 mln, of which more than a million were opened in 2019, which is twice as much as in the previous four years. The total value of assets on IIAs in 2019 increased by 99%, reaching RUB 197.3 bln (according to the Bank of Russia), the total trading volumes on IIAs increased by 30% to RUB 620 bln.

Customer activity increased: the number of private clients that concluded at least one transaction in the month of December reached 390,000; the number of customers that concluded at least one transaction in 2019 on the Equity Market stood at 791,000 (versus 456,000 in 2018).

Retail investors accounted for 34% of stock trading volume in 2019, versus 36% in 2018. Retail investors purchased 18.2% of primary corporate bond issuance (not including overnight bonds) versus 11.2% in 2018, and accounted for 10.6% of secondary trading of corporate bonds, versus 8.4% in 2018.

1.9 mln
new private investors

The influx of retail investors into the market is being driven by the development of digital technologies, tax incentives, lower interest rates on deposits and the expansion of exchange tools. In August 2019, online customer registration became available across all the Exchange’s markets. This allows investors to start trading seconds after concluding a contract with a broker or bank. Previously, this procedure took nearly a full day. In addition, retail investors now have the opportunity to deposit funds into brokerage accounts using the Faster Payments System, accelerating conclusion of transactions and reducing costs.

Exchange-traded funds

In 2019, the market for exchange-traded funds, primarily, exchange-traded investment funds (BPIF) – the equivalent of ETFs under Russian law – was actively expanded. The legislative framework for the start of trading in BPIFs was created in 2018, and at the end of 2019 19 BPIFs were traded on the Exchange, 17 of which were admitted to trading during 2019.

In total in 2019, 35 exchange-traded funds of eight companies based on benchmarks of eight countries were traded on the Exchange. The underlying assets of these funds are stock indices, shares, bonds and commodities. The total value of the net assets of exchange-traded funds for 2019 increased by 168% to RUB 38.6 bln in 2019; the total average daily trading volume was RUB 205 mln.

+168 %
growth of ETFs' NAV

Exchange-traded funds facilitate investing with minimal costs, following the fund portfolio strategy, and also ensure the interaction of asset management businesses and brokerage companies. Exchange-traded funds provide retail and institutional investors with the opportunity to purchase portfolios of shares of leading Russian or global companies, government and corporate bonds. Trades in fund shares are conducted both in RUB and in foreign currency.

In 2019, the Exchange provided participants with trading technology that allows them to admit exchange-traded funds with partial deposits and settlement on T+2 basis, as well as the ability to conduct transactions with exchange-traded funds in EUR. A number of exchange-traded funds are currently traded in three currencies – RUB, USD and EUR.

In order to popularize exchange-traded funds, as well as increase the number of active retail investors, the Exchange held a competition for analysts "Prize Funds" on the invest-idei.ru portal. As part of the competition, 28 trading ideas from 11 participants were published, eight of which gave positive yield. 30% of all ideas were released for BPIFs, which indicates the growing popularity of this instrument both among investors and analysts.

Responsible investing

In 2019, the Sustainability Sector was established to promote responsible investing and help companies that implement environmental and social projects to raise financing.

The new sector consists of three independent segments: green bonds, social bonds and national projects. In 2019, two green bond issues totaling RUB 750 mln debuted on the Sustainability Sector.

The green and social bond segments may include securities of Russian and foreign issuers if the issue, issuer or investment project is compliant with the green / social financing principles of the International Capital Market Association (ICMA) or Climate Bonds Initiative (CBI), and an independent external evaluation certifies compliance. This is in line with the strategy for development of green and social bonds and sustainability bonds being developed by the Ministry of Economic Development of Russia, relevant federal executive bodies, the Bank of Russia and representatives of the business community. This strategy provides for tax incentives for issuers and Bank of Russia support for investors, including in the form of special provisioning conditions.

Bonds of Russian and foreign issuers may be included in the national projects segment if the issue, issuer or investment project meets the objectives and results of the national projects "Environment", "Demography", "Healthcare", federal projects including "Implementation of Best Available Technologies", or if there is a decision of bodies or officials of state authorities, interdepartmental commissions on compliance with the objectives and results of one of the projects specified in the Listing Rules.

In March 2019, the Exchange entered into a cooperation agreement with the Russian Union of Industrialists and Entrepreneurs (RSPP) to develop and strengthen sustainable business practices of Russian issuers, increase their investment attractiveness, promote increased transparency of issuers and strengthen investor confidence. As part of this work, in April the Exchange began daily calculation and publication of two sustainability stock indices – Responsibility & Transparency and the Sustainable Development Vector – based on the analysis of companies by ESG indicators carried out annually by RSPP. The indices are calculated based on the issuers who disclose the most complete information in the areas of sustainable development and corporate social responsibility.

Attracting international investors

In 2019, active development of the Sponsored Market Access (SMA) service continued, allowing clients of market participants to directly trade on the Exchange's Equity & Bond Market. At the end of 2019 130 SMA-logins were registered by 12 participants.

SMA accounted for 5% of total Equities Market trading volume in December 2019, up from 1% in January 2019.

In 2019, foreign investor customer activity increased. According to ThomsonONE, the volume of investments of foreign funds in Russian shares in 2019 increased by 22% to USD 83.3 bln, nearly returning to the level of pre-crisis 2013 (USD 85.6 bln).

Liquidity

In autumn, the first stage of the transition of corporate bonds to the T+1 trading mode with partial collateral for transactions took place. 294 securities were transferred, and the remaining corporate bonds are planned to be transferred to T+1 mode in the first half of 2020. This process is designed to support an increase in trading volumes for these instruments. In November, the minimum lot size for 18 Eurobonds was reduced to USD 1,000, which increased turnover on the Exchange more than twofold to RUB 62 mln per day.

In April, the first cross-market market maker program to support liquidity of Equity & Bond Market and Derivatives Market instruments was launched. The program is aimed at supporting liquidity and improving the quality of the exchange order book for 12 pairs of instruments (equities and equity futures) that are traded simultaneously on the two markets. For each pair of instruments, mirror spreads of bilateral quotes with the same volumes were supported during the main trading session. Thanks to the program, existing Equity & Bond Market and Derivatives Market market makers began to simultaneously fulfil their obligations in relation to the instruments of both markets. Another success was the attraction of additional market makers to support liquidity of the Equity & Bond Market and Derivatives Markets.

Expanding the range of instruments

2019 saw placement of the first issue of structured bonds registered under Russian law. Issuance of structured bonds became possible in October 2018 after amendments to the legislation on securities came into force.
Under Russian law, a structured bond is a security that does not provide guaranteed repayment of the nominal value to its holder. Payment of the nominal value, part of the value or yield on such a security depends on certain circumstances specified in the resolutions of the issue.

In August 2019, a joint pricing convention of mortgage bonds was developed together with DOM.RF, which calculates the yield, duration and other parameters of this type of bonds. From December 16 these indicators are published on the Exchange's website.

It's become possible to hold OFZ placement auctions without limiting the size of the Ministry of Finance of the Russian Federation's offering. Of the 84 OFZ auctions held in 2019, 48 were held without limitations on the size of the offering.

In August a new format of OFZ-PK was issued. The new format sets the interest yield rate with minimal "delay" relative to the RUONIA rate (with a shift of seven days back). In 2019, RUB 100 bln of such bonds were placed.

In 2019, the first stage of the modernization of the trading regime for large blocks of OFZs (DarkPool) took place. This improved the algorithm that sets pricing and the auction time.

After an eight-year hiatus, in July 2019 the Ministry of Finance of the Republic of Belarus returned to the Russian bond market with two three-year bond offerings denominated in RUB, totaling RUB 10 bln. Belarus had last tapped the Russian bond market in 2010.

The development of debt market OTC systems, which began in 2018, continued. In 2019, market participants got the opportunity to clear OTC transactions with a central counterparty with settlement in RUB, USD and EUR with bonds, including those not listed on the Exchange. This made it possible to expand the list of available instruments in the OTC system, including through Eurobonds. In this mode, at the end of 2019, 60% of transactions worth RUB 2.4 bln were concluded. In addition, participants gained access to settlement using the Delivery versus payment (DVP) technology at NSD. Reference prices RuData and Refinitiv, which can be used by participants as reference points of the current price of bonds to negotiate the terms of the transaction, also became available to users of the OTC system.

At the end of 2019, 73 companies were connected to the OTC system. At the end of 2019, the total number of instruments available in the OTC system was 2,118 bond issues with a total nominal value of more than RUB 54 trln, including Russian government and corporate bonds, as well as over 285 sovereign and corporate Eurobond issues

2,118 bond issues
are available in the OTC system

Attracting SMEs

To encourage SMEs to tap the public markets, the Growth Sector has been functioning on MOEX since 2017. The Growth Sector is intended to attract 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 investors' allocations.

The Growth Sector is supported by the SME Corporation, MSP Bank, Industry Development Fund (IDF), the Russian Direct Investment Fund (RDIF), Russian Export Centre (REC) and the Ministry of Economic Development and the Ministry of Industry and Trade. The main partner of this initiative is the Bank of Russia.

In 2019, securities of 22 issuers were included in the Growth Sector, including 15 bonds of SME issuers. The total Growth Sector bond issuance doubled year-on-year in 2019, exceeding RUB 20 bln.

In 2019, implementation of the SME national project began. One of the most important goals of the project, which is planned to run through 2024, is to expand access to financial resources for SMEs, including by encouraging SMEs to tap the public markets.

In 2019, seven SMEs traded on the Growth Sector received support under the national project.

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: from January 1, 2019, investment income from securities of issuers with a market capitalization of up to RUB 25 bln is not taxable, provided that the investor holds them for at least one year.

In 2019 total trading volumes in the IIM Sector increased by 20% to RUB 57.7 bln. Securities of four issuers were placed. At the end of 2019, 20 securities were traded in the sector and the capitalization of the sector stood at RUB 423 bln.

> RUB 20 bln
volume of bonds placed in the Growth Sector

Companies are 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 adhere to 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 retail and institutional investors.

In 2019, a new version of the listing rules came into force, that introduces additional requirements for securities and issuers whose shares or bonds are included in the second listing level. In particular, a new requirement was introduced for credit rating of the issuer / bond issue or surety / guarantor, similar to the rating level applicable for the first level.

As part of the process of informing investors about the quality of traded securities, 72 securities of 33 issuers were included in the Sector of High Investment Risk Companies in 2019.

A new securities sector was introduced, the Sustainability Sector – which consists of the green bond segment, the social bond segment and the national project segment – for bonds placed in order to raise funds for financing or refinancing of environmental or other social projects.

The Exchange is actively working with small- and medium-sized enterprises (SMEs), supporting the development of the SME national project. Securities issued by SMEs can only be included in the second or third listing level simultaneously with inclusion in the Growth Sector or in the third level simultaneously with inclusion in the High Investment Risk Companies Sectors.

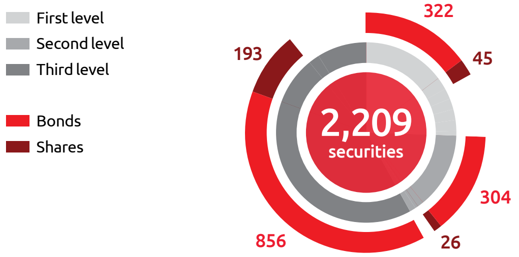
In 2019, the implementation of a strategy on digitalization of listing services for issuers continued: use of an electronic digital signature, as well as electronic document management for registration of issue documents of exchange-traded bonds allows issuers to reduce costs for placements by eliminating paper document management, increase the speed of interaction with MOEX and improve the reliability of document management. At the end of 2019, 306 issuers (46%) used electronic signatures for listing purposes, up 20% versus the previous year.

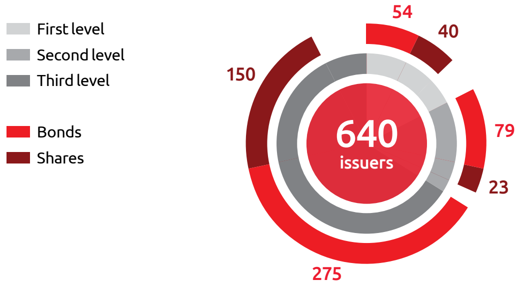
In 2019, new listing services and tariffs for listing services were developed due to new legislation coming into force in 2020 that effects the securities market. Under the new tariff model, from 2020 the cost of maintaining bonds will not depend on the listing level of the issuer's bonds. In addition, preferential tariffs are maintained for the issuance of bonds by SME issuers included in the Growth Sector.

As of the end of 2019, 2,209 securities of 640 issuers were admitted to trading, including 264 shares of 213 issuers and 1,482 bonds of 354 issuers. The Exchange quotation lists include 923 securities of 222 issuers, including 558 securities of 128 issuers in the first level and 365 securities of 118 issuers in the second level.

The number of exchange-traded structured bonds increased, indicating interest among large issuers in similar instruments intended for retail investors. In 2019, the Exchange registered 187 issues of exchange-traded structured bonds (20% of all issues). Over the last four years the number of structured bonds in circulation has grown nine-fold, and the number of issuers has grown to 10.

Secuities admitted to trading on MOEX





Basic requirements for inclusion of ordinary shares in quotation lists

Criteria	First level listing	Second level listing
Free float	• ≥ 10% with an 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% with market value of the free-float ≥ RUB 1 bln
Length of issuer's existence	≥ 3 years	≥ 1 year, or ≥ 1 month, if the issuer controls a company with duration ≥ 1 year, provided that its share of business under IFRS is ≥ 50% of the group's total business
Preparation and disclosure of IFRS statements	3 years	1 year
Corporate governance	• At least 1/5 of the composition of the Board of Directors, but at least three independent directors • Audit, Remuneration, and HR Committees • Corporate Secretary and the approved Regulations on the Corporate Secretary	• At least two independent directors on the Board of Directors • Audit Committees • Corporate Secretary
	• Approved dividend policy • Internal Audit Unit and approved internal audit policy	

Basic requirements for inclusion of bonds in quotation lists

Criteria	First level listing	Second level listing
Issue volume	≥ RUB 2 bln	≥ RUB 500 mln
Nominal value	≤ RUB 50,000 or 1000 monetary units, if the nominal value is expressed in foreign currency	
Length of existence	≥ 3 years	≥ 1 year or 3 months in the presence of a guarantor (surety), the period of existence of which is ≥ 1 year
Preparation and disclosure of IFRS	3 years and publication of the guarantor's statements if there is security for the issue	1 year or publication of guarantor's statements, if the period of existence of the issuer is < 1 year
No defaults	No defaults or ≥ 3 years have passed since the default	No defaults or ≥ 2 years have passed since the default
Credit rating not lower than	• BBB+ (ACRA) • ruBBB+ (Expert RA) • BB- (Fitch) • BB- (S&P) • B1 (Moody's)	
Corporate governance	• Board of Directors, • Internal Audit Unit; • approved internal audit policy	–
Bondholder Representative	No additional terms established	Applicable to unsecured bonds

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, agricultural products).

Trading volumes

In 2019, the total trading volumes on the Derivatives Market amounted to RUB 82.4 trln, or 1,455 mln contracts (versus RUB 89.3 trln or 1,500 contracts in 2018), including futures trading volumes of RUB 77.4 trln and options trading volumes of RUB 5.0 trln.

The year-on-year decrease in trading volumes on the Derivatives Market was mainly due to the decrease in the volume of trading of FX against a background of low exchange rate volatility. Nonetheless, Moscow Exchange was one of the top three exchanges globally by FX futures trading volume, according to the Futures Industry Association (FIA).

At the same time, trading volume in commodity derivatives continued to grow steadily: in 2019, commodity futures volumes increased by 32% to RUB 27.5 trln, primarily driven by Brent crude oil contracts, which posted a 30% increase in volumes. According to the FIA, in 2019 Moscow Exchange maintained the top position globally for Brent futures in terms of the number of contracts traded for the second year in a row.

At the same time, the volume of open positions across nearly all instruments increased, which indicates an increase in long-term investment demand. The total volume of open positions in the Derivatives Market as of the end of 2019 increased by 35% compared to the end of 2018, to RUB 614.9 bln. The volume of open positions in commodity futures increased by 2.6 times to RUB 131.1 bln.

Derivatives Market

	2016	2017	2018	2019	Change 2019/2018 (%)
Derivatives Market trading volumes, RUB billion	**115,271**	**84,497**	**89,263**	**82,370**	–7.7
Futures	109,489	77,624	82,397	77,376	–6.1
Options	5,782	6,873	6,866	4,994	–27.3
Futures, RUB billion	**109,489**	**77,624**	**82,397**	**77,376**	–6.1
FX	64,561	39,460	37,868	28,996	–23.4
Interest rates	27	17	10	12	15.4
Single stock	3,529	3,383	4,439	4,345	–2.1
Indices	26,138	18,486	19,161	16,504	–13.9
Commodities	15,234	16,278	20,918	27,519	31.6
Options, RUB billion	**5,782**	**6,873**	**6,866**	**4,994**	–27.3
FX	2,119	2,184	2,047	1,478	–27.8
Single stock	87	35	25	51	100.9
Indices	3,434	4,440	4,438	3,107	–30.0
Commodities	142	213	356	358	0.5

New product offering

In 2019, the Derivatives Market continued to actively expand the line of derivatives on various types of assets with the aim of providing additional trading and hedging opportunities to professional participants and portfolio managers as well as retail investors.

In March, the Exchange launched trading of deliverable futures contracts and options on futures of ordinary shares of PJSC Polyus and Magnitogorsk Iron & Steel Works. As of the end of 2019, 24 futures and 24 options contracts of shares of 22 Russian issuers were available to Derivatives Market participants. In 2019, trading volume in futures and options on Russian stocks amounted to RUB 4.4 trln.

In May, the Derivatives Market began trading settlement futures contracts for the RUSFAR (Russian Secured Funding Average Rate) Money Market rate, calculated on the basis of orders and transactions of the Russian repo market with the CCP in general collateral certificates (GCC).

New contracts provide various trading strategies to Money Market participants:

- hedging of interest income when placing/raising funds secured by GCC;
- hedging a portfolio of securities;
- investing in one-month Money Market instruments.

+35 %
growth of open interest in derivatives in 2019

In October, trading of deliverable silver futures began on the Derivatives Market. The new contract expanded the range of deliverable commodity derivatives: a year earlier, the Exchange started trading in deliverable gold futures. Gold and silver are supplied to the spot market of precious metals of the Exchange. The new tool promotes the development of the Exchange's precious metals market, provides additional trading opportunities for both private investors and professional participants (banks and brokers), as well as participants in the precious metals market, including jewelry companies and non-ferrous metal working plants.

Technological development

At the beginning of 2019, the possibility of separating trading and clearing memberships was introduced on the Derivatives Market. As a result, foreign companies were able to independently carry out clearing and settlement of their own transactions and transactions of their clients concluded on the Exchange's markets. This will allow investment companies to offer their institutional customers security lodging and safekeeping of cash assets directly on NCC accounts, which minimizes counterparty and credit risks for international clients trading on the Exchange.

In August, Derivatives Market participants were provided with an online registration service for new customers. This was the final step in online customer registration becoming available on all the Exchange's major markets: the Equity and Bond Market, the FX Market and the Derivatives Market. Using the new service, clients of trading participants are able to access and begin to conduct transactions with futures and options within a few seconds from the moment of concluding an agreement with a broker or bank. Previously, this procedure took nearly 24 hours. Since this service was rolled out on the Derivatives Market, more than 220,000 customer accounts have been opened.

Liquidity

In order to grow liquidity of derivatives and improve the quality of the Exchange order book, a number of significant changes were made to liquidity incentive programs on the Derivatives Market in 2019. These changes focused on increasing market and financial efficiency of existing market-maker programs, as well as attracting large market participants for quoting.

New programs to support liquidity were launched, including linking instruments across trading strategies, for cross-market pairs of instruments and for a series of long-term options. The criteria was also established to select participants in the programs.

In total, in 2019 more than 70% of instruments were supported by market makers, some of which were new interest and commodity futures, as well as index options launched during the year.

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 transition trading in standardized derivative financial instruments to on-exchange marketplaces.

In 2019, the Exchange observed a shift in the structure of transactions concluded in the Standardized Derivatives Market. The greatest activity was recorded in operations with cross currency and interest rate swaps and interest rate swaps. Trading volume in interest rate derivatives in 2019 more than doubled. The volume of open positions at the end of 2019 increased by 47% year-on-year and reached RUB 440 bln. On average, the tenor of transactions concluded in 2019 roughly doubled. The total number of participants in the Standardized Derivatives Market increased by 14% to 48.

In 2019, the Standardized Derivatives Market was connected to the NCC settlement infrastructure and to the Unified Collateral Pool technology, giving participants the opportunity to use unified collateral and a single account on the Exchange markets.

In May 2019, a new instrument for hedging interest rate risk with a tenor of up to one year became available to Standardized Derivatives Market participants, the Overnight Index Swap (OIS) for RUSFAR rate. Banks that are participants of the Standardized Derivatives Market were able to effectively manage interest rate risks and expand their product offerings, including through the introduction of floating rate loan products for corporate clients.

FX MARKET

Moscow Exchange is the oldest regulated trading venue in Russia, and has offered FX trading since 1992. It is a liquidity center for operations with the Russian ruble and a crucial element of the Russian 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 2019, operations on MOEX accounted for 56% of USD/RUB conversions in Russia and 64% of EUR/RUB conversions in Russia.

Moscow Exchange's FX Market hosts trading in 17 currency pairs: USD, EUR, GBP, CHF, HKD, CNY, JPY, BYR, KZT and TRY with the Russian ruble, as well as EUR, GBP, CHF, CNY, JPY, KZT and TRY with the US dollar.

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

Trading volumes

Trading volumes in the FX Market in 2019 accounted for RUB 308.3 trln, down from RUB 348.4 trln in 2018. Spot trading volumes were RUB 67.4 trln, while swap trading volumes were RUB 240.9 trln.

RUB 308.3 trln
trading volumes in the FX Market

In 2019 the structure of trading by currency pair changed only marginally: the share of trading accounted for by the USD/RUB pair decreased from 80% to 79% and the share of trading accounted for by the EUR/RUB pair remained at 17%. All other currency pairs accounted for 4%, up from 3% in 2018.

FX Market

	2016	2017	2018	2019	Change 2019/2018 (%)
FX Market trading volumes, RUB billion	**329,954**	**347,671**	**348,368**	**308,274**	**–11.5**
Spot	107,169	78,380	86,682	67,370	–22.3
Swaps and forwards	222,785	269,291	261,686	240,904	–7.9
Currency pairs, RUB billion					
USD – RUB	278,334	285,962	277,751	242,627	–12.6
EUR – RUB	43,065	48,231	59,243	51,571	–12.9
EUR – USD	7,669	12,869	10,084	13,349	32.4
CNY – RUB	776	492	1,081	551	–49.1
Other	110	117	209	176	–15.8

Expansion of the client base

More brokerage companies continued to provide their clients with direct access to MOEX's FX Market. In 2019 the number of clients registered with MOEX increased 2.5 times to RUB 3.5 mln. The number of active individual clients increased 2.4 times to 147,000 (December 2019 versus December 2018). Individuals accounted for approximately 8% of spot transactions.

The Exchange continues to expand direct access for legal entities that are not professional financial market participants. As of the end of 2019, 40 corporations, including insurance companies, connected to the FX Market. Their aggregate trading volume in 2019 was more than twice that of 2018 at RUB 1.1 trln.

Technological development

One of the main principles of the FX Market's development strategy is to provide various services for order execution across a range of volumes and client types, and subsequently for clearing of these transactions.

In 2019 the Exchange continued to expand access to global FX liquidity with the use of exchange infrastructure and interfaces of the FX Market on quotes of world currencies from the major international banks that act as liquidity providers. Since the start of this project at the end of 2018 market participants have been able to execute OTC trades with the EUR/USD, GBP/USD, USD/CNY, USD/TRY, USD/JPY currency pairs. Additionally, participants are now able to join OTC-mode using FIX-protocol, a global standard in use on all MOEX markets.

Obtaining a flow of quotations from major Western liquidity providers strengthened MOEX's positions in these currency pairs. At the end of the year 65 participants had joined the service and average daily trading volume exceeded USD 100 mln.

In April, a speed bump that randomly delays orders was rolled out on the FX Market. Under the new system, cancel transactions are sent to the system immediately. Initially an alternative matching technology was implemented in individual instruments, and in November conclusion of major non-negotiated spot transactions with the use of a speed bump was segregated as a special mode with large lots for TOD and TOM instruments in the USD/RUB and EUR/RUB currency pairs.

In addition, an asymmetrical fee has been introduced for all instruments in the speed bump mode, which allows liquidity takers to conclude transactions with zero trading fee.

The launch of speed bump technology and fee differentiation made it possible to gain large-block liquidity from non-banking providers and major Russian banks. In 2019, 46 participants joined the large lot mode. In December, the average daily trading volume was USD 80 mln.

In December, a new OTC service Request for Stream (RFS) with an asymmetrical fee became available to market participants; the service makes it possible to conclude major foreign exchange transactions at the best prices thanks to micro-auctions with a wide range of liquidity providers.

Expanding the range of instruments

As part of its efforts to streamline its product offering and provide participants with additional opportunities to diversify transactions, MOEX launched trading in a new currency pair, USD/JPY.

In addition, TOM instruments and TODTOM swaps became available in the JPY/RUB currency pair.

As part of the efforts to develop matching services and promote exchange-based fixings, in April market participants were provided with a Matching Service at the weighted average USD/RUB FX rate set by MOEX at 11:30 am MSK as the official Bank of Russia rate. In October, MOEX extended the time of receipt of orders for the instrument and at USD/RUB MOEX currency fixing determined at on-exchange trades on a daily basis at 12:30 pm.

New product offerings provide participants with additional opportunities to diversify their business strategies and promote liquidity of the FX Market.

Attracting international investors

In 2019 MOEX continued to develop services and 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 of the end of 2019, the FX Market's client base included 14,600 registered non-resident clients from 125 countries. For the third consecutive year, non-residents accounted for 38% of spot turnover.

In 2019, turnover of non-resident transactions under SMA and ICM increased by 15% to RUB 18.3 trln. Approximately 100 SMA logins were registered for seven participants during the year.

As part of development of the integrated FX Market of the Eurasian Economic Union (EAEU), in 2019 access to the FX Market was provided to five banks: Bank BelVEB OJSC, VTB Bank, Paritetbank (Belarus), VTB Bank (Kazakhstan) and Islamic Zaman-Bank. Thus, as at the end of 2019, direct access to MOEX's FX Market was provided to 19 banks from five Eurasian Economic Union countries, including two international financial institutions: the Interstate Bank and the Eurasian Development Bank (EDB). In 2019, trading volumes generated by participants of the integrated FX Market exceeded RUB 1.3 trln.

Expanding the range of instruments to include currency pairs with the RUB and national currencies of EAEU and BRICS states as well as other countries is a priority growth area for the FX Market. In 2019 the volumes of transactions with KZT increased 11-fold and for BYR and TRY volumes nearly doubled. Developing liquid trading markets promotes the use of national currencies in foreign trade and investment.

In November, MOEX signed a memorandum of understanding with China Foreign Exchange Trade System (CFETS) aimed at boosting liquidity of the CNY/RUB currency pair on both platforms and promoting settlements in national currencies.

Liquidity

In the first half of 2019 the Exchange operated a market-maker program aimed boosting large-lot liquidity in the USD/RUB currency pair with TOM (tomorrow) settlement. During that time, average daily instant liquidity increased threefold, reaching USD 20 mln.

In February a new marketing promotion called Growth Program was launched, which included a 100% refund of trading fees for the USD/RUB currency pair in TOM settlements, with the aim of promoting passive transactions. Six months into the program, participants had increased their passive volumes by USD 4 bln.

At present, 12 market-maker programs aimed at stimulating liquidity are in place. Under the programs market-makers conduct transactions aimed at improving the spread and maintaining instant liquidity.

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 fulfilment of obligations before all participants. Repo with the CCP in general collateral certificates (GCC) is also available and is now the most widely traded segment on the Money Market.

Trading volumes

In 2019, total Money Market trading volumes amounted to RUB 346.3 trln, down from RUB 364.2 trln in 2018. Repo trading volumes for 2019 totalled RUB 292.8 trln, accounting for 85% of total Money Market volumes; trading volumes of deposit and credit transactions for 2019 totalled RUB 53.5 trln.

15.3 %
growth of turnover in GCC repo

The year-on-year decrease in total Money Market trading volumes was the result of a reduction of inter-dealer repo transactions (down by 26.6% to RUB 36.4 trln) and by the extension of terms of repo transactions with the CCP. The average daily open interest in repos with the CCP in 2019 increased by 11% – to RUB 2.87 trln, and the average duration of repos with the CCP increased to 4.1 days from 3.5 days in 2018.

GCC repo with the CCP was the fastest-growing repo product in 2019: trading volumes in that segment totalled RUB 54.1 trln, an increase of 15.3% versus 2018. The average daily open interest in GCC repos doubled year-on-year to RUB 733.5 bln.

In 2019, 240 new securities were admitted for repo transactions with the CCP, accounting for RUB 2.7 trln in trading volume. At the end of 2019 participants were able to conclude repo transactions with the CCP with a total of 1,175 securities. In addition to settlements in RUB, USD and EUR, in 2019 it became possible to perform settlements for repo transactions with the CCP in CNY.

In April, MOEX started calculation of a new index tracking performance of the Money Market, RUSFAR (Russian Secured Funding Average Rate). RUSFAR reflects the value of secured money and is calculated on the basis of the most liquid segment of the Money Market – CCP-cleared repo transactions using general collateral certificates. RUSFAR is calculated daily on the basis of orders and CCP-cleared repo transactions using general collateral certificates concluded between 10:00 am to 12:30 pm Moscow time. In August RUSFAR became available for repo transactions concluded in USD, thus establishing a dollar-denominated index of the Russian Money Market.

Money Market

	2016	2017	2018	2019	Change 2019/2018 (%)
Money Market trading volumes, RUB billion	**333,883**	**377,141**	**364,216**	**346,347**	**–4.9**
On-exchange repo	**296,226**	**339,509**	**309,913**	**292,813**	**–5.5**
Direct repo with the Bank of Russia	54,662	35,575	829	274	–67.0
Interdealer repo	65,393	72,397	49,663	36,441	–26.6
CCP-cleared repo	176,171	231,537	259,421	256,075	–1.3
including GCC-repo	324	6,170	46,888	54,054	15.3
Credit market	**37,657**	**37,631**	**54,303**	**53,534**	**–1.4**

RUSFAR is calculated for all key maturities – from one day to three months – in effect creating a curve of the value of secured money. Market participants were provided with the opportunity to develop instruments with a floating interest rate for long terms (deposits, credits). Additionally, trading of futures contracts on the Derivatives Market and interest swaps on RUSFAR in the Standardized Derivatives Market was launched.

Expanding the range of instruments

In 2019, Federal Treasury funds began to be deposited with the CCP on MOEX's Money Market. This allowed all participants of the Russian money market to access a new source of deep liquidity via market-based auctions. And the Federal Treasury was given the opportunity to enjoy all advantages of MOEX's Money Market, notably transparent pricing and reliability of the Central Counterparty. At the first auctions held in December 2019 the total volume of deposited funds with the CCP for the terms from one to 14 days totalled RUB 18 bln, with 13 organizations participating in the auctions.

In order to provide participants of the Money Market with a more flexible approach to liquidity management, MOEX expanded the range of instruments by introducing additional maturities:

- the terms for inter-dealer repo transactions increased from one year to three years;
- it became possible to conclude GCC repo transactions and deposits with the CCP for nine months;
- it became possible to conclude repo transactions with the CCP with OFZ for term of one and three months.

Additionally, participants were provided with the option of early execution of negotiated trades in repo with the CCP, which is beneficial for lifting maturity of transactions.

A new convention for setting settlement dates for GCC repo transactions and deposits with the CCP was introduced, taking into account working days and limitation of terms in particular modes. This improved conditions of conclusion of long-term transactions for accounting of statutory requirements of brokerages at execution of repo transactions with the CCP.

A major effort has been made to improve the quality of pricing when settling non-delivery to the CCP: changes were introduced to procedures of transfer of positions of bad-faith participants by means of non-negotiated market orders ("order to all"), applied by market participants for closure of positions of bad faith clearing participants.

Market participants were also given an opportunity to execute exchange repo transactions with the Federal Treasury by means of exchange terminal with collateral management system (CMS) and settlements at National Settlement Depository (NSD). This solution made it easier for participants to work with the Exchange services and provided access to a wide range of products by means of unified technology access. Transaction volumes in 2019 exceeded RUB 22 bln.

Attracting new categories of participants

In 2019 MOEX continued to expand direct access to the Money Market for Russian legal entities that are neither credit institutions nor professional securities market participants. Growth of this new category of participants is in line with global trends and contributes to liquidity growth. Companies themselves increased efficiency of their operations given the transparency of on-exchange trading with the possibility to deposit cash with the CCP at market repo rates. The presence of the Central Counterparty, NCC, guarantees the fulfilment of obligations in relation to all bona fide participants, and eliminates the need for market participants to assess risks and set limits on each other.

In 2019, asset management companies were provided with direct access to the deposit market with the CCP for the first time. Three companies managing funds of four PIFs became market participants.

In 2019, 34 companies were provided with access to the deposit market with the CCP, including manufacturers, banks, insurance and asset management companies and international financial organizations. Their total number reached 121 and total trading volume was RUB 19.4 trln.

COMMODITIES MARKET

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

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.

Agricultural products are traded on the Urozhay Trading and Clearing Platform, which allows for adapting functionality and specifications to industry-accepted trade and logistics standards. The technology provides direct access to trading not only for brokers, but also to partners and end customers. The main advantage of exchange-based trading for the market participants is guaranteed fulfilment of 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), maintains the participants' commodity accounts, and keeps records of cash and guaranteed funds.

At the end of 2019, total trading volumes in agricultural products amounted to RUB 38.04 bln, in line with 2018 results of RUB 38.1 bln. On the grain market, trading volumes in swap instruments totaled RUB 35.09 bln (RUB 34.8 bln in 2018), while forward transactions totaled RUB 971.4 mln or 78,800 tons (RUB 1.4 bln or 119,000 tons in 2018). The decrease in trading volumes is explained by the suspension of operations on the agricultural product market in the second half of 2019 due to issues encountered in grain storage at a number of elevators accredited by NCC. Trading volumes on the sugar market in 2019 totaled RUB 3.96 bln (RUB 3.9 bln in 2018).

In 2019, grain sales from the government intervention fund on NAMEX totaled 970,200 tons, or RUB 10.3 bln (2018: 1,025,300 tons, or RUB 9.94 bln). In total since 2002, 32.7 mln tons of grain have been sold under government interventions for a total amount of RUB 190.4 bln, and the total number of trading participants exceeded 9,300 producers, processors and exporters of grain.

RUB 38.04 bln
total trading volumes in agricultural products

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 metals accounts opened with CCP NCC. Post-trade services include dealing with bullion at NCC's depository, and an option to use precious metals held on market participants' accounts as collateral.

As of the end of 2019, total turnover in spot and swap instruments on the precious metals market was RUB 35.4 bln, down from RUB 102.3 bln in 2018. Spot market volumes totaled RUB 16.1 bln, down from RUB 17.0 bln in 2018.

RUB 35.4 bln
total turnover in spot and swap instruments on the Precious Metals Market

In October, NCC became a clearing member of the Shanghai Gold Exchange (SGE) under a memorandum on cooperation signed between the Bank of Russia and the People's Bank of China. In the future this status will allow Moscow Exchange to open a trading and clearing link with the Shanghai Gold Exchange and gain access to the world's largest gold market, China.

In December 2019, Mnogovershinnoye (a division of Highland Gold Mining Limited Group), became the first gold mining company to conclude a transaction on the precious metals market.

In addition, under the project "Links with foreign liquidity providers", the creation of a trading link for transactions with precious metals was completed. At the end of 2019, clearing participants entered into the first gold transactions via the trade link with the largest liquidity providers in London.

All these innovations are designed to increase liquidity and precious metals trading volumes on the Exchange, diversify sales markets and increase the efficiency of gold transactions for Russian precious metals market participants and their customers.

At the end of 2019, precious metals market participants included the Bank of Russia, 42 commercial banks, 12 brokerage companies and one mining company.

Commodities Market

	2016	2017	2018	2019	Change 2019/2018 (%)
Precious Metals Market trading volumes, RUB billion	**125**	**122**	**102**	**35**	**–65.4**
Grain and Sugar Market trading volumes, RUB billion	**12**	**6**	**50**	**50**	**0.7**
Grain	12	5	46	46	0.6
Sugar		0.5	4	4	2.3

Post-trade services

CLEARING

Since 2007, the National Clearing Centre (NCC; part of Moscow Exchange Group) has acted as a Clearing House and 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 markets 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) (Global Association of Central Counterparties, or CCP12) and the European Association of Central Counterparty Clearing Houses (EACH).

Ratings

In 2019, Fitch Ratings affirmed the NCC's ratings. The NCC's long-term local currency Issuer Default Rating (IDR) was affirmed at BBB with a Stable outlook, while the long-term foreign currency IDR was raised to BBB with a Stable outlook.

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 2019, the CCP's safeguard structure was further improved by increasing the amount of dedicated capital of the Standardized Derivatives Market to RUB 1 bln and introducing stress collateral on the Standardized Derivatives Market. The CCP's total amount of dedicated capital thus increased to RUB 10.1 bln.

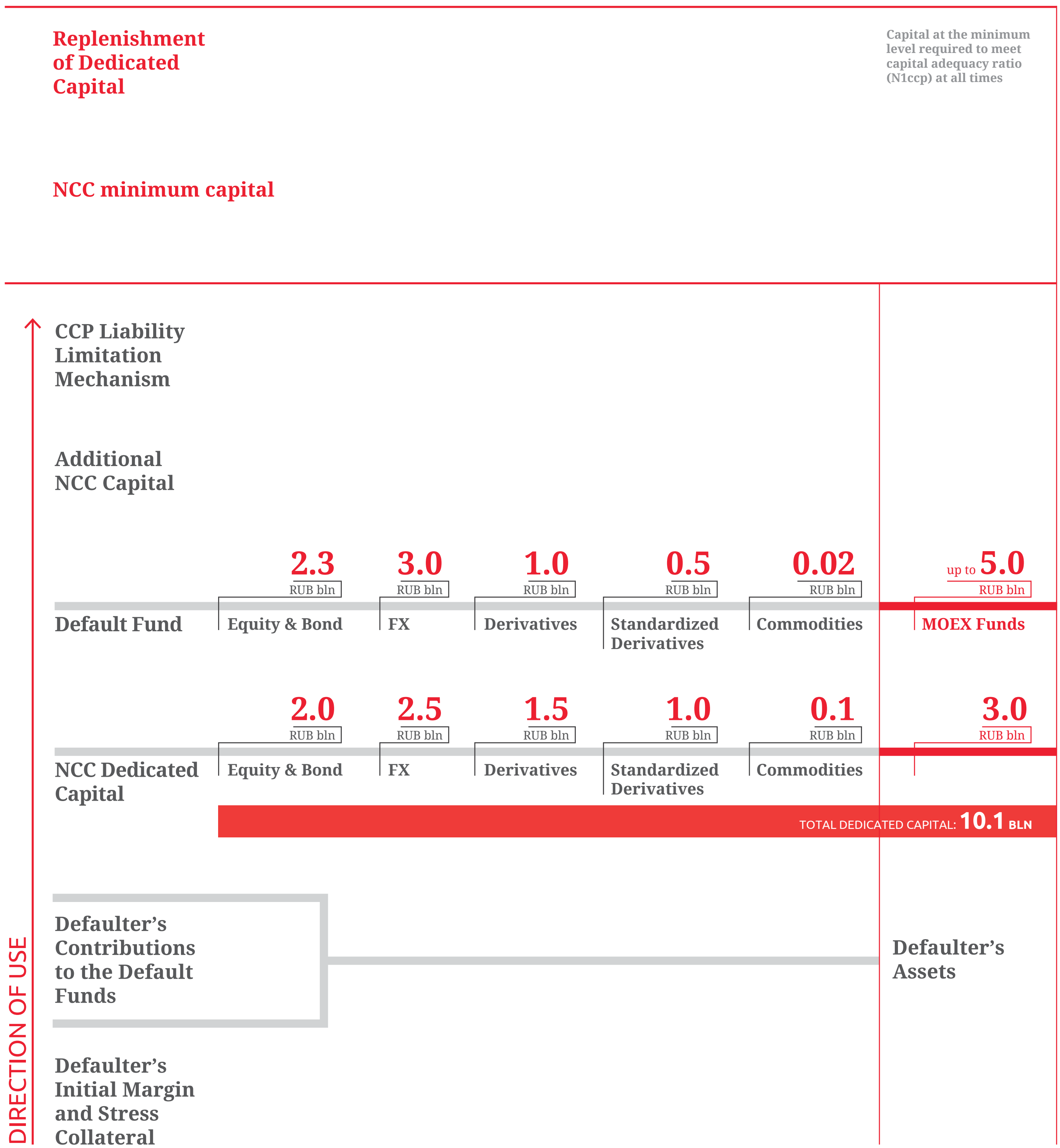
The alignment of CCP safeguard structures across MOEX's markets is designed to boost the reliability and viability of the Central Counterparty and ensuring that the NCC remains financially robust regardless of market conditions. The safeguard structure put in place meets the highest international CCP standards and the requirements of the Bank of Russia.

RUB 10.1 bln
CCP's total dedicated capital

Risk management

In 2019, as part of default management, a regime was introduced in MOEX's trading system that allows settlement of the obligations of bad-faith clearing members based on transactions concluded by the CCP in the most market way.

CCP safeguard structure



A mechanism has been introduced to control the CCP's concentration risk for consistent economic restriction of the activity of the clearing member related to the opening of positions containing concentrated risks for any of the assessed risk factors: price risk and volatility change risk, which are components of market risk, as well as interest risk. This allows to set individual limits for all risk factors that affect the risk of a portfolio of positions.

Liquidation netting with respect to the clearing participant is automated when the procedure is initiated during which corresponding prohibitory characteristics are set in all trading systems of the Group, and active orders and transactions are withdrawn. This functionality does not make it possible to carry out actions leading to increase in the positions of a clearing member whose positions are subject to compulsory liquidation.

Technological improvement

The NCC accounting system automates the generation, sending and processing of SWIFT messages through the Bank of Russia's System for Transfer of Financial Messages (SPFS). SPFS, which is based on the Bank of Russia's information and telecommunication system, was created as an alternative channel for interbank interaction to ensure guaranteed and uninterrupted provision of services for the transmission of electronic messages regarding financial transactions, and to reduce risks affecting the security and confidentiality of financial messaging.

Reporting and audit

International registrars Det Norske Veritas and Germanischer Lloyd confirmed that the NCC's quality management system complies with the international Quality Management System standard. The certificate of confirmation of compliance for clearing services, including the CCP function, is valid until December 10, 2021.

The NCC successfully validated its models for assessing the and variation margins of clearing participants, with the overall level of risk protection rated as high. Validation was carried out by PwC in accordance with the relevant Bank of Russia regulation regarding the CCP.

The NCC's IT processes were confirmed as compliant with international standards by an audit conducted by Deloitte & Touche CIS in accordance with the requirements of the relevant Bank of Russia regulation.

The NCC Reporting project in 2019 was transformed into the creation of the Hadoop Data Lake, a corporate database containing primary data from initial processing source systems, as well as storage of primary documents. NCC began by storing primary data on transactions with liquidity providers and providing them to consumers.

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, repository and clearing services, settlement and cash services, information services, collateral management services and technology services.

The NSD Strategy through 2024, as approved by the NSD's Supervisory Board, forms part of the Group's Strategy 2024, which is designed to support the synchronized and synergized development of all Group companies.

The Strategy highlights three key areas for the NSD's growth:

- settlement and depository infrastructure;
- new market and client segments;
- information assets.

Central securities depository

The volume of assets held on NSD accounts increased by 17.1% to RUB 52.67 trln in 2019. The total amount of issued securities being serviced by the NSD increased by 16.6% to 23.4 thousand. In addition, the number of securities issued by foreign issuers and Russian Ministry of Finance Eurobonds increased by 23.3% to 15.5 thou, while the number of Russian securities increased by 5.7% to 7.9 thousand.

RUB 52.67 trln
assets held on NSD accounts

The volume of federal loan bonds (OFZ) on foreign nominees' accounts increased by 61.7% YoY and reached RUB 2.8 trln as of the end of 2019.

Collateral management

The volume of funds placed by the Federal Treasury through tri-party repo trades with a basket of OFZs in 2019 increased by 15% year-on-year to RUB 19.9 trln. The year was characterized by a small decrease in structural liquidity surplus in the banking sector compared with 2018, and by gradual reduction of interest rates. The Federal Treasury reacted flexibly to market conditions and placed more than third of all monetary funds through floating-rate repo trades.

In 2019, the City of St Petersburg became the first Russian constituent region to join the NSD's collateral management system (CMS). The city's Finance Committee placed a total of RUB 87.1 bln during the year. Using repo with the NSD's CMS allows Russian regions to increase the range of instruments for investing available budget funds, minimize risks associated with placements on unsecured bank deposits, widen access to repo agreements to a greater number of credit organizations, and thereby increase the profitability of budget liquidity management operations.

The number of Single Account service users doubled to 21. This service allows for the automation of standard assets transfer between clients' positions in the NCC and NSD.

Repository

In 2019, the number and volume of transactions included in the register of agreements by the NSD's repository increased to 15,196 transactions, or RUB 559 trln, up 21% and 28%, respectively, on 2018. FX instruments and repo agreements remain the key drivers in repository reports.

15.2 mln transactions
registered by NSD repository

The Reporting Agent service implemented during 2019 allows clients with no experience of preparing reports for repository, corporations or professional participants to outsource the preparation of repository reports for the NSD.

Corporate actions center

During 2019, issuers held 4,082 meetings of holders of their securities using E-voting. There were 334 corporate actions related to securities repurchases totaling RUB 237 bln, and 48 corporate actions related to exercising preferential rights.

In 2019, the number of corporate actions totaled 16,134, up 6% on 2018. In 2019, there were 32,007 corporate actions related to foreign securities, up 27% on 2018, primarily driven by the NSD's acceptance of newly issued securities. The corporate action categories where the largest increases were recorded were coupon payments and dividends on securities.

In 2019, 19 general meetings of shareholders were held using e-voting.

Settlement and payment system

In 2019, the number of OTC transactions settled using delivery versus payment (DVP) increased by 31.6% to 286.5 thousand. The volume of transactions increased by 17.2% year-on-year to RUB 9.38 trln.

+36.1 %
growth in OTC trades with DVP settlement

There was a significant increase interest from clients in securities trading using Free of Payments Settlements (FOP) and DVP via NSD accounts with international central securities depositories (ICSDs). FOP grew by 12% while DVP increased by 72%. In 2019, clients carried out 156 thousand operations, compared to 117 thousand in 2018.

In 2019, the volume of cash transfers in Russian rubles and foreign currency decreased by 10% on 2018 to RUB 302.4 trln, due to a reduction in the number of transfers in Russian rubles. The volume of cash transfers in foreign currency almost tripled.

In 2019, the number of transactions, including in Russian rubles, totaled 1.20 mln, down 7%. The number of transactions in foreign currency increased by 34%.

The currency basket for settlements by NSD clients was expanded. The number of corporate clients making settlements using bank accounts in the NSD's payment system increased.

The NSD became the first central depository to join the SWIFT GPI global service. This service allows information about a transaction to be received during the payment transmission via the chain of banks involved in a settlement.

Technological services

In 2019, the NSD successfully completed certification by the SWIFT Service Bureau as part of the Shared Infrastructure Programme (SIP). SIP compliance confirms the high level of security and reliability of operations via the NSD's Service Bureau.

Seven new clients joined the NSD's Service Bureau during the year, bringing the total number at the end of the year to 71. Service Bureau clients sent 5,057 SWIFT messages via the NSD, up 27% on 2018.

71
total number of NSD's Service Bureau clients

As of the end of 2019, 15 corporations and 11 banks (including eight core banks) has joined the Transit 2.0 platform. Transit 2.0 includes a transfer system in Russian rubles; foreign currency transfers and foreign currency controls are partially developed.

Financial instruments identification

The NSD is the National Numbering Agency for Russia and the Substitute Numbering Agency for CIS countries, assigning ISIN, CFI and FSIN international codes to financial instruments. In 2019, the NSD assigned ISIN, CFI, and FSIN codes to 1,592 Russian financial instruments and 43 CIS financial instruments.

In May 2019, the NSD successfully underwent annual re-accreditation to confirm its Local Operating Unit (LOU) status.

As a LOU, the NSD serves 29 jurisdictions including Russia and other CIS countries, as well as countries across Europe and elsewhere. Market participants in these countries can ask the NSD to assign and service LEI codes. The NSD continues to expand its list of serviced jurisdictions based on client requests. In 2019, the NSD assigned 83 LEI codes and verified 530 LEI codes.

The NSD's activities as a Numbering Agency and LOU support the introduction of international codification standards on Russian and CIS markets, thereby increasing their transparency and integration into global market infrastructure, as well as facilitating and optimizing financial market operations.

Information products

Moscow Exchange's information services focus primarily on providing market data containing value, quantity and cost parameters for bids and transactions made on its markets, as well as aggregated indicators used in its financial and investment activities: indices, market prices and recognized quotations.

INDICES

The MOEX Russia Index and RTS Index are the key benchmarks of 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 issuers by market capitalization; the Mid- and Small-Cap Stock Index, consisting of liquid shares of mid- and small-cap companies; and the Broad Market Stock Index, which 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 the calculation base of the index by sector profiles.

The MOEX bond index family includes indices of corporate, government and municipal bonds segmented by duration and credit quality.

MOEX also calculates several industry-specific indices for market segments not included in the main line of index products. These include the Public Sector Index, Pension Savings Assets Index, Innovations Index, Volatility Index and the MOEX 10 Index.

In 2019, MOEX intensified work on developing a service to calculate the indicative Net Asset Value (iNAV) for asset managers and participants involved in rolling out and supporting structured financial products. This service is especially relevant for exchange-based mutual investment funds (EMIFs). By the end of 2019 MOEX had calculated 24 iNAVs for 19 exchange-based funds.

In addition, in 2019 the number of index exchange-based funds having the same structure as MOEX benchmarks reached 14, with volumes of assets under management totally RUB 16.9 bln. Five new MOEX index EMIFs were created in 2019.

New benchmarks

Since April 2019, the Exchange has calculated and published two sustainability indices: the Responsibility and Transparency Index and the Sustainability Vector Index. The indexes are calculated based on analysis of major Russian companies on ESG indicators carried out annually by Russian Union of Industrialists and Entrepreneurs (RSPP). The calculation base for the indices includes securities of issuers who disclose the most complete information on their sustainability and corporate social responsibility activities.

The Responsibility and Transparency Index is calculated based on share prices of 22 leading issuers in terms of information disclosure around sustainability. The Sustainable Development Vector Index is based on share prices of 15 issuers with the best growth of sustainability indicators compared to the previous year.

The indices are reviewed every year. Index values are published on the websites of MOEX and RSPP, and relayed to the market through news and information agencies on a daily basis. MOEX's Sustainable Development indices were awarded ISAR Honours in 2019.

In April 2019, MOEX launched a new Money Market indicator. The RUSFAR rate reflects the value of secured money and is calculated based on CCP-cleared repo transactions using general collateral certificates. In August, the RUSFAR rate started to be settled in USD. Participants of the repo and FX swap markets thus gained objective market indicators of the cost of funding in RUB and USD.

MOEX also introduced a new service offering of index calculation configured to client requirements. Customer indices are widely used around the world as part of individual client strategies. In 2019, MOEX launched eight customer indices in Eurobonds, corporate bonds, shares and foreign securities segments.

International recognition of MOEX indices

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, as well as the zero-coupon yield curve for government bonds of Russia, which were included in the Statement of Compliance in 2019 based on the results of the audit.

The report confirms the transparency of MOEX's index management procedures; the high quality of the Exchange's index generation, calculation and disclosure processes; and the effectiveness of MOEX's internal controls over the development, calculation and publication of financial indices, and interaction with the users.

MARKET DATA

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 to clients, MOEX uses the infrastructure of partners including leading Russian and international media vendors, as well as its own corporate website and other special programs developed by MOEX. As of the end of 2019, MOEX had contracts with more than 30 vendors distributing market data in real time and more than 50 companies distributing information on the results of on-exchange trading.

The Group is continuously expanding its range of information services. Currently it offers more than 70 unique services (more than 200 including technology services) to traders and other users of MOEX's financial market services. Outstanding expert review and a high level of competence allow the Group to expand its range of information and analytical products and services in new areas.

In October 2019, MOEX introduced calculation of indicative risk rates for securities not traded on MOEX markets. The service gives trading participants and their clients the opportunity to carry out transactions resulting in an uncovered position in the specified securities. Rates are calculated by the NCC using a procedure based on Bank of Russia regulations.

Clients have been given access to a new Repo information product with aggregated real-time information on trading on MOEX's Money Market. This allows clients to obtain consolidated information on the repo market in one product.

MEOX also implemented a service allowing access to historical data on trading on the bonds market. This will help to increase interest among new potential players and investors in this segment of the on-exchange equity & bond market, by enabling deeper analysis of historical data on fixed income instruments.

ANALYTICAL PRODUCTS

MOEX regularly offers new analytical products for brokerages, funds, and algorithmic and high-frequency traders. Analytical products allow professional market participants to assess their performance and optimize their activities.

In 2019, an analytical report on "Analysis of Retail Investor Activity on Moscow Exchange" was presented, allowing banks and brokerages to obtain aggregated information on the behavior of their individual clients.

The Exchange developed a new analytical product, Private Investor Portfolio, that shows the share of the most popular Russian stocks held by individual investors in their portfolios. The product can be used by analysts and investment advisors, brokerages and banks to research the preferences and behavior of individual investors on the securities market.

MOEX continued its work on analyzing customer inflow and outflow rates. Since December 2019, the Exchange has published the monthly "Individual Investment Indicator" report, which contains information on net inflows/outflows of investments in shares by individual investors.

In 2019 MOEX made historical indicators through its Web API using the Aggregated Net Volume 2 analytical product introduced for market participants in November 2018. The product shows net trading volumes at the end of each day for the 30, 70 and 100 biggest clients using instruments on the Equity & Bond, FX and Derivatives Markets.

Client services

One of Moscow Exchange's major priorities is constantly enhancing the services it offers to ensure effective cooperation with clients and customers, reduce the costs they incur, and optimize document flow. In 2019, the Client Support Department focused on a significant upgrade to a number of processes to improve the quality of client service and reduce operational risks. As part of this, two large projects were launched: Optimization of Admission to Trading (On-Boarding) and Unified File.

The Optimization of Admission to Trading project aims to reduce time to admission to trading on all MOEX markets, and consequently speed up the process of customer engagement in the markets. As part of the project, the admission to trading procedure on the MOEX side will be reduced by 80%, from 46 to 10 working days. MOEX also plans to substantially simplify and automate the relevant business processes, retaining a maximum of 30 operations out of the current 200, and with a Straight Through Processing Rate reaching 70%.

Electronic client services are expected to continue developing, and there will be a transition to electronic interaction with clients at admission to trading through the submission of all required documents via the Online Account. Clients will be able to send documents, review document processing statuses and monitor the whole cycle of the admission to trading process using their Online Account.

The Unified File project will make it possible for MOEX to have a single "golden" set of documents for each client. Thus, if a client makes an application to the NSD (for example), they will not have to bring the documents to NCC or MOEX. This will increase the number of services used by clients by making access easier. A single point of maintenance for all documentation will significantly reduce expenses for collection, retention and updating documents.

MOEX has also optimized its client identification procedure for the purposes of KYC, monitoring annual updates of identification information, and reducing operational risks and the risk of failure to comply with regulatory requirements. This has allowed the Group to unify this functionality and expertise by main business processes, enhancing control in the event that clients fail to provide documents for identification and updating information, achieving a higher level of customer loyalty, and concentrating under a single managerial remit all matters related to identification and updating of client information, including document submissions.

Information technologies

The Exchange is a company with advanced IT infrastructure across trading, clearing and risk management. The Group has a major focus on upgrading its technological infrastructure and providing reliable, high-quality services.

The Exchange's trading and settlement services are on par with those of leading international trading venues, and are based on state-of-the-art IT platforms.

INFRASTRUCTURE

The Group's computing capacities are located in two advanced data centres (DCs) — DataSpace, the main centre, which holds Tier III certification; and M1, the backup centre. Failsafe technologies at the network and hardware levels allow for maximum seamless system switching both inside the two data centres and between the main and backup locations. The same approach is applied to backing up clients' connections: interfaces with communication service providers are switched between data centres automatically, with no manual intervention required.

MOEX uses the most advanced server and network hardware from leading international manufacturers across its paltforms, including ultra low latency network loops and optimised computing capacities for on-line computation in trading systems.

TECHNOLOGICAL ACCESS TO TRADING

The Exchange offers a complete range of trading solutions. Options for optimizing performance include remote connections via authorized operator networks, global financial networks, dedicated channels, the Internet, and international points of presence (PoP) in major financial centers such as London, Chicago, New York and Frankfurt, as well as in Asia and the Middle East (Singapore, Hong Kong, Shanghai, Dubai, Mumbai). In 2019, MOEX added new options for Russian and international market participants to connect to the Exchange's trading and clearing systems using business-to-business channels and technological infrastructure provided by leading international providers of technical access services.

Access to trading on the Group's markets and distribution of exchange data utilize standardized FAST and FIX protocols, including TWIME and Plaza II protocols developed by the Exchange.

A colocation zone located at the main DataSpace DC ensures the highest levels of reliability, accessibility and security for connecting clients who are interested in high-frequency trading on the Exchange's markets. About 40 professional market participants use colocation services. In 2019, as part of the expansion of colocation services, several new services were commissioned, including exact time and traffic mirroring services.

RELIABILITY MANAGEMENT AND INFORMATION SECURITY

The Exchange maintains a strong focus on the reliability of its trading and computing infrastructure, which achieved 99.99% uptime during 2019.

99.99 %
reliability of trading and computing infrastructure

Uninterrupted functioning and fault tolerance are maintained using "hot" and "cold" backup technologies which support fast recovery of trading and clearing systems. In 2019, the Exchange supplemented these instruments with a distributed cluster of database management systems for one of its exchange platforms, which will lead to significantly shorter recovery times in case of emergency.

The Exchange's technical policy for its IT infrastructure is designed to maintain hardware reliability. Server equipment for critical trading and clearing operations is replaced every four years, while network equipment is replaced every five years.

The Exchange regularly conducts information security audits, including intrusion and anti-phishing tests, and continues to improve its applied security systems.

To enhance continuity of its core businesses in 2019, the Exchange created a mobile backup office that supports continuous trading management even in case of emergency.

DEVELOPMENT OF THE TRADING AND CLEARING SYSTEMS

The Exchange's main markets are based on two trading and clearing systems: ASTS (Equity & Bonds and Money Markets, as well as FX and Precious Metals Market) and SPECTRA (Derivatives Market). These systems have a modular architecture which simultaneously supports a high level of performance of exchange infrastructure. The performance indicators of the Exchange's trading systems are comparable to those of major global platforms, and can process a combined 200 thousand transactions per second.

In 2019, trading and clearing systems successfully underwent a major transformation. A system version with hardware-independent trading and clearing cores was introduced on the Equity Market. Within the FX Market, a separating (partitioning) system for clearing cores was implemented. The Derivatives Market system was divided into hardware-independent trading and clearing cores with the possibility of clearing partitioning. SPECTRA migrated to the Linux operating system, which offers additional sustainability and performance. Both platforms also migrated to a new version of the high-speed LLM bus.

ELECTRONIC PLATFORM DEVELOPMENT

In 2019, the Exchange continued the creation of the Marketplace platform. This was developed using a microservice architecture with Java/JS for development, Kubernetes for containers management, Apache Kafka for message queue management, Camunda BPM for business processes management, free PostfreSQL database management system, and other elements from the latest technological stack.

A separate platform was developed for corporate clients, offering simple and convenient access to the Exchange's FX and Money Markets.

APPLYING COMPUTERIZED LEARNING

In 2019, computerized learning technologies were introduced to analyze cases when users contacted technical support. Messages are now handled classified, categorized and assigned to an incident group automatically.

NEW IT STRATEGY

A new IT strategy was adopted as part of the Exchange's overall strategy in 2019. The strategy focuses on developing the architecture of main applications using loose coupling of modules, restructuring of application and infrastructure management to support 24/5 and 24/7 operation, development of a multi-vendor system for main equipment types, switching IT team management to a "product/platform" model, and embedding a culture of IT interaction based on "community/contribution" principles.

Growth outlook for 2020

In accordance with MOEX's new corporate strategy through 2024, the Exchange will introduce new instruments and improve availability of products and services for market participants and customers, as well as introduce new technologies and attract new categories of customers.

Particular attention will be paid to working with investors and issuers, including small and medium-sized enterprises, with the goal of developing the equity and debt capital markets.

ATTRACTING PRIVATE INVESTORS

Retail investors are one of the most important customer groups for Moscow Exchange. The Exchange will continue to actively develop its product range and introduce special services targeting this customer segment.

The Exchange plans to offer FX conversion with the currency pairs US Dollar – Russian Ruble and Euro – Russian Ruble in the amount of 1 to 1,000 units of the underlying currency, with a lot size of one cent. The new instruments will benefit retail investors, who require conversion of small and fractional parts, for example, dividends and coupons received in a foreign currency.

The financial products Marketplace will also be improved, thus giving individuals an opportunity to view offerings from Russian financial institutions, compare them and purchase online. Customers can access information on all the products purchased through the Marketplace and manage them online. The launch of the project is scheduled for the fourth quarter of 2020. During the first stage, individuals will be able to open accounts with the banks participating in the project. The range of products offered via the financial product supermarket that is being created will expand to include credit, insurance and investment products.

EXPANDING THE CUSTOMER BASE

In 2020, the Group will continue to expand its initiative to provide direct market access to the its markets for new categories of participants. The Exchange plans to provide non-financial companies with direct access to the standardized OTC derivatives market. Corporate customers will also be eligible for the Unified Collateral Pool. Non-government pension funds and banks of the Eurasian Economic Union (EEU) will be provided with access to the deposit market with the central counterparty.

This will enable corporate customers to consolidate deposit transactions with the central counterparty, significantly simplifying the process of transaction accounting and reducing the need for automated accounting of corporate customers' transactions on the Exchange deposit market, and it will reduce the costs of participants.

The Exchange will continue working on the creation of a platform for corporate customers (MOEX Treasury) that have direct access to the Exchange. The new web terminal will consolidate all markets in one window, thus making operations with Exchange products more convenient. The interface is being developed in cooperation with customers and with due regard to their requirements.

At present, the project includes access to the FX Market and the market for deposits with the central counterparty; in 2020 the M-deposit market, Derivatives Market and the standardized OTC derivatives market will be added, as well as the services for quote requests in all the markets available to the customers on this platform.

Within the Growth Sector, the Exchange will continue to assist small and medium-sized businesses in attracting support from the state and development institutions with bond placements. Additional tools will be provided, including subsidies on bond coupon rates, listing preparation, anchor investments from MCP Bank and guarantees from MCP Corporation.

Effective October 2020, bonds admitted to the Growth Sector will be required to maintain a credit rating. This will supply market participants with additional information regarding the credit risk associated with issuers of public debt, which is particularly important when dealing with bonds of smaller companies. The Exchange plans to gradually extend the credit rating requirement to all issuers entering the public debt market regardless of their listing level.

ATTRACTING INTERNATIONAL INVESTORS

In 2020, Moscow Exchange will continue to actively develop projects to encourage non-residents to access the Exchange: Direct Market Access (DMA), Sponsored Market Access (SMA) and International Clearing Membership (ICM).

The Exchange plans to implement a project to separate the status of trading participant and clearing participant on all markets. As a result, foreign companies will have the opportunity to clear and settle both their own transactions and transactions of their customers on the Exchange's markets. This approach will enable the investment companies to offer their institutional customers security lodging and keeping cash assets on NCC accounts, thus minimizing counterparty and credit risks for international customers that trade on the Exchange. Customers will be able to increase their limits for the Russian market by attracting non-resident clearing brokers, and the NCC will become a tax agent for non-resident clearing participants. The Exchange drew a distinction between trading and clearing participants on the Derivatives Market in early 2019 and on the FX Market in 2014.

The Exchange intends to actively attract global trading companies with the DMA offering, and they will in turn provide their private, institutional and corporate customers access to the Exchange.

EXPANDING THE RANGE OF INSTRUMENTS

The Exchange will continue to enhance its product range on the Derivatives Market. Several single-stock futures will be introduced.

The Derivatives Market expects to launch real estate index futures that will help create a benchmark for the average price per square meter paid for residential real estate in Moscow based on real mortgage transactions.

The Exchange also plans to develop product benchmarks, including the launch of deliverable wheat futures, crude oil futures, index futures on a basket of European companies and a basket of emerging markets companies.

In February 2020, a cash-settled natural gas futures contract tracking the CME's natural gas futures became available for trading in the commodities section of the Derivatives Market. This contract is a widely used international benchmark for natural gas, meaning Russian market participants have access to a global commodity instrument.

In addition, the Exchange launched a cash-settled futures contract on the USD-denominated Russian Secured Funding Average Rate (RUSFARUSD), which tracks rates of CC-cleared repo orders and trades secured with USD-denominated General Collateral Certificates (GCC) on MOEX's Money Market. The new futures will complement MOEX's interest rate derivatives offering and allow banks, investment companies and their customers to hedge interest rate risk in foreign currency on the domestic market.

In 2020, the Exchange will offer market participants of the Standardized OTC Derivatives Market additional benefits for trade strategies by enhancing basic assets of derivative financial instruments, including the list of traded foreign currencies and securities. MOEX plans to expand the maximum contractual term of contracts to 10 years and introduce non-targeted trades.

The end of the trading session in CNY-RUB, CHF-RUB, BYN-RUB and KZT-RUB on TOD instruments and TODTOM swaps will be extended to 12:00 noon (Moscow time). At present, trading in these instruments ends at 11:00 a.m..

Market participants will be offered floating rates and with an open transaction date. The Exchange also plans to introduce repo transactions with the Federal Treasury, with the collateral management system via a Stock terminal and settlement in foreign currency.

The Exchange expects that first mortgage-backed bond programs will be submitted for registration by MOEX in 2020. The Exchange has been entitled to register mortgage-backed bond programs under the law. It is expected that the volume of mortgage-backed bonds on the Russian market will exceed RUB 7 trillion by 2024 versus RUB 400 billion currently traded on MOEX.

DEVELOPMENT OF OTC SERVICES

In 2020 the Exchange plans to continue to enhance access for market participants and their customers to global OTC markets and to offer better prices thanks to the exchange infrastructure and to further expand new customized mechanisms for liquidity takers/makers that are recognized globally among OTC FX platforms.

Further development of the OTC system in the debt market requires development of user interface features, including the opportunity to use reference prices for setting benchmarks. The Exchange also plans to apply service opportunities of the OYC-system to securities market instruments.

In March 2020, the RFS Service (Request for Stream) quotation system for block trading will be launched on the Derivatives Market.

There will be an opportunity to perform sell/purchase transactions with foreign exchange within the RFS service by requesting auction of the amount in Rubles.

There will also be an option to choose counterparties. In order to deal with more taker orders for sell/purchase of G10 currencies in the OTC segment, a large over-the-counter trading mode will be introduced, in addition to the launch of swap instruments and RFS technologies.

The Exchange intends to offer its accounting and clearing services on the OTC market. Customers will be offered new flexible clearing and accounting services on the FX Market. It is also planned to introduce a FIX-protocol in the Negotiated Deal Mode and to implement a two-way net-settlement of OTC transactions in NCC.

In the context of promoting MOEX's currency fixing on global markets, an opportunity to license the use of fixings by international trading platforms, clearing and other finance organizations is under consideration.

As it develops the Precious Metals Market, MOEX expects to set up a trading and clearing link with Shanghai Gold Exchange in 2020–2021. This will make it possible for Russian market participants to access the largest gold market in the world and execute loco Shanghai gold trades with settlement via NCC. Additional plans call for the launch of gold swaps through trading links with the largest liquidity providers in London.

To boost liquidity and promote operations in national currencies, MOEX is working to establish trading links with Kazakhstan Stock Exchange (KASE) on the currency pair KZT-RUB and with the China Foreign Exchange Trade System (CFETS) for trading in the RMB-RUB.

A project is going to be implemented on the Equity & Bond Market on cross-listing exchange-traded funds with the Shanghai Stock Exchange.

DEVELOPMENT OF TECHNOLOGIES

In the second quarter of 2020, the Exchange plans to launch evening trading sessions from 19:00 to 23:50 (Moscow time). Initially, the 25 most liquid shares included in the MOEX Russia Index will be traded. All index constituents will be made available for trading by the end of 2020. After-hours trading will expand access to the Russian financial market for all groups of investors and open up new trading strategy opportunities including hedging and arbitrage between the Derivatives and FX Markets and hedging and arbitrage with international platforms.

During the evening session, online customer registration will also be available from 19:00 to 23:50 (Moscow time).

Technical availability for morning sessions in the FX Market and Derivatives Market will be provided during 2020. This will improve the trade experience for market participants and will provide them extra opportunity to asset management, will make the work of customers in the Far East and Siberia more convenient and will facilitate attracting new customers in the Asia-Pacific region.

It is proposed to host secondary trading of all corporate bonds in T+1 mode, making it possible to reduce margin rates for liquid bonds submitted to the order book and give the Exchange more opportunities for effective pricing on the domestic RUB-denominated debt market.

In 2020, market participants will be given the opportunity to connect the outer trading systems with the reading and clearing system of the Standardized OTC Derivatives Market as well as a service to access trading with liquidity providers.

“Iceberg” orders for only part of the “ current visible amount of securities” will become available on the Derivatives Market to minimize the impact on the market price. Synthetic matching of calendar spreads will also be implemented – a service that allows combining orders not only inside the order book, but also in the order books of related instruments.

In order to stimulate liquidity, the Exchange plans to launch a market makers program for market making during periods of heightened financial volatility. It is also planned to develop a market-making program with several market-making conditions (blocks), the implementation of which will influence the level of remuneration.

In order to offer corporate customers flexible liquidity management, early refunding from deposits will be provided. Market participants will be able to withdraw part of the placed deposit at the market price. This technology will make it possible to expand the period of execution of transactions with the central counterparty.

The Exchange is also considering a project to create a single trading pool with GCC. This would improve the depth of the market and GCC liquidity.

MOEX plans to provide market participants with information and technological services such as a service to check for IIA (individual investment account) duplicates with market participants’ clients; this service was successfully tested late in 2019. Partner services will also be offered, for example financial market news on trading terminals, a service created jointly with the leaders of financial news markets. Customers will be able to order reference data from the NSD analytical systems by a simplified process through the Exchange’s web interface.

Additionally, MOEX plans to significantly increase the range of data access services in 2020, which will make risk parameters and reference data on assets and other on-exchange instruments available in machine-readable formats, including on the channels of MOEX’s partners.

Human resources

HR POLICY

The Exchange believes that employees who are effectively motivated to achieve business goals and bring innovative thinking to the company are the single most important factor in achieving the Group's strategic goals. To ensure sustainable growth and enhance productivity, the Exchange relies on its employees' creativity and diversity of experience, and fosters teamwork to achieve business goals and creating opportunities to improve our society.

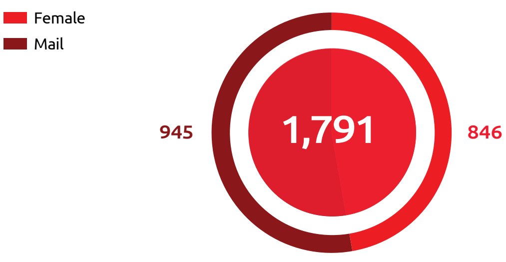
The Exchange's HR Policy aims to:
- involve, motivate and retain highly qualified staff and managers;
- support employees' continuous professional development;
- create an atmosphere that supports employees' personal development and enables the Exchange to achieve best results and achieve its strategic goals.

In line with applicable regulation and the MOEX Business Ethics Code, the Exchange practices equality of opportunity. The Business Ethics Code enshrines adherence to principles of equality with regard to the observance of labor rights as well as non-discrimination based on sex; race; skin color; nationality; language; national origin; financial, marital, social, and employment status; age; place of residence; religious orientation; beliefs; or membership or non-membership of any non-governmental association or social group. The Exchange respects the cultures, opinions and lifestyle of all of its employees, and categorically opposes any actions that could contribute to the creation of a threatening, hostile, insulting or humiliating atmosphere.

The Business Ethics Code can be found on the Exchange's internal portal, and adherence to its principles are mandated in all job descriptions and labor agreements with employees. As part of their induction programme, all employees are given the "New Employee's Book", which contains a section devoted to business ethics. In addition, the Group's obligatory training system includes a course on business ethics. As part of the induction process for all new employees, topics related to business ethics, conflicts of interests and handling of insider and confidential information are covered by representatives of the Internal Control Service.

Total number of employees
(persons)

Personnel structure by gender in 2019,
(employees)



CORPORATE STRUCTURE

The Exchange continuously improves business processes and the efficiency of its management system. A major area of process optimization in 2019 was reliability enhancement to reduce operational risks.

In 2019, the Exchange's IT subdivisions were restructured. To manage resources effectively, a Trade and Clearing System Development Unit was formed to support the development of key IT systems within the Exchange's main business, as was an Electronic Platform and Integration Services Development Unit to support the development of new platforms, including a marketplace for financial products .

In 2019, a Compliance Service was created to embed plans for the development of compliance culture across the Group.

During the reporting period, the number of members of the Exchange's Board of Directors remained unchanged.

WAGE AND SALARY POLICY

The Exchange seeks to offer competitive compensation in order to engage, retain, and motivate employees. The compensation system includes a fixed salary and a variable annual bonus. The fixed salary and the target amount of the variable component are determined taking into consideration applicable job grades and market data on comparable salaries. The variable component of the remuneration depends on the Group's business performance and an employee's individual results as assessed as part of the efficiency management process.

The Exchange's Supervisory Board approved corporate goals for 2019 including financial metrics, key performance indicators and projects aimed at reducing operational risks within the Group (both with regard to technologies and compliance).

The corporate goals of the NSD and NCC differ from those of the Exchange because of the specificity of their activities as a CCP and central depository, respectively, and due to the legal requirements imposed on credit organizations. Because of this, the NSD and NCC's corporate goals are considered separately and approved by their respective supervisory boards.

To retain key employees and ensure they are motivated to support the long-term sustainable business development of the whole Group, the Exchange has adopted a Long-Term Motivation Program based on campaigns for which principles and parameters are approved by the Supervisory Board. In 2019, a new Program was developed, and will be launched in 2020.

The Group also has an incentive scheme including several types of insurance as well as various types of financial assistance.

The Exchange continuously seeks to improve its competitiveness on pay in order to hire and retain the best talent.

CORPORATE CULTURE

A strategic priority for the Group is to build a corporate culture aimed at:

- developing the most effective behavioural models that enable employees to achieve business goals;
- increase employee engagement in delivering the Exchange's strategy;
- improve effective cooperation among employees (vertical, horizontal, cross-functional).

The Exchange's values serve as a basis for strengthening corporate culture:

- We are responsible for the company's future;
- We are developing and ready for changes;
- We cooperate with clients;
- We are open and honest.

In 2019, one of the Exchange's corporate goals was to create and develop a compliance culture. In the coming years, embedding a compliance culture will be one of the main priorities within the development of the Group's corporate culture.

To strengthen cross-functional cooperation, strategic sessions were organised for front-the front-office and divisions supporting business processes. In 2019, five strategic sessions were held for 160 employees.

TRAINING AND DEVELOPMENT

Training and development opportunities for employees include educational programs and tools for self-directed learning and development. The Exchange believes it is important that employees should take responsibility for their own professional development, and to support this provides advanced technologies, resources and additional opportunities. In 2019, 938 employees participated in educational programs and training sessions.

938 employees
participated in educational programs and training sessions

In 2019, MOEX focused on developing corporate competences, leadership skills and the necessary personal efficiency skills for employees to implement the Exchange's strategic projects. Up to 67% of employees completed corporate trainings. In 2019, a new corporate school, the Personal Efficiency School, was opened, and 209 employees successfully completed training sessions.

At Personal Efficiency School sessions, employees study influencing and persuasion techniques, systems thinking, and new approaches to and ways of generating unconventional and innovative ideas.

In autumn 2019, a management school was also launched, divided into two levels. At the first level, line managers study the basics of operational management, including how to set tasks for their direct reports, organize teamwork, motivate employees and ensure tasks are completed. The second level of the school is designed for mid-level managers who already have some experience. At this level, the objective is to help participants update and upgrade their management skills, to introduce new management techniques, and to improve skill levels in the use of some practical instruments.

At the beginning of September every year, MOEX runs a Week of Knowledge for the whole Group, which includes daily two-hour workshops on different topics with top speakers. During the week, 220 employees attended the workshops.

MOEX's professional school is continuing its successful Internal Coaches project, as part of which Group employees run short workshops, training sessions and seminars, to promote knowledge-sharing among the company. In 2019, internal coaches ran 40 training sessions and 495 employees took part.

MOEX pays particular attention to efficiency management skills. Tools available to managers include results obtained through MOEX FeedBack, a continuous feedback resources. All managers also have the opportunity to assess managerial competences using 360-degree feedback and adjust development plans based on the resulting recommendations.

SOCIAL SUPPORT

As part of the Group's social policy to provide social security for its employees, Moscow Exchange provides social support and guarantees over and above the basic legal minimum. Corporate social support is provided in accordance with the Regulation on Employees' Corporate Social Support approved by the Group's executive bodies in 2016. Priorities for social support include health care, maternity and support for children. All Group companies provide voluntary health insurance schemes and international medical insurance for their employees, as well as travel insurance policies including accident and sickness insurance.

The Group has a standing Social Committee which can provide financial assistance to employees in the event of an accident or force majeure not covered by insurance schemes.

The Group also promotes healthy living, including specially arranged Health Days. Running, triathlon, indoor soccer, hockey, basketball, volleyball and yachting clubs are arranged for employees. MOEX's facilities have a gym and shower rooms, as well as bicycle parking facilities for those who cycle to work.

Corporate educational and entertainment clubs operating include MOEX Smart Club, MOEX Data Science, MOEX Walk, MOEX Kitchen and MOEX Dance. All of these measures contribute to the development of MOEX corporate culture and support employee welfare and health.

OCCUPATIONAL SAFETY AND HEALTH PROTECTION

MOEX places high value on its employees' life and health, and maintains high standards in occupational safety and health protection. Management sets relevant tasks and goals for occupational health and safety, as well as planning and financing measures to achieve these goals. Management undertakes to respect these values and calls on employees to do the same.

Provision of an optimal work-life balance is controlled through regular assessment of working conditions, maintenance of high sanitary standards, and implementation of sanitary and preventative health measures. This helps to support a high level of workplace efficiency.

In 2019, working conditions were specially assessed at 103 NCC locations. The assessment found no harmful or hazardous operational factors, and working conditions were considered acceptable.

In addition, professional risks at all MOEX and NCC locations were assessed to determine professional hazards for employees in the course of their duties, and to determine the scale of any hazards and the severity of possible consequences.

In 2019, managers received training on first aid and on occupational and fire safety. A total of 70 people participated, and were trained on basic occupational and fire safety, as well as on how to respond promptly to emergencies.

The Group regularly organises briefings on occupational, electric, fire and civil safety and emergencies. In 2019, 374 new employees competed the occupational safety induction course.

MOEX's internal corporate portal contains instructions and provisions on occupational safety, as well as articles about health, and allows for remote learning on occupational safety topics.

Employees who feel unwell or need urgent medical aid can be treated by in-house corporate doctors at their facilities in the Exchange's offices in Moscow.

To maintain safe working conditions and prevent industrial injuries and occupational illness, the Group has established failsafe measures including procedures for dealing with injuries and sickness based on existing response and mitigation plans and plans currently under development.

Moscow Exchange and the community

PROFESSIONAL COMMUNITY

The Exchange is working hard to build constructive dialogue with Russian and international investors, market participants, current and potential issuers, regulatory agencies and with the professional community, both by direct communication through advisory bodies and working groups, and also at investment conferences, forums and specialized training events. This work helps to attract new investors to the Exchange's markets, expand the Exchange's client base, increase liquidity on the financial markets and attract investment into the Russian economy.

Exchange Council

The Exchange actively interacts with market participants through advisory bodies. This enables to Exchange to receive feedback from customers on planned innovations in products and services, to effectively improve market infrastructure, and to draft proposals to improve the regulation of financial markets.

The main advisory body is the Exchange Council, which is tasked with elaborating strategic proposals for the development of the Russian financial market, and also represents the interests of market participants and the Exchange's clients, to ensure that their needs are fully reflected when addressing issues related to the organization and development of financial market infrastructure. The Exchange Council includes management of major market participants, heads of self-regulatory organizations, management companies, investment banks and the Bank of Russia.

In 2019, the Exchange Council comprised 25 members approved by the Exchange's Supervisory Board at the end of 2017. The Chairman of the Exchange Council is Andrei Zvezdochkin, CEO of ATON Investment Company.

In 2019, two meetings of the Exchange Council were held to consider the following issues:

- results of strategic projects and approaches to the new Group strategy;
- measures to stimulate demand among domestic institutional investors;
- measures to encourage public offerings by Russian companies;
- management of short-term surplus liquidity.

User Committees

The Exchange and NSD convene 20 user committees comprising groups of financial market participants and issuers.

In July 2019, a new user committee was formed, the Debt Market Indicators Committee. The Committee is tasked with developing proposals to improve methods for calculating bond and composite indices and other debt market indicators, and to conduct expert assessments of debt market instruments.

Most committees are formed on an annual basis and draw their members from professional market participants including banks, brokers and investment companies, as well as issuers and non-financial companies. Their main areas of focus include preparing proposals to amend legislation and other regulation, considering regulatory issues regarding securities issuance and trading, information disclosure and corporate governance. Committees also develop proposals regarding organized on-exchange trading of securities, improvements to clearing and settlement technologies, and expansion of the range of available tools and services.

For the convenience of committee members, customers and market participants, the Exchange publishes a monthly digest including a list of issues discussed at meetings of the Exchange Council and user committees, as well as decisions taken.

Information on the activities of the Exchange's committees and the Exchange Council is publicly available on the Exchange and NSD websites.

Expert Council on Listing

The Expert Council on Listing has operated since 2017 to strengthen the depth of expertise of securities prior to the inclusion in the Exchange quotation lists. The Council is charged with advising the Exchange in relation to listing, delisting, moving companies between the listing levels and trading suspensions.

At the end of 2019, the Expert Council on Listing's 41 members included brokers, auditors, bankers, lawyers, analysts, investors and methodologists.

In 2019, the Expert Council on Listing held 18 meetings.

IR Academy

Since 2016, the Exchange's IR Academy has served as a discussion platform for investor relations professionals and a center for the development of professional principles and standards in IR.

In 2019, the IR Academy held a series of seminars at which leading industry experts and consultants discussed topics including independent analytics, tools available on MOEX (including indices, trading modes and exchange information), analyzed best practices in annual reports, and discussed the question "Is there life after IR?" .

Since the IR Academy launched, it has held more than 15 round tables and seminars with more than 100 speakers including IR leaders, portfolio managers, leading analysts and independent experts sharing their knowledge. During this time, 90% of all Russian public companies have attended classes at the IR Academy.

123 companies
including 14 newcomers
participated in the annual report contest

Corporate governance development in Russia

One of the key events in the field of corporate governance and investor relations is the annual report contest organized by the Exchange and RCB media group. The competition helps to increase transparency among public companies and effective information disclosure to investors and customers. In 2019, 123 companies took part in the 22nd annual reports contest, including 14 debutants.

At the competition awards ceremony, the Exchange and Institutional Investor magazine awarded winners based on an independent survey of international investors' views of the IR programs of Russian companies. The study involved more than 180 portfolio managers and analysts from 89 banks and funds around the world.

The Exchange also held its annual Corporate Governance in Russia conference, which discussed prospects for the Russian and global securities markets, the responsibilities of boards of directors at public companies, and opportunities for responsible business.

Interaction with the investment community

For many years, the Exchange has organized its own events and supported major professional financial markets conferences. Since 2009, the Exchange has held the Moscow Exchange Forum in leading global financial centers – Moscow, London, New York and Shanghai. They help to improve perceptions of the Russian financial market among the investment community and increase the interest of domestic and international investors in the Russian stock market. In 2019, more than 2,500 delegates took part in MOEX's forums.

over 2,500 guests
took part in the Exchange Forums in 2019

In 2019, in addition to its own annual Foreign Exchange Market Forum and Structural Products and Retail Investor conferences, the Exchange was also a partner of the business program at the St. Petersburg International Economic Forum (SPIEF), the Bank of Russia's annual International Financial Congress in St. Petersburg, and the Forum of Innovative Financial Technologies in Sochi. The Exchange also supported events organized by two self-regulatory organizations – the Ural Conference and the Russian Stock Market Conference of the National Association of Stock Market Traders (NAUFOR) and the Repo Forum organized by the National Financial Association (NFA). In addition, MOEX supported events organized by ACI Russia, the Association of Corporate Treasurers and the Cbonds conference.

In 2019, the Exchange held regional exchange forums for individual investors in Samara, St. Petersburg, Yekaterinburg, Novosibirsk, Voronezh and Kazan. More than 3,500 individual investors had an opportunity to hear from the Exchange about the latest financial market developments, learn from leading traders, and familiarize themselves with products and services offered by brokerage companies in their region.

International cooperation

The Exchange has for many years worked with international financial organizations to learn from global best practices and to exchange experience. In 2019, MOEX focused on expanding cooperation with companies, banks and exchanges from China, including by holding joint events and signing cooperation agreements.

In July, an Exchange delegation visited Beijing and signed a memorandum of understanding with Galaxy Securities, the largest brokerage company in China, to deepen investment cooperation between Russia and China and develop the offshore yuan market in Russia. The memorandum covers organization of joint marketing events for investors in Russia and China, as well as implementation of projects to develop trading of CNY-denominated instruments on Moscow Exchange, and cross-listing of ETFs and other instruments on Moscow Exchange and Chinese platforms. During the visit, the first joint seminar was held for institutional investors from China.

In September, a memorandum of understanding was signed with Zhengzhou Commodity Exchange to develop cooperation and comprehensively strengthen the partnership and interaction between the exchanges regarding the development of the commodity derivatives market.

In October, the NCC received the status of a clearing member with Shanghai Gold Exchange (SGE) as part of a cooperation agreement between the Bank of Russia and the People's Bank of China covering on-exchange gold trading. This status will allow the Exchange to establish a trading and clearing link with the SGE, which will increase liquidity and trading volumes, diversify sales markets and make operations with gold more efficient for Russian precious metals market participants and their customers.

In 2019, a memorandum of understanding with the Chinese foreign exchange trading platform China Foreign Exchange Trade System (CFETS) was signed, which was designed to improve the quality of pricing and liquidity of the Chinese Yuan-Russian Ruble currency pair at both sites. Strengthening ties between the financial infrastructures of Russia and China will stimulate settlements in national currencies and contribute to the growth of mutual investments.

In April, memorandums of understanding were signed with the Bombay Stock Exchange (BSE) and India International Exchange (India INX) as part of the annual Exchange Forum in Moscow, with the aim of developing cooperation and comprehensively strengthening partnerships and interactions between the exchanges. The memorandums cover organization of joint events and meetings to foster deeper understanding of the markets in both countries, as well as implementation of projects to provide access to markets on both sides for investors, including possible cross-listing of financial instruments.

The Exchange continued working with the Kazakhstan Stock Exchange (KASE) to increase reliability of market infrastructure, reduce market risks and provide Kazakh and Russian market participants and investors mutual access to the markets of both countries, which will contribute to the creation of a single financial market for the Eurasian Economic Union (EAEU). Moscow Exchange technologies are being introduced at KASE as part of a strategic partnership agreement concluded in 2018. In December 2019, equities trading on KASE was transferred to MOEX's trading and clearing platform (ASTS+) with a central counterparty.

Moscow Exchange is a member of the World Federation of Exchanges (WFE) and the Futures Industry Association (FIA). During 2019, the Exchange was represented at several conferences as well as WFE and FIA working groups in London, Boca Raton, Mumbai, Zurich and Singapore.

Employer branding and attracting young professionals

In 2019, the Exchange was recognized for a third straight year as one of the world's most attractive employers by Forbes magazine – one of only seven Russian companies among the 500 employers named in the ranking.

In 2019, the Exchange launched a careers website with information about conditions for employment and career opportunities offered by the company. Social media accounts dedicated to careers at the Exchange were also created to give potential applicants more information about life at MOEX, current vacancies, career advice and more.

The Exchange regularly participates in career fairs for students and young professionals, and also holds information days at leading universities in Moscow to give inform students about career opportunities at the Exchange and invite strong candidates to apply for internships.

Given the Exchange's unique profile, one of the priorities of HR policy is to attract experienced professionals and young talent. Under the Exchange's program of working with young talent in 2019, 37 finance and IT students completed internships, taking part in real projects and undergoing a comprehensive training program to develop and increase personal efficiency. The best students received an offer to pursue a career at the Exchange.

In 2020, identifying young talent will remain a significant priority, with the internship program undergoing further development in accordance with best market practices. In April 2020, three programs will start simultaneously:

- **MOEX Future** Leaders is an annual internship for senior finance students who want to pursue a career in the financial market industry and are targeting leadership opportunities. For a year, trainees will be able to gain universal experience by working in several divisions of the Exchange;
- **MOEX Study & Work** is a program for finance and IT students who wish to participate in company projects under the supervision of experienced professionals at the Exchange;
- **MOEX Start** is a three-month internship that introduces the Exchange's activities and gives participants some initial experience during the summer holidays.

Cooperation with universities

The Exchange is actively involved in a number of initiatives to promote financial literacy. Together with the Financial University under the Government of the Russian Federation, one of Russia's leading economic universities, the Exchange runs Fincontest, a specialized financial markets Olympiad that not only tests participants' knowledge of corporate finance, the securities market and financial analysis, but can also kick-start a professional career. In 2019, more than 1,000 students took part, and three were subsequently offered internships at the Exchange following a multi-stage selection process.

more than 1,000 students
took part in a specialized financial markets Olympiad

The Exchange also participates in joint programs with leading Russian universities. In 2019, Exchange speakers held a series of master classes at the Moscow State Institute of International Relations (MGIMO), the Higher School of Economics (HSE), the Financial University under the Government of the Russian Federation, and the Moscow Engineering Physics Institute (MIFI). An educational program to develop financial literacy has been launched with the Financial University, in the form of a Master's program on Securities and Financial Engineering. A joint program has operated for 20 years with MIFI, which has a department specializing in exchange-based trading technologies.

Moscow Exchange supports Bank of Russia and Ministry of Finance projects to support financial education and improving financial literacy. In 2019, the Exchange participated in the annual Forum of Financial Literacy, the Forum of Financial Volunteers and a nationwide Olympiad on financial markets and the basics of consumer knowledge for high school students. Exchange employees took part in Financial Literacy Weeks in regions across Russia, as well as the Bank of Russia Open Day.

The annual Governor's Cup of the Novosibirsk Region on the Exchange Financial Market was held for students of Russian universities. The tournament gave 201 students from 29 universities the opportunity to familiarize themselves with exchange tools, try out trading strategies, practice building an investment portfolio and gain experience in the stock market.

201 students
took part in the annual Governor's Cup of the Novosibirsk Region on the Exchange Financial Market

Together with leading brokerages and banks, the Exchange organized the Financial Triathlon – Treasure Exchange for the fifth time for undergraduates and graduate students in St. Petersburg, including a gamified history of exchange-based trading in Russia, as well as exchange and brokerage mechanisms. Students got involved as investors in solving entertaining economic problems and mini-cases and answering blitz questions.

Stock exchange history

Since 2002, the Exchange has operated a historical exhibition about the main stages of the creation and development of exchange and financial infrastructure in Russia. Exhibits include documents related to the functioning of the Exchange, a collection of securities and coins, and videos about the work of Russian exchanges.

In 2019, over 100 tours were held, which were attended by about 2,500 people, including schoolchildren and students, employees of financial companies and banks, as well as delegations from China, France, Iran, Uzbekistan, Kazakhstan and other countries.

nearly 2,500 visitors
toured the stock exchange history museum

Lectures on financial history are regularly held for new employees of the Exchange.

As part of the Exchange's ongoing research and development work, a collection of securities of revolutionary and Soviet Russia, "Down to the Foundations, and Then ...", was published in 2019, alongside the Consolidated Charter of Joint-Stock Commercial Banks.

CHARITY

The Group places great emphasis on its social responsibilities in the form of charitable activities, which are carried out in accordance with the Policy approved by the MOEX Board on 6 September 2012.

A priority of the Group's charitable activities is to provide financial support to long-term and socially significant projects via specialized foundations. The list of projects is approved every year by the Exchange's Board based on recommendations from the Charity Policy Committee.

The Group's charity activities focus on:
- supporting children's development, education and medical treatment;
- providing assistance to victims of natural disasters;
- providing support to veterans and elderly people.

The Exchange does not support organizations that discriminate based on sex, sexual orientation or nationality. Nor is the Exchange either directly nor indirectly involved in financing organizations that violate human rights or produce or distribute weapons of mass destruction. The Exchange also does not support projects that carry a risk of environmental pollution.

The Exchange works with several charity foundations with a proven track record, and distributes its charitable contributions between them. Working with non-commercial organizations as partners and as mediators guarantees that funds are used in a transparent way makes it possible to help a larger number of under-privileged people. In 2019, the Group's charitable spending totaled RUB 24.2 mln.

RUB 24.1 mln
Group's charitable spending

The Exchange selects new projects and makes decisions to continue financing based on:
- whether a project addresses a significant problem in Russian society;
- whether its impact is measurable;
- whether Moscow Exchange employees are able to participate in the project.

Support for educational programs

In 2019, the Exchange allocated RUB 3 mln to support the Teacher for Russia Program as part of its work with the New Teacher Charitable Foundation for Education Support and Development, which it has supported since 2016. The Program is a social project that sends talented young people and graduates from leading universities to teach in public schools. The programme aims to improve access to good education for children from socially deprived areas, to raise the prestige of the teaching profession among the best graduates from Russian universities and get more talented teachers into the school system, to further the transformation ordinary public schools, and to introduce new educational formats and technologies. In 2019, the Exchange's funding provided instructional and stipendiary support for 15 mathematics and economics teachers working in Tambov, Voronezh, Kaluga, and Novgorod Regions. In total, more than 170 teachers are involved in the program.

In 2019, 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.

In 2019, the NSD contributed RUB 500 thousand to pay the salary of a teacher of financial literacy at the Big Change Foundation, which provides social support for orphans before and after graduation. Orphans can be an easy target for fraudsters who want to deprive them of property and money given by the state. The NSD helps the Foundation to protect children and give them basic knowledge of handling money.

Aid for children

Since 2014, the Exchange has supported the Gift of Life Charitable Foundation, which specializes in helping children with cancer and other severe diseases. In 2019, the Exchange contributed RUB 3.5 mln to support the Foundation's most important program, the Voluntary Donation Foundation Program, which encourages people to donate blood to hospitals.

RUB 3.5 mln

The Exchange contributed RUB 3.5 mln to support the Voluntary Donation Foundation Program

In 2019, the NSD supported several charity foundations and volunteer organizations that support orphans and seriously ill children. These organizations provide the children with psychological and medical help, and take care of their education and creative development when relatives are unable to.

The NSD allocated RUB 470 thousand to the Sheredar Charity Foundation to support rehabilitation programs for 70 teenagers with cancer, as well as RUB 500 thousand to support the Meaningful Holidays Summer and Winter Sports and Health Programme for orphans organized by the Our Children Foundation. 18 children benefited from the programme during the summer, and 20 in winter.

The NSD supports in particular initiatives that help children in medical institutions. A contribution of RUB 300 thousand went towards the work of hospital groups organized by the Danilovtsy Volunteering Movement over six months. As part of the NSD's support of the Wonderland Charity Foundation, RUB 450 thousand were allocated to purchase medicines, bandages and hi-tech deaf aids, and to pay for therapeutic courses for children.

The NSD also helps children who have been left without parental care. In 2019, RUB 276 thousand were contributed to the Elizavetinsky Orphanage to pay the salary of a junior correctional group career, and RUB 120 thousand went to the Udelninsky Out-of-School Work Centre to buy a multimedia studio and Lego.

Supporting terminally ill people and their families

To support the development of palliative care in Russia, the Exchange works with the Vera Charity Foundation, which assists more than 20 hospices in Moscow and various regions of Russia.

In 2019, the Exchange contributed RUB 3.5 mln towards providing financial, medical and social support for families of terminally ill children, hospices for children and adults and other medical organizations in regions providing palliative care, as well as the Moscow City Department of Health's Multi-Disciplinary Palliative Care Centre.

In 2019, the NSD contributed RUB 569 thousand to the Mercy Charity Foundation's Pediatric Mobile Palliative Service to pay the salaries of a neurologist, a pediatrician and a social worker for four months.

Rehabilitation of stroke patients

Since 2014, the Exchange has worked with the Association of Relatives of Stroke Patients Charity Foundation which is Russia's first and only foundation for combating stroke. The aim of the cooperation is to raise awareness of how to prevent stroke, and to help stroke survivors get back to independent daily life.

In 2019, the Exchange contributed RUB 200 thousand to make a video highlighting the importance of quickly calling for first aid at the first sign of stroke. The video was widely shared on the Internet and was shown on Channel One, the main Russian state TV channel.

Support for military veterans and the disabled

On the 74th anniversary of the end of World War II, the Group provided financial help to war veterans and the disabled, home-front workers, survivors of the siege of Leningrad and survivors of concentration camps. One-time payments totaling RUB 4.37 mln were received by 89 people.

RUB 4.37 mln
financial assistance to war veterans and the disabled, home-front workers, survivors of the siege of Leningrad and survivors of concentration camps

In 2019, the NSD provided RUB 250 thousand in funding to the Duet Wheelchair Dance Club to support trips to the Dance and Parachute Festival and the Wheelchair Dance Sport Continents Cup, among other initiatives.

Corporate volunteering

Group employees take part in charity activities by volunteering or making donations. Announcements of important social events are made via the Company's daily email newsletter. Reports and photo reportage from charity events are published on the Corporate Charity page of the company's intranet. Staff can also apply volunteer to participate in charity events and make donations through the intranet, and also publish announcements of other charity projects.

In 2019, MOEX offices hosted Donor Days with assistance from the Blood Service and Podari Zhizn Foundation. During this event, 138 employees gave blood, charity fairs were held, and fundraising campaigns to collect money for children with cancer were organized. In total, MOEX employees contributed more than RUB 100 thousand to support the activities of the Podari Zhizn Foundation.

138 employees
gave blood during MOEX Donor Days

In addition, employees organized the following initiatives:

- collecting New Year's gifts for the Happy Old Age Foundation;
- collecting clothes and gifts for Odoyevsky Orphanage;
- organizing a charity game to support an appeal by the Be Human Foundation;
- purchasing 80 gifts for orphans undergoing treated at Kirovsk Regional Children's Clinical Hospital.

Environmental impact

Moscow Exchange Group companies are guided in their approach to environmental impact by regulatory requirements and best practices adopted by companies in the financial services sector worldwide. The Group supports the precautionary principle enshrined in the UN's 1992 Rio Declaration.

MOEX's environmental policies are governed by the Exchange's Industrial Control Program, as well as the draft standards on Waste Generation and Disposal Limits approved by the Moscow Department of Environmental Management and Protection for the five years to February 2023.

Key areas for reducing MOEX's environmental impact include:

- increasing energy efficiency (including electricity, heat and automobile fuel);
- improving efficiency of water use;
- reducing the amount of waste generated and increasing the share of recyclable waste;
- increasing awareness of environmental issues and encouraging responsibility among employees.

ENERGY EFFICIENCY AND GREENHOUSE GAS EMISSIONS

Energy consumption by types of energy[1]

Total energy consumption	2018		2019		Change 2019/2018 (%)
	Units consumed	MJ	Units consumed	MJ	
Fuel					
Gasoline (l)	78,924.09	2,584,862.05	70,670.43	2,314,544.43	-10.5
Diesel (l)	7,048.60	248,616.08	7,254.31	255,871.82	2.9
Electricity (kWh)	**11,246,767.20**	**40,488,361.92**	**11,286,228.48**	**40,630,422.52**	**0.4**
Heat (GCal)	**5,029.38**	**21,903,482.49**	**4,588.42**	**19,983,049.11**	**–8.7**

The Group continuously seeks to reduce energy consumption and greenhouse gas emissions by using more energy-efficient equipment and vehicles. The Group's companies operate a modern vehicle fleet, with most vehicles produced after 2014 and all cars equipped with class IV or V engines.

[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.

Electricity consumption

Electricity consumption volumes are recorded at all of the Group's office facilities, both owned and leased. Increased electricity consumption in 2019 was due to the installation of new equipment and in the context of an increase in energy use intensity to revenue.

Servers and computing equipment are the Group's largest consumers of electricity. The operation of MOEX's systems involves maintaining large amounts of equipment at three data centers.

The Group is focusing on two main areas to manage computing power and use energy responsibly:

- Consolidation of computing capacity by developing virtualization systems and introducing solutions based on microservice architecture, which means server equipment is operational only as and when needed.
- Ongoing equipment rotation and updating, and deployment of more modern and energy- efficient server solutions.
- In addition to control over operation of computing equipment, the Exchange carefully monitors power consumption at office premises. Forced shutdown is applied to all electrical equipment when not in use, and cold atmospheric air is used to air-condition server rooms in winter.
- In 2019, the Group doubled the number of energy-saving light-bulbs. In just three years, about a third of all lightbulbs at MOEX's main office have been replaced with energy-saving bulbs.

Energy costs
(thousand rubles)

Resource	2018	2019	Change 2018/2019 (thousand rubles)	Change 2018/2019 (%)
Gasoline	3,212.77	2,848.01	–364.76	11.35
Diesel	291.86	296.72	4.86	1.6
Electricity	56,495.66	58,196.17	1,700.51	3
Heat	7,500.09	7,073.56	426.53	–5.7

Greenhouse gases

In its activities, Moscow Exchange directly emits greenhouse gases through the operation of corporate vehicles and its own diesel generators to generate electricity in the event of emergency outages. Indirect emissions occur due to the use of electric and thermal energy purchased from energy suppliers.

In 2019, the Group reduced direct and indirect emissions (Scope 1 and Scope 2) of greenhouse gases and the ratio of emissions intensity to revenue. This was achieved through a reduction in the Group's consumption of heat and diesel fuel by limiting the operation of a number of older and less efficient vehicles and as a result of lower energy consumption for heating purposes due to a warm winter in 2019–2020.

WASTE COLLECTION AND DISPOSAL

At all of the Exchange's premises, waste is collected and disposed of systematically as per the draft standards on Waste Generation and Disposal Limits. Waste is separated by type, hazard class and other characteristics to ensure proper collection, storage, transport and disposal.

In 2019, the Exchange significantly reduced the share of waste destined for landfill by increasing the share of processed and recycled waste accordingly.

The Exchange subscribes to modern waste recycling principles and is seeking to increase environmental awareness among all staff. Batteries are collected and disposed of at all MOEX Group offices, which are also equipped with waste sorting bins. The Exchange is reducing volumes of waste paper generated by introducing electronic document management.

Following the introduction of a set of tools to improve environmental efficiency in 2019, the volume of waste generated by the Exchange decreased by 9.5% by 2018. Most of this was low-risk or non-hazardous household waste (hazard classes IV and V).

WATER USAGE

Moscow Exchange has adopted measures to use water responsibly at all Group offices. Volumes of water collected and discharged are recorded at MOEX's offices on Bolshoy Kislovsky Pereulok, Sredny Kislovsky Pereulok, Spartak Street and Vozdvizhenka Street.

Water is supplied through municipal water supply systems. Water is discharged into the city sewer system and storm drains operated by of Mosvodostok, and does not require preliminary processing.

The increase in water consumption in 2019 was the result of installation of additional shower equipment in the fitness room at the office on Sredny Kislovsky Pereulok and also due to growth in the number of Group employees.

In 2019, mixer faucets with sensors were installed at the office on Sredny Kislovsky Pereulok, and the cold-water pumping station was replaced with a more modern model with smooth power control. In 2020, the Exchange plans to further increase the efficiency of water consumption at its offices.

Over its seven years as a public company, Moscow Exchange has become one of the leaders in corporate governance in Russia. The Supervisory Board and the management team have made great efforts to introduce best corporate governance practices and have achieved impressive results. I am confident that this will serve as a solid basis for the successful development of the company going forward.

Mikhail Bratanov,
Member of the Supervisory Board,
Independent Director

Corporate Governance

Corporate governance system

CORPORATE GOVERNANCE MODEL AND PRACTICE

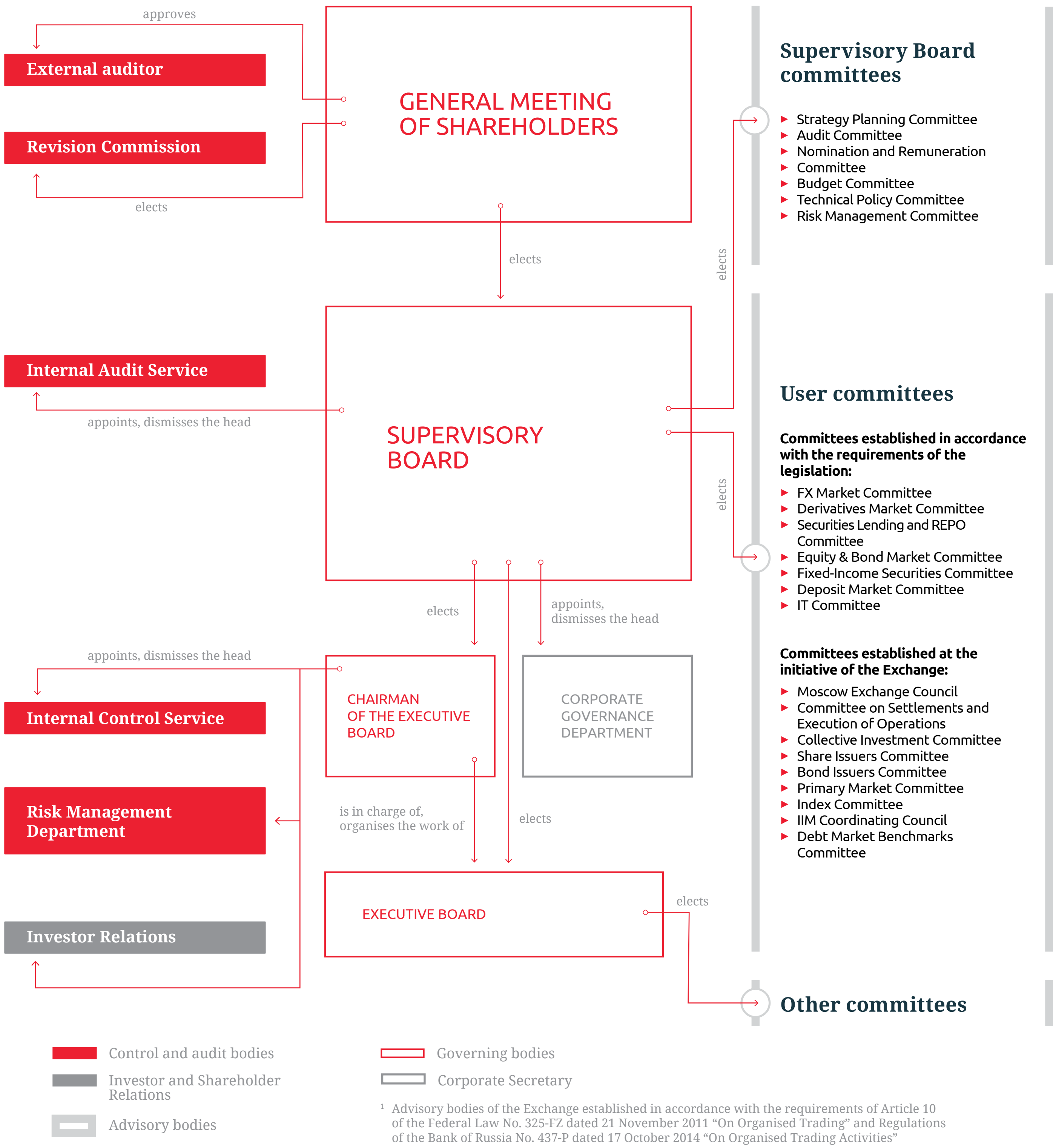
Moscow Exchange is one of Russia's largest public companies, and its shares are included in key financial market benchmarks such as the MOEX Russia Index and the RTS Index. The Bank of Russia, which acts as regulator of the financial market, is one of the Exchange's shareholders. The Exchange is also a market infrastructure operator that establishes rules for other issuers. Because of all these factors, the Exchange must adhere to the highest 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 maintaining a positive perception of the Exchange's corporate governance system among shareholders, investors and the broader 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 corporate governance requirements for the organizer of trading; 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 2019:

- seven independent directors were elected to the Supervisory Board, which consists of 12 members;
- 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 structure



[1] 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.

The Annual General Meeting of Shareholders (AGM) of Moscow Exchange was held on 25 April 2019. In addition to reviewing mandatory and routine issues, the AGM voted for resolutions on approval of a new version of the Charter and individual internal documents, as well as on participation of Moscow Exchange in the Financial Technology Development Association.

On 21 November 2019, an Extraordinary General Meeting of Shareholders of the Exchange was held, at which resolutions on early termination of powers of Revision Commission members elected by the Annual General Meeting of Shareholders on 25 April 2019 were adopted. A new Revision Commission was elected.

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.

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 oversight of the Exchange and long-term sustainable development;
- establishes strategic goals and key performance indicators.

When developing Moscow Exchange's strategy, the Supervisory Board takes into account shareholders' vision for the development of the Exchange. The Supervisory Board considers queries and requests from shareholders and investors and, if necessary, gives appropriate instructions to senior management.

The work schedule approved by the Supervisory Board 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 executives on priority issues are taken into account.

Information on the activities of the Supervisory Board, including its composition, meetings held and work of its committees, is disclosed on the Exchange's website 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 is composed of directors who have the experience and professional skills required to oversee implementation of the Exchange's strategy.

In accordance with the Exchange's Charter, the number of members of the Supervisory Board is set by the resolution of the General Meeting of Shareholders. Currently, the Supervisory Board of Moscow Exchange is comprised of 12 members.

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

The Chairman is elected/re-elected by the members of the Supervisory Board from among the Board membership, 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.

Members of the committees are selected 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.

In 2019, an Interim Corporate Governance Committee was created as a working group on revision of the shareholder agreement with respect to NSD. The main task of the committee was to prepare amendments to the shareholder agreement with respect to NSD and develop corresponding recommendations for the Supervisory Board. Following the signing of the shareholder agreement by NSD shareholders, the Interim Committee was dissolved.

The Supervisory Board is comprised of 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 2019 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. At the first meeting, two additional directors were qualified as independent directors, notwithstanding existing formal relationship with counterparties. 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 related to conflict of interests of Supervisory Board members and 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

No.	Composition of the Supervisory Board during the period from 1 January 2019 to 25 April 2019	No.	Composition of the Supervisory Board elected on 25 April 2019
Independent directors			
1	Rainer RIESS	1	Rainer RIESS
2	Maria GORDON	2	Maria GORDON
3	Oleg VIYUGIN	3	Oleg VIYUGIN
4	Alexander IZOSIMOV	4	Alexander IZOSIMOV
5	Mikhail BRATANOV	5	Mikhail BRATANOV
6	Anatoly KARACHINSKY	6	Paul A. BODART
7	Duncan PATERSON	7	Dmitry EREMEEV
Non-executive directors			
8	Andrey GOLIKOV	8	Andrey GOLIKOV
9	Valery GOREGLYAD	9	Valery GOREGLYAD
10	Bella ZLATKIS	10	Bella ZLATKIS
11	Anatoly BRAVERMAN	11	Ilya BAKHTURIN
12	Yury DENISOV		
Executive director			
		12	Yury DENISOV (since 16 May 2019)

Information on the Supervisory Board members elected at the Annual General Meeting of Shareholders held on 25 April 2019

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.

In 1974, he graduated from the Lomonosov Moscow State University with a qualification in Mathematics.

He holds a PhD in Physics and Mathematics.
He is a professor in the Finance Department at the Higher School of Economics.

- Since 2019, he has been an Adviser to the Director General of SAFMAR Financial Investment. He is a member of the Council of the Strategic Development Center and AGAT Youth Entrepreneurship Fund. He is Chairman of the Board of Directors of NAUFOR and SAFMAR Financial Investment; a member of the Board of Directors of Rosneft, Unipro and SF Holdings Company Plc; a member of the Presidium of the National Council on Corporate Governance; and a member of the Supervisory Board of NSD.
- He was first elected to Moscow Exchange's Supervisory Board on 27 April 2017.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Andrey GOLIKOV

Deputy Chairman of the Supervisory Board

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

Born on 14 March 1969 in Volzhsky, Volgograd region.

In 1991, he graduated from the Lomonosov Moscow State University, Department of Mechanics & Mathematics, with a degree in Mechanics.

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

- He is an independent director of the Supervisory Board of Russian National Reinsurance Company, a member of the Boards of Directors of Otkritie Bank and Absolut Bank, a member of the Supervisory Boards of CCP NCC and NSD, 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 of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Ilya BAKHTURIN

member of the Supervisory Board

Member of the Strategy Planning Committee.

Born on 3 January 1978 in Moscow.

In 2001, he earned a Master of Science degree in Mathematical Finance from the University of Southern California.

In 2000, he graduated from the Lomonosov Moscow State University with a Bachelor's degree in Economics.

- From 2016 to 2017, he was an Executive Director at Goldman Sachs (Russia) and held a post at Baring Vostok Capital Partners Group Limited.
- From 2017 to 2019, he was Special Investment Project Director at the Russian Direct Investment Fund.
- Currently, he holds the position of Chief Investment Director at WITEL AG.
- He was elected to Moscow Exchange's Supervisory Board on 25 April 2019.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Paul A. BODART

member of the Supervisory Board, Independent Director

Member of the Strategy Planning Committee, member of the Audit Committee.

Born on 22 January 1953 in Rotterdam.

In 1976, he graduated from the Universite Catholique de Louvain (Belgium) with a Master's degree in Applied Engineering Mathematics.

- In 1986, he graduated from INSEAD business school (Fontainebleau, France) with an MBA degree.
- Since 2013, he has been a professor at Solvay Brussels School (post-degree program in financial markets).
- From 2012 to 2015, he was a member of the Board of Directors of the European Central Bank, and from 2013 to 2016, he was an independent director of Dexia SA.
- Currently, he is a member of the Supervisory Board of NSD, and independent director of Belfius Bank S.A.
- He was elected to Moscow Exchange's Supervisory Board on 25 April 2019.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Mikhail BRATANOV

member of the Supervisory Board, Independent Director

Chairman of the Nomination and Remuneration Committee, member of the Budget Committee, member of the Risk Management Committee.

Born on 16 May 1973 in Dolgoprudny, Moscow region.

In 1996, he graduated from the Moscow State Institute of Electronic Engineering with degrees in Electronic Engineering and Management.

In 2011, he graduated from the Moscow School of Management SKOLKOVO with an Executive MBA degree.

In 2017, he received a Chartered Director qualification from the Institute of Directors (IoD).

In 2019, he graduated from the Centre for Effective Dispute Resolution, UK with Accredited CERD Mediator qualification.

He holds a PhD in Economics.

- Since 2007, he has been the Director of the Securities Services Department and 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 the Professional Association of Transfer-Agents, Registrars and Depositories (PARTAD), National Financial Association (NFA), RB Specialised Depository, and Russian National Reinsurance Company.
- He was first elected to Moscow Exchange's Supervisory Board on 19 May 2011.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Maria GORDON

member of the Supervisory Board, Independent Director

Chairman of the Audit Committee, member of the Budget Committee, member of the Nomination and Remuneration 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.

- She is a member of the Supervisory Boards of ALROSA and Polyus.
- She was first elected to Moscow Exchange's Supervisory Board on 27 April 2016.

She has no interest in the share capital of Moscow Exchange. She reported no transactions involving shares of Moscow Exchange in 2019.

Valery
GOREGLYAD
member
of the Supervisory Board

Yury
DENISOV
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 holds a PhD in Economics. He is a professor at the Higher School of State Audit at Lomonosov Moscow State University.

- Since 2013, he has been the Chief Auditor of the Bank of Russia.
- He is a member of the Board of Directors of Rosgosstrakh; a member of the Supervisory Board of Russian National Reinsurance Company; a member of the Supervisory Boards of the Russian Union for Collection (ROSINKAS) and Sberbank; as well as a member of the Council of Institute of Internal Auditors Association.
- He was first elected to Moscow Exchange's Supervisory Board on 26 June 2014.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

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.

- Since 2019, he has been Chairman of the Moscow Exchange Executive Board.
- He is a member of the Supervisory Boards of CCP NCC and NSD, as well as 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 24 April 2008.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Dmitry EREMEEV

member of the Supervisory Board, Independent Director

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

Born on 26 May 1983 in Kazan.

In 2005, he graduated from Kazan State University with a qualification in Applied Mathematics and IT.

- From 2013 to 2016, he was a Senior Expert Advisor to the Head of Kazan Municipal Entity Office of the Secretariat of the Kazan City Duma. Currently, he is the Chairman of the Board of Directors of Bank 131.
- He was elected to Moscow Exchange's Supervisory Board on 25 April 2019.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

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.

- Since 2004, she has been the Deputy Chair of the Executive Board at 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 and is currently its Chairwoman. Ms. Zlatkis is 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 of Moscow Exchange. She reported no transactions involving shares of Moscow Exchange in 2019.

Alexander IZOSIMOV

member of the Supervisory Board, Independent Director

Member of the Audit Committee, member of the Nomination and Remuneration Committee, Chairman 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 DRC Advisors AB.
- From 2003 to 2011, he was the CEO of VimpelCom.
- During the period from 1996 to 2003, he worked in Mars Inc., and from 2001 to 2003 held the position of its President in CIS Countries, Central Europe and Scandinavia.
- Earlier in his career he worked at the international consultancy McKinsey & Company.
- From 2012 to 2015, he was a member of the Boards of Directors of MTG AB, LM Ericsson AB, and Transcom AB. Currently, he is a member of the Boards of Directors of Evraz Plc., Nilar AB and Hövding Sverige AB.
- He was first elected to Moscow Exchange's Supervisory Board on 26 April 2018.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Rainer RIESS

member of the Supervisory Board, Independent Director

Chairman of the Strategy Planning 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 (Finance, Marketing).

- In 1994, he graduated from the Wolfgang Goethe University (Frankfurt) with a Master of Arts degree in Economics.
- He is the Managing Partner and owner of Addwis GmbH (Frankfurt, Germany) and RR Little Paradise Real Estate LLC, as well as the General Director of the Federation of European Securities Exchanges AISBL (FESE).
- He was first elected to Moscow Exchange's Supervisory Board on 25 June 2013.

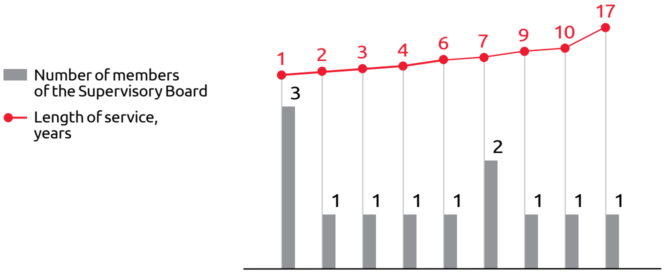
He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2019.

Activities of the Supervisory Board in 2019

From 1 January 2019 to 31 December 2019, the Supervisory Board held 23 meetings (including six in-person meetings).

Six meetings of the Supervisory Board were held prior to and 17 meetings after the Annual General Meeting of Shareholders on 25 April 2019.

Length of service on the Supervisory Board



Board members' attendance at Meetings of the Supervisory Board

Full name	Number of meetings attended	% of meetings attended
Anatoly BRAVERMAN (member of the Supervisory Board until 25 April 2019)	6	100
Anatoly KARACHINSKY (member of the Supervisory Board until 25 April 2019)	6	100
Duncan PATERSON (member of the Supervisory Board until 25 April 2019)	6	100
Ilya BAKHTURIN (member of the Supervisory Board since 25 April 2019)	14	82
Paul A. BODART (member of the Supervisory Board since 25 April 2019)	15	88
Mikhail BRATANOV	23	100
Oleg VIYUGIN	23	100
Andrey GOLIKOV	23	100
Maria GORDON	23	100
Valery GOREGLYAD	22	96
Yury DENISOV	23	100
Dmitry EREMEEV (member of the Supervisory Board since 25 April 2019)	17	100
Bella ZLATKIS	23	100
Alexander IZOSIMOV	23	100
Rainer RIESS	23	100

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

In 2019, the Supervisory Board considered issues relating to the performance of its main functions, including:

strategy issues:

- approval of the strategy of the Group and new version of the Dividend Policy;
- resolution on participation of Moscow Exchange in the Financial Technology Development Association

personnel issues:

- election of Yury Denisov to the post of the Chairman of the Executive Board of Moscow Exchange;
- preparation of recommendations to shareholders with regard to the membership of the Exchange's Supervisory Board for election at the Annual General Meeting of Shareholders;

business development issues:

- review of fees on the Equity and Bond Market, deposit market and Derivatives Market; trading fees on the FX Market, and listing fees; approval of Regulations on Fees for Participation in Trading on the Equity and Bond Market and Deposit Market;

key documents of Moscow Exchange:

- Rules of the organized trading on the Exchange's markets, Listing Rules;
- Rules of admission to organized trading on all markets;

risk management issues:

- approval of the Operational Risk Management Policy;
- approval of the rules on management of risks related to trading organizer activities, and Compliance Risk Management Principles;
- approval of the method for defining benchmark indices of risk appetite;
- approval of the list of measures aimed at prevention of conflicts of interest at carrying out activities on stock trading.

Appointment, induction and training of the Supervisory Board members

In accordance with the Federal Law on Joint Stock Companies and the Exchange's Charter, shareholders holding in aggregate at least 2% of the voting shares in Moscow Exchange may nominate candidates to the Supervisory Board of the Exchange (the number of which cannot exceed the number of members of the Supervisory Board of the Exchange) no later than 60 days after the end of each fiscal year.

As of 1 March 2019, the Exchange had received proposals for the nomination of three candidates to the Supervisory Board to be elected at the Annual General Meeting of Shareholders in 2019; all three were included in the list for voting at the General Meeting of Shareholders.

In accordance with the amendments to the Federal Law on Joint Stock Companies, the Supervisory Board is entitled to nominate candidates for the Exchange's Supervisory Board (apart from those nominated by the shareholders) at its own discretion. Succession planning and provision for the required competencies on the Supervisory Board are considered to be best practice. The Nomination and Remuneration Committee, taking into account consultations with the members of the Supervisory Board and significant shareholders, recommended that the Supervisory Board include 12 candidates most suitable for election to the Supervisory Board for the 2019-2020 corporate year (including three candidates nominated by shareholders of the Exchange) in the list of candidates for election to the Moscow Exchange Supervisory Board at the 2019 Annual General Meeting of Shareholders.

As part of the introduction of newly elected directors, an onboarding program for new Board members is being implemented, which provides for familiarization with the main internal documents of the Exchange, resolutions of the meeting of shareholders and the Supervisory Board, as well as for holding individual meetings with the Chairman of the Supervisory Board, Chairman of the Executive Board, corporate secretary and key managers of the Group.

ACTIVITIES OF THE SUPERVISORY BOARD COMMITTEES

Number of meetings of Supervisory Board committees

	Over the period 01.01.2019.- 25.04.2019		Over the period 25.04.2019 – 31.12.2019		Total in 2019
	in-person	remote	in-person	remote	
Strategy Planning Committee	2	1	3	4	10
Audit Committee	3	1	5	0	9
Nomination and Remuneration Committee	6	3	7	2	18
Budget Committee	1	2	6	4	13
Risk Management Committee	5	0	3	2	10
Technical Policy Committee	0	0	2	0	2

Board members' attendance at committee meetings

Full name	Strategy Planning Committee	Audit Committee	Nomination and Remuneration Committee	Budget Committee	Risk Management Committees	Technical Policy Committees
A.A. BRAVERMAN (Member of the Committee until 25.04.2019)	67%			100%	40%	
Duncan PATERSON (Member of the Committee until 25.04.2019)	100%	100%				
BAKHTURIN I.Y. (Member of the Committee since 25.04.2019)	43%					
Paul A. BODART (Member of the Committee since 25.04.2019)	100%	100%				
M.V. BRATANOV			94%	100%	100%	
O.V. VIYUGIN	100%		94%			
A.F. GOLIKOV	100%			100%	100%	
M.V. GORDON		89%	89%	85%		
V.P. GOREGLYAD					80%	
Y.O. DENISOV	100%				100%	
D.N. ERENEEV (Member of the Committee since 25.04.2019)	86%					100%
A.V. IZOSIMOV	67%	100%	100%			100%
Rainer RIESS	100%	100%	89%			

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.

Composition of the Committee:

- Maria Gordon, Chairman of the Committee;
- Members of the Committee: Rainer Riess, Paul Bodart, Alexander Izosimov.

59 issues were considered at meetings of the Audit Committee in 2019.

The main issues considered by the Committee in 2019 and on which recommendations were given to the Supervisory Board related to the assessment of the performance of the Group's external auditor, review of the consolidated financial statements and reports of the Internal Audit Service.

The Audit Committee reviewed issues related to the Anti-Corruption Policy and Fraud Management Program; information disclosure exercising a significant influence on financial indicators of the Moscow Exchange Group; audit "Internal Control System".

In April 2019, the Audit Committee defined the terms for performance of transactions with financial instruments by the persons included into the insider list as well as by persons associated with them.

In 2019, the Supervisory Board recommended that the General Meeting of Shareholders select ZAO Deloitte & Touche CIS as external auditor upon the recommendation of the Audit Committee and the corresponding decision was made at the Annual General Meeting.

Additionally, 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 2018.

Nomination and Remuneration Committee

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

Composition of the Committee:

- Mikhail Bratanov, Chairman of the Committee;
- Members of the Committee: Oleg Viyugin, Maria Gordon, Alexander Izosimov.

65 issues were considered by the Nomination and Remuneration Committee of the Supervisory Board in 2019.

The main issues considered by the Committee in 2019 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 of the Group and individual KPIs of members of executive bodies and the Director of the Corporate Governance Department of the Exchange, the option program for management, management succession program and early termination or extension of powers of members of the Executive Board as well as selection of a new Chairman of the Executive Board.

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.

Composition of the Committee:

- Rainer Riess, Chairman of the Committee;
- Members of the Committee: Ilya Bakhturin, Oleg Viyugin, Andrey Golikov, Dmitry Eremeev, Paul Bodart.

36 issues were considered at the meetings of the Strategy Planning Committee of the Supervisory Board in 2019.

The main issues considered by the Committee in 2019 and on which recommendations were given to the Supervisory Board related to key market trends, generation and approval of a new development strategy, innovation management and the adoption of an amended dividend policy. In the course of formulating the new strategy, the Committee focused on the issues of the corporate values of the Exchange and formulating the dividend policy in accordance with the new strategy. All members of the Supervisory Board were involved in the development of the new strategy during the course of a Strategy Day specially organized to coincide with a meeting 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 Group companies in order to enhance the reliability and efficiency of the activities of the Exchange.

Composition of the Committee:

- Andrey Golikov, Chairman of the Committee;
- Members of the Committee: Valery Goreglyad, Mikhail Bratanov.

36 issues were considered by the Risk Management Committee of the Supervisory Board in 2019.

The main issues considered by the Committee in 2019 and on which relevant recommendations were given to the Supervisory Board related to the regular analysis of the Group's reports on management of various risks, including business continuity, operational, non-financial, uneconomic and other risks. At the meetings of the Committee, special attention was paid to improvement of operational risk management, improvement of performance criteria of the risk management system and adoption of the risk appetite indicators.

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.

Composition of the Committee:
- Andrey Golikov, Chairman of the Committee;
- Members of the Committee: Mikhail Bratanov, Maria Gordon.

39 issues were considered by the Budget Committee in 2019.

The main issues considered by the Committee in 2019 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 dividends of Exchange subsidiaries, setting fees for all Exchange markets and evaluating effectiveness of marketing periods, control of execution of priority project budgets, the Exchange's capital management, providing guidance with 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 strengthening of effectiveness of the Group's activities through preparation of recommendations and expert opinions to the Supervisory Board, boards of directors (supervisory boards) of 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.

Composition of the Committee:
- Alexander Izosimov, Chairman of the Committee;
- Members of the Committee: Dmitry Eremeev, Vladimir Kurlyandchik, Kirill Menshov, Yury Yartsev.

Three issues were considered by the Technical Policy Committee of the Supervisory Board in 2019.

The main issues considered by the Committee in 2019 and on which recommendations were given to the Supervisory Board related to approaches to the Exchange's IT strategy formulation and NSD's IT architecture development concept for the period to 2024.

ASSESSMENT OF SUPERVISORY BOARD AND COMMITTEE PERFORMANCE

Assumptions and grounds for assessment

In accordance with the recommendations of the Corporate Governance Code and best international practices, Moscow Exchange assesses the performance of the Supervisory Board on an annual basis. In accordance with the Corporate Policy, the Nomination and Remuneration Committee of the Supervisory Board regularly engages external consultants for an independent assessment.

By decision of the Supervisory Board, assessment in 2019 was performed with the assistance of Ward Howell, an independent consultant selected following a competitive process. The selection criteria, in addition to the cost of services, were as follows: a consultant's experience in implementing similar projects, academic and practical expertise in the area of corporate governance, experience and level of professional competence of the project team as well as absence of any links with the Exchange.

Assessment goals and objectives

The assessment is aimed at monitoring changes in the activities of the Supervisory Board, as well as identification of areas to enhance the effectiveness of the work of the Board and its individual members.

In order to achieve these goals, the following issues were assessed:

- The role and functions of the Supervisory Board and committees in the Exchange's Corporate Governance System;
- The composition of the Supervisory Board and committees in terms of balance and effectiveness of the formation process;
- The priorities for work of the Supervisory Board and committees;
- The effectiveness of working processes and procedures of the Supervisory Board and committees;
- The dynamics of meetings of the Supervisory Board and committees;
- The contribution and effectiveness of the Chairman of the Supervisory Board, chairmen of committees and the Corporate Secretary;
- An individual assessment of the level of involvement and the preparation for meetings of the members of the Supervisory Board;
- Recommendations for the improvement of activities of the Supervisory Board were formulated.

Assessment methodology

To collect the necessary information and obtain as objective results as possible, the consultants used several tools:

- Analysis of internal documents;
- Attendance at meetings of the Supervisory Board and committees;
- Questionnaire of members of the Supervisory Board and management representatives;
- Interview with members of the Supervisory Board, management representatives and shareholders;
- Individual 360-degree assessment of members of the Supervisory Board;
- Benchmarking of Russian and international practices.

The members of the Supervisory Board, management representatives and shareholders took an active part in the assessment. External consultants noted the profound, detailed and open nature of the discussions in the course of their interviews.

Assessment participants	Number of participants	Took part in questionnaire	Took part in interview
Members of the Supervisory Board	12	9 (75%)	12 (100%)
Management representatives	19	10 (53%)	15 (79%)
Shareholders	2	N/A	2 (100%)
Total:	33	19 (61%)	29 (88%)

Involvement of participants from different groups facilitated as broad and as objective an assessment as possible.

Assessment results

Overall, the assessment demonstrated the Supervisory Board's activities are in line with best international practices of corporate governance. The following aspects were the most highly rated:

- **Professionally invested and involved directors** – most directors prepare for meetings and take an active part in discussions, demonstrating a responsible attitude and professional interest.
- **Effective strategic direction** – the Supervisory Board effectively organizes the process of discussion and determination of the Exchange's strategic direction, including involving the main stakeholders in work on the strategy.
- **Effective organization of committee work** – Supervisory Board committees complete the tasks assigned to them. The chairmen of most of the committees organize their work.
- **Leadership style of the Chairman of the Supervisory Board** – ensures the substantive quality of discussions and representation of all points of view. The Chairman effectively represents the Supervisory Board in external communications.
- **Professional Corporate Secretary** – ensures the effective functioning of the Supervisory Board and implementation of best practices of corporate governance.

The Supervisory Board increased its effectiveness in some aspects of its work, which were identified as areas for improvement in the course of an external assessment in 2016 and self-assessment in 2018. In particular, the processes for interaction between the Supervisory Board, committees and management was improved. Another improvement was improved efficiency of the process of developing and revising the company's strategy. The professional work of the Strategy Committee played a key role in this regard. In comparison with the self-assessment performed in 2018, Board members' preparation for meetings improved.

CORPORATE SECRETARY

In accordance with a resolution of the Supervisory Board, the function of 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.

Alexander KAMENSKY
Corporate Secretary of Moscow Exchange

Born in 1982 in Moscow.

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

He was awarded the Director of the Year Prize by AID and RSPP in the Corporate Secretary category in 2015; the twelfth ARISTOS 2014 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:

- 2013 – present: Director of the Corporate Governance Department – Corporate Secretary of PJSC Moscow Exchange;
- 2012–2013: Head of the Corporate Governance Centre – Corporate Secretary of PJSC MDM Bank;
- 2011–2012: Manager for Corporate Governance – Corporate Secretary of PJSC Enel Russia.

Number of shares held / equity interest in the Exchange: 5,005 shares / 0.00022%. As of 1 January 2019, he owned 145,005 shares. He sold 115,310 shares on 25 June 2019 and 24,690 shares on 26 June 2019.

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

REVISION COMMISSION

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.

Composition of the Revision Commission elected by shareholders on 25 April 2019 is as follows:

No.	Full name, position
1	Vladislav ZIMIN, Economic Advisor, Corporate Relations Department, Bank of Russia
2	Olga ROMANTSOVA, Executive Director, Head of Financial Market Operation Audit Department, Internal Audit Department, PJSC Sberbank
3	Mikhail KIREEV, Senior Vice President, JSC "Management Company of the Russian Direct Investment Fund"

On 21 November 2019, at the initiative of the Supervisory Board, an Extraordinary General Meeting of Shareholders was held, at which it was decided to terminate the powers of the Revision Commission members ahead of schedule and elect the following members of a new Revision Commission:

No.	Full name, position
1	Mikhail KIREEV, Senior Vice President, JSC "Management Company of Russian Direct Investment Fund"
2	Natalia PERCHATKINA, Deputy Chief Accountant, VEB.RF, General Accounting Department, Financial Planning and Controlling Unit
3	Olga ROMANTSOVA, Executive Director, Head of Financial Market Operation Audit Department, Internal Audit Department, PJSC Sberbank

As per Russian legislation, the Revision Commission monitors the financial and business activities of the Exchange, conducts inspections and assesses the reliability of data included in the Annual Report and the RAS Annual Financial Statements .

FURTHER DEVELOPMENT OF CORPORATE GOVERNANCE

In 2019 the Supervisory Board defined the following main priorities on the basis of the external assessment:

- **Representation of competencies on the Supervisory Board** – improvement of competencies of the Supervisory Board in the field of information technology and development of digital products.
- **Succession planning** – introduction of a succession planning system for members of the Supervisory Board, facilitating a process whereby the Board engages best competencies from the market while maintaining the accumulated experience and knowledge.
- **Interaction with management** – strengthening interaction between the Supervisory Board and management. In particular, conducting orientation sessions including discussion of joint work, prioritization of requests to the management, division of responsibility of the Supervisory Board and management, and other issues.
- **Effectiveness of meetings** – make meetings more efficient by removing technical issues from the agenda. In particular, developing an annual cycle of work of the Supervisory Board with indication of the key topics for meetings and prioritization of agenda on that basis.

In 2019 the Supervisory Board approved a new dividend policy and revised Corporate Governance Code, a development strategy, considered the questions of calling and holding an extraordinary shareholders meeting, development of the collective investment market, activities to promote demand from domestic institutional investors and reform of the Commodities Market.

MOSCOW EXCHANGE’S CORPORATE GOVERNANCE CODE

In 2019, the Exchange’s Supervisory Board approved a new version of Moscow Exchange’s Corporate Governance Code, which was first adopted in 2015. The Code complies Russian legislation and was developed taking into account principles and recommendations of the Bank of Russia’s Corporate Governance Code and the OECD’s Corporate Governance Principles.

The Exchange’s Code describes the system, principles and practices of corporate governancet of the company and risk management. Additionally, the Code contains the Exchange's corporate social responsibility goals and principles , the principles of interaction with service users and other stakeholders and the principles of corporate governance at Group companies.

A distinctive feature of the document is that it contains development plans for the implementation of corporate governance principles. This sets not a declarative but a practical tone for the Code and allows the Exchange to continue reforming and improving corporate governance.

INFORMATION POLICY

The Exchange strives to ensure that its activities are as transparent as possible for shareholders, investors and other stakeholders. In December 2015, the Exchange's Information Policy was adopted.

The document is available on the MOEX website at: https://www.moex.com/s1358

The information policy is a body of rules that the Exchange (including members of its management bodies, officials and employees) adheres to ollows when disclosing information and/or providing information to shareholders and other stakeholders.

The information policy provides additional opportunities for stakeholders to exercise their rights and interests and is also aimed at improving the Exchange's information interaction with all stakeholders.

Methodology used by the Exchange to assess compliance with the corporate governance principles set out in the Bank of Russia's Corporate Governance Code

The recommendations of the Bank of Russia were applied as the methodology used by the Exchange to assess compliance with the corporate management principles set out in the Bank of Russia's Corporate Management Code.

Among other things, the assessment analyzed the compliance of the Exchange's corporate management practices and internal procedures with the principles and recommendations of the Bank of Russia's Corporate Management Code.

The results of the assessment are contained in the Report on compliance with the principles and recommendations of the Corporate Management Code, which is a part of this Annual report.

Over the past years, the Exchange has been working to bring its corporate management practices in line with the Bank of Russia's Corporate Management Code. The annual analysis of the results of the corporate management assessment shows a tendency to increase the number of principles and recommendations followed.

DIRECTORS' LIABILITY INSURANCE

Since 2013, the liability of Moscow Exchange's directors and offcers (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 2019, the insurance premium is USD 140,000, 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 Street, 125047 Moscow

The auditor is the member of Self-Regulatory Organization Sodruzhestvo

The organization is located at:
21 Michurinsky Prospect, building 4, 119192 Moscow

Principal Number of Registration Entry:12006020384.

Auditing Team:
- Andrey Shvetsov, Lead Auditor;
- Ekaterina Ponomarenko, Partner, Quality Control;
- Anna Naydunova, Senior Audit Manager;
- Natalia Kaprizina, Partner, Internal Control Audit;
- Natalia Konakova, Senior Manager, Internal Control Audit;
- Ekaterina Shelkova, Manager, Internal Control Audit;
- Sergey Akimov, Manager, Internal Control Audit;
- Aleksei Chagovets, Director, Valuation;
- Willy Elizarov, Partner, Tax Audit;
- Eldana Nusipakinova, Manager, Tax Audit.

The fee for the audit of the annual accounting (financial) statements of Moscow Exchange and of the consolidated statements of Moscow Exchange Group for 2019, as well as the review of the consolidated statements for 6M 2019 was RUB 15,207 thousand, including VAT.

Deloitte and Touche CIS rendered no other services to PJSC Moscow Exchange in 2019 beyond audit services.

External auditor selection procedure

Moscow Exchange selects its auditors every three years, as stipulated by the Regulations on the Auditor Selection Commission. The number of audit years by one organization normally does not exceed six years, or two consecutive auditor selection periods. The best candidate is chosen by the Auditor Selection Commission.

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

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 FOR MEMBERS OF THE SUPERVISORY BOARD

The Exchange's remuneration system for Supervisory Board members is set by the Remuneration and Compensation Policy (the "Policy") approved by the Supervisory Board in December 2016 and by the Remuneration and Compensation Regulation (the "Regulation") initially approved by 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 corporate governance best practice and the experience of other public companies and international exchanges. The Policy and the Regulation apply only to members of the Moscow Exchange Supervisory Board. During the reporting year, no amendments were made to the Policy.

According to the Policy, remuneration paid to Supervisory Board members shall be sufficient to attract, retain and properly motivate individuals with the skills and qualifications necessary to work effectively on the Supervisory Board.

The Nomination and Remuneration Committee provides recommendations on remuneration of Supervisory Board members on the basis of an expert assessment of remuneration paid by Russian companies with similar capitalization and competitors of the Exchange, and also based on the results of external studies conducted at the initiative of the Nomination and Remuneration Committee.

At the end of 2018 the Nomination and Remuneration Committee decided to engage an external consultant to conduct a new study. Based on an independent assessment conducted by Stanton Chase, it was found that total remuneration paid to the Supervisory Board of the Exchange in 2018 was approximately 20% less than average total payments to the boards of directors of Russian companies and 45% lower than average payments to the directors of international exchanges in 2017, and the level of individual remuneration of the directors in most cases is lower than at other companies. Additionally, the Nomination and Remuneration Committee took into account the increase of the Russian consumer price index and decrease of the purchasing power of Russian ruble in 2015–2018 (from the date of previous study).

Taking into account remuneration paid by similar public companies in Russia and international competitors of the Exchange, the effect of inflation, the central position of the Exchange (without a controlling shareholder) in the financial market infrastructure and the key role of the independent Supervisory Board of the Exchange for successful growth of the company, the Supervisory Board proposed that the General Meeting of shareholders review the Regulation on Remuneration and Compensation of the Members of the Supervisory Board of Public Joint-Stock Company "Moscow Exchange MICEX-RTS".

On 25 April 2019 the Regulation was approved as amended by resolution of the Annual General Meeting of Shareholders.

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 an option program. 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 Supervisory Board member shall not be paid to state employees, employees of the Bank of Russia, employees and managers of the Exchange or its subsidiaries.

Remuneration of directors for performing their duties comprises basic and supplementary components.

The level of 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 7.5 mln;
- for a non-independent member of the Supervisory Board, amounts to RUB 5 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 member of a Supervisory Board Committee, and:

- for the Chairman of the Supervisory Board, amounts to RUB 8.5 mln;
- for the Deputy Chairman of the Supervisory Board, amounts to RUB 3.5 mln;
- for the Chairman of a Supervisory Board Committee, amounts to RUB 3.75 mln;
- for a member of the Supervisory Board Committee, amounts to RUB 1.5 mln.

In order to ensure remuneration of Supervisory Board members corresponds to changing market demands until the next cycle of remuneration level review, the Regulation provides for adjustment of the level of remuneration of Supervisory Board members in line with the consumer price index at the end of the year in which the corresponding composition of the Supervisory Board was elected, and accrued starting from 1 January 2019.

When a member of the Supervisory Board performs the duties of Chairman and/or 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 location 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 duties of a member of the Supervisory Board, and is not tied to participation in each meeting of the Supervisory Board or Supervisory Board Committees (including unscheduled ones). However, the amount may be reduced by 25% or 50% if a member of the Supervisory Board attended less than 50% or 75% 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 pro-rate for the actual period of performance of his/her duties.

Apart from the remuneration for work on the Supervisory Board and Supervisory Board Committees, in accordance with the Exchange's Policy, members of the Supervisory Board are reimbursed for travel expenses relating to participation in in-person meetings of the Supervisory Board or its Committees, General Meetings of Shareholders as well as events attended while performing 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 for travel expenses.

In order to maintain the necessary professional level of Supervisory Board members, the Nomination and Remuneration Committee 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 members of the Supervisory Board participate in oversight of the remuneration of Supervisory Board members.

The amount of remuneration paid in 2019 to MOEX Supervisory Board members for the performance of their duties in the period from the date of election in 2018 to the date of termination of their powers in 2019 (corporate year) is determined in accordance with the terms of the Regulation which were in effect until the Annual General Meeting of Shareholders held on 25 April 2019. 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 26 April 2018, was adopted at the Annual General Meeting of Shareholders held on 25 April 2019.

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

Payments (by Types of Remuneration),
RUB Thousand

No.	Full name					2019	2018	2017
		Basic remune-ration	Supple-mentary remune-ration	Reimbur-sement of travel expenses	Remu-neration for work in governance bodies of subsidiaries	Total amount of all payments and com-pensation	Total amount of all payments and com-pensation	Total amount of all payments and com-pensation
1	Mikhail Bratanov	4,867.123	2,500	0	3,500	10,867.123	3,500	3,500
2	Alexander Izosimov	5,500	2,789	1,032	0	9,321	0	0
3	Oleg Viyugin	5,500	8,500	300	3,500	17,800	14,101.2	5,750
4	Anatoly Braverman	4,000	3,750	0	0	7,750	7,750	0
5	Andrey Golikov	4,000	8,000	29	8,000	20,029	17,944.4	17,250
6	Maria Gordon	5,500	2,789	42.8	0	8,331.8	8,019.5	9,882.8
7	Valery Goreglyad	0	0	0	0	0	0	0
8	Yury Denisov	4,000	3,750	212	8,750	16,712	15,562.2	14,430.5
9	Bella Zlatkis	4,000	0	0	4,750	8,750	8,750	8,750
10	Anatoly Karachinsky	5,500	2,500	0	0	8,000	8,000	8,817.4
11	Rainer Riess	5,500	4,560	154.3	0	10,214.3	14,591.4	11,533.9
12	Duncan Paterson	5,500	3,302	51.7	0	8,854	11,260	8,569.8

CHAIRMAN AND MEMBERS OF THE EXECUTIVE BOARD

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

The Executive Board is headed by the Chairman who manages its activities.

Yury DENISOV

Chairman of the Executive Board

Information on the Chairman of the Executive Board

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.

- He was elected to the post of Chairman of the Executive Board by the resolution of the Supervisory Board (Minutes No.19 dated 24 April 2019) for the period from 16 May 2019 to 12 May 2022.
- He is a member of the Supervisory Boards of CCP NCC and NSD, as well as 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 24 April 2008.

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

He reported no transactions involving shares in Moscow Exchange in 2019.

Information on Members of the Executive Board

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.

- From 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 (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; member of the Council of the International Association of Commonwealth of Independent Countries; and member of the Board of Directors of the National Financial Association.

Length of service with the Exchange: since 2000.

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

He reported no transactions involving shares in Moscow Exchange in 2019.

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 Lomonosov Moscow State University with a qualification in Mechanics and Applied Mathematics.

In 1998, she graduated from Lomonosov Moscow State University with a Bachelor's degree in Political Economy.

In 1999, she completed a post-graduate course at the Mechanics and Mathematics Faculty of Lomonosov Moscow State University.

She holds a PhD in Physics and Mathematics.

- From 2008 to 2013, she worked as the Deputy CEO and, from 2013 to 2016, as the CEO of MICEX Stock Exchange.
- Since 21 July 2016, she has been a member of the Executive Board and the Managing Director of the Equity & Bond Market.
- Since 2018, she has been a professor and the Head of the Financial Markets Infrastructure Chair at the National Research University Higher School of Economics.
- Currently, she is a member of the Board of Directors of NAUFOR, and a member of the Supervisory Board of the Financial Literacy Development Association.
- Length of service with the Exchange: since 2001.

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

She reported no transactions involving shares in Moscow Exchange in 2019.

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 holds a PhD in Engineering Sciences.

- In 2016, he graduated from the Moscow School of Management SKOLKOVO with an Executive MBA (Master of Business Administration) degree.
- 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 (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.

Number of shares held / equity interest in the Exchange: 17,258 / 0.00076%.

He reported no transactions involving shares in Moscow Exchange in 2019.

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 qualification in Economics.

In 2007, he graduated from Columbia Business School with a degree of Master of Business Administration in Finance.

- From 2003 to 2009, he worked as a consultant at McKinsey & Company.
- From 2009 to 2014, he was head of planning and analysis at Sibur.
- From February 2014 to July 2016, he headed business development and performance management at Magnitogorsk Iron and Steel Works.
- In August 2017, he joined Moscow Exchange. Since 2 October 2017, he has been Chief Financial Officer and a member of the Executive Board of Moscow Exchange. His term of office is from 2 October 2019 to 30 September 2021 (established by resolution of the Supervisory Board dated 28 June 2019 – Minutes No. 5 dated 28 June 2019).
- Since 2018, he has been Chairman of the Board of Directors of MB Innovations.

Length of service with the Exchange: since 2017.

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

He reported no transactions involving shares in Moscow Exchange in 2019.

REMUNERATION OF EXECUTIVE BOARD MEMBERS

Remuneration of members of the Executive Board is regulated by the Remuneration and Compensation Policy for Members of the Executive Board, approved by the Supervisory Board in December 2016. The Policy sets out principles for remuneration, and establishes procedures for determining remuneration levels as well as types of payments, incentives and privileges payable to members of the Executive Board.

The Policy is based on the following key principles:

- Involvement and retention of a professional and effective team consisting of Executive Board members able to implement the Exchange's strategy and other priorities and increase shareholder value;
- Competitive remuneration at a level sufficient to engage, motivate and retain competent and qualified Executive Board members;
- Maintaining an optimal balance between the Exchange's business performance and the personal contribution of an Executive Board member in determining remuneration levels.

To maintain openness and accessibility for investors, the Remuneration Policy is published on the Exchange's web site at http://www.moex.com/s798.

Executive Board members' remuneration consists of a fixed salary and a variable component. The variable component comprises a significant portion of annual remuneration, and includes short- and long-term components. Short-term variable remuneration takes the form of an annual bonus based on the Exchange's results and the individual contribution of the Executive Board member to those results. Long-term variable remuneration is shares-based and is established by the Long-Term Incentive Programme.

The short-term variable component is determined by an annual approval of key performance indicators including corporate and individual key efficiency indicators. In 2019, the ratio of corporate and individual indicators was 40:60.

To promote personal responsibility, the Supervisory Board applies a delayed bonus plan taking into account the contribution of Executive Board members to the Exchange's financial and other results, including the possibility of reducing or cancelling part of the delayed bonus if no positive results are obtained in the relevant area. Payment of 60% of the approved bonus amount for 2019 will be made in 2020, and 40% will be paid with a delay in equal portions within one and two calendar years (20% within one calendar year, and 20% within two calendar years) based on the relevant decisions of the Exchange's Supervisory Board. This procedure makes it possible to account for risks created by decisions made by Executive Board members.

The stock-based Long-Term Incentive Programme, as approved by the Supervisory Board, is designed to boost Executive Board members' motivation and responsibility, align their interests with those of shareholders and connect remuneration with long-term performance results. Under this Programme, Executive Board members are granted the right to dispose of shares over periods of one, two and three years, provided that their contract remains in force.

Compensation paid in the event of early termination of the authority of a member of the Management Board (following a Supervisory Board decision on terminating a contract), and assuming no unethical practices on the part of the member, is capped at the amount of the fixed annual bonus component. If a contract is terminated for other reasons, compensation is paid only in cases and amounts provided for by the Labor Code of the Russian Federation.

Specific remuneration due to executive body members, conditions and procedure for paying such remuneration, as well as conditions for early termination of agreements, including discharge allowances, compensations and other payments in any form exceeding those established by law, and conditions for their provision are considered and approved by the Supervisory Board based on recommendations made by the Assignment and Remuneration Committee, which reports to the Supervisory Board. To avoid any conflict of interests, the sole executive body (i.e., the Chairman of the Board), abstains from votes on the contractual terms and conditions of Executive Board members.

The Supervisory Board, supported by the Assignment and Remuneration Committee, ensures oversight of implementation of the Remuneration Policy, and can amend it as necessary. Total remuneration due to a member of the Board, including the ratio of the remuneration components, is assessed by the Assignment and Remuneration Committee to ensure compliance with remuneration levels at comparable companies, based on a remuneration study from a leading consulting company. Executive Board members are not paid for their work in management bodies of other Group companies.

Remuneration and compensation payments made to the members of the Executive Board in 2019, thousand RUB

	2019
Remuneration for participating in work of the Management Board	0.00
Salary/wage	183,172.46
Bonus	148,337.34
Commission fees	0.00
Remuneration for participating in work of subsidiary’s management body	0.00
Expense reimbursement	0.00
Other types of remuneration	29,297.08
TOTAL	**360,806.89**

Internal control system

MOEX's internal control system ensures that the Exchange's licensed activities are conducted in accordance with Russian legislation and regulation, the rules of organised trading, and the Exchange's own constituent and internal documents.

Internal control activities aim to identify, analyze, assess and monitor the risk of loss and/or other adverse consequences of both MOEX's operational activities and measures taken by the Bank of Russia ("compliance risk"), and to manage any such risks.

Within this framework, the Exchange's internal control system is based on the COSO concept and utilizes a Three Lines of Defense model, which distributes risk management and internal control obligations among MOEX's governing bodies, control and coordination units, and the internal audit unit.

The First Line of Defense is represented by employees of the Exchange's business and operational units of the Exchange, whose key functions are to identify, assess and manage the risks inherent in MOEX's daily activities, and to develop and implement policies and procedures governing existing business processes.

The Second Line of defense is represented by the Operational Risk, Informational Security and Business Continuity Department, the Internal Control Service, and the Compliance Service, which carry out continuous risk monitoring and management of the following areas:

- ensuring information security, including protecting the Exchange's interests in the information sphere;
- compliance with legislation, as well as the Exchange's own constituent and internal documents;
- preventing the Exchange and its employees from being involved in unlawful and unethical activities, including money laundering and terrorism financing;
- preventing unlawful use of insider information and/or market manipulation;
- preventing conflicts of interests, including by identifying and monitoring conflicts of interests and preventing the consequences of conflicts of interests.

These units support the first line of defense in identifying compliance risks, developing and embedding control procedures, interpreting applicable legislation, and preparing reports for MOEX's governing bodies based on the results of monitoring.

The Third Line of Defense is represented 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.

The Exchange's governing bodies set the terms of reference for internal control systems related to risk management.

The Internal Control System was subject to an independent audit conducted by EY, which assessed the system maturity level as "developed". The Group continues to enhance its internal control system to improve effectiveness and maintain the system at a high level. In addition, the Stabilization 3.0 project now underway aims to elaborate a development strategy for the compliance system in terms of best practice and establish a foundation for creating a unified compliance culture across Group companies.

Risk management

KEY RISKS

The Moscow Exchange Group has built an integrated risk management system, however each of the Group company faces its own inherent risks associated with the specific field of its activities. Thus, the Moscow Exchange, being the parent company of the Group, assumes the risks of a market operator.

That said, the Group's principal risk taker is none other than Non-banking credit institution - Central Counterparty National Clearing Centre (short name "CCP NCC") on the grounds that it operates as clearing house, a central counterparty for all main markets of the Moscow Exchange Group, and an operator of deliveries in the Commodities Market.

The Group's comprehensive risk management system extends to the NSD, the infrastructure powerhouse of the Russian financial market, whose priorities lie in 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 2019, 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 Det Norske Veritas and Germanischer Lloyd (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 2019, NCC's initial and variation margin assessment model successfully underwent validation. The model was validated by multinational professional services firm PwC in line with the Bank of Russia's Regulation No. 658-P On the Requirements for a Qualified Central Counterparty, the Procedure for Recognition of Central Counterparty Management Quality as Satisfactory; on the Grounds and the Decision-Making Procedure for Recognition of Central Counterparty Management Quality as Unsatisfactory; on the Procedure for Informing the Central Counterparty of the Decision dated 1 November 2018. In its report submitted following the validation process, PwC assigned NCC with high risk protection rating.

In 2019, the Exchange was reaffirmed under 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 principles of comprehensive coverage, continuity, transparency, independent assessment, paper trail, prudence and materiality:

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 in providing relevant information regarding the RMS to clearing members / counterparties. Clearing members, including potential members, have access to methodological documents describing the RMS, including approaches to risk assessment, as well as to key aspects of the procedures employed in monitoring their financial stability. 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 are 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, 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.

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 they assumed by reference to strategic objectives they have set.

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.

Financial risks

Risk	Description	Actions
Credit risk (incl. CCP risk and concentration risk)	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.
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 will be closed, or the collateral can be sold.	The market risk management upon investing idle cash is aimed primarily 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.

Risk	Description	Actions
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 with respect to the liquidity efficient control and management.
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

Risk	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 assist in avoiding (minimizing) 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.

Risk	Description	Actions
Custody risk	Risk of loss of Group's assets posted on it as collateral caused an action or omission of a counterparty responsible for safe custody and record-keeping of the asset.	The custody risk is estimated within the credit risk as the custody risk occurrence may cause the credit risk event; and the custody risk is managed as part of the operational risk which may be the trigger the custody risk event. The custody risk management methods include: • evaluation of financial position of a third-party custodian; • the multi-level admission scheme for elevators and warehouses including accreditation and storage limits establishment processes; • verification of compliance with the established requirements for technical facilities and regular audits of assets in the depositories and vaults of precious metals; • insurance of commodities at stock; • verification of custodians; confirmation of qualitative and quantitative measures of a commodity by a surveyor upon storage and transfer of the commodity to a bailor; • monitoring of actual location of the asset; • monitoring of the asset's availability by the time a claim is made.
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.
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 an inappropriate 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 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:

- the following committees operate: the Risk Committee of the NCC Supervisory Board, Risk Management Committee of Moscow Exchange, Risk Management Committees of NCC Management board and Moscow Exchange and Risk Committee of NSD Executive Board;
- a system of distribution of powers and responsibilities is in place to implement key risk management principles;
- risks are regularly identified and mitigation measures;
- 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.

SHORT-TERM RISK OUTLOOK

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.

HR risks will remain neutral, given that most ongoing activities are long-term; however, staff turnover remains low.

Given that the Exchange's strategic objectives include the financial platform and balance management, 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 regulatory and legal risk.

Stabilization and Reliability 2.0 and Stabilization 3.0 programs being implemented will result in the reduction of operational and compliance risks; however, the full effect will be visible only in the long term.

Plans to upgrade the Exchange's key information systems will keep information security risks elevated.

Strategic risks 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 considering the Group's new strategy through 2024.

Information for investors

SHARE CAPITAL

Information on 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
Total number of outstanding shares	2,276,401,458 shares
Share capital	RUB 2,276,401,458
Trading code / ISIN	MOEX / RU000A0JR4A1

In 2019, Moscow Exchange’s share capital remained unchanged. As of 31 December 2019, 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 were also a constituent of the MOEX Index 10 (which is comprised of the 10 most liquid Russian stocks); they are also in 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 in the MSCI Russia Index and the MSCI Emerging Markets Index. As of 24 March 2020, the weight of MOEX shares in the MSCI Russia Index was 1.13%. MV Index Solutions includes the Exchange's shares in the MVIS Russia Index, a benchmark for the largest ETF focused on the Russian stock market. As of 24 March 2020, the weight of MOEX shares in the index was 2.17%.

Ownership structure as of 31 December 2019

Shareholder	Holding (%)
Central Bank of the Russian Federation	11.780
Sberbank of Russia	10.002
VEB.RF	8.404
EBRD	6.070
RDIF Asset Management-6	3.181
MICEX-Finance	0.972
Free float (excl. MICEX-Finance)	59.591

In 2019, the composition of shareholders that own at least 5% of Moscow Exchange's shares changed following the partial sale of RDIF's stake.

Shareholders that own at least 5% of Moscow Exchange's shares

Shareholder	31 December 2018		31 December 2019	
	Voting power (units)	Voting power (%)	Voting power (units)	Voting power (%)
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
VEB.RF	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	72,409,643	3.181

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, such as 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 2019, the total number of MOEX shareholders was 64,637, including 63,661 individual shareholders.

As of 31 December 2019, MICEX-Finance, a controlled entity of the Exchange, held 22,131,768 shares (0.972% of the capital).

REGISTRAR

Registry company STATUS keeps the register of Moscow Exchange's shareholders

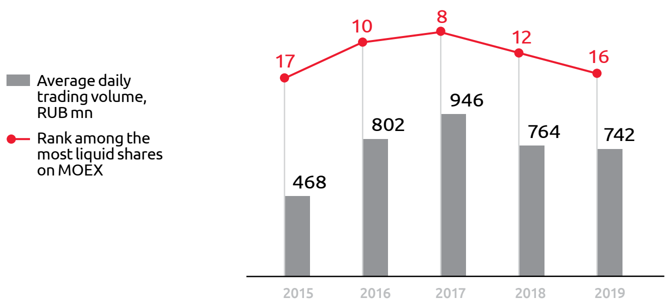
Full company name	Joint-Stock Company “Registry company STATUS”
Address	23/1 Novokhokhlovskaya St., Office 1, 109052, Moscow Russian Federation
Registration details	State registration certificate No. 066.193 from 20 June 1997, certificate to confirm the legal entity from 4 July 2002
Primary State Registration 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 PERFORMANCE

As of the end of 2019, Moscow Exchange's market capitalization was RUB 245.5 bn (vs. RUB 184.3 as at the end of 2018). Since MOEX’s IPO in February 2013, the share price has increased by 96%. In 2019, the average daily trading volume (ADTV) of the company's shares decreased by 2.9% YoY to RUB 742 mln, although MOEX's shares remained one of the most liquid stocks on the Russian market, ranking 16th in terms of liquidity in the central order book.

ADTV and liquidity position vs. other MOEX-listed shares

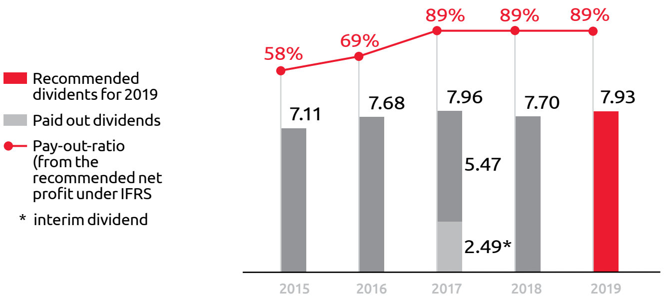


DIVIDENDS

For 2018, Moscow Exchange's Annual General Meeting of Shareholders (AGM) resolved to distribute dividends in the amount of RUB 7.70 per share. In total, RUB 17.53 bn was allocated for the payment of dividends, equivalent to 89% of the 2018 IFRS consolidated net income of the Exchange. The Exchange's Dividend Policy, which was approved by the MOEX Supervisory Board in October 2019, requires that dividends equal at least 60% of IFRS consolidated net income. The target level of the profit allocated for dividend payment is determined as the free cash flow to equity (FCFE).

On 5 March 2020, the Exchange's Supervisory Board recommended that shareholders at the AGM approve the payment of dividends based on the Exchange's 2019 results in the amount of RUB 7.93 per share. In total, it was recommended to allocate RUB 18.1 bn for the payment of dividends. If the AGM approves dividends at this level, the dividend payment for 2019 will be equivalent to 89% of IFRS net income for 2019.

Dividends per share in 2015–2018 and recommended dividends for 2019
(RUB)



Dividend payments in 2015–2018

Dividend payment year	Dividend period	Announcement date, shareholders meeting minutes No.	Total pre-tax amount of dividends declared and paid (RUB)	Actual payment date
2016	for 2015	29 April 2016 Minutes of AGM No. 54	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	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	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	12,451,915,975.26	29 May 2018 for nominee holders; 20 June 2018 for other registered holders
2019	for 2018	25 April 2019, Minutes of AGM No. 59	17,528,291,226.60	27 May 2019 for nominee holders; 17 June 2019 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 has the opportunity to interact with and ask questions of MOEX management at least once a year and receive all the information s/he needs in a timely manner in order to make reasonable investment decisions. It is one of Moscow Exchange's priorities to adhere to the highest standards of information disclosure given its roles as both a public company and operator of Russia's core financial markets infrastructure.

In 2019, Moscow Exchange's management held 318 meetings with institutional investors and took part in 18 international conferences for investors, including Moscow Exchange Forums in Moscow, New York, London and Shanghai. It also held a number of investor roadshows across continental Europe, the UK, North America, Asia and the Middle East. In 2019, roadshows in Miami, Abu Dhabi and Dubai were held for the first time in the company's history.

Years	2015	2016	2017	2018	2019
Number of meetings with investors	270	349	355	326	318

In total, in 2019, Moscow Exchange's management contacted 205 institutional investors who, according to Nasdaq IR Insight, at the end of 2019 owned 47% of the company's free float (as compared to 56% in 2018). 28% of business contacts were institutional investors from North America, 27% from the UK, 20% from continental Europe, 15% from Russia, 7% from Asia and 3% from other regions.

Geography of institutional investors that had business contact with the Exchange

(%)

Region	2018	2019
North America	34	28
UK	22	27
Continental Europe	20	20
Russia	12	15
Asia	6	7
Others	6	3

MOEX also places strong emphasis on engaging with retail investors. The number of retail shareholders exceeded 64,000 as of the end of 2019. Since 2014, MOEX has run an annual Shareholder Day for retail investors, an event in the form of a conference call with representatives of senior management.

INVESTORS' OPINION ON INVESTOR RELATIONS AT MOSCOW EXCHANGE

Since 2014, Moscow Exchange has annually commissioned a perception study to learn more about how MOEX is viewed by investors and analysts.

Results of the perception study on investor relations at Moscow Exchange in 2019

(%)

	No response	Good	Very good	Excellent
Knowledge of the business	12	0	16	72
Quality of IR materials	16	0	24	64
Quality of conference calls and webcasts	16	0	24	60
Confidence and transparency	12	4	20	64
Responsiveness	12	0	8	80
Friendliness/helpfulness	12	0	8	80
Access to the management	24	0	8	68

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.

As of 31 December 2019, the market consensus forecast for MOEX shares based on forecasts of nine analysts was RUB 114.3 per share.

Sell-side covering analysts

Company	Analyst	Tel.	E-mail
Citigroup	Samarth Agrawal	+44 (20) 7986 4225	samarth.agrawal@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
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
	Veronika Yan	+7 (495) 785 5336	vyan@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

Moscow Exchange is continuing to execute on its strategy to increase fee and commission income while controlling growth of operating expenses. This has allowed us to improve the operating leverage and grow cash flow. Under the new dividend policy, the Group will pay out its entire free cash flow to shareholders.

Max Lapin,
Chief Financial Officer

Consolidated Financial Statements

Public Joint-Stock Company
"Moscow Exchange MICEX-RTS"

Consolidated Financial Statements
for the Year Ended December 31, 2019[1]

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, 2019, 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 December 31, 2019, 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 Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (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 determined this area as a key audit matter because functioning of the financial accounting and reporting systems are dependent 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 and accounting system ("Oracle" or "OeBS"), as the most significant proportion of revenue is recognized based on automated data generated by these systems.	We tested design and operating effectiveness of general IT and certain application controls over significant IT systems that support information capture and processing in the financial accounting and reporting processes. In respect of these systems we obtained understanding and tested operating effectiveness of key controls, 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.
Internal controls over back-office payments and commodity collateral safeguarding During 2019, the Group incurred losses related to shortages of grain used as a collateral under swap trades on the commodity market (as disclosed in Note 11) and several incorrectly processed back-office payments (as disclosed in Note 12). In response to the identified risks, the Group has taken measures to improve the system of internal controls over commodity safeguarding and back-office payments (as disclosed in Note 36). We identified this area as a key audit matter due to significance of challenges faced by the Group as a response to the incidents, including remediation actions and revisions of the internal controls relating to safeguarding of assets and prevention of financial losses. The extent of audit effort to evaluate the changes to the Group's systems and processes was significant and required involvement of professionals with relevant expertise.	We examined the Group's internal investigation reports and other supporting and primary documents in order to determine whether the cases identified had significant effect on the consolidated financial statements. 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 to improve risk management and internal controls over commodity safeguarding and back-office payments. Further we evaluated whether all significant non-routine transactions during the year had business rationale and were appropriately authorised. We 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 in the circumstances. We also assessed appropriateness of 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 International Financial Reporting Standards ("IFRSs"), and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

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.

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, and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Shvetsov Andrei Viktorovich,
Engagement partner

5 March 2020

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED DECEMBER 31, 2019

(in millions of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Fee and commission income	4	26,181.4	23,647.1
Interest and other finance income	5	13,634.3	17,932.2
Interest expense	6	(2,919.4)	(446.5)
Net gain on financial assets at fair value through other comprehensive income		1,494.3	262.0
Foreign exchange gains less losses	7	4,503.8	(1,686.7)
Other operating income	8	335.1	193.3
Operating Income		**43,229.5**	**39,901.4**
General and administrative expenses	9	(8,321.4)	(7,941.4)
Personnel expenses	10	(7,113.9)	(6,512.3)
Profit before Other Operating Expenses and Tax		**27,794.2**	**25,447.7**
Other operating expenses	11	(2,614.8)	(1,075.2)
Profit before Tax		**25,179.4**	**24,372.5**
Income tax expense	13	(4,978.8)	(4,652.2)
Net Profit		**20,200.6**	**19,720.3**
Attributable to:			
Equity holders of the parent		20,189.0	19,716.5
Non-controlling interest		11.6	3.8
Earnings per share (rubles)			
Basic earnings per share	30	8.96	8.76
Diluted earnings per share	30	8.96	8.74

Chairman of the Executive Board
Y.O. Denisov

March 5, 2020
Moscow

Chief Financial Officer, Executive Board Member
M.V. Lapin

March 5, 2020
Moscow

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED DECEMBER 31, 2019

(in millions of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Net profit		20,200.6	19,720.3
Other comprehensive income/(loss) that may be reclassified subsequently to profit or loss:			
Exchange differences on translating foreign operations		(3.0)	1.3
Movement in investment revaluation reserve for financial assets at fair value through other comprehensive income		5,662.4	(3,811.9)
Movement in the credit risk of financial assets at fair value through other comprehensive income	12	27.3	(146.6)
Net loss on investments at fair value through other comprehensive income reclassified to profit or loss		(1,494.3)	(262.0)
Income tax relating to items that may be reclassified	13	(839.0)	844.0
Other comprehensive income/(loss) that may be reclassified subsequently to profit or loss		**3,353.4**	**(3,375.2)**
Total comprehensive income		23,554.0	16,345.1
Attributable to:			
Equity holders of the parent		23,551.7	16,337.6
Non-controlling interest		2.3	7.5

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2019

(in millions of Russian rubles)

	Notes	December 31, 2019	December 31, 2018
ASSETS			
Cash and cash equivalents	14	466,098.8	416,391.2
Financial assets at fair value through profit or loss	15	13,695.4	4,350.9
Due from financial institutions	16	60,424.0	95,377.8
Central counterparty financial assets	17	3,262,670.6	3,312,020.2
Financial assets at fair value through other comprehensive income	18	179,313.4	210,752.4
Property and equipment	19	5,446.6	5,973.9
Intangible assets	20	16,989.0	17,604.3
Goodwill	21	15,971.4	15,971.4
Current tax prepayments		1,481.9	506.0
Assets held for sale	22	105.4	-
Deferred tax asset	13	1,701.5	125.1
Other assets	23	4,696.4	3,511.3
TOTAL ASSETS		**4,028,594.4**	**4,082,584.5**
LIABILITIES			
Balances of market participants	24	565,922.6	606,479.8
Overnight bank loans	25	49,229.1	5,003.1
Central counterparty financial liabilities	17	3,262,670.6	3,312,020.2
Distributions payable to holders of securities	26	11,714.1	24,676.0
Margin account		0.6	979.6
Current tax payables		1,041.5	30.9
Liabilities related to assets held for sale	22	5.8	-
Deferred tax liability	13	2,361.0	3,821.4
Other liabilities	27	3,796.7	3,968.9
TOTAL LIABILITIES		**3,896,742.0**	**3,956,979.9**

	Notes	December 31, 2019	December 31, 2018
EQUITY			
Share capital	28	2,495.9	2,495.9
Share premium	28	32,199.8	32,140.2
Treasury shares	28	(1,504.3)	(1,768.2)
Foreign currency translation reserve		-	(20.9)
Reserves relating to assets held for sale	22	(14.6)	-
Investments revaluation reserve		1,598.2	(1,758.2)
Share-based payments		457.6	710.1
Retained earnings		96,435.1	93,623.3
Total equity attributable to owners of the parent		**131,667.7**	**125,422.2**
Non-controlling interest		184.7	182.4
TOTAL EQUITY		**131,852.4**	**125,604.6**
TOTAL LIABILITIES AND EQUITY		**4,028,594.4**	**4,082,584.5**

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2019

(in millions of Russian rubles)

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Cash flows from operating activities:			
Profit before tax		25,179.4	24,372.5
Adjustments for:			
Depreciation and amortisation charge	9	3,547.3	3,339.5
Net change in deferred commission income		(439.7)	(94.2)
Revaluation of derivatives		888.4	(517.9)
Share-based payment expense	10	95.0	285.8
Unrealized (gain)/loss on foreign exchange operations		(1,250.2)	(277.5)
Gain on disposal of financial assets at FVTOCI		(1,494.3)	(262.0)
Net change in interest accruals		2,512.2	707.6
Net loss on disposal of property and equipment		-	38.3
Change in allowance for expected credit losses	12	2,583.1	(117.5)
Change in other provisions	27	(186.6)	218.3
Cash flows from operating activities before changes in operating assets and liabilities		**31,434.6**	**27,692.9**
Changes in operating assets and liabilities:			
(Increase)/decrease in operating assets:			
Due from financial institutions		16,277.3	(16,439.5)
Financial assets at FVTPL		(10,618.7)	4,298.0
Central counterparty financial assets		49,544.3	(804,923.7)
Other assets		(3,980.1)	307.5
Increase/(decrease) in operating liabilities:			
Balances of market participants		52,772.2	46,552.0
Overnight bank loans		44,226.0	5,000.0
Central counterparty financial liabilities		(49,544.3)	804,923.7
Distributions payable to holders of securities		(12,610.0)	22,168.2
Margin account		(979.0)	595.0
Other liabilities		582.0	8.7
Cash flows from operating activities before taxation		**117,104.3**	**90,182.8**
Income tax paid		(8,822.3)	(2,965.4)
Cash flows from operating activities		**108,282.0**	**87,217.4**

	Notes	Year ended December 31, 2019	Year ended December 31, 2018
Cash flows from / (used in) investing activities:			
Purchase of financial assets at FVTOCI		(90,027.9)	(247,217.8)
Proceeds from disposal of financial assets at FVTOCI		113,926.1	256,372.2
Purchase of property and equipment and intangible assets		(2,071.7)	(1,976.3)
Proceeds from disposal of property and equipment and intangible assets		1.6	5.1
Cash flows from investing activities		**21,828.1**	**7,183.2**
Cash flows from / (used in) financing activities:			
Dividends paid	29	(17,377.2)	(12,320.5)
Sale of treasury shares		-	87.4
Cash outflow for lease liabilities		(209.0)	-
Cash flows used in financing activities		**(17,586.2)**	**(12,233.1)**
Effect of changes in foreign exchange rates on cash and cash equivalents		(62,812.5)	60,979.8
Net increase in cash and cash equivalents		**49,711.4**	**143,147.3**
Cash and cash equivalents, beginning of period	**14**	**416,395.9**	**273,248.6**
Cash and cash equivalents, end of period	**14**	**466,107.3**	**416,395.9**

Interest received by the Group during the year ended December 31, 2019, amounted to RUB 13,409.4 million (December 31, 2018: RUB 18,644.7 million).

Interest paid by the Group during the year ended December 31, 2019, amounted to RUB 2,904.4 million (December 31, 2018: RUB 442.5 million).

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED DECEMBER 31, 2019

(in millions of Russian rubles)

	Share capital	Share premium	Treasury shares	Investments revaluation reserve	Share-based payments	Foreign currency translation reserve	Reserves relating to assets held for sale	Retained earnings	Total equity attributable to owners of the parent	Non-controlling interest	Total equity
December 31, 2017	**2,495.90**	**32,105.50**	**-1,908.10**	**1,357.00**	**524**	**-18.5**	**-**	**86,546.40**	**121,102.20**	**176.6**	**121,278.80**
Effect of adoption of IFRS 9	**-**	**-**	**-**	**261.3**	**-**	**-**	**-**	**-319.1**	**-57.8**	**-1.7**	**-59.5**
Net profit	-	-	-	-	-	-	-	19,716.50	19,716.50	3.8	19,720.30
Other comprehensive income/(loss)	-	-	-	-3,376.50	-	-2.4	-	-	-3,378.90	3.7	-3,375.20
Total comprehensive income for the period	**-**	**-**	**-**	**-3,376.50**	**-**	**-2.4**	**-**	**19,716.50**	**16,337.60**	**7.5**	**16,345.10**
Dividends declared (Note 29)	-	-	-	-	-	-	-	-12,320.50	(12,320.5)	-	-12,320.50
Share-based payments	-	34.7	139.9	-	186.1	-	-	-	360.7	-	360.7
Total transactions with owners	**-**	**34.7**	**139.9**	**-**	**186.1**	**-**	**-**	**-12,320.50**	**-11,959.80**	**-**	**-11,959.80**
December 31, 2018	**2,495.90**	**32,140.20**	**-1,768.20**	**-1,758.20**	**710.1**	**-20.9**	**-**	**93,623.30**	**125,422.20**	**182.4**	**125,604.60**
Net profit	-	-	-	-	-	-	-	20,189.00	20,189.00	11.6	20,200.60
Other comprehensive income/(loss)	-	-	-	3,356.40	-	4	2.3	-	3,362.70	-9.3	3,353.40
Total comprehensive income for the period	**-**	**-**	**-**	**3,356.40**	**-**	**4**	**2.3**	**20,189.00**	**23,551.70**	**2.3**	**23,554.00**
Foreign currency translation reserve relating to Assets held for sale	-	-	-	-	-	16.9	-16.9	-	-	-	-
Dividends declared (Note 29)	-	-	-	-	-	-	-	-17,377.20	-17,377.20	-	-17,377.20
Share-based payments	-	59.6	263.9	-	-252.5	-	-	-	71	-	71
Total transactions with owners	**-**	**59.6**	**263.9**	**-**	**-252.5**	**-**	**-**	**-17,377.20**	**-17,306.20**	**-**	**-17,306.20**
December 31, 2019	**2,495.90**	**32,199.80**	**-1,504.30**	**1,598.20**	**457.6**	**-**	**-14.6**	**96,435.10**	**131,667.70**	**184.7**	**131,852.40**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2019

(in millions of Russian rubles, unless otherwise indicated)

Organization

Public Joint-Stock Company Moscow Exchange MICEX-RTS (Moscow Exchange) is a stock exchange based in Moscow, Russian Federation. It was established as closed joint-stock company "Moscow Interbank Currency Exchange" (MICEX) in 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, 2019	December 31, 2018
		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%	100%

NCC performs functions of a clearing organization and is the single qualified central counterparty on Russian financial market and holds licences for clearing operations and banking operations for non-banking credit institutions – central counterparties issued by the CBR.

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, as well as Local Operating Unit of a global system of legal entities identification, authorized to assign LEI codes to the legal entities. 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 in commodities in Russia.

ETS is a commodity exchange, which has a licence for organisation of trading in commodities in Kazakhstan. In March 2019 the Supervisory Board approved a plan to sell ETS, therefore, as at the reporting date ETS is presented as disposal group held for sale, for details refer to Note 22.

MICEX Finance is established for facilitating financial activities of the Group.

MOEX Innovations concentrates on start-ups development in the fintech sphere.

MOEX Information Security was established in Russia in October 2018 for providing information security services.

Moscow Exchange and all subsidiaries are located in Russia, except for ETS which is located in Kazakhstan.

The Group has 1,791 employees as at December 31, 2019 (December 31, 2018: 1,710 employees).

The financial statements approval. Consolidated Financial Statements of the Group were approved for issue by the Management on March 5, 2020.

Basis of Preparation and Significant Accounting Policies

Statement of compliance
These Consolidated Financial Statements of the Group have been prepared in accordance with the International Financial Reporting Standards ("IFRS").

Basis of preparation
These Consolidated Financial Statements are presented in millions of Russian rubles rounded to one decimal place, 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 the historical cost basis except for certain financial assets and liabilities that are measured at fair value.

These Consolidated Financial Statements have been prepared on basis of the statutory accounting records and have been adjusted to conform to IFRS.

The Russian ruble exchange rates applied in the preparation of these Consolidated Financial Statements are presented below:

	December 31, 2019	December 31, 2018
USD	61.9057	69.4706
EUR	69.3406	79.4605

Significant Accounting Policies

The accounting policies adopted by the Group in the preparation of these Consolidated Financial Statements are consistent with those followed in the preparation of the Group's Consolidated Financial Statements for the year ended December 31, 2018, except the adoption of IFRS 16 "Leases" since January 1, 2019.

In the current period, the Group has adopted all of the new and revised Standards and Interpretations issued by the IASB and IFRIC of the IASB that are relevant to its operations and effective for reporting periods ending on December 31, 2019:

- IFRS 16 Leases;
- Amendments to IFRS 9 Prepayment Features with Negative Compensation;
- Amendments to IAS 28 Long-term interests in 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;
- IFRIC 23 Uncertainty over Income Tax Treatments.

The adoption of these new and revised Standards and Interpretations (except the adoption of IFRS 16 "Leases") has not resulted in significant changes to the Group's accounting policies that have affected the amounts reported for the current or prior years.

The effects of the adoption of IFRS 16 "Leases"

In the current period, the Group for the first time has applied IFRS 16 Leases. The date of initial application of IFRS 16 for the Group is 1 January 2019.

IFRS 16 introduces new or amended requirements with respect to lease accounting. It introduces significant change to the lessee accounting by removing the distinction between operating and finance requires and requiring the recognition of a right-of-use asset and a lease liability at commencement for all leases, except for short-term leases and leases of low value assets. Details of these new requirements are described below.

The Group has applied IFRS 16 using modified retrospective approach recognising the cumulative effect of initial application as an adjustment to the opening balance of retained earnings which is zero as right-of-use assets equal lease liabilities. Therefore, comparative information is not restated.

The change in definition of a lease mainly relates to the concept of control. IFRS 16 determines whether a contract contains a lease on the basis of whether the customer has the right to control the use of an identified asset for a period of time in exchange for consideration.

IFRS 16 changes how the Group accounts for leases previously classified as operating leases under IAS 17, which were off-balance-sheet.

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with lease term of 12 months or less) and leases of low value assets. For these leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the incremental borrowing rate as the rate implicit in the lease cannot be readily determined. The incremental borrowing rate is determined using the most recent CBR statistics on loan interest rates in the same currency and of the same term.

Impact on the lessee accounting (former operating leases)

The lease payments included in the measurement of the lease liability comprise:

(a) fixed payments (including in-substance fixed payments), less any lease incentives;
(b) variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
(c) amounts expected to be payable by the lessee under residual value guarantees;
(d) the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
(e) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

The lease liability is presented within other liabilities in the consolidated statement of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

(a) the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate;
(b) there is a change in future lease payments resulting from a change in an index or a rate used to determine those payments, or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using the initial discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case the revised discount rate is used);
(c) a lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.

The right-of-use asset comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the obligation for costs to dismantle and remove a leased asset is incurred or an obligation to restore the site on which it is located or restore the underlying asset to the condition required by the terms of the lease, a provision is recognized and measured under IAS 37. The costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented within the line property and equipment in the consolidated statement of financial position.

The Group applies IAS 36 “Impairment of assets” to determine whether a right-of-use asset is impaired and to account for the impairment.

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognised as an expense in the period in which the event or condition that triggers those payments occurs and are included in the line “general and administrative expenses” in the consolidated statement of profit or loss.

As a practical expedient, IFRS 16 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. The Group has not used this practical expedient.

The application of IFRS 16 has the following impact on the consolidated statement of cash flows of the Group:

(a) short-term lease payments, payments for leases of low-value assets and variable lease payments not included in the measurement of the lease liability are presented as part of operating activities;
(b) cash payments for the principal portion for lease liability are presented as part of financing activities;
(c) cash payments for the interest portion for lease liability can be presented as either operating activities of financing activities, as permitted by IAS 7. The Group has opted to include interest paid as part of financing activities.

Under IAS 17 all lease payments were presented as part of cash flows from operating activities.

The adoption of IFRS 16 did not have an impact on net cash flows.

The Group as lessor

IFRS 16 did not change substantially how a lessor accounts for leases. A lessor continues to classify leases as finance or operating leases and account for those two types differently. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease (the Group does not have such contracts). All other leases are classified as operating leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease.

Impact on assets, liabilities and equity as at January 1, 2019

The weighted average lessee's incremental borrowing rate applied to lease liabilities recognised in the consolidated statement of financial position at the date of initial application is 6.08%.

Reconciliation of the operating lease commitments to lease liability at January 1, 2019 is as follows:

	January 1, 2019
Lease payments under operating lease	**244.9**
Future lease payments that are due in periods subject to lease extension options that are reasonably certain to be exercised	33.7
Recognition exemption: short-term leases	(2.0)
Future lease payments under IFRS 16	**276.6**
Effect of discounting	(7.6)
Lease liabilities under IFRS 16	**269.0**
Right-of-use assets under IFRS 16	**269.0**

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 in 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 in 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 in 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 in 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 in equity; recognises the fair value of the consideration received, the fair value of any investment retained and any surplus or deficit in profit or loss and reclassifies the parent's share of components previously recognised in other comprehensive income to profit or loss.

Business combinations

Business combinations are accounted for using the acquisition method. The consideration transferred in 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 in exchange for control of the acquiree. Acquisition-related costs are recognised in 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 in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the 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 in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

When a business combination is achieved in stages, the Group's previously held equity interest in 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 in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in 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 in the unit. Any impairment loss for goodwill is recognised directly in profit or loss in the Consolidated Statement of Profit or Loss. An impairment loss recognised for goodwill is not reversed in subsequent periods. On disposal of the relevant cash-generating unit, the attributable amount of goodwill is included in 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 in associates

Associates are entities in 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 in associates are accounted for under the equity method and are initially recognised at cost, including goodwill. Subsequent changes in the carrying value reflect the post-acquisition changes in the Group’s share of net assets of the associate. The Group’s share of its associates’ profits or losses is recognised in profit or loss, and its share of movements in reserves is recognised in other comprehensive income. However, when the Group’s share of losses in an associate equals or exceeds its interest in 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 in the associates; unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Inflation accounting

applied IAS 29 Financial Reporting in 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 in subsequent periods.

Cash and cash equivalents

Cash and cash equivalents in 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 in 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 in cash and cash equivalents.

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 in 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:
  c. 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
  d. 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 in 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, in 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 in 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. Thatprincipal 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 in the currency in 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 in the contractual cash flows that are not related to a basic lending arrangement, such as exposure to changes in 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 in its legal form.

When a debt instrument measured at FVTOCI is derecognised, the cumulative gain/loss previously recognised in 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 in 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 in 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 in business model that results in reclassification the Group's financial assets. Changes in 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 in 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 in 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 in 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 in 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 in measuring the amount of ECLs and in 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 in 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 in credit risk

The Group monitors all financial assets that are subject to the impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in 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 in credit risk has occurred and the asset is in 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 in derecognition. In accordance with the Group's policy a modification results in 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 in currency;
(c) change of counterparty;
(d) the extent of change in 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 in 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 in 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 in 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 in 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 in 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 in 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 in OCI and accumulated in equity is recognised in profit or loss. The cumulative gain/loss on equity investment designated as measured at FVTOCI, previously recognised in OCI is not subsequently reclassified to profit or loss.

On derecognition of a financial asset other than in 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 in OCI is recognised in profit or loss. A cumulative gain/loss that had been recognised in 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 in 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 in 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 in impairment gains.

Presentation of allowance for ECL in the statement of financial position

Loss allowances for ECL are presented in 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 in 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 in the investments revaluation reserve.

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 in 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, in 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 in 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 in 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 in 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 in 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.

Precious metals

Precious metals are represented by physical precious metals and accounts in precious metals. Precious metals are recorded on the reporting date at the CBR prices, which approximate fair values. Corresponding accounts in precious metals are recorded within Due from financial institutions and physical precious metals are recorded within Other assets. Clients' accounts in precious metals are recorded within Balances of market participants. Precious metals are not financial instruments and therefore excluded from financial risk management disclosures in 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 in 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 in 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 in 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 in a business combination
Intangible assets acquired in 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 in 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 in 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 in the period in which it is incurred.

Subsequent expenditure on intangible assets is capitalised only when it increases the future economic benefits embodied in 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 in 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 in 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 in use. In assessing value in 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 in profit or loss, unless the relevant asset is carried at a revalued amount, in 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) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

Assets classified as held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

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 in 'Interest and other finance income' and 'Interest expense' in 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 in 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 in 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.

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 in the countries where the Group operates and generates taxable income.

Management of the Group periodically evaluates positions taken in the tax returns with respect to situations in 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 in 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 in subsidiaries, associates and interests in 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 in 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 in 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 in individual contracts.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity within Share-based payments reserve, over the period in 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 in 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 in fair value recognised in 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 in the Consolidated Statement of Financial Position but are disclosed unless the possibility of any outflow in settlement is remote. A contingent asset is not recognised in 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 in 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 in 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 in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in 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, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in 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 in 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 in 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 (Executive Board) 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, 2019 and 2018, the Group comprised of four operating segments (Note 35).

New or amended standards issued but not yet effective

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective:

New or amended standard or interpretation	Effective date – for annual periods beginning on or after
IFRS 17 Insurance Contracts	1 January 2021
Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	Date to be determined by the IASB
Amendments to IFRS 3 Definition of business	1 January 2020
Amendments to IAS 1 and IAS 8 Definition to Material	1 January 2020

The management does not expect that the adoption of the Standards listed above will have a material impact on the financial statements of the Group in future periods, except as noted below:

IFRS 10 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 in a transaction with an associate or a joint venture that is accounted for using the equity method, are recognised in the parent's profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, gains and losses resulting from the remeasurement of investments retained in 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 in the former parent's profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The effective date of the amendments has yet to be set by the board; however, earlier application of the amendments is permitted. The management of the Company anticipates that the application of these amendments may have an impact on the Group's consolidated financial statements in future periods should such transactions arise.

Amendments to IFRS 3 Definition of a Business. The amendments clarify that while businesses usually have outputs, outputs are not required for an integrated set of activities and assets to qualify as a business. 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.

Additional guidance is provided that helps to determine whether a substantive process has been acquired.

The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets.

The amendments are applied prospectively to all business combinations and asset acquisitions for which the acquisition date is on or after the first annual reporting period beginning on or after January 1, 2020, with early application permitted. The management of the Group does not expect that the application of these amendments will have an impact on the consolidated financial statements of the Group.

Amendments to IAS 1 and IAS 8 Definition of Material. The amendments are intended to make the definition of material in IAS 1 easier to understand and are not intended to alter the underlying concept of materiality in 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 in IAS 8 has been replaced by a reference to the definition of material in 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 does not expect that the application of these changes will have an impact on the consolidated financial statements of the Group.

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 in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

Critical accounting judgements

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 in 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 in credit risk. In assessing whether the credit risk of an asset has significantly increased the Group takes into account the information listed in Note 2.

Recoverability of deferred tax assets
The management of the Group is confident that no valuation allowance against deferred tax assets at the reporting date is considered necessary, because it is more likely than the deferred tax asset will be fully realised. The carrying value of deferred tax assets amounted to RUB 1,701.5 mln and RUB 125.1 mln as at December 31, 2019 and 2018, respectively.

Key sources of estimation uncertainty

Probability of default
PD constitutes a key input in 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 36 for more details, including analysis of the sensitivity of the reported ECL to changes in PD resulting from changes in 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 litigations. Such litigations 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 31 for further information.

Impairment of goodwill and other intangible assets
Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires the management to estimate the future cash flows expected to arise from the cash-generating unit and a discount rate in 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 in Note 21.
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 in 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, 2019 the Group adjusted the estimates in relation to remaining useful lives of intangible assets. The amendments were applied to certain types of software and licences. Should the Group not apply these amendments, amortisation of software and licences for the year ended December 31, 2019 would be RUB 190.11 million lower.

Valuation of financial instruments
For financial instruments not traded in 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 in Note 33.

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 in Note 10.

Fee and Commission Income

	Year ended December 31, 2019	Year ended December 31, 2018
Money market	6,979.5	6,389.8
Securities market	5,490.0	4,444.0
bonds	2,551.4	2,173.5
equities	2,264.0	1,932.2
listing and other services	674.6	338.3
Depository and settlement services	5,226.8	4,530.7
Foreign exchange	3,547.4	3,990.0
Derivatives	2,852.6	2,318.9
Sale of software and technical services	901.8	695.9
Information services	859.6	792.4
Other	323.7	485.4
Total fee and commission income	**26,181.4**	**23,647.1**

Interest and Other Finance Income

	Year ended December 31, 2019	Year ended December 31, 2018
Gain/(loss) on financial assets at FVTPL		
Interest income	255.1	154.0
Net gain/(loss) on financial assets at FVTPL	151.2	(8.9)
Total gain on financial assets at FVTPL	**406.3**	**145.1**
Interest income on financial assets other than at FVTPL		
Interest income on financial assets at FVTOCI	9 529.2	12 336.3
Interest on cash and cash equivalents and due from financial institutions	3 698.8	5 450.8
Total interest income on financial assets other than at FVTPL	**13 228.0**	**17 787.1**
Total interest and other finance income	**13 634.3**	**17 932.2**

Interest Expense

	Year ended December 31, 2019	Year ended December 31, 2018
Interest expense on interbank loans and deposits	2,477.6	155.1
Interest expense on accounts of clearing participants	389.2	271.2
Interest expense on stress collateral	37.1	17.6
Interest expense on lease liabilities	10.7	-
Interest expense on repo agreements and other	4.8	2.7
Total interest expense	**2,919.4**	**446.5**

Foreign Exchange Gains Less Losses

	Year ended December 31, 2019	Year ended December 31, 2018
Foreign exchange swaps	4,235.2	(1,757.5)
Net result from other foreign exchange operations	268.6	70.8
Total foreign exchange gains less losses	**4,503.8**	**(1,686.7)**

Net gain on foreign exchange swaps includes gains/(losses) from swap deals used to hedge open foreign currency position of the Group and gain from swap transactions used to earn interest income from ruble-denominated funds.

Other Operating Income

	Year ended December 31, 2019	Year ended December 31, 2018
Foreign exchange swaps	218.3	-
Net result from other foreign exchange operations	-	117.5
Total foreign exchange gains less losses	116.8	75.8
Total other operating income	**335.1**	**193.3**

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.

During the year 2018 the courts of first and second instances ruled to fulfil plaintiffs demands. The Group made a 100% provision (Note 11, Note 27) and filed a cassation which was satisfied. As a result the provision was conservatively decreased to 25% of the amount claimed to RUB 218.3 million. In January 2019 the plaintiffs applied to the Supreme Court. As of March 31, 2019 the Group performed additional risk-assessment and recovered the provision in full. In the second quarter 2019 The Supreme Court rejected to satisfy the plaintiffs' claim.

General and Administrative Expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Amortisation of intangible assets (Note 20)	2,346.8	1,995.6
Equipment and intangible assets maintenance	1,381.4	1,205.5
Depreciation of property and equipment (Note 19)	1,200.5	1,343.9
Market makers fees	674.6	517.0
Taxes, other than income tax	603.9	554.3
Professional services	538.4	572.6
Advertising and marketing costs	330.0	376.1
Rent and office maintenance	318.4	484.6
Registrar and foreign depository services	312.6	292.3
Information services	307.3	237.6
Business trip expenses	84.4	83.7
Communication services	82.8	104.7
Security expenses	30.3	29.7
Charity	24.1	27.5
Transport expenses	20.3	19.0
Loss on disposal of property, equipment and intangible assets	-	38.3
Other	65.6	59.0
Total general and administrative expenses	**8,321.4**	**7,941.4**

Professional services comprise consulting, audit, legal services and other services. Rent and office maintenance expenses for the year ended December 31, 2019 include only short-term expenses due to adoption of IFRS 16 Leases.

Personnel Expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Employees benefits except for share-based payments	5,890.1	5,250.8
Payroll related taxes	1,128.8	975.7
Share-based payment expense on equity settled instruments	71.0	273.3
Share-based payment expense on cash settled instruments	24.0	12.5
Total personnel expenses	**7,113.9**	**6,512.3**

Rights to purchase equity instruments granted to some employees give 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. The 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 in 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 under 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. The 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 in rights to purchase equity settled instruments:

	Number	WAEP
Outstanding at January 1, 2018	**42,924,517**	**93.16**
Granted	12,900,000	113.86
Exercised (Note 28)	(2,058,440)	73.64
Forfeited	(2,533,334)	111.81
Redeemed	(1,498,226)	73.64
Outstanding at January 1, 2019	**49,734,517**	**98.97**
Granted	5,625,000	106.87
Exercised (Note 28)	(3,882,662)	71.36
Forfeited	(6,659,513)	104.55
Redeemed	(14,350,675)	71.36
Outstanding at December 31, 2019	**30,466,667**	**109.94**

WAEP for exercised rights in the table above is calculated based on the contractual exercise price.

No cash settled instruments were granted during the year ended December 31, 2019 (December 31, 2018: 235,720). The weighted average remaining contractual life is 0.37 years (December 31, 2018: 1.02 years).

175,252 cash settled instruments were exercised during the year ended December 31, 2019 with WAEP of RUB 87.10 (December 31, 2018: 80,342 with WAEP of RUB 118.86).

The number of equity rights exercisable as at December 31, 2019 is 12,916,667 with WAEP of RUB 114.42 (December 31, 2018: 22,941,573 with WAEP of RUB 81.49).

The weighted average fair value of equity rights granted during the year ended December 31, 2019 was RUB 9.70 (December 31, 2018: RUB 17.50).

The range of exercise prices and weighted average remaining contractual life of equity rights are as follows:

Exercise price	December 31, 2019		December 31, 2018	
	Number outstanding	Weighted average remaining contractual life	Number outstanding	Weighted average remaining contractual life
46.9–62.0	-	-	-	-
62.0–77.0	-	-	15,000,000	-
77.0–102.0	6,700,000	1.28	4,183,337	0.76
107.0–122.0	23,766,667	0.34	30,551,180	1.07
	30,466,667	**0.55**	**49,734,517**	**0.72**

The following table lists the inputs to the models used:

Assumption	Equity settled		Cash settled	
	Year ended December 31, 2019	Year ended December 31, 2018	Year ended December 31, 2019	Year ended December 31, 2018
Expected volatility	23.0%	24.7%	19.7%	25.6%
Risk-free interest rate	7.4%	6.8%	5.5%	7.9%
Weighted average share price, RUB	80.94	113.65	107.86	96.85
Dividend yield	8.7%	6.5%	7.1%	6.8%

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 date.

Other Operating Expenses

	Year ended December 31, 2019	Year ended December 31, 2018
Movement in allowance for ECLs (Note 12)	2,583.1	-
Provision for losses related to potential commodity market shortages	31.7	-
Legal case provision	-	218.3
Operational error provision	-	856.9
Total other operating expenses	**2,614.8**	**1,075.2**

Grain

In the first quarter of 2019, a subsidiary of the Group that operates as a Commodity Delivery Operator (CDO) found, during regular inspections of commodities stored in grain warehouses, several instances where grain stockpiles used as collateral under swap trades were missing, allegedly due to theft. This risk related to use of a partner's infrastructure for storing commodity assets is inherent exclusively to the agricultural products market.
The Group's risk protection system and risk monitoring on the grain market consists of evaluation of technical condition and financial position of counterparty (certification), regular independent surveys with rotation of surveyors, and insurance coverage, including covering the risk of fraud, which size which size was sufficient to cover possible losses based on previous cases in the market.
The Group has undertaken all nesessary actions, such as: has filed 12 claims for the initiation of criminal and civil proceedings, demanding the execution of trades, reclaiming missing collateral and claiming insurance.

The amount receivable from the accredited grain elevators and sugar warehouses is presented as other assets (Note 23), for which a 100% provision has been created. The total amount of provisions for CDO operations as at 31 December 2019 is RUB 2,368.2 million.

Sugar

Despite the fact that there have been no instances of missing sugar stocks, the Group has applied a conservative approach to creating provisions for sugar stockpiles at wharehouses. On a regular basis, the Group conducts on-site inspections to ensure the security and quality of sugar stockpiles.

Money Market default

In the first quarter 2018, a professional participant in 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 million were paid out from the Group's funds and the related amount receivable from the participant was written off as bad debt (Note 27). 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 in the future.

Movement in Allowance for Expected Credit Losses

The information on the movement in the allowance for expected credit losses of the Group for the years ended December 31, 2019 and 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, 2017	-	-	-	23.3	23.3
Effect of adoption of IFRS 9	5.2	23.7	338.6	49.7	417.2
January 1, 2018	**5.2**	**23.7**	**338.6**	**73.0**	**440.5**
(with IFRS 9 effect)	(0.5)	12.6	(146.6)	17.0	(117.5)
Net (reversal) / charge for the period	-	-	-	(5.5)	(5.5)
Write-offs	**4.7**	**36.3**	**192.0**	**84.5**	**317.5**
December 31, 2018	(3.0)	(36.2)	27.3	2 595.0	2 583.1
Net (reversal) / charge for the period	-	-	-	(237.2)	(237.2)
Write-offs	**1.7**	**0.1**	**219.3**	**2 442.3**	**2 663.4**
December 31, 2019					

In the first quarter 2019 the Group's management had 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 in the future. Also, the Group's management created the provision on receivables at the amount of RUB 265.9 million. As at the reporting date, the receivables in the amount of RUB 223.8 million were written off against provision as uncollectible, the excess of provision was recovered.

Total net charge of the allowance for expected credit losses of the Group for the year ended December 31, 2019 is included in other operating expence within Consolidated Statement of Profit or Loss (Note 11). Net reversal for the year ended December 31, 2018 is included in other operating income within Consolidated Statement of Profit or Loss (Note 8).

As at December 31 2019 and 2018, the allowance for expected credit losses of financial assets at fair value through other comprehensive income is included in 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, 2019 and 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, 2019					
Stage 1 assets	466,100.5	60,424.1	179,313.4	721.4	706,559.4
Stage 2 assets	-	-	-	358.3	358.3
Stage 3 assets	-	-	-	2,396.4	2,396.4
Total financial assets	**466,100.5**	**60,424.1**	**179,313.4**	**3,476.1**	**709,314.1**
Allowance for Stage 1 assets	(1.7)	(0.1)	(219.3)	(6.2)	(227.3)
Allowance for Stage 2 assets	-	-	-	(39.7)	(39.7)
Allowance for Stage 3 assets	-	-	-	(2,396.4)	(2,396.4)
Total allowance for expected credit losses	**(1.7)**	**(0.1)**	**(219.3)**	**(2,442.3)**	**(2,663.4)**
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)**

The tables below analyze information about the significant changes in the gross carrying amount of other financial assets during the period that contributed to changes in 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**	**1006.9**
Loss allowance at December 31, 2018	**(49.4)**	**(0.5)**	**(34.6)**	**(84.5)**
Loss allowance at January 1, 2018	**32.8**	**3.0**	**37.2**	**73.0**
Net increase/(decrease) in 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**

The tables below analyze information about the significant changes in the gross carrying amount of other financial assets during the period that contributed to changes in the loss allowance as well as the movement of the loss allowance during the 2019:

	Стадия 1	Стадия 2	Стадия 3	Итого
Gross carrying amount at January 1, 2019	**968.0**	**4.3**	**34.6**	**1,006.9**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	2,706.4	-	-	2,706.4
Transfer to stage 2	(354.0)	354.0	-	-
Transfer to stage 3	(2,599.0)		2,599.0	-
Write-offs	-	-	(237.2)	(237.2)
Gross carrying amount at December 31, 2019	**721.4**	**358.3**	**2,396.4**	**3,476.1**
Loss allowance at December 31, 2019	**(6.2)**	**(39.7)**	**(2,396.4)**	**(2,442.3)**
Loss allowance at January 1, 2019	**49.4**	**0.5**	**34.6**	**84.5**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	23.4	-	(23.4)	-
Transfer to stage 2	(3.1)	3.1	-	-
Transfer to stage 3	(22.5)	-	22.5	-
Net increase/(decrease) in credit risk	(41.0)	36.1	2,599.9	2,595.0
Write-offs	-	-	(237.2)	(237.2)
Loss allowance at December 31, 2019	**6.2**	**39.7**	**2,396.4**	**2,442.3**

Income Tax

The Group provides for taxes based on the tax accounts maintained and prepared in 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 in the Russian Federation on taxable profits under the tax law in that jurisdiction.

The analysis of the temporary differences as at December 31, 2019 and 2018, is presented below:

	December 31, 2019	December 31, 2018
Tax effect from deductible temporary differences:		
Cash, cash equivalents and amounts due from financial institutions	0.4	8.1
Financial assets at FVTPL	87.2	0.3
Financial assets at FVTOCI	799.7	22.1
Property and equipment and intangible assets	23.5	21.7
Other assets	711.0	25.8
Other liabilities	511.6	739
Tax loss carried forward	10.1	13.4
Total tax effect from deductible temporary differences	**2,143.5**	**830.4**
Tax effect from taxable temporary differences:		
Financial assets at FVTPL	(4.6)	(181.3)
Financial assets at FVTOCI	(6.1)	(1,293.1)
Property and equipment and intangible assets	(2,785.9)	(3,039.5)
Other assets	(4.9)	(11.8)
Other liabilities	(1.5)	(1.0)
Total tax effect from taxable temporary differences	**(2,803.0)**	**(4,526.7)**
Deferred income tax assets	**1,701.5**	**125.1**
Deferred income tax liabilities	**(2,361.0)**	**(3,821.4)**

	Year ended December 31, 2019	Year ended December 31, 2018
Beginning of the period – deferred tax assets	**125.1**	**258.2**
Beginning of the period – deferred tax liabilities	**(3,821.4)**	**(2,943.3)**
Changes in deferred income tax balances recognised in other comprehensive income	(839.0)	844.0
Change in deferred income tax balances recognised in profit or loss	3,878.2	(1,855.1)
Effect of movements in exchange rates	-	(0.1)
Deferred income tax transferred to assets of disposal group held for sale	(2.4)	-
End of the period – deferred tax assets	**1,701.5**	**125.1**
End of the period – deferred tax liabilities	**(2,361.0)**	**(3,821.4)**

Reconciliation of income tax expense and accounting profit for the year ended December 31, 2019 and 2018, are explained below:

	Year ended December 31, 2019	Year ended December 31, 2018
Profit before income tax	**25,179.4**	**24,372.5**
Tax at the statutory tax rate (20%)	5,035.9	4,874.5
Tax effect of income taxed at rates different from the prime rate	(321.0)	(398,8)
Non-deductible expenses for tax purposes	262.3	176.3
Adjustments in respect of current income tax of previous years	1.6	507.3
Deferred tax from a previously unrecognised temporary difference of a prior period	-	(507.1)
Income tax expense	**4,978.8**	**4,652.2**
Current income tax expense	8,855.4	2,289.8
Current income tax expense related to previous years	1.6	507.3
Deferred taxation movement due to origination and reversal of temporary differences	(3,879.8)	1,856.4
Deferred taxation movement due to tax losses carried forward	1.6	(1.3)
Income tax expense	**4,978.8**	**4,652.2**

Cash and Cash Equivalents

	December 31, 2019	December 31, 2018
Correspondent accounts and overnight deposits with banks	415,657.5	398,747.5
Balances with the CBR	50,416.2	17,641.7
Receivables on broker and clearing operations	22.5	1.0
Cash on hand	**13,695.4**	**4,350.9**
Total cash and cash equivalents	4.3	5.7
Less allowance for ECL (Note 12)	**466,100.5**	**416,395.9**
Total cash and cash equivalents	(1.7)	(4.7)
Total cash and cash equivalents before allowance for ECL	**466,098.8**	**416,391.2**
Cash and cash equivalents attributable to Assets of disposal group held for sale	6.8	-
Cash and cash equivalents for the purpose of Consolidated Statement of Cash Flows	**466,107.3**	**416,395.9**

As at December 31, 2019, the Group has balances with eight counterparties, each of which is greater than 10% of equity (December 31, 2018: seven counterparties). The total aggregate amount of these balances is RUB 431,356.3 million or 93% of total cash and cash equivalents as at December 31, 2019 (December 31, 2018: RUB 391,448.4 million or 94% of total cash and cash equivalents).

Financial Assets at Fair Value Through Profit or Loss

	December 31, 2019	December 31, 2018
Eurobonds issued by Russian companies	13,418.5	3,188.5
Shares issued by Russian companies	139.8	120.5
Derivative financial instruments	69.6	1,029.4
Shares issued by foreign companies	67.5	12.5
Total financial assets at FVTPL	**13,695.4**	**4,350.9**

The table below shows the analysis of derivatives of the Group as at December 31, 2019 and 2018:

	Fair value of principal amount or agreed amount		Assets - positive fair value	Liabilities - negative fair value
	Receivables	Payables		
December 31, 2019				
Currency swaps	70,945.1	(70,908.3)	69.6	(32.8)
December 31, 2018				
Currency swaps	62,302.5	(61,377.3)	1,029.4	(104.2)

As at December 31, 2019, the negative fair value of derivative financial instruments in the amount of RUB 32.8 million is included in other liabilities (Note 27) (December 31, 2018: RUB 104.2 million).

Due from Financial Institutions

Due from financial institutions are presented as follows:

	December 31, 2019	December 31, 2018
Reverse repo receivables from financial institutions	48,445.5	48,382.7
Interbank loans and term deposits	7,789.3	42,728.5
Correspondent accounts and deposits in precious metals	4,189.1	4,301.8
Receivables on broker and clearing operations	0.2	1.1
Total due from financial institutions	**60,424.1**	**95,414.1**
Less allowance for ECL (Note 12)	(0.1)	(36.3)
Total due from financial institutions	**60,424.0**	**95,377.8**

As at December 31, 2019, the Group has balances with one counterparty, which is greater than 10% of equity (December 31, 2018: two counterparties). The amount of this balance is RUB 38,399.8 million or 64% of the total amount due from financial institutions as at December 31, 2019 (December 31, 2018: RUB 56,215.7 million or 59% of the total amount due from financial institutions).

As at December 31, 2019 the fair value of bonds pledged under reverse repo was RUB 60,190.2 million (December 31, 2018: RUB 59,455.3 million).

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 clients, in the amount of RUB 7,683.7 million (December 31, 2018: RUB 7,805.5 million). Balances of market participants include balances due to these clients in respect of those securities in the amount of RUB 7,683.7 million (December 31, 2018: RUB 7,805.5 million).

Central Counterparty Financial Assets and Liabilities

	December 31, 2019	December 31, 2018
Repo transactions	3,259,579.2	3,310,008.3
Currency transactions	3,091.4	2,011.9
Total CCP financial assets and liabilities	**3,262,670.6**	**3,312,020.2**

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, 2019 the fair value of securities purchased and sold by the Group under repo transactions is RUB 3,771,234.9 million (December 31, 2018: RUB 3,706,037.1 million).

As at December 31, 2019 and 2018, 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 in accordance with IAS 32. Information about financial assets offset against financial liabilities in the statement of financial position is disclosed in Note 37.

Financial Assets at Fair Value through Other Comprehensive Income

	December 31, 2019	December 31, 2018
Bonds issued by the Russian Federation	85,834.1	133,825.1
Bonds issued by foreign companies	40,479.8	25,099.6
Bonds issued by Russian companies	32,063.1	24,160.5
Bonds issued by Russian banks	20,167.7	17,590.8
Bonds issued by foreign banks	768.7	-
Bonds issued by the CBR	-	10,076.4
Total financial assets at FVTOCI	**179,313.4**	**210,752.4**

Property and Equipment

	Land	Buildings and other real estate	Furniture and equipment	Construc-tion in progress	Right-of-use assets	Total
Cost						
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 in 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**
January 1, 2019 (with IFRS 16 effect)	**219.8**	**5,865.9**	**7,075.0**	**47.0**	**269.0**	**13,476.7**
Additions	-	-	405.7	49.9	15.6	471.2
Reclassification	-	-	46.7	(46.7)	-	-
Disposals	-	-	(119.2)	-	-	(119.2)
Reclassification to assets held for sale	(10.1)	(60.4)	(14.2)	-	-	(84.7)
Effect of movements in exchange rates	(1.2)	(6.9)	(1.4)	-	-	(9.5)
December 31, 2019	**208.5**	**5,798.6**	**7,392.6**	**50.2**	**284.6**	**13,734.5**
Accumulated depreciation						
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 in exchange rates	-	0.5	0.6	-	-	1.1
December 31, 2018	**-**	**1,571.6**	**5,662.2**	**-**	**-**	**7,233.8**
Charge for the period	-	118.0	891.0	-	191.5	1,200.5
Disposals	-	-	(117.9)	-	-	(117.9)
Reclassification to assets held for sale	-	(15.4)	(10.3)		-	(25.7)
Effect of movements in exchange rates	-	(1.6)	(1.2)	-	-	(2.8)
December 31, 2019	**-**	**1,672.6**	**6,423.8**	**-**	**191.5**	**8,287.9**
Net book value						
December 31, 2018	**219.8**	**4,294.3**	**1,412.8**	**47.0**	**-**	**5,973.9**
December 31, 2019	**208.5**	**4,126.0**	**968.8**	**50.2**	**93.1**	**5,446.6**

As at December 31, 2019, historical cost of fully depreciated property and equipment amounts to RUB 5,350.3 million (December 31, 2018: RUB 3,243.2 million).

Intangible Assets

	Software and licenses	Client base	Intangible assets development	Total
Cost				
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 in exchange rates	0.1	-	-	0.1
December 31, 2018	**5,872.1**	**19,606.7**	**777.2**	**26,256.0**
Additions	773.0	**-**	959.4	1,732.4
Reclassification	322.0	**-**	(322.0)	-
Disposals	(49.6)	-	(0.3)	(49.9)
Reclassification to assets held for sale	(1.7)	-	-	(1.7)
Effect of movements in exchange rates	(0.2)	-	-	(0.2)
December 31, 2019	**6,915.6**	**19,606.7**	**1,414.3**	**27,936.6**
Accumulated amortisation and impairment				
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 in exchange rates	0.2	-	-	0.2
December 31, 2018	**2,365.6**	**6,286.1**	**-**	**8,651.7**
Charge for the period	1,170.4	1,176.4	-	2,346.8
Disposals	(49.6)	-	-	(49.6)
Reclassification to assets held for sale	(1.2)	-	-	(1.2)
Effect of movements in exchange rates	(0.1)	-	-	(0.1)
December 31, 2019	**3,485.1**	**7,462.5**	**-**	**10,947.6**
Net book value				
December 31, 2018	**3,506.5**	**13,320.6**	**777.2**	**17,604.3**
December 31, 2019	**3,430.5**	**12,144.2**	**1,414.3**	**16,989.0**

Goodwill

As at December 31, 2019 and 2018, the Group's goodwill amounted to RUB 15,971.4 million.

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 in 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 in 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 in any CGU was identified.

Value in use calculations for each CGU are sensitive to changes in discount rates. Management of the Group carried out sensitivity analysis to determine the impacts of changes in this variable on the calculated value in use: change of 150 bps in the discount rate. As at December 31, 2019 the sensitivity analysis revealed the cumulative value in use of the segments 10.8% lower or 13.7% higher than the value in use estimated, which does not lead to any significant change of the results of goodwill impairment testing in any CGU (December 31, 2018: 10.7% lower or 13.7% higher).

Assets Held for Sale

In March 2019, the Supervisory board approved a plan to sell ETS. Therefore, as at December 31, 2019 the Group presented ETS as disposal group held for sale under IFRS 5 "Non-current assets held for sale and discontinued operations". During 2019 ETS generated net cash inflows from operating activities of RUB 39.9 million. Foreign currency revaluation reserve accumulated in equity related to disposal group is RUB 14.6 million loss.

The major classes of assets and liabilities of ETS classified as held for sale as of the reporting date:

	December 31, 2019
Assets of the disposal group held for sale	
Cash and cash equivalents	6.8
Due from financial institutions	16.2
Property and equipment	59.0
Intangible assets	0.5
Other assets	22.9
Total assets of the disposal group held for sale	**105.4**
Liabilities of the disposal group held for sale	
Other liabilities	5.8
Total liabilities of the disposal group held for sale	**5.8**

Other Assets

	December 31, 2019	December 31, 2018
Other financial assets:		
Receivables on services rendered and other operations	3,476.1	1,006.9
Less allowance for ECLs (Note 12)	(2,442.3)	(84.5)
Total other financial assets	**1,033.8**	**922.4**
Other non-financial assets:		
Precious metals	3,134.3	1,976.8
Prepaid expenses and advances	447.9	392.2
Taxes receivable other than income tax	46.9	64.7
Non-current assets prepaid	24.8	141.1
Other	8.7	14.1
Total other assets	**4,696.4**	**3,511.3**

Balances of Market Participants

	December 31, 2019	December 31, 2018
Accounts of clearing participants	450,993.4	521,359.0
Other current and settlement accounts	83,110.5	58,121.3
Stress collateral	19,006.2	14,629.7
Accounts of clearing participants in precious metals	7,336.3	6,278.4
Risk-covering funds	5,476.2	6,091.4
Total balances of market participants	**565,922.6**	**606,479.8**

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 in 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 are 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 in NSD. These securities are not assets of the Group and are not recognised in 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 in excess of positions of other participants in 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 in respect of the ability of the Group to guarantee proper settlements of open positions in 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 in the risk-covering funds is placed with top-rated banks (Notes 14, 16).

Overnight bank loans

	December 31, 2019	December 31, 2018
Overnight bank loans	49,229.1	5,003.1
Total overnight bank loans	**49,229.1**	**5,003.1**

As at December 31, 2019, the Group has balances with one counterparty, which is greater than 10% of equity (December 31, 2018: none). The amount of this balance is RUB 31.741.4 million or 64% of the total overnight bank loans as at December 31, 2019 (December 31, 2018: none).

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, 2019	December 31, 2018
Other financial liabilities		
Trade and other payables	720.6	633.7
Payables to employees	337.2	293.9
Lease liabilities	86.6	-
Derivative financial liabilities	32.8	104.2
Dividends payable	0.3	0.2
Total other financial liabilities	**1,177.5**	**1,032.0**
Other non-financial liabilities		
Personnel remuneration provision	1,723.2	1,601.4
Taxes payable, other than income tax	435.5	405.9
Advances received	258.0	239.3
Tax agent liabilities regarding distributions payable to holders of securities	170.8	32.3
Provision (Notes 8, 11)	31.7	218.3
Deferred commission income	-	439.7
Total other liabilities	**3,796.7**	**3,968.9**

The movement of provision is provided below:

	Year ended December 31, 2019	Year ended December 31, 2018
Beginning of the period	**218.3**	**-**
Net charge for the period (Note 11)	31.7	1,075.2
Write-offs (Note 27)	-	(856.9)
Recovery of legal case provision (Note 8)	(218.3)	-
End of the period	**31.7**	**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, 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)**
Exercised equity instruments (Note 10)	-	3,882,662
December 31, 2019	**2,276,401,458**	**(22,131,768)**

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, 2019 and 2018, is 12,095,322,151.

During the year ended December 31, 2019 the Group distributed to employees 3,882,662 treasury shares under exercised equity instruments (December 31, 2018: 2,058,440 treasury shares) (Note 10).

Retained Earnings

During the year ended December 31, 2019 the Group declared and paid to the owners of the parent dividends for the year ended December 31, 2018 of RUB 17,377.2 million. The amount of dividends per share is RUB 7.70 per ordinary share (for the year ended December 31, 2018 of RUB 12,320.5 million; dividends per share: RUB 5.47).

The Group's distributable reserves are limited to the amount of reserves reported in 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, 2019	Year ended December 31, 2018
Net profit attributable to ordinary equity holders of the parent	**20,189.0**	**19,716.5**
Weighted average number of shares	**2,253,209,254**	**2,249,496,134**
Effect of dilutive share options	1,075,924	6,061,693
Weighted average number of shares adjusted for the effect of dilution	**2,254,285,178**	**2,255,557,827**
Basic earnings per share, RUB	8.96	8.76
Diluted earnings per share, RUB	8.96	8.74

Commitments and Contingencies

Legal proceedings – From time to time and in 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 in these Consolidated Financial Statements (Note 8, Note 11 and Note 27).

Operating environment – The Russian economy continued to be negatively impacted by ongoing political tension in the region and continuing international sanctions imposed in 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.

Commodities
Acting as CDO the Group provides safekeeping of commodities required for clearing purposes. As at 31 December 2019 the Group had 3,800 tonns of sugar and 5.1 tonns of grain in safekeeping (31 December 2018: 1.5 tonns of sugar and 292,755.6 tonns of grain). The Group accepts the operational risk on these activities, but the Group's customers bear the credit and market risks associated with such operations.

Fiduciary activities – The Group provides depositary services to its customers. As at December 31, 2019 and 2018, the Group had customer securities totaling 101,739 bln items and 123,590 bln items, respectively, in its nominal holder accounts. The Group accepts the operational risk on these activities, but the Group's customers bear the credit and market risks associated with such operations.

Taxation – Major part of the Group's business activity is carried out in the Russian Federation. Russian tax, currency and customs legislation as currently in 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 in 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 in the past may be challenged at any time in 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 in 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 in 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, 2019 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 in this note. Details of transactions between the Group and other related parties are disclosed below.

(a) 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 in the Consolidated Statement of Financial Position are the following amounts that arose on transactions with key management personnel:

	December 31, 2019	December 31, 2018
Other liabilities	403.9	499.9
Share-based payments	169.8	427.8

Included in the Consolidated Statement of Profit or Loss are the following amounts that arose due to transactions with key management personnel:

	Year ended December 31, 2019	Year ended December 31, 2018
Short-term employee benefits	565.9	509.8
Long-term employee benefits	90.1	98.5
Share-based payment expense on equity settled instruments	22.3	111.4
Total remuneration of key management personnel	**678.3**	**719.7**

(b) Transactions with government-related entities

As at December 31, 2019 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, 2019 and 2018, and for the years ended December 31, 2019 and 2018:

	December 31, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	132,337.4	141,543.9
Due from financial institutions	105.6	4,098.9
Central counterparty financial assets	947,805.0	987,644.2
Financial assets at FVTOCI	116,345.6	187,486.7
Other assets	427.4	396.6
LIABILITIES		
Balances of market participants	244,708.6	272,766.2
Overnight bank loans	42,343.1	-
Central counterparty financial liabilities	1,852,415.6	1,806,265.5
Distributions payable to holders of securities	9,354.8	22,210.6
Other liabilities	97.6	195.4

	Year ended December 31, 2019	Year ended December 31, 2018
Fee and commission income	9,264.4	8,087.1
Interest and other finance income	8,389.2	12,330.4
Interest expense	(2,601.3)	(223.3)
Net gain on financial assets at FVOCI	1,411.3	242.3
Other operating income	11.0	24.5
Administrative and other expenses	(228.9)	(276.2)

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 in 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 in the principal market for the asset or liability, or in the absence of a principal market, in 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 in making the measurements:

- Level 1: Quoted market prices in 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, 2019 and 2018, by the level in the fair value hierarchy into which the fair value measurement is categorised:

				December 31, 2019
	Level 1	Level 2	Level 3	Total
Financial assets at FVTPL	13,418.5	69.6	207.3	13,695.4
CCP financial assets and liabilities (currency transactions)	3,091.4	-	-	3,091.4
Financial assets at FVTOCI	171,028.0	8,285.4	-	179,313.4
Derivative financial liabilities	-	(32.8)	-	(32.8)

				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)

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, 2019 and 2018, 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 in Consolidated Statement of Financial Position approximates their carrying value.

Transfers between level 1 and 2

For assets and liabilities that are recognised at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in 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, 2019	Year ended December 31, 2018
From Level 1 to Level 2		
Financial assets at FVOCI	1,706.7	7,008.6
From Level 2 to Level 1		
Financial assets at FVOCI	5,031.1	5,151.1

Capital Management

The Group's policy is to maintain a strong capital base 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 in 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 in respect of capital management and allocation are regularly reviewed by the Supervisory Board through approval and review within annual budgets.

The Group entities are subject to capital requirements established by the CBR in 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. Moscow Exchange and NAMEX have to maintain capital adequacy ratio at minimum level 100%.

Regulatory capital ratios for the major Group companies were as follows:

	Own funds		Own funds requirements		Capital adequacy ratio	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Moscow Exchange	46,344.3	48,490.1	100.0	100.0	273	-
NCC	70,580.6	65,700.9	300.0	300.0	164.70	153.20
NSD	9,767.8	8,927.5	4,000.0	4,000.0	31.82	27.94
NAMEX	197.3	179.2	100.0	100.0	326.78	-

The Group companies had complied in 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 in 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 in the following currencies: USD, EUR, CNY, HKD, GBP, CHF, TRY, KZT and BYR. Deliverable forward contracts for currency pairs are also traded in 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, in particular, funds placement auctions on bank deposits.

In the **Securities Market** of Moscow Exchange primary and secondary trades in 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 in 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 in 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 in 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 in 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, 2019 and 2018, is provided below.

					Year ended December 31, 2019
	Trading services	Clearing	Depository	Other services	Total
INCOME					
Fee and commission income	9,559.1	9,498.6	5,443.4	1,680.3	26,181.4
Net interest and other finance income[1]	5,305.6	9,302.6	2,104.8	-	16,713.0
Other operating income	-	-	-	335.1	335.1
Total income	**14,864.7**	**18,801.2**	**7,548.2**	**2,015.4**	**43,229.5**
EXPENSES					
Personnel expenses	(3,335.0)	(1,122.7)	(2,085.9)	(570.3)	(7,113.9)
General and administrative expenses,	(4,279.3)	(1,164.6)	(2,265.8)	(611.7)	(8,321.4)
Incl. depreciation and amortisation	(1,771.9)	(544.0)	(1,070.0)	(161.4)	(3,547.3)
Total expenses before other operating expenses	**(7,614.3)**	**(2,287.3)**	**(4,351.7)**	**(1,182.0)**	**(15,435.3)**
Total profit before other operating expenses and tax	**7,250.4**	**16,513.9**	**3,196.5**	**833.4**	**27,794.2**
Other operating expenses	(286.8)	(2,330.0)	2.0	-	(2,614.8)
Total profit before tax	**6,963.7**	**14,183.9**	**3,198.5**	**833.4**	**25,179.4**

					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[1]	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**

[1] including net gain on financial assets at FVOCI 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.

The key changes of the Group risk management system implemented within a reporting period are the following:

- Amendments to documents in terms of commodities market risk management controls aiming to enhance monitoring of commodity market members' affiliates, enhance warehouse requirements including their equipment, infrastructure and documentation provided, set requirements for warehouse principals and guarantors:
  - Rules of warehouse accreditation
  - Commodity storage regulations
  - Methodology for defining maximum storage limits
  - Warehouse accreditation internal interaction guide
  - Clearing Rules on the Commodities Market
- Amendments to NCC Regulations on loss provisions, which imply the creation of reserves in advance for the potential loss of stored assets and their recognition in financial statements;
- Initiation of a separate business line focused on work with distressed assets;
- Risk-appetite indicators for the Moscow Exchange, NCC and NSD were revised to account for events occurred in the reporting period and changes developed in the new Group Strategy;
- The procedure of preliminary risk-assessment for new products providing a more detailed and thorough risk analysis, project review as well as product analysis after its launch;
- According to external audit of controls performed for all key business areas of the Groups core companies, a detailed roadmap has been prepared. The roadmap encompasses upcoming internal process improvements and document amendments aiming to mitigate residual risk.

A description of the Group's risk management policies in relation to each significant risk is as follows.

Credit risk

The Group uses credit 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 in credit risk management:

- implement a systemic and enhanced approach to optimize the structure of the assets in 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 in 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 in 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 in compliance with the highest international standards and consisting of various lines of defence applicable in case of a clearing participant default.

As explained in Note 2, the Group monitors all financial assets that are subject to impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in 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 in its assessment of significant increase of credit risk as well as in 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 in the economic scenarios used at December 31, 2019 for the years 2020-2022, for Russia which is the country where the Group operates and therefore is the country that has a material impact in ECLs.

	2020	2021	2022
GDP growth	1.9%	3.1%	3.2%
Consumer price index	3%	4%	4%
Average nominal wage growth	2.4%	2.2%	2.4%
Money supply growth	9.5%	9.5%	9.5%
USD/RUB rate	63.9	66.1	66.5

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, 2019 if the assumptions used to measure ECL remain as expected (amount as presented in 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 in isolation for illustrative purposes, in 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%	67.73%	3,393.5
GDP	-	69.79%	3,496.5
	+3.0%	71.84%	3,599.5
	-3.0%	62.31%	3,121.8
Consumer price index	-	69.79%	3,496.5
	+3.0%	77.27%	3,871.2
	-3.0%	70.07%	3,510.4
Average nominal wage	-	69.79%	3,496.5
	+3.0%	69.51%	3,482.6
	-5.0%	70.25%	3,519.9
Money supply	-	69.79%	3,496.5
	+5.0%	69.32%	3,473.1
	-15.0%	65.03%	3,257.9
USD/RUB rate	-	69.79%	3,496.5
	+15.0%	74.55%	3,735.1

As at December 31, 2019 and 2018, 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, 2019 included into other assets are overdue receivables of RUB 2,754.7 million (December 31, 2018: RUB 62.7 million).

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, 2019 and 2018, 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, 2019 and 2018. Table below does not include equity instruments.

	AA	A	BBB	less BBB-	Not rated	Total
December 31, 2019						
Cash and cash equivalents	242,215.1	80,797.9	116,767.8	24,745.1	1,568.6	**466,094.5**
Financial assets at FVTPL	15.1	22.3	13,430.7	-	20.0	**13,488.1**
Due from financial institutions	7,683.7	-	1.0	38,504.3	10,045.9	**56,234.9**
CCP financial assets	-	-	467,000.9	1,363,523.5	1,432,146.2	**3,262,670.6**
Financial assets at FVTOCI	-	1,469.0	147,910.8	27,135.0	2,798.6	**179,313.4**
Assets held for sale	-	-	-	23.0	-	**23.0**
Other financial assets	32.6	0.2	277.3	199.7	524.0	**1,033.8**
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	432.7	**922.4**

Geographical concentration

The analysis of the geographical concentration of the financial assets and liabilities of the Group as at December 31, 2019 is presented below:

				December 31, 2019
	Russia	OECD	Other	Total
FINANCIAL ASSETS				
Cash and cash equivalents	63,161.7	402,644.1	293.0	466,098.8
Financial assets at FVTPL	173.4	13,466.0	56.0	13,695.4
Due from financial institutions	48,551.2	7,683.7		56,234.9
CCP financial assets	3,262,656.3	-	14.3	3,262,670.6
Financial assets at FVTOCI	138,064.9	37,465.8	3,782.7	179,313.4
Assets held for sale	-	-	23.0	23.0
Other financial assets	909.8	116.1	7.9	1,033.8
Total financial assets	**3,513,517.3**	**461,375.7**	**4,176.9**	**3,979,069.9**
FINANCIAL LIABILITIES				
Balances of market participants	545,815.5	10,547.0	2,223.8	558,586.3
Overnight bank loans	49,229.1	-	-	49,229.1
CCP financial liabilities	3,262,670.6	-	-	3,262,670.6
Distributions payable to holders of securities	11,184.0	380.5	149.6	11,714.1
Margin account	-	0.6	-	0.6
Liabilities related to assets held for sale	-	-	5.8	5.8
Other financial liabilities	844.7	327.7	5.1	1,177.5
Total financial liabilities	**3,869,743.9**	**11,255.8**	**2,384.3**	**3,883,384.0**

The analysis of the geographical concentration of the financial assets and liabilities of the Group as at December 31, 2018 is presented below:

				December 31, 2019
	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	784.8	105.8	31.8	922.4
Total financial assets	**3,663,225.0**	**368,004.7**	**4,324.4**	**4,035,554.1**
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	787.2	241.1	3.7	1,032.0
Total financial liabilities	**3,923,021.4**	**18,862.8**	**2,028.1**	**3,943,912.3**

As at December 31, 2019, the balances with OECD counterparties include the following balances with OECD subsidiaries of Russian companies:

- Cash and cash equivalents in the amount of RUB 58,010.3 mln (December 31, 2018: RUB 64,599.5 mln);
- Financial assets at fair value through profit or loss in the amount of RUB 1,896.6 mln (December 31, 2018: RUB 3,188.5 mln);
- Financial assets at fair value through other comprehensive income in the amount of RUB 10,928.3 mln (December 31, 2018: RUB 21,506.8 mln);
- Balances of market participants in the amount of RUB 660.7 mln (December 31, 2018: RUB 502.8 mln);
- Distributions payable to holders of securities in the amount of RUB 1.5 mln (December 31, 2018: RUB 14,674.4 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 in 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 in 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 in 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 in assessing the liquidity of the Group and its exposure to changes in 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.

In case of any liquidity shortages the following liquidity management tools are used by the Group: overdrafl borrowing from the CBR, Lombard and interbank borrowings, repo deals, currency SWAPs.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, 2019						
FINANCIAL ASSETS						
Cash and cash equivalents	466,098.8	-	-	-	-	466,098.8
Financial assets at FVTPL	69.6	-	7,268.2	6,150.3	207.3	13,695.4
Due from financial institutions	10,131.1	-	38,420.1	-	7,683.7	56,234.9
CCP financial assets	2,835,616.9	381,839.3	45,214.5	-	-	3,262,670.6
Financial assets at FVTOCI	126,144.4	577.4	11,536.4	41,055.2	-	179,313.4
Assets held for sale	23.0	-	-	-	-	23.0
Other financial assets	727.7	306.1	-	-	-	1,033.8
Total financial assets	**3,438,811.5**	**382,722.8**	**102,439.2**	**47,205.5**	**7,891.0**	**3,979,069.9**
FINANCIAL LIABILITIES						
Balances of market participants	550,902.6	-	-	-	7,683.7	558,586.3
Overnight bank loans	49,229.1	-	-	-	-	49,229.1
CCP financial liabilities	2,835,616.9	381,839.3	45,214.5	-	-	3,262,670.6
Distributions payable to holders of securities	11,714.1	-	-	-	-	11,714.1
Margin account	-	0.6	-	-	-	0.6
Liabilities related to assets held for sale	5.8	-	-	-	-	5.8
Other financial liabilities	643.4	233.3	268.8	32.0	-	1,177.5
Total financial liabilities	**3,448,117.6**	**382,073.2**	**45,483.3**	**32.0**	**7,683.7**	**3,883,389.8**
Liquidity gap	**(9,306.1)**	**649.6**	**56,955.9**	**47,173.5**	**207.3**	
Cumulative liquidity gap	**(9,306.1)**	**(8,656.5)**	**48,299.4**	**95,472.9**	**95,680.2**	

	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	620.6	233.1	6.0	-	62.7	922.4
Total financial assets	**3,848,665.1**	**125,078.4**	**39,101.6**	**14,222.7**	**8,486.2**	**4,035,554.1**
FINANCIAL LIABILITIES						
Balances of market participants	591,906.8	-	-	-	8,294.6	600,201.4
Overnight bank loans	5,003.1	-	-	-	-	5,003.1
Central counterparty 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 under reverse repo	-	979.6	-	-	-	979.6
Other financial liabilities	1,031.5	-	0.5	-	-	1,032.0
Total financial liabilities	**3,838,585.2**	**97,032.0**	**0.5**	**-**	**8,294.6**	**3,943,912.3**
Liquidity gap	**10,079.9**	**28,046.4**	**39,101.1**	**14,222.7**	**191.6**	
Cumulative liquidity gap	**10,079.9**	**38,126.4**	**77,227.5**	**91,450.1**	**91,641.7**	

Undiscounted cash flows on financial liabilities are approximately equal to cash flows presented in the analysis of liquidity risk above.

The Group presents securities included in the CBR Lombard list as matured in one month.

Market risk

Market risk is the risk of losses due to changes in 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 in interest income or the financial instruments price due to the interest rate changes.

The Group's result is exposed to the effects of fluctuations in 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 in 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 in interest rates.

The impact of changes in fair value of financial assets on the income, losses and equity is conducted based on the interest rates existing as at December 31, 2019 and 2018, and reasonably possible changes of 150 bps. Corresponding negative and positive results shown on the yield curve are as follows:

	Year ended December 31, 2019		Year ended December 31, 2018	
	Net profit	Equity	Net profit	Equity
150 bp parallel rise	(252.1)	(5,901.9)	(82.4)	(6,772.8)
150 bp parallel fall	260.0	6,114.2	85.3	6,712.3

Currency risk

Currency risk is the risk of changes in 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 in 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 in accordance with current market environment.

The Group's exposure to foreign currency exchange rate risk is presented in the tables below:

	RUB	USD	EUR	Other currencies	December 31, 2019, Total
FINANCIAL ASSETS					
Cash and cash equivalents	50,876.4	59,559.0	349,864.6	5,798.8	466,098.8
Financial assets at FVTPL	141.2	13,418.5	10.1	56.0	13,625.8
Due from financial institutions	990.8	55,241.7	2.4	-	56,234.9
Central counterparty financial assets	2,606,997.2	600,329.8	55,343.6	-	3,262,670.6
Financial assets at FVTOCI	116,349.7	37,445.0	25,518.7	-	179,313.4
Assets held for sale	-	1.0	-	22.0	23.0
Other financial assets	959.8	71.4	1.5	1.1	1,033.8
Total financial assets	**2,776,315.1**	**766,066.4**	**430,740.9**	**5,877.9**	**3,979,000.3**
FINANCIAL LIABILITIES					
Balances of market participants	67,455.2	134,241.0	351,053.1	5,837.0	558,586.3
Overnight bank loans	23,704.1	25,525.0	-	-	49,229.1
Central counterparty financial liabilities	2,606,997.2	600,329.8	55,343.6	-	3,262,670.6
Distributions payable to holders of securities	11,266.2	400.1	-	47.8	11,714.1
Margin account	-	0.6	-	-	0.6
Liabilities related to assets held for sale	-	-	-	5.8	5.8
Other financial liabilities	847.2	143.4	185.0	1.9	1,177.5
Total financial liabilities	**2,710,269.9**	**760,639.9**	**406,581.7**	**5,892.5**	**3,883,384.0**
Derivatives	**28,916.6**	**(4,988.9)**	**(23,999.5)**	**108.6**	**36.8**
Open position	**94,961.8**	**437.6**	**159.7**	**94.0**	

	RUB	USD	EUR	Other currencies	December 31, 2019, 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	843.2	66.7	6.5	6.0	922.4
Total financial assets	**2,808,138.3**	**846,762.5**	**369,115.2**	**10,508.7**	**4,034,524.7**
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	838.8	55.1	110.9	27.2	1,032.0
Total financial liabilities	**2,716,688.0**	**812,008.1**	**404,755.6**	**10,460.6**	**3,943,912.3**
Derivatives	**525.1**	**(35,364.3)**	**35,764.4**	**0.1**	**925.2**
Open position	**91,975.4**	**(609.9)**	**124.0**	**48.2**	

The following exchange rates are applied during the period:

	December 31, 2019		December 31, 2018	
	USD	EUR	USD	EUR
Minimum	61.7164	68.2328	55.6717	67.8841
Maximum	67.1920	77.2105	69.9744	81.3942
Average	64.6184	72.2835	62.9264	74.1330
Year-end	61.9057	68.2328	69.4706	79.4605

In addition to projecting and analysing its earnings and debt profile by currency, the Group reviews sensitivities to movements in exchange rates which are appropriate to market conditions. The Group has considered movements in the Euro and the US Dollar over the year ended December 31, 2019 and 2018, and has concluded that the following movements in rates are reasonable levels to measure the risk to the Group:

	December 31, 2019	December 31, 2018
Movement in USD/RUB rate	15%	15%
Movement in EUR/RUB rate	20%	20%

The impact of these movements on post-tax profit for the years ended December 31, 2019 and 2018, and equity as at December 31, 2019 and 2018, is set out in the table below:

	December 31, 2019		December 31, 2018	
	USD	EUR	USD	EUR
	15%	20%	15%	20%
Ruble appreciation	(53.3)	(25.5)	73.1	(19.8)
Ruble depreciation	53.3	25.5	(73.1)	19.8

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 in the performance of their official duties. Losses attributed to legal risk are recorded in 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 in 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 in 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 in 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 in general. In order to avoid such losses the Group constantly monitor its appearance in 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 in 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 in the form of cash or securities for current deals and make contribution to a risk-covering fund, as described in Note 36. Clearing rules give the Group right to use these amounts under certain conditions (e.g. in 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. in case of default), but offsetting criteria is not met as there is no enforceable right to set off in the normal course of business.

The table below shows financial assets and liabilities offset in the statement of financial position, as well as the effect of clearing agreements that do not result in an offset in the statement of financial position:

	December 31, 2019			Related amounts not set off in the statement of the financial position		Net amount
	Gross claims	Gross liabilities	Net amount presented in financial statements	Financial instruments	Cash collateral received	
Due from financial institutions (Reverse repo receivables from financial institutions)	48,445.5	-	48,445.5	(48,445.5)	-	-
Central counterparty financial assets (repo transactions)	3,259,579.2	-	3,259,579.2	(3,259,579.2)	-	-
Central counterparty financial assets (currency transactions)	3,091.4	-	3,091.4	(1,026.7)	(2,064.7)	-
Central counterparty financial liabilities (repo transactions)	-	(3,259,579.2)	(3,259,579.2)	3,259,579.2	-	-
Central counterparty financial liabilities (currency transactions)	-	(3,091.4)	(3,091.4)	1,026.7	2,064.7	-
Margin account under reverse repo	-	(0.6)	(0.6)	-	-	(0.6)

	December 31, 2018			Related amounts not set off in the statement of the financial position		Net amount
	Gross claims	Gross liabilities	Net amount presented in financial statements	Financial instruments	Cash collateral received	
Due from financial institutions (Reverse repo receivables from financial institutions)	48,382.7	-	48,382.7	(48,382.7)	-	-
Central counterparty financial assets (repo transactions)	3,310,008.3	-	3,310,008.3	(3,310,008.3)	-	-
Central counterparty financial assets (currency transactions)	2,806.2	(794.3)	2,011.9	-	(2,011.9)	-
Central counterparty financial liabilities (repo transactions)	-	(3,310,008.3)	(3,310,008.3)	3,310,008.3	-	-
Central counterparty 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)

Events after the Reporting Date

In February 2020 the Group reduced its ownership in ETS by selling a 40.82% stake in the company and therefore ceding the control over this subsidiary. Further sale of 15% share in ETS is expected until the end of 2024. The financial result from this sale is estimated to be immaterial to the Group.

Appendices

Information on major transactions and related-party transactions

MAJOR TRANSACTIONS

In 2019, the Exchange executed no transactions recognized as major transactions under Federal Law No. 208-FZ on Joint-Stock Companies dated 26 December 1995.

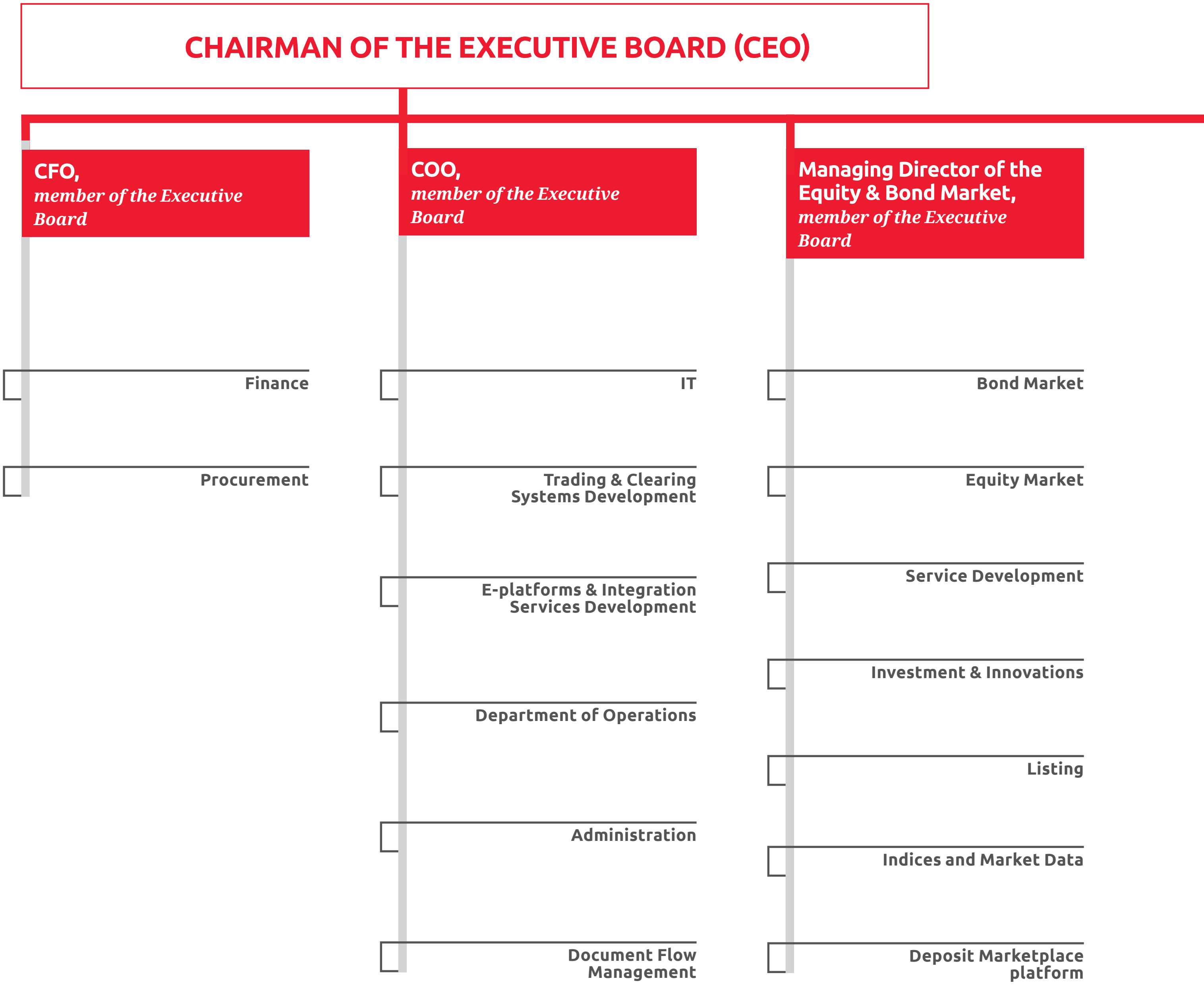
The Moscow Exchange Charter does not define any other transactions that are subject to a major transactions approval procedure.

RELATED-PARTY TRANSACTIONS

In the 2019 reporting year, the Exchange performed transactions that were recognized as related party transactions under 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 2019 (the "Report"), approved on 27 March 2020 by the Supervisory Board of the Exchange (Minutes No. 22). The Report is available on MOEX's website at http://moex.com/s1457.

Organisational chart of Moscow Exchange



Internal Audit

SUPERVISORY BOARD

Managing Director of the Money and Derivatives Market,
member of the Executive Board

- Derivatives Market
- Money Market
- FX Market
- Commodities Market
- Business Development
- Regional Development
- Product Marketing & Development
- Market Data + Services
- Client Support
- Standartised OTC Derivatives Market
- Project Management

- Relations with key accounts and issuers
- Government Relations
- Strategy
- Corporate Communications
- Internal Control
- Legal Services
- Corporate Governance
- Human Resources
- Security
- Operational risks, Information Security & Business Continuity
- Compliance

Supply chain management

The Group manages its supply chain responsibly and works closely with product and service suppliers to ensure economically efficient procurement processes and reduce financial and non-financial risks. The Group promotes fair competition on the market and always seeks to involve reliable and responsible suppliers.

Procurement processes are centralised inside the Group and regulated by the Provision on MOEX Procurement Activities and the regulations on cooperation between the Exchange, NCC and NSD with regard to procurement activities.

PRIORITIES

MOEX's procurement system allows for an unbiased choice of the best technological solution, ensures the necessary level of transparency in terms of cooperation with suppliers, and supports competition.

Key principles of the Group's procurement activities are:

- informational transparency – any supplier can complete the relevant questionnaire on the Exchange's website, and procurement is carried out via the B2B-Center electronic trading platform;
- equality, fairness, non-discrimination and lack of unjustified competition restrictions with regard to procurement participants: price negotiations are conducted only among a short list of similar offers;
- ban on any additional competitive commercial stages after the announcement of a final request for quotes, except for cases of justified change in a scope of work, which is deemed to be a new procurement. Additional commercial negotiations are allowed only with a contractor;
- consolidation of volumes and conclusion of long-term agreements to achieve best commercial terms;
- commitment to expand a competitive environment by involving alternative producers and suppliers. All suppliers, regardless of the size of their business and country of registration, have the right to participate if they comply with transparent qualification criteria.

High-tech IT services to develop and maintain advanced software and equipment comprise more than 90% of the Exchange's supply structure.

In 2019, MOEX concluded supply agreements for products and services worth a total of RUB 6.95 bln[1], of which RUB 6.31 bln was related to IT products and services. The total number of unique suppliers exceeded 200.

[1] Including estimated deferred costs.

Business ethics and anti-corruption

Maintaining and developing a culture of trust and responsibility is one of the key priorities of the Exchange's strategy. MOEX adheres to high standards of conduct in its corporate business and takes a zero tolerance approach to corruption in any and all situations.

KEY PRINCIPLES OF MOEX'S BUSINESS ETHICS CODE

- respect for employees and provision of equal opportunities;
- ensuring occupational health and safety;
- combating corruption;
- preventing conflicts of interests;
- combating legalisation of income generated by illegal means and financing of terrorism;
- combating the use of insider information;
- protection of MOEX's assets, including intellectual property rights;
- observing non-disclosure of confidential information;
- maintaining trust-based relationships with clients and partners and adherence to strict business ethics;
- maintaining a neutral position with regard to political and religious activities (while not imposing restrictions on employees engaging in such activities in a personal capacity);
- pursuing a corporate social responsibility programme and adhering to sustainable development principles.

Key Principles of the Anti-Corruption Policy Approved in 2015:

- prohibiting any transfer/receipt of valuables (including gifts and incentive payments) to obtain assistance in solving any issue;
- prohibiting transactions with third parties acting on behalf or in favour of the Exchange;
- establishing a collective body to make a decision on entering into contracts;
- inclusion of anti-corruption clauses in contracts, vetting of all counterparties;
- providing employees with channels to inform of corruption risks (including anonymously).

COMBATING CORRUPTION

As part of its zero tolerance principle, the Exchange takes preventative measures with regard to both internal and external stakeholders, including by providing information and training to employees, developing mechanisms for receiving information about corruption risks, and including anti-corruption clauses in contracts with counterparties.

PLANS FOR 2020

In 2020, MOEX plans to continue implementing a roadmap to embed a compliance culture within the Group, including:

- take measures aimed at strengthening a culture of informing about corruption risks via the creation of a “single button” to inform of any risks;
- carry out several training sessions on corruption risk management;
- update the Group’s anti-corruption policy and ensure employees are familiar with its new methods and techniques;
- update the Group’s Business Ethics Code based on an analysis of best Russian and international practices with the inclusion of several new provisions and principles, including from the ESG and sustainable development perspective.

ESG components

For more details on ESG principles adopted on MOEX, please see the Moscow Exchange ESG Report 2019.

GOVERNANCE

Corporate governance

	GRI Standards	Page
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Board of Directors' effectiveness	102–15, 102–22	103–104
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Transparency of managers' remuneration		113, 118
Ratio of employees' remuneration to managers' remuneration	102–38	113, 118
Ownership of the company's shares by the management		114–116
Management and control system / accountability system		119
Company's involvement in crisis situations with potential negative impact on its reputation		122–125
Risk management system and responsibility distribution in relation to GRI	102–19, 102–20, 102–29, 102–30	120–121
Risk map		122–125
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Anti-bribery and corruption codes of conduct	2015–2	205
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	GRI Standards	Page
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Risk assessment across the supply chain	102–9	204
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Integration of ESG principles in the supply chain management system	308–1, 414–1	204
Advantages of the supply chain and their positive impact on the business		204
Disclosed provisions of the supply chain management policy (publicly accessible)		204

Tax strategy

	GRI Standards	Page
Approach to tax management (policy provisions)		134–197
Approach to disclosing key financial and tax information	201–1	134–197
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Highlights of the customer privacy policy	418–1	134–197
Customer privacy practices (number of contracts, procedures, etc.)	418–1	134–197
Responsibility for using personal data	102–19, 102–20, 418–1	134–197
Informing customers about the company’s privacy policy		134–197
Data security system		134–197
Risk events / incidents		134–197
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	GRI Standards	Page
Environmental policy: key provisions and availability to stakeholders		81
Availability of environmental information to stakeholders	102–45, 102–46, 102–49	81
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Environmental performance management system		81
Energy consumption	302–1, 202–2	82
Water consumption		83
Direct greenhouse gas emissions	102–13	82
Indirect greenhouse gas emissions	102–13	82
Air pollutant emissions	305–7	n/a
Polluted discharge	303–1, 303–3	83
Waste generation	102–56	83
External assurance for environmental indicators	102–56	not conducted
Certification of the environmental management system (EMS)		not conducted
Risk events / incidents		not identified
Improvement program		81–83

SOCIAL

	GRI Standards	Page
Key principles of recruitment and employee development		68
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Percentage of employees from local communities		100%
Talent acquisition and retention		71
Employee performance assessment	404–3	71
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Strategic priorities of charity programs	413–1	78–80
Types of charity projects and community development initiatives (including indigenous peoples)	201–1	125
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Risk events / incidents		

Compliance with the Russian 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 27 March 2020 (Minutes No. 22).

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 2019 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	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle[1]	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle[2]
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 should create most favourable conditions for its shareholders enabling them to participate in the general meeting 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 the "hotline", email 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**	
1.1.2	Procedures for notification of the general meeting and provision of materials for it should enable the shareholders to get properly prepared for participation therein.	1. The notice of the General Meeting of Shareholders was posted (published) on the 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 premise. 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 Commission of the Company was provided to shareholders.	**Complied with**	

[1] The "complied with" status is only indicated if the Company meets all the criteria of the corporate governance principle compliance assessment. Otherwise, the "partially complied with" or "not complied with" status is displayed.
[2] They are shown for each criterion of the corporate governance principle compliance if the Company meets only part of the criteria or fails to meet any of the principle compliance assessment criteria. If the Company indicated the "complied with" status, no explanations are required.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
1.1.3	During the preparation for and holding of the general meeting, the shareholders should be able to freely and timely receive information about the meeting and its materials, to pose questions to members of the company's executive bodies and board of directors, and to communicate with each other.	1. The shareholders were enabled to ask members of the executive bodies and members of the Company's Board of Directors before and during the annual General Meeting in the reporting period. 2. The standpoint 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 was included into the materials of the General Meeting of Shareholders. 3. The Company provided the 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**	
1.1.4	There should be no unjustified difficulties 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, 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 the shareholder's proposal.	**Complied with**	
1.1.5	Each shareholder should be able to freely exercise his right to vote in a straightforward and most 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 counting board.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with 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 are held in the reporting period in the form of a meeting (joint presence of shareholders), sufficient time is envisaged for the reports on agenda items and the time to discuss these issues. 2. Nominees to the Company's management and control bodies were available to answer shareholders' questions at the meeting where 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**	
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**	
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 false assumptions about the company's activity.	1. The Company's dividend policy comprises clear-cut indications to financial/ economic circumstances when no dividends are due to the Company.	**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 the existing shareholders' dividend rights.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
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, which would rule 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**	
1.3.2	The company should not perform any acts which will or might result in artificial reallocation of corporate control therein.	1. Quasi-treasury shares are not available or were not used in the voting during the reporting period.	**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	The 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 meet the Company's and its shareholders' needs.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
2.1	**The Board of Directors shall be in charge of strategic management 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 procure 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 on fulfillment of the Company's strategy.	**Complied with**	
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**	
2.1.3	The board of directors should determine principles of and approaches to creation of the risk management and internal control system in the company.	1. The Board of Directors determines the principles and approaches to the risk management and internal control system in the Company. 2. The Board of Directors assessed the risk management and internal control system of the Company during the reporting period.	**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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 settlement of internal conflicts. 2. The Company has established the system to identify the transactions related to the conflict of interests and the system of efforts aimed at settlement of such conflicts	**Complied with**	
2.1.6	The board of directors should play a key role in procuring that the company is transparent, discloses information in full and in due time, 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**	
2.1.7	The board of directors should monitor the company's corporate governance practices and play a key role in its material corporate events.	1. During the reporting period, the Board of Directors reviewed the corporate governance practice in the Company.	**Complied with**	
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 the 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**	
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 standpoint thereon to the Chairman of the Board of Directors.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
2.3	**The board of directors should be an efficient and professional governing body of the company which is able to make objective and independent judgements 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 Nomination 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**	
2.3.2	Board members should be elected pursuant to a transparent procedure enabling the shareholders to obtain information about respective candidates sufficient for them to get an idea of the candidates' personal and professional qualities.	1. Where 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 Nominations 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**	
2.3.3	The composition of 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 professional qualifications, experience and business skills.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
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 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.	**Partially complied with**	In 2019, the Moscow Exchange Listing Rules were amended to update the parties' affiliation assessment method. In view of these circumstances, in the reporting period, three members of the Supervisory Board who were simultaneously members of the Supervisory Board of the subsidiary being a credit organization with which the Company held funds for settlement of trades, were temporarily found to lose their independence status due to the increase of the settlement account balance and subsequent surpassing the limit set out in the Listing Rules for significant counterparties. The discrepancy was corrected on the next day after being identified; the directors restored compliance with the independence criteria.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 Nominations Committee of the Board of Directors) formed the estimate of 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 Nominations 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 the 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 timely notify the Board of Directors accordingly.	**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**	
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**	In the reporting year, the Company did not record any material corporate actions related to a potential conflict of interest.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with 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 Director is an independent director or a senior independent director is identified among independent directors[1]. 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.	**Partially complied with**	1. Partially complied. In 2019, the Moscow Exchange Listing Rules were amended to update the parties' affiliation assessment method. In view of these circumstances, in the reporting period, the Chairman of the Supervisory Board of the Company who was simultaneously a member of the Supervisory Board of the subsidiary being a credit organization with which the Company held funds for settlement of trades, was temporarily found to lose their independence status due to the increase of the settlement account balance and subsequent surpassing the limit set out in the Listing Rules for significant counterparties. The discrepancy was corrected on the next day after being identified; the director restored compliance with the independence criteria. 2. Complied with.
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 fulfilment of decisions made by the board of directors.	1. Performance of the Chairman of the Board of Directors was estimated as part of the BoD efficiency assessment procedure in the reporting period.	**Complied with**	
2.5.3	The chairman of the board of directors should take any and all measures as may be required to provide the 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**	

[1] Please specify, which of the two alternative approaches admitted by the principle is implemented in the Company and explain the reasons for the selection made.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with 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 interests 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 interests. 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**	
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**	
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 about such actual appointment.	**Partially complied with**	1. Complied with. 2. Partly complied with. The internal documents do not provide for the Supervisory Board members' duty to notify the Board of Directors of their intention to become member of the governance bodies of other entities (other than company subsidiaries and affiliates). The Supervisory Board members, however, observe this duty through quarterly questionnaire-based survey of Supervisory Board members, conducted by Moscow Exchange. *Continuation on next page >*

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
				In accordance with the Supervisory Board Regulations, an SB member has the duty to provide full and reliable information on the legal entities wherein he/she holds positions with governance bodies, and/or serves on the boards of directors (supervisory boards). In accordance with the decision made by the Supervisory Board on March 2, 2017, a new version of the SB Regulations incorporating this recommendation will be brought before the AGM in 2017.
2.6.4	All board members should have 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**	
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 then current goals.	1. The Board of Directors held at least six meetings in the reporting year.	**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 above procedure should enable the shareholders to get prepared properly 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 be normally made at least 5 days prior to the meeting.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
2.7.3	The form of a meeting of the board of directors should be determined with due account of importance of issues on the agenda of the meeting. 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 the personal meetings of the Board.	**Partially 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. Issues of material related party transactions are included on the said list, since the Company's Code of Corporate Governance does not classify related party transactions as a specific material transaction criterion. In view of the foregoing, the Company does not seek to meet this recommendation in full with respect to the above-mentioned part, and will strive to consider material and related party transactions at in-person meetings. 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 Organised Trading, (1) the Company's sole executive body is elected by the Supervisory Board, and (2) the Organiser of Trading is no authorised to delegate the powers of the sole executive body to other entity (asset manager, asset management company).

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with 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 envisages 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.	**Partially 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. As of the beginning of the reporting period, the list did not include approval of (1) priority activities, (2) business plan, (3) placing amendments to the Charter before the Annual General Meeting of Shareholders (AGM), approval of major transactions and delisting, and (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 some issues on the relevant list. On 25 April 2019, the AGM adopted the new version of the Company's Charter under which the list of issues was extended. By the end of the reporting year, the list includes all issues as recommended except priorities approval, 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. *Continuation on next page >*

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
				Submitting issues on listing to the consideration by the AGM is not on the list as these issues are referred to the Supervisory Board competency (3/4 majority vote), but not to the AGM.
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 the 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.	**Partially complied with**	1. Partly complied with. In 2019, the Moscow Exchange Listing Rules were amended to update the parties' affiliation assessment method. In view of these circumstances, in the reporting period, one member of the Audit Committee of the Supervisory Board of the Company who was simultaneously a member of the Supervisory Board of the subsidiary being a credit organization with which the Company held funds for settlement of trades, was temporarily found to lose their independence status due to the increase of the settlement account balance and subsequent surpassing the limit set out in the Listing Rules for significant counterparties. The discrepancy was corrected on the next day after being identified; the director restored compliance with the independence criteria. 2. Complied. 3. Complied. 4. Complied.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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. Chairman of the Remunerations Committee is an independent director, other than Chairman of the Board of Directors. 3. The Company's internal documents determine the objectives of the Remunerations Committee, including those contained in Recommendation 180 of the Code.	**Partially complied with**	1-2. Partly complied with. In 2019, the Moscow Exchange Listing Rules were amended to update the parties' affiliation assessment method. In view of these circumstances, in the reporting period, two members of the Nomination and Remuneration Committee of the Supervisory Board of the Company who were simultaneously members of the Supervisory Board of the subsidiary being a credit organization with which the Company held funds for settlement of trades, were temporarily found to lose their independence status due to the increase of the settlement account balance and subsequent surpassing the limit set out in the Listing Rules for significant counterparties. The discrepancy was corrected on the next day after being identified; the directors restored compliance with the independence criteria. 3. Complied.
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 Nominations Committee (or its objectives specified in Recommendation 186 of the Code are implemented as part of another committee[1]), a majority of which are independent directors. 2. The Company's internal documents determine the objectives of the Nominations Committee (or the relevant committee with a combined functionality), including those contained in Recommendation 186 of the Code.	**Partially complied with**	1. Partly complied with. The tasks set out in para 186 of the Bank of Russia CGC are carried out by the Nomination and Remuneration Committee (please see notes to paragraph 2.8.2). 2. Complied with.

[1] If the objectives of the Nomination Committee are only implemented as part of another committee, indicate its name.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 or 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**	[1]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.
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	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 into the Audit Committee, the Nominations Committee and the Remunerations Committee, may attend meetings of the committees upon invitation of the Chairman of the respective committee only.	**Partially 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. In certain periods of the reporting year, the Chairman of one of the Committees was not compliant with the independence criteria (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.

[1] List the established additional committee.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with 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	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 into the Audit Committee, the Nominations Committee and the Remunerations Committee, may attend meetings of the committees upon invitation of the Chairman of the respective committee only.	**Partially complied with**	Issues related to the range of the Supervisory Board committees and their lists of members including the nomination of chairmen, are considered after the Annual General Meeting of Shareholders. The Supervisory Board considers the independence status of potential committee members and above all their competencies and ability to make sufficient contribution to the Committee. Based on these considerations, the Committees members and chairmen are named. As the number of independent directors in the Supervisory Board increases and/or the number of committees decreases, the recommendation may be fulfilled. Thus, incomplete compliance with this part of the code is a temporary nature; the Exchange seeks to comply in full. 2. Complied.
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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 personal meeting of the Board of Directors.	**Complied with**	
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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 of 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 the 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**	
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**	
4.1	**The level of remuneration paid by the company should be sufficient to enable it to attract, motivate, and retain persons having 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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 Remunerations 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**	
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**	
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 compensations.	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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
4.2	**The system of remuneration of board members should ensure harmonisation 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 of the 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**	
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**	Company's internal documents do not provide for the provision of shares to the 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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
4.3	**The system of remuneration due to 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 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 performance 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 Remunerations Committee) made sure 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.	**Partially 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 2019, 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 a new long-term incentive programme. In particular, in its report on the first stage of the programme project, the adviser included a comparative analysis of the management renumeration structure including members of the executive bodies, vs. remuneration levels at the peer companies. The total size of remuneration due to a member of the Executive Board, inclusive of 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). In 2020, the Long-Term Incentive Programme aimed also at the improvement of remuneration structure is expected. *Continuation on next page >*

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
				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 Labour Code, therefore, it is not required to additionally secure this procedure in internal documents of the Company. In case of restitution under the Russian Labour 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	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
4.3.2	Companies whose shares are admitted to trading at organised markets are recommended to put in place a long-term incentive programme 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 program 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.	**Partially complied with**	1. Complied with. 2. Partly complied 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 programme, the Supervisory Board discussed the terms during which the rights under the programme may be exercised, and found it expedient to identify opportunities for the rights under the programme 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 Programme 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 and the Supervisory Board was considering the terms and conditions of the long-term incentive programme, including the links between achieving certain targets and the right to sell shares under the programme. In December 2019, the Supervisory Board approved the principles of the new long-term incentive programme. The programme will be adopted and then introduced in March 2020.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
4.3.3	The amount of severance pay (so-called «golden parachute») payable by the company in the event of early dismissal of an 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 the double fixed portion of the annual remuneration in the reporting period.	**Complied with**	
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 approved by the Board of Directors.	**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 concerns risk management and internal control among their subordinate managers (heads) of business units and divisions.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
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 assessment are included into the Company's annual report.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
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 internal control and risk management system efficiency was assessed. 2. The Company uses common approaches to internal control and risk management.	**Complied with**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
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 the general corporate governance principles applied in the Company, in particular, in 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**	1. Complied with. 2. Complied with. 3. The are no persons controlling the Company.
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 in foreign organized markets, materials 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**	1. Complied with. 2. Not applicable as the Company securities do not trade on foreign regulated markets. 3. Complied with.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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**	
6.2.3	The company's annual report, as one of the most important tools of its information exchange with its shareholders and other stakeholders, should contain information enabling one to evaluate the company's performance results 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**	
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 determines the easy procedure for providing access to shareholders to the information, in particular, the information on the legal entities dependent on the Company, at the shareholders' request.	**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 keeping confidential sensitive business information that might have a material impact on its competitiveness.	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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 reorganisation of the company, acquisition of 30 or more percent of its voting shares (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 which 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 determines 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 GSM, the Board of Directors makes the relevant recommendations to the shareholders.	**Partially 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 reorganisation, 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.

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
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 envisages the procedure; whereby independent directors announce their standpoint on material corporate actions before their approval.	**Complied with**	
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 of the 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**	

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
7.2	**The company should have in place such a procedure for taking any material corporate actions that would enable its shareholders to receive full information about such actions in due time and 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 timely and in detail, including reasons for and timing of taking such actions.	**Complied with**	In 2019, the Company did not conduct material corporate actions.
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 in evaluating 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 for the 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.	**Partially complied with**	1. Partly complied with. In February 2019, the new Corporate Governance Code was adopted, allowing for the engagement of an appraiser when purchasing or selling assets under major transactions. 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 an interested 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. *Continuation on next page >*

#	Corporate governance principles	Corporate governance principle compliance criteria	Status of conformity with the corporate governance principle	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
				2. Partly complied with. In redemption requested by shareholders, an appraiser is engaged under the law. The Company's by-laws do not envisage the obligation to engage an appraiser to evaluate the Company's shares. The reason for this non-compliance is that since Company's shares are traded on the exchange, the share purchase price has been determined subject to share weighted average price according to trading results for six months. Hence, the Company does not plan to establish the obligation to involve an appraiser in purchasing its shares in the near future. 3. Not complied with. Internal documents do not provide for an extended list of the grounds for which the Supervisory Board members and other persons referred to in the law may be found to be interested in a transaction. On April 26, 2016 the Audit Committee recognized inexpedient the extension of the specified list of the grounds. However, the Company has introduced an alternate, meaning control over transactions involving a conflict of interest, whereby it collects and studies information of related parties, associates and affiliates of shareholders, therefore allowing to minimize risks attributed to potential pursuit of personal gains among members of management bodies.

Compliance with Moscow Exchange Corporate Governance Code[1]

Moscow Exchange fully complies with its Corporate Governance Code, a new version of which was approved by resolution of the Supervisory Board on October 14, 2019.

The following is information on the results of implementing corporate governance principles set forth in Chapter I, section 4, clause 4.2 of Moscow Exchange's CGC:

No.	Principle	Implementation Results
1	Provide a management system that meets the Exchange's strategic goals, corporate values, business features, as well as the needs and interests of customers	The Exchange is unique in that it is a public company whose shares are traded, and yet at the same time it sets corporate governance standards by applying its listing mechanism to Russian public companies (including itself). Thus, the Group's pro-active attitude to improving corporate governance at Russian companies is one of the strategic initiatives enshrined in the Group Strategy. The Exchange recognizes that adherence to corporate governance principles and best practices as well as the implementation of the Group Strategy are very important conditions for its successful development. The Exchange strives to be a model for other public companies in the implementation of the highest standards of corporate governance. The corporate governance system of the Exchange includes management bodies, control bodies and other bodies as well as a system of communications between the management bodies, control bodies and other bodies and its shareholders, as well as their interaction with other stakeholders. A system of communications between the corporate bodies and the shareholders of the Exchange, and their interaction with other stakeholders, is based on the following principles: • preservation and efficient use of equity provided by the shareholders; • reduction of risks which cannot be assessed by investors; • corporate accountability; • taking into account the interests of users of the Exchange's services; • information disclosure in order to ensure transparency for stakeholders.

[1] In accordance with Order of the Bank of Russia No. 5062-U of 17/01/2019

No.	Principle	Implementation Results
2	Support for the activities of the Exchange Supervisory Board based on:	
	• strategic governance of the Exchange;	Setting the Exchange's strategic goals is carried out as part of the Moscow Exchange Strategy. The Exchange's strategic goals are subject to ongoing monitoring on the basis of the Group Strategy. In accordance with the Articles of Association of the Exchange, the Supervisory Board carries out strategic management of the Exchange by: • setting priorities and main guidelines of the activities; • participation in strategy development and approval, oversight of implementation and setting a development strategy and evaluating the results of activities of the controlled companies. Thus, in 2019, by resolution dated October 14, 2019, the Supervisory Board approved the Strategy of the Moscow Exchange Group (previously considered at a meeting of the Supervisory Board's Strategic Planning Committee), which defines the strategic goals of the Exchange through 2024.
	• on implementation by the Supervisory Board of oversight of activities of the Exchange's executive bodies, as well as the adoption of resolutions aimed at eliminating deficiencies in the activities of the Exchange's executive bodies, if they are identified as a result of such oversight;	The Supervisory Board exercises oversight of the activities of the Exchange's executive bodies by: • election of the sole (temporary sole) and collective executive bodies and the early termination of their powers and approval of the terms of employment contracts with them, including setting remuneration; • coordination of overlapping positions by members of the executive bodies in management bodies of other organizations; • approval of the policy on remuneration of executive bodies and oversight of its implementation; • monitoring of strategy implementation; • consideration of the annual, and if necessary, interim reports of the Chairman of the Executive Board and members of the Executive Board on the results of their activities, as well as quarterly reports of the Executive Board on the results (including financial results) of the Exchange and decision-making based on these results, including concerning bonuses; • approval and evaluation of corporate and individual key performance indicators (KPIs) of the Chairman of the Executive Board and members of the Executive Board for the reporting year. Thus, in 2019, the Exchange Supervisory Board considered and took note of: • the report of the Executive Board on the results of work, financial performance and implementation of the Moscow Exchange Group strategy in 2018 (resolution dated March 6, 2019); • the report of the Executive Board on the results (including financial results) of the Exchange for January-May 2019 (resolution dated June 27, 2019); • interim reports on the results of corporate KPIs of Moscow Exchange and Moscow Exchange Group companies (excluding employees of NCC and NSD for 2019, as well as interim reports on the results of implementation of individual KPIs for 2019 by members of the Executive Board (resolution dated September 26, 2019); • the report of the Executive Board on the results (including financial results) of the Exchange for January-August 2019 (resolution dated September 26, 2019); • the report of the Executive Board on the performance and financial results of Moscow Exchange Group in the first 11 months of 2019 and the forecast on executing the planned consolidated financial performance of Moscow Exchange Group in 2019 (resolution dated December 20, 2019); On March 6, 2019, the Supervisory Board of the Exchange also decided to pay bonuses to executive body members based on the results in 2018 for of executive body members.

No.	Principle	Implementation Results
	• assessment of the activities of the Exchange's Supervisory Board, as well as evaluation of the quality of the committes' activities under the Exchange's Supervisory Board and disclose the results of such an assessment;	Based on evaluation of the activities of Executive Board members in 2018, as well as taking into account operational risk in 2019, the Supervisory Board, in determining bonuses for Executive Board members, took into account these circumstances and adjusted bonus awards for Executive Board members for whom shortcomings were identified in their performance. The Supervisory Board of the Exchange evaluates its performance and work of each member, as well as the Supervisory Board committees. Performance of the Supervisory Board and Supervisory Board committees is evaluated under the Exchange Corporate Governance Evaluation Methodology approved by the Supervisory Board on October 21, 2016. Performance is evaluated internally (self-assessment and competency assessment) once a year, and externally (with the assistance of an independent expert) once every three years. For example, an external assessment of the Supervisory Board was carried out in the spring of 2019 by VEKTOR LIDERSTVA, JSC, an independent external consultant. Results of the external assessment (Report of the independent consultant on the external assessment results) were considered at an in-person meeting of the Supervisory Board on April 25, 2019. A substantial part of the recommendations in the Report have been implemented; some of the recommendations are to be implemented in future. In 2019, an internal assessment of the work of members and committees of the Supervisory Board was also performed. Based on its findings, the Director of the Corporate Governance Department analyzed and prepared both a report and an action plan to improve the current corporate governance processes related to the performance of functions and delineation of authority of the executive bodies. Information on the results of the performance evaluation of the Supervisory Board and its committees is included in the Exchange's annual report, which is published on the Exchange's official website.
	• on separation of the control functions and managerial duties, determination of individual and corporate responsibility of members of the Exchange Supervisory Board.	Governance and oversight functions of the Supervisory Board are delineated by the Articles of Association. In terms of oversight, the Supervisory Board controls: • corporate governance practices, including material corporate actions; • financial, economic and business activities; • activities of the executive bodies. In terms of governance, the Supervisory Board provides overall governance of the Exchange. The Supervisory Board determines the basic guidelines, strategy and priority directions, annually approves the Group's consolidated budget, defines principles and approaches to the organization of risk management and the internal control system. The Supervisory Board is guided by the principle of responsibility. Supervisory Board members shall act in the best interests of the Exchange, in good faith and reasonably. They also shall be held liable for unfair or unreasonable actions, including cases when their actions (or inaction) fail to meet the common business practices or normal entrepreneurial risk. Moreover, they shall reimburse the Exchange and the shareholders for any losses caused by their faulty actions.

No.	Principle	Implementation Results
3	Ensuring functioning of the internal control, internal audit and risk management systems of the Exchange	The Exchange has organized a risk management and internal control system that meets, among other criteria, the requirements of Russian legislation imposed on the Exchange as an organizer of trading, as well as international recommendations for building risk management and internal control systems. The internal control system is based on a risk-based approach. Internal control shall be carried out by: the governance bodies of the Exchange (the General Meeting of Shareholders, Supervisory Board, Executive Board and the Chairman of the Executive Board), the Supervisory Board Audit Committee, the Revision Commission, the external auditor, the Internal Audit Service, the Internal Control Service (compliance control), the Compliance Service, the risk and operational continuity units, security units, other units and employees of the Exchange (including the Chief Accountant and their deputies), who exercise control in accordance with the powers determined by the internal documents of the Exchange. The Internal Control System is based on the principle of three lines of defense, which is in accordance with best international practices. The **first line** of defense consists of all employees of the Exchange's business units and operational divisions involved in identifying, assessing and managing risks inherent in daily activities, as well as developing and implementing policies and procedures governing existing business processes. The **second line** is the Operational Risk, Information Security and Business Continuity Department, the Internal Control Service and the Compliance Service, which continuously monitor and manage risks, as well as exercise control over compliance of the activities of the Exchange with the federal laws and relevant regulations, the rules of organized trading, as well as the constituent and internal documents of the Exchange in the following areas: • ensuring information security, including security of interests (objectives) of the Exchange in the information space; • compliance with the laws of the Russian Federation as well as constituent and internal documents of the Exchange; • prevention of the involvement of the Exchange and the participation of its employees in illegal and unfair activities, including legalization of illegal earnings (money laundering) and financing of terrorism; • prevention of illegal use of insider information and/or market manipulation; • ensuring prevention of conflict of interest, including the identification and control of conflict of interest as well as prevention of its consequences. These units provide support to the first line of defense units to define the regulatory risks, development and implementation of control procedures, interpretation of requirements of applicable laws and preparation of reports on monitoring results for management bodies. The **third line** of defense is the Exchange's management bodies, which determine the principles and approaches to organizing the risk management and internal control system in accordance with the Articles of Association and the regulations on management bodies, as well as the Internal Audit Service, which monitors the efficiency and effectiveness of financial and business activities, efficiency of the management of assets and liabilities, including ensuring the safekeeping of assets and efficiency of the risk management of the organizer of trading in accordance with the Regulation on the Internal Audit Service. The Exchange has organized a risk management system appropriate to the nature and volume of transactions it carries out and contains measures aimed at reducing risks, a risk monitoring system that ensures that the necessary information is brought to the attention of Exchange management bodies, as well as a process for managing the main risk groups that can negatively affect its activities. The risk management functions are distributed between the Supervisory Board and its committees, executive bodies, heads of units responsible for certain areas of Exchange activities, within which the risks may arise, a specially created unit responsible for risks arising in the activities of the organizer of trading, the Internal Control Service, and advisory bodies of the Exchange. In order to develop a unified approach to managing compliance risks in the Group companies and coordinating the actions of the respective services of the Group companies under the Chairman of the Executive Board, a Compliance Management Committee has been created, the main task of which is to develop common policies and procedures for the group of companies in the field of compliance risk management. *Continuation on next page >*

No.	Principle	Implementation Results
		Since 2019, the Exchange's priority in the field of risk management has shifted to forecasting potential risks. In September 2019, the Supervisory Board approved the Risk Management System Improvement Program, which includes a set of measures aimed at proactive response to the risks in changing conditions, introducing new tools, such as scenario analysis, data analysis with elements of machine learning and staff training with a focus on predicting the most negative effects (the "Anticipate Risk" program). In addition, in 2019, a decision was made to change the organization of the risk committees of Moscow Exchange Group companies, allowing for communication between them regarding the risks associated with the introduction of new products. In order to develop recommendations for the executive bodies related to risk management in the course of the Exchange's activities as an organizer of trading, it was decided to create a Risk Management Committee under the Executive Board of the Exchange, the main tasks of which are monitoring the level of risks accepted by the Moscow Exchange Group companies, synchronizing risk management methods of Moscow Exchange Group companies, preliminary planning of automated risk management procedures and preliminary risk analysis of new projects of the Moscow Exchange Group. Information on the risk management system is communicated to shareholders, trading and clearing participants, the Bank of Russia and other related parties on an ongoing basis through reporting or by posting information on the website. At the level of Moscow Exchange Group, the "Stabilization 3.0" program is being implemented, including an independent assessment of the internal control system and implementation of measures to reduce operational and compliance risks. One of the main elements of the program is to grow compliance culture and develop new channels of interaction between employees of Moscow Exchange Group companies in relation to risks. The Internal Audit Service carries out internal audit, including a systematic independent assessment of the reliability, effectiveness and efficiency of the organization and implementation of the internal control, corporate governance and business processes of the Exchange, as well as the organization of a risk management system and assessment of the efficiency of the methods used to ensure the safety of Exchange property and Moscow Exchange Group companies. The main activities of the Internal Audit Service are to assist the Supervisory Board, the Executive Board and the Chairman of the Executive Board in improving: efficiency of the management of the Exchange and its financial and economic activities through a systematic and consistent approach to the analysis and evaluation of risk management and internal control, as well as corporate governance and business processes as tools to ensure reasonable confidence in achieving the goals.

No.	Principle	Implementation Results
4	Ensuring the prevention, identification and resolution of conflicts of interest related to the activities of the Exchange, as well as combatting corruption.	The measures taken by the Exchange in order to prevent conflicts of interest shall be elaborated in the internal documents of the Exchange, including a List of Measures on Preventing Conflict of Interest in the Trading Activities of Moscow Exchange. Such measures are aimed at preventing situations when the personal interest of Exchange employees may affect fair and efficient performance of their duties. In terms of managing the risk of corruption violations, the Exchange adheres to the basic principles set forth in the Policy on Preventing Corruption approved in 2015. Namely, the prevention of actions associated with any manifestation of corruption, investigation in the event of a situation containing signs or giving grounds to assume existence of corruption risk and analysis of business relations risks with contractors as well as employee training. Key features of the Policy include: • a ban on the delivery/receipt of any material items in exchange for assistance in resolving any issue (including gifts); • a ban on concluding transactions with third parties operating on behalf of or in the interests of the Exchange; • the presence of a body that supervises procurement to decide on the conclusion of contracts; • the presence of anti-corruption conditions (or stipulation) in contracts; • counterparty verification; • the ability to inform employees about corruption risk (including anonymously). The measures aimed at managing a conflict of interest arising in cases of a conflict between the interests of the Exchange and the personal interests of members of the management due to their business, friendship, family and other ties and relations, as well as in cases of a conflict between their obligations in regard to the Exchange and obligations in regard to other persons defined in the Conflict of Interest and Corporate Conflict Management Policy of Moscow Exchange approved by the Supervisory Board. This Policy defines the liabilities of members of management aimed at implementing measures to manage a conflict of interest, sets approaches and methods for preventing and identifying a conflict of interest, including identifying transactions made under a conflict of interest (including transactions with the Exchange's securities, related-party transactions and transactions that go beyond the ordinary course of business, that may have a potential conflict of interest).
5	Ensuring equal and fair attitude to all shareholders in exercising their legitimate rights in governing the Exchange, as well as maintaining a balance of the rights and interests of clients, counterparties and other stakeholders.	The Exchange ensures an equal and fair attitude to all shareholders concerning the exercise of their legitimate rights in governing the Exchange. Each shareholder shall have an opportunity to attend the General Meeting of Shareholders held in the form of joint participation and to vote in a convenient way: by sending voting ballots by mail, personally participating in the meeting or by electronic voting. The Exchange provides shareholders with the opportunity to vote electronically by filling out an electronic ballot form on the website. In order to ensure equal treatment of all shareholders, the Exchange shall provide information on the meeting, including meeting materials, in both Russian and English. Ballots shall also be translated into English, which, in accordance with OECD recommendations, allows shareholders to vote from abroad. Much attention is paid to working with retail shareholders. Since 2014, a Shareholder Day has been held annually for retail investors. The event is an online conference with participation of the Exchange's management. Meetings are also held with current and potential investors, so that investors may ask the management team questions and get relevant information that allows them to make an informed investment decision. Additionally, the Exchange seeks to build long-term, stable and mutually beneficial relations with its counterparties. The Exchange has a competitive procedure for selecting counterparties, which makes the process of concluding contracts transparent and facilitates choosing the optimal counterparties for the company.

No.	Principle	Implementation Results
6	EEnsuring the transparency of activities and effective communication of the Exchange with its shareholders and other stakeholders.	The Exchange strives to provide stakeholders with access to information on all material facts about the Exchange's activities, allowing them to make informed investment and management decisions. The main approaches and principles of the Exchange concerning information disclosure are established by the Information Policy, under which the information disclosed by the Exchange is divided into three groups: • information on the Exchange's activities as an issuer of securities and as an organizer of trading, disclosed without fail in accordance with the requirements of legislation and regulations; • information disclosed voluntarily at the discretion and choice of the Exchange; • information freely available at the request of stakeholders. For the convenience of users, the following sections are available on the Exchange's official website, issuer information and information of the organizer of trading. Information is also published in the news feed. For foreign shareholders and investors, a special section, https: //www.moex.com/en /, is provided on the English version of the Exchange's website, that includes news for investors, key information about the Exchange's shares, dividend policy and dividend payments, financial and operating results of the Exchange, corporate governance, past and upcoming events for investors and shareholders as well as contact information. In order to effectively communicate with shareholders and other stakeholders, the IR service (Investor Relations) was created. The Investor Relations Director is responsible for the work of the IR Service, who directly interacts with shareholders and prospective shareholders. Information for contacting/receiving advice on IR issues (phone, e-mail), including information about the Director for Investor Relations, is available on the Exchange's website. In addition, an investor's calendar is published annually on the Exchange's website in the "Investor Relations" section. The calendar contains information on important events for shareholders and other stakeholders, including those held by the Exchange, and the time and location they are to be held. In preparation for the annual General Meeting, a Shareholder Day is held in the form of an online conference, where the Exchange's management team talks about the annual results and answers questions from conference participants in real time. Questions for the Shareholder Day are collected by e-mail or by phone. The Corporate Governance Department facilitates interaction with existing shareholders of the Exchange, and, as necessary, with shareholders of Moscow Exchange Group companies, including in preparation for the General Meetings of Shareholders.
7	Desire for further development with the aim of sustainable growth of the Exchange and increasing returns on invested capital.	In order to provide sustainable growth of the Exchange and increase the return on invested capital over the long term, the Exchange management bodies recognize the need to continually improve the Exchange's corporate governance system taking into account its development and the influence of external factors, as well as the need for ongoing monitoring of the rights and interests of shareholders and other stakeholders.

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- 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 has been prepared by PJSC Moscow Exchange MICEX-RTS ("Moscow Exchange", "the Exchange" or "MOEX").

It reviews the consolidated performance in 2019 of the Group, which is comprised of PJSC Moscow Exchange MICEX-RTS and its subsidiaries, including NCO CJSC National Settlement Depository ("NSD"), JSC Bank National Clearing Centre("NCC"), and JSC National Mercantile Exchange ("NME").

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.