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WHERE INVESTMENTS START

ANNUAL REPORT 2021

MOSCOW EXCHANGE

MOEX MOSCOW EXCHANGE

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MOSCOW EXCHANGE IN BRIEF

Moscow Exchange Group (the Group) operates Russia's only multifunctional trading platform for equities, bonds, derivatives, currencies, money market instruments and commodities.

The Group is comprised of:

- Public Joint-Stock Company Moscow Exchange MICEX-RTS (the "Moscow Exchange", the "Exchange" or "MOEX" which operates the Equity & Bond Market, Money Market, Derivatives Market as well as FX Market and Precious Metals Market;
- NCO JSC National Settlement Depository (NSD), the central securities depository;
- JSC Non-Banking Credit Institution – Central Counterparty National Clearing Center (CCP NCC, or NCC), operating as clearing house and a central counterparty for all MOEX's markets;
- 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, directly and indirectly, a 88.25% 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 2021, the company's market capitalization was RUB 348 billion, and the free float was 63%.

BUSINESS MODEL

CLIENTS → MARKETS → OPERATING INCOME

MARKET DATA

CLIENTS

74,500
Legal entities

1,711
Professional trading participants

16.8 mln
Retail investors

CLIENT SERVICES

MARKETS

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

2021	2020	2019
52.4	54.5	40.7

Fee & commission income

	Equity Market	Bond Market
2021	▲23.0 %	▼17.4 %
2020	▲86.7 %	▲15.3 %
2019	▲17.2 %	▲17.4 %

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 (RUSFAR, RUONIA)
- Oil and gas
- Precious and non-ferrous metals
- Wheat and sugar

Trading volumes, RUB trln

2021	2020	2019
158.0	129.0	82.4

2021 ▲31.9 %
2020 ▲38.1 %
2019 ▲23.0 %

FX MARKET

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

Trading volumes, RUB trln

2021	2020	2019
319.8	329.0	308.3

2021 ▼2.0 %
2020 ▼20.5 %
2019 ▲11.1 %

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

2021	2020	2019
474.0	426.8	346.3

2021 ▲35.8 %
2020 ▲23.4 %
2019 ▲9.2 %

COMMODITIES MARKET

- Gold
- Silver
- Wheat

Trading volumes, RUB bln

2021	2020	2019
223.8	78.0	85.8

Post-trading Services

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

Depository and settlement services

2021 ▲28.7 %
2020 ▲24.8 %
2019 ▲15.4 %

OPERATING INCOME

41,554.0 RUB mln
Fee & commission income

12,902.2 RUB mln
Interest income

412.7 RUB mln
Other operating income

54,868.9 RUB mln
Total

STATEMENT FROM THE CHAIRMAN OF THE SUPERVISORY BOARD

Dear shareholders,

I am pleased to present you with the 2021 report of the Supervisory Board of Moscow Exchange.

The past year 2021 was a year of strong global and Russian economic recovery and high capital market activity, which had a positive impact on Moscow Exchange's business. However, the risks of an ongoing pandemic remained high, and we had to continue operating under administrative restrictions on public events and transport logistics. For these reasons, the activities of the Supervisory Board and the Board committees took place predominantly remotely. This did not prevent the Supervisory Board from holding in-depth discussions and adopting a number of crucial decisions aimed at supporting the company's business development and expansion, improving the quality of risk control and information security, ensuring the transformation of corporate culture to increase employee initiative and responsibility, and developing sourcing in the IT field. Particular attention was paid to implementing the transformation plan for the National Clearing Centre and establishing competence centres across the Group, supporting management initiatives in the area of innovation and transition to a flexible office, adopting a clearing strategy and considering strengthening the Group's risk management, internal audit and compliance controls. Much attention was given to succession planning for the senior management team as well as the Supervisory Board itself.

The Annual General Meeting 2020, which elected the current Supervisory Board, took place at a time of acute pandemic development in the country and the world. For this reason, it was held in absentia. At the same time, shareholders were given the opportunity to read the speeches of the company's management online and to ask questions as part of the traditional Shareholders' Day, which took place in the form of a video conference. On the recommendation of the Supervisory Board, 85% of the consolidated net profit under IFRS for 2020 was allocated for dividends. The Annual General Meeting for 2021 will also be held in absentia. Individual shareholders of the Exchange, whose number exceeds 370,000, will be able to use the E-voting service developed by National Settlement Depository, part of the Moscow Exchange Group, to vote at the meeting.

Moscow Exchange achieved record operating and financial results for 2021. The continued inflow of private investors, intensification of the IPO market, expansion of trading hours, and launch of new products and services all resulted in record trading volumes and fee income.

The Supervisory Board recommended that shareholders abstain from approving an annual dividend distribution for the year 2021. This decision rests on the current dividend policy, which stipulates the primacy of compliance of Moscow Exchange companies with regulatory requirements for capital allocation over dividend distribution. We consider the current high burden on capital of the Group's subsidiaries as temporary. Moscow Exchange's dividend policy remains unchanged. The Supervisory Board continues to assess the situation and intends to resume discussions around dividend payments later in 2022.

The composition of the Supervisory Board of the Moscow Exchange to be elected at the 2022 Annual General Meeting of Shareholders is planned to be substantially renewed. This will concentrate expertise in financial infrastructure, as well as retail and digital products. Moscow Exchange continues to follow best practices in corporate governance. Under the proposed composition, independent directors should comprise more than a third of the Supervisory Board. In order to improve the efficiency of the Supervisory Board, the Annual General Meeting will be asked to reduce the number of members to nine.

In conclusion, I would like to thank all of the members of the Supervisory Board who were on the previous Supervisory Board for their great contribution to the development of the company and for their active involvement in the work of the Supervisory Board.

I would like to acknowledge the friendly and highly professional work of all employees and especially the contribution of the Group's management, which made it possible to achieve outstanding results and create a good foundation for the future.

In conclusion, I would like to thank Moscow Exchange's clients and shareholders for their trust, support and effective cooperation in developing the Russian financial market.

Chairman of the Supervisory Board

Oleg Viyugin

STATEMENT FROM THE CHIEF EXECUTIVE OFFICER

Dear shareholders,

We had the strongest year in 2021 in the history of the Moscow Exchange Group in terms of operational and financial performance. Revenues and net profit reached record levels. Total trading volumes crossed the one quadrillion ruble mark for the first time ever.

Moscow Exchange continued to actively develop its range of products and services, expanding opportunities for market participants and their clients. Trading hours on various markets and the number of available stock market instruments increased, and trading in small lots on the FX Market and futures and options on various assets on the Derivatives Market began.

The personal finance platform Finuslugi introduced a number of new products. Customers of the platform can now compare offers and purchase financial institutions' products online: open deposits, take out loans, buy/sell "people's" bonds and take out insurance, such as OSAGO (compulsory motor third-party liability insurance) and mortgage insurance policies. In 2021, the number of Finuslugi users grew more than 25 times, to 2.4 million users, with the platform's products being available to residents of 109 cities.

In 2021, Russian companies actively raised capital for their business development on Moscow Exchange. Six initial public offerings (IPO) and 12 secondary public offerings (SPO) were carried out, raising more than RUB 500 billion, while 176 companies, of which 60 entered the market for the first time, placed 618 bond issues for RUB 3.3 trillion.

Nearly eight million new retail investors opened brokerage accounts in 2021, bringing the total number of retail clients to 16.8 mln at year-end.

Moscow Exchange remains focused on sustainability and applies ESG practices in its operations. This year, Moscow Exchange Group companies switched to green electricity, produced without carbon dioxide emissions, using renewable energy sources.

Charitable activities are an important part of Moscow Exchange's socially responsible position. We help veterans, assist people in need, support educational projects and cooperate with charitable foundations. In 2021, we allocated RUB 35 million for charitable purposes.

The history of Moscow Exchange is inextricably linked to the history of the entire Russian financial market. This year, Moscow Exchange celebrates 30 years in business. Over these years, the Group has come a long way and is ready for new challenges. The company is continuously looking for opportunities to take a fresh look at business development. We have the knowledge and experience to adapt to any situation.

We are focused on supporting the work of the market, its participants, and retail investors. The main thing for us is to maintain high business efficiency, team cohesion and accessibility of our infrastructure for all participants.

I would like to thank all our clients, partners and shareholders for their trust and assistance in developing the Exchange infrastructure and the entire financial market. I am sure that together we will cope with any difficulties and any challenges.

Chief Executive Officer

Yury Denisov

MOEX MOSCOW EXCHANGE

02

STRATEGIC REPORT

MAIN TRENDS IN THE DEVELOPMENT OF THE SECTOR

INDUSTRY OVERVIEW

Exchanges are organized platforms for trading financial instruments, including securities, currencies, commodities and derivatives. The bulk of the revenue of exchanges, as a rule, is made up of commissions charged from issuers for listing securities and from financial intermediaries directly involved in trading financial instruments, as well as fees for the sale of exchange information, technological solutions and services.

In many countries, depository, clearing and settlement services are provided by certain independent organizations, but recently there has been a growing trend towards unification of the largest exchange operators with vertical integration of most or all of these activities within a single group of companies.

Vertically integrated exchanges receive additional income for settlement, clearing and depository services, as well as net interest income from the placement of client funds on the balance sheet of the exchange.

Oversight of exchange activities is usually carried out by the government body responsible for regulating the financial sector of the economy. In some cases, exchanges have quasi-government powers, acting through self-regulatory organizations (SROs).

Global Trends

The financial market in 2021 was dramatically transformed: the emerging post-COVID-19 trends, together with the current macroeconomic situation, had a strong impact on financial market participants, including global stock exchanges. The influx of individual investors in the stock market, the development of ESG themes and the growing interest in digital financial assets are trends that have taken on new forms in 2021.

Retail investment was already showing growth before the pandemic. However, it was COVID-19 that provided the necessary impetus that brought financial markets into the spotlight to improve people's economic well-being. The simultaneous effects of low interest rates, remote working, the abolition of traditional entertainment, consolidation around social media, and broker activity (particularly low or zero commissions and the development of trading apps with game elements) catalysed the growth of retail investor activity. Although retail investors are investing smaller sums in markets than institutional investors, their influence is becoming more prominent. Banks and brokerages are writing about the growing role of the retail investor in financial markets.

More and more investors are considering the environmental and social impact of a company when deciding whether to invest in it.

ESG trends are setting a development vector for global stock exchanges not only from the perspective of an individual issuer, but also as a key financial market institution responsible for creating the necessary infrastructure to meet new sustainability interests and requirements.

The year 2021 saw continued improvement in ESG disclosure processes, an increase in the number of ESG instruments on exchanges, ESG-themed events, as well as the implementation of numerous exchange projects aimed at intensifying sustainability processes, including:

- achieving carbon neutrality (Deutsche Börse, JPX, LSE, SGX, WSE);
- launching ESG bonds (SZSE), ESG indices (Euronext / Borsa Italiana, SIX) and ESG derivatives (CME, Eurex, ICE, LME, NASDAQ, SGX);
- trading in CO_2 emission allowances (ICE, etc) and carbon offsets (TSX);
- creation of new venues and platforms (FEX Global, Nasdaq ESG Data Hub, SGX);
- inorganic growth towards ESG (Deutsche Börse, ICE, NASDAQ, SIX).

Rising capitalisation of the cryptocurrency market, interest in non-fungible tokens (NFTs), and government CBDC (Central Bank Digital Currency) projects indicate a growing interest in digital assets.

The first cryptocurrency exchange (Coinbase) went public in April 2021. Its market capitalisation is comparable to that of the world's largest traditional exchanges, highlighting the investment community's belief in the future of digital assets.

Amid increased volatility, MOEX's infrastructure in 2021 not only showed resilience, but also ramped up trading volumes and revenues, as it had the year before. Key strategic initiatives for exchanges include the desire to transform themselves into 'technology providers', embrace new asset classes and generate and commercialise pre-trade data and analytics. An essential part of exchange strategies is cybersecurity and the adoption of cloud technologies, which are already finding their way into the business models of major exchanges.

Competitors

MOEX's main competitors in 2021 were SBP Exchange in Russia; and 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) abroad.

The **London Stock Exchange (LSE)** is both one of the world's, largest financial centers and the largest overseas venue for trading in global depositary receipts on shares of Russian companies. The LSE has a main market and a small business market.

The **New York Stock Exchange** (NYSE, owned by the Intercontinental Exchange – ICE) is one of the largest exchanges in the world. Since 1996 it has been trading in global depositary receipts on shares of Russian companies.

NASDAQ is one of the largest global stock exchanges, and has traded in global depositary receipts on shares of Russian corporate issuers. It has been in competition with MOEX since 2000. A new phase of competition to attract Russian issuers began with the placement of Yandex in 2011.

The **EBS currency platform** is the world's largest inter-dealer broker and one of the global market leaders in currency trading. Other developed and emerging market instruments, including commodity derivatives, bonds, stocks, depositary receipts and interest rate derivatives are traded on ICAP platforms in addition to FX instruments. EBS is the issuer's main competitor in trading the USD/RUB and EUR/RUB currency pairs on the spot market.

The **Chicago Mercantile Exchange, 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. CME offers matching, clearing with a central counterparty and settlement services. 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. RDX is an index for depository receipts an index for depositary receipts on Russian blue chips calculated by Wiener Börse.

HKEX is one of the largest Asian exchanges. Competition with MOEX began in 2010 with the listing of RUSAL shares.

SPB Exchange is the organiser of trading in foreign securities within the Russian jurisdiction. The competition began after the launch the launch of trading in foreign shares on MOEX in 2020.

MOSCOW EXCHANGE IN THE GLOBAL CONTEXT

No. 3 exchange for bonds (2021)[1]

No	Exchange	Country	Trading volume (USD bln)	Including repo
1	CME Group	the US	23,517	✓
2	BME	Spain	5,421	✓
3	**Moscow Exchange**	**Russia**	**3,297**	✓
4	Shanghai SE	China	2,603	✓
5	Johannesburg SE	South Africa	2,410	×
6	Shenzhen SE	China	1,818	×
7	Korea Exchange	Korea	1,282	×
8	Iran Fara Bourse	Iran	673	×
9	Bolsas y Mercados Argentinos	Argentina	326	×
10	Tel-Aviv Stock Exchange	Israel	308	×

No. 11 exchange for derivatives (2021)[2]

No	Exchange	Country	Trading volume (contracts, mln)
1	NSE India	India	17,099
2	B3	Brazil	8,781
3	CME Group	USA	4,943
4	NASDAQ	USA	3,299
5	CBOE	USA	3,096
6	Iran Fara Bourse	Iran	2,764
7	Zhengzhou Commodity Exchange	China	2,582
8	Shanghai Futures Exchange	China	2,446
…	…	…	…
11	**Moscow Exchange**	**Russia**	**2,102**

[1] Bond market data may be incomparable across the marketplaces due to difference in methods.
[2] Position of Moscow Exchange in the ranking is given taking into account the combined performance of NASDAQ (including Nasdaq-US and Nasdaq Nordic and Baltic), CBOE (including Cboe Global Markets and Cboe Europe) and excluding the performance ICE & NYSE (including NYSE, ICE Futures Europe, ICE Futures US) due to lack of data in WFE for the period.

No. 26 exchange for equities (2021)[1]

No	Exchange	Country	Market capitalisation (USD bln)	Number of issuers	Trading volume (USD bln)
1	ICE & NYSE	USA	27,686	2,525	29,096
2	NASDAQ	USA	27,114	4,914	28,960
3	Shenzhen SE	China	6,220	2,578	22,043
4	CBOE	USA	n/a	n/a	22,830
5	Shanghai SE	China	8,154	2,037	17,442
6	Japan Exchange	Japan	6,544	3,824	6,568
7	Korea Exchange	Korea	2,219	2,406	5,794
8	HKEx	Hong Kong	5,434	2,572	4,153
9	Taiwan SE	Taiwan	2,029	970	2,326
…	…	…	…	…	…
26	**Moscow Exchange**	**Russia**	**842**	**719**	**394**

No 15 publicly traded exchange by market capitalization (2021)[2]

No	Exchange	Country	Capitalisation (USD bln)
1	CME	USA	82.1
2	ICE & NYSE	USA	77.1
3	HKEx	Hong Kong	74.1
4	LSE Group	United Kingdom	57.0
5	Nasdaq OMX	USA	35.1
6	Deutsche Börse	Germany	31.6
7	CBOE	USA	13.9
8	ASX	Australia	13.1
9	B3	Brazil	12.2
10	Japan Exchange	Japan	11.7
11	Euronext	The EU	11.1
12	SGX	Singapore	7.8
13	Dubai Financial Market	The UAE	6.2
14	TMX Group	Canada	5.7
15	**Moscow Exchange**	**Russia**	**5.3**

[1] The largest equity exchanges by equity trading volume (EOB only). Place of Moscow Exchange in the ranking is given taking into account the combined indicators for the Nasdaq exchanges (incl. Nasdaq-US and Nasdaq Nordic and Baltics) and CBOE (incl. Cboe Global Markets and Cboe Europe).
[2] Market capitalisation of publicly traded exchanges according to Thomson Reuters data as of 31 December 2021.

MISSION AND CORPORATE VALUES

The mission of the Group is to bring trust, efficiency and innovation to the financial markets, to help companies and citizens achieve the goals of tomorrow. The Group's vision is to be the leading platform in the Russian financial market, providing reliable access to all classes of traded assets and meeting a wide range of clients' financial needs.

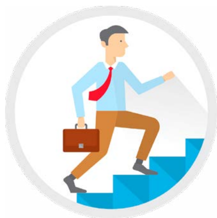
The goals and objectives of the strategy serve the values of the Group.

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

PRIORITY AREAS OF MOSCOW EXCHANGE

GROUP DEVELOPMENT STRATEGY 2024

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.

In April 2021, the Supervisory Board approved additional provisions in the development strategy related to updating ESG topics, developing international cooperation and strengthening cyber security of infrastructure.

In 2021, the Exchange continued to expand accessibility, trading hours and its range of products and services. MOEX focused 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.

With the updated strategy, the Sustainability Sector and Growth Sector initiatives, including the launch of ESG tools, as well as international cooperation initiatives, have been added to the current market deepening plans.

In developing a culture of trust and responsibility, the Exchange will focus on accelerating and digitalising 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.

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.

KEY PROJECTS IN 2021

FURTHER EXPLORING THE MAIN MARKETS

Expanding trading hours on the markes

In March 2021, Moscow Exchange FX, Derivatives and Precious Metals Markets started trading at 7 am MSK. At the beginning of December, the pre-market session was also launched in the Equity Market. Clients in Siberia and the Far East can now benefit from more convenient trading hours offered by MOEX. Thus, trading hours on most MOEX markets have increased to 17 hours a day.

The Bond Market trading hours were also extended with the after-hours session launched at the end of September. Investors can now trade federal government bonds (OFZ) and Eurobonds from 19:00 to 23:50 MSK.

The increase in trading hours is particularly popular with retail investors. They account for 56 % of pre-market trading volume on the Derivatives Market, 64% on the Equity Market and 25% on the FX Market. Individuals account for 60% of the trading volume in the after-hours session of the Equity and Bond Market.

Trading in international stocks

In September 2021, Moscow Exchange began trading in international stocks with settlement in USD. Trading in international stocks with settlement in RUB was launched in September 2020. These stocks are traded and settled in both Russian rubles and US dollars within the reliable infrastructure of Moscow Exchange: with the participation of a qualified central counterparty (or CCP) (National Clearing Center, NCC) and securities record-keeping with the Central Securities Depository (National Settlement Depository, NSD). At the end of 2021, 521 most liquid stocks of the largest international companies were listed.

NSD launched a new service for professional market participants, banks and brokerage firms, that provide access to trading in international securities on the Exchange - as part of a simplified procedure for submitting Form W-8BEN to calculate tax on international shares. The service allows NSD to automate the process of accepting electronic individual identification Form W-8BEN when paying income on US securities.

New instruments

In 2020, Moscow Exchange held six initial public offerings (IPOs) of Russian companies such as Segezha Group, Renaissance Insurance, European Medical Center, Fix Price, Softline and CIAN. M.Video-Eldorado, Etalon Group, MKB, VTB, HeadHunter, Beluga Group, Fix Price, MMK, Rusagro, PIK Group and Magnit conducted secondary public offerings (SPOs).

The Derivatives Market began trading in futures and options on SPDR S&P 500 ETF Trust, futures on shares of Chinese companies Alibaba and Baidu, as well as PIK Group shares, RTS Index (mini) futures, options on natural gas and Yandex shares. A the end of December, trading in FX futures on Euro-based currency pairs was launched.

The range of corporate Eurobonds was expanded: 49 new securities were added during 2021, bringing the total number of Eurobonds traded to 115. The number of exchange-traded funds (ETFs) which became increasingly popular among retail investors grew: at the end of 2021, 138 ETFs, including 114 Russian-law ETFs and 24 ETFs, were traded on the Exchange's Equity Market.

PROMOTING A CULTURE OF TRUST AND RESPONSIBILITY

In 2021, Moscow Exchange launched a program to improve its compliance culture and develop new channels of interaction between employees of the Group companies in relation to risks.

The following compliance initiatives were implemented in 2021:

- Compliance and business ethics working groups were established with market participants and the regulator;
- A Code of Good Conduct for market participants was developed;
- the Exchange's hotline on the Code of Good Conduct for market participants was launched;
- the Exchange together with NAUFOR developed a typology of unfair practices on the financial market;
- the Exchange held a conference for market participants entitled "Compliance: Key Trends 2021";
- the Exchange joined the Anti-Corruption Charter of Russian Business;
- procedures were strengthened and processes were automated for managing compliance risks;
- Moscow Exchange achieved ISO 37301 certification;
- the Exchange achieved its FATCA/QI target structure; NCC was granted QDD status.

FINANCIAL PLATFORM

"Transit 2.0"

"Transit 2.0" helps market participants meet the challenges of reducing costs and improving transparency and interaction. "Transit 2.0" meets the demands of a modern multi-banking platform, which is a necessary element for an efficient digital treasury. In 2021, traffic increased to 2,500,000 payment documents, and a currency transfer and control functionality was launched. At the beginning of 2022, 26 corporations and 14 banks were connected to the Transit 2.0 platform.

Financial Transaction Registrar (FTR)

The FTR began its work together with the launch of Finuslugi platform. Created on the basis of NSD, the FTR accumulates information on all transactions made on any financial platform. In 2021, the key milestones in the development of FTR were:

- expansion of the list of registered products;
- implementation of the Bonds to Marketplace project: the first issuer was the administration of the Kaliningrad Region.

BALANCE MANAGEMENT

MOEX Treasury corporate marketplace

In 2020, MOEX Treasury - a terminal for corporate clients with direct access to trading - was launched.

The MOEX Treasury terminal allows companies to perform conversion and swap transactions on the FX Market, including RFS service, spot and swap transactions on the Precious Metals Market, deposit funds with the CCP on the Money Market, raise funds on the Credit Market, as well as view quotes for hedging instruments in the Derivatives Market and conduct deposit auctions to place funds in the M-Deposit Market.

67 companies, 35 of which were connected in 2021, are already using the MOEX Treasury terminal for efficient liquidity management. Integration with the trader's personal account and with the "Transit 2.0" system is also available through the terminal.

In 2021, Moscow Exchange started using the technology and infrastructure of the NTPro platform to provide OTC services, and expanded corporate clients' capabilities on the MOEX Treasury platform:

- integration with NSD's "Transit 2.0" platform took place;
- the option to make money transfers (clearing terminal) has been added;
- algorithmic FX Market orders were added;
- an aggregate CCP deposit order book and a currency fix premium order book were added;
- the option to receive analytical statements on own transactions was introduced.

Acquisition of a stake in the OTC FX platform NTPro

At the end of October 2021, MOEX completed the acquisition of a 65.5% stake in BierbaumPro AG which is 100% owner of NTPro. The transaction increased Moscow Exchange's ownership in BierbaumPro AG from 29.5% to 95%. The platform offers solutions for liquidity aggregation, matching and algo execution across a wide range of FX instruments, as well as services to connect to more than 60 FX liquidity providers. In 2021, average daily turnover on the platform was approximately USD 7.5 billion.

MARKET ACCESS

Finuslugi (financial marketplace)

The Exchange rolled out the personal finance platform Finuslugi.ru on 15 October 2020. In 2021, the Exchange acquired INGURU, an electronic platform for selecting insurance and banking products, that has allowed Finuslugi clients to compare and purchase various financial products.

During the year 2021, great efforts were made to develop the Finuslugi service:

- the option to open replenishable deposits was introduced;
- "KASKO" comprehensive insurance product was launched;
- consumer loans were launched;
- sales of mortgage insurance were launched;
- a unique investment product was launched: 'people's' bonds of Russian regions, which can only be purchased through Finuslugi, without opening a brokerage account;
- a new multi-product website was launched;
- instant wallet and deposit replenishment service implemented.

MOEX MOSCOW EXCHANGE

03

FINANCIAL RESULTS REVIEW

FINANCIAL RESULTS REVIEW

FY 2021 was a successful year for the Exchange. Cumulative fee and commission income again reached a record high, up 21% compared to FY 2020. The share of operating income accounted for by F&C continued to increase and exceeded 75% in FY'21. The Money Market, Derivatives Market and Depository and Settlement Services posted the largest increases in F&C income.

Operating income increased by 12.9%, and operating expenses grew 22.5%. EBITDA increased by 9.9% YoY; and EBITDA margin was 70.5%, 1.9 pp lower than in 2020. Capex for the year was RUB 3.61 bln. Net profit increased 11.6% to reach RUB 28.1 bln.

FINANCIAL HIGHLIGHTS (RUB mln)

	2016	2017	2018	2019	2020	2021	Δ 2021/2020
Operating income	43,567.2	38,538.9	39,901.4	43,229.5	48,591.0	54,868.9	12.9%
Fee and commission income	19,797.6	21,207.6	23,647.1	26,181.4	34,268.2	41,554.0	21.3%
Net interest and other finance income	23,695.0	17,285.3	16,061.0	16,713.0	14,158.7	12,902.2	–8.9 %
Other operating income	74.6	46.0	193.3	335.1	164.1	412.7	151.5 %
Operating expenses (except other operating expenses and movements in allowance for ECLs)	(12,259.4)	(13,431.8)	(14,453.7)	(15,435.3)	(16,750.0)	(20,514.6)	22.5 %
Operating profit	31,307.8	25,107.1	25,447.7	27,794.2	31,841.0	34,354.3	7.9 %
EBITDA	33,602.1	28,059.6	27,712.0	28,726.7	35,188.9	38,671.2	9.9 %
EBITDA margin, %	77.1	72.8	69.5	66.5	72.4	70.5	–1,9 p.p.
Movements in allowance for ECLs (from 2021 onwards)/other operating expenses (before 2021)	–	–	(1,075.2)	(2,614.8)	(0.9)	627.4	–
Net profit	25,182.6	20,255.2	19,720.3	20,200.6	25,170.5	28,097.5	11.6 %
Basic earnings per share	11.22	9.02	8.76	8.96	11.16	12.45	11.6 %

FEE AND COMMISSION INCOME

In 2021, most fee and commission income lines increased. At the same time, fee and commission income on the Bond Market decreased as a result of rising interest rates. Fee and commission income remained well diversified across seven business lines. The fastest growing businesses were Money and Derivatives Markets as well as Depository and Settlement Services. The largest contributors to the F&C line in absolute terms YoY were Money Market (+RUB 3,087.1 mln), Depositary & Settlement Services (+RUB 1,871.4 mln) and Derivatives Market (+RUB 1,258.6 mln).

Fee and commission income structure (RUB mln)

	2020	2021	∆ 2021/2020 (RUB mln)	∆ 2021/2020 (%)
Money Market	8,612.0	11,699.1	3,087.1	35.8
Depository and Settlement Services	6,524.9	8,396.3	1,871.4	28.7
Equities Market	4,227.4	5,200.8	973.4	23.0
Derivatives Market	3,939.8	5,198.4	1,258.6	31.9
IT services, listing, financial marketplace fees and other fees and commissions[1]	3,745.5	4,436.4	690.9	18.4
FX Market	4,276.1	4,191.4	-84.7	-2.0
Bond Market	2,942.5	2,431.6	-510.9	-17.4

Money Market

Money Market fee income expanded by 35.8% following an increase in trading volumes of 11.1%. The share of the market in the overall F&C income was 28%. GCC-repo volumes gained 11.6% to reach RUB 83.8 trln. CCP repo trading volumes improved 11.3%. The effective fee dynamics are mainly explained by the expansion of the average repo terms, which improved 32%.

Equities Market

The total market capitalization of the Equities Market as of 31 December 2021 was RUB 62.82 trln (USD 841.85 bln). Fee and commission income from the Equities Market was up 23.0% on the back of a corresponding increase in trading volumes (+25.5%). The market accounted for 13% in the total fee and commission income. A modest divergence between fee and volume dynamics is the result of the tariff structure that incentivizes higher volumes traded.

Depository and Settlement Services

Fee and commission income from depository and settlement services increased by 28.7% as average annual assets in custody grew by 27.7% YoY. Growth was seen across all asset classes, especially in domestic government bonds (OFZs) (+40.4 %) and shares (+32.2 %). Fee and commission income was also influenced by other services, mainly for collateral management and clearing by NSD.

Derivatives Market

The Derivatives Market F&C income added 31.9%. The share of the market in the total fee and commission income was 13%. The trading volume growth of 21.7% was mainly driven by a 40.4% expansion of commodity derivatives volumes and a sharp rise in index derivatives trading (+30.5%). Together with a surge in single-stock derivatives trading and the moderate volume dynamics in FX derivatives, these factors explain the effective fee dynamics.

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

IT services, listing, financial marketplace fees and other fees and commissions

IT Services, Listing and other fee income line was largely driven by revenue from the financial marketplace Finuslugi, which includes income from e-commerce platform Inguru acquired in 2021. The share of this line in the total fee and commission income was 11%. Sale of software and technical services improved 18.5%, which is mainly explained by sales growth of the ASTS FIFO MFIX protocol that was launched in late 2020. Listing and other services decreased 5.8%, while sales of information services added 6.8%. The Other fee income line includes an additional fee on EUR balances of 0.2% above the ECB rate that was introduced at the beginning of 2020.

FX Market

Fee income and trading volumes from the FX Market were virtually flat, decreasing by just 2.0% and 2.8%, respectively. The share of the market in the total fee and commission income was 10%. Spot volumes were down by 1.8%, while swap volumes declined by 3.2%. The trading volume mix slightly improved towards the more profitable spot segment.
FX Market fee income now includes consolidated revenue from FX OTC platform NTPro following its acquisition in 4Q'21.

Bond Market

Fee income from the Bond Market decreased 17.4% while trading volumes dropped 28.9% (excluding placements of overnight bonds). The market accounted for 6% in the total fee and commission income. Primary market volumes (excluding placements of overnight bonds) shrank by 36.8%, largely driven by lower OFZs & OBRs placements in a growing interest rate environment. Secondary market trading volumes decreased 8.9%.

NET INTEREST AND OTHER FINANCE INCOME

Net interest income fell by 8.9% to RUB 12.9 billion, on the back of lower realised interest rates on average for the year; net interest income excluding realised gains or losses on the revaluation of the investment portfolio fell by 6.9%.

Operating expenses (RUB mln)

	2020	2021	∆ 2021/2020 (RUB mln)	∆ 2021/2020 (%)
General and administrative expenses	**8,290.7**	**10,632.9**	**2,342.2**	**28.3**
Amortization of intangible assets	2,472.3	2,717.6	245.3	9.9
Equipment and intangible assets maintenance	1,589.7	1,912.1	322.4	20.3
Depreciation of property and equipment	876.5	971.9	95.4	10.9
Advertising costs	202.7	835.5	632.8	312.2
Taxes (other than income tax)	647.5	787.8	140.3	21.7
Market makers fees	572.1	764.1	192.0	33.6
Professional services	465.6	629.6	164.0	35.2
Registrar and foreign depository services	454.4	620.8	166.4	36.6
Information services	380.3	433.5	53.2	14.0
Rent and office maintenance	329.3	337.9	8.6	2.6

	2020	2021	Δ 2021/2020 (RUB mln)	Δ 2021/2020 (%)
Remuneration to agents	0.0	328.6	328.6	–
Other general and administrative expenses	213.9	189.2	-24.7	-11.5
Communication services	86.4	104.3	17.9	20.7
Personnel expenses	**8,459.3**	**9,881.7**	**1,422.4**	**16.8**
Employees benefits except for share-based payments	6,865.9	7,839.0	973.1	14.2
Payroll related taxes	1,381.4	1,620.8	239.4	17.3
Share-based payment expense on equity settled instruments	198.2	372.6	174.4	88.0
Share-based payment expense on cash settled instruments	13.8	49.3	35.5	257.2

Operating expenses grew 22.5%, slightly above the FY'21 OPEX guidance. The key drivers of the increase in OPEX were: 1) the effect of the consolidation of BierbaumPro AG and Inguru acquired during 2021; 2) the hiring of additional staff: the Group had 2,208 employees at the end of 2021 compared to 1,980 employees at the end of 2020; 3) marketing and advertising costs.

CAPITAL EXPENDITURES

Capex for the year was RUB 3.61 bln, in line with the guidance range for 2021, all of which was spent on Finuslugi development, purchases of equipment and software as well as software development.

CASH AND CASH EQUIVALENTS

The cash position[1] at the end of 2021 was RUB 90.66 bln. The company had no debt as of the end of the reporting period.

[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.

MARKET PERFORMANCE

Equity & 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 of Russian and foreign shares; government, regional and corporate bonds; Bank of Russia bonds; sovereign and corporate Eurobonds; mutual funds (PIFs), ETFs, Russian-law ETFs and mortgage participation certificates.

Trading results

Total trading volume on the Equity Market rose by 25.5% to RUB 30.0 trillion in 2021, reaching an all-time record high.

In particular, the volume of trading in shares of Russian and "quasi-Russian" companies increased by 22% to RUB 28.5 trillion. The trading volume of exchange-traded funds doubled to RUB 611 billion, reaching its highest level ever.

A record inflow of retail investors, extension of trading hours due to the introduction of pre-market trading and development of after-hours trading, as well as a significant increase in the number of instruments traded, including international stocks and exchange-traded funds, contributed to the increase in trading volume on the market.

Total trading volume on the Bond Market decreased by 26.7% to RUB 22.4 trillion in 2021, of which RUB 10 trillion was traded on the secondary market. In 2021, bonds worth RUB 11.9 trillion were placed, including 176 bond issuers (including 60 first-time issuers) placing 618 bonds for a total of RUB 3.3 trillion.

In 2021, the MOEX Russia Index and RTS Index added 15%. By the end of 2021, the MOEX Russia Index was 3,787. The index reached a record high of 4,287.52 on 20 October 2021.

Equity & Bond Market

	2019	2020	2021	Δ 2021/2020
Equity Market trading volumes, RUB billion	**12,443**	**23,904**	**29,997**	**25.5%**
Including by instrument type, RUB billion:				
Russian and "quasi-Russian" shares	12,374	23,463	28,521	21.6 %
International shares (-RM)	–	86	726	744.2 %
ETFs and Russian-law ETFs	52	295	611	107.1 %
Open-ended, interval and closed-ended mutual funds, mortgage participation certificates	18	60	139	131.7 %
including by trading sessions, RUB billion:	**12,443**	**23,904**	**29,997**	**25.5 %**
Main trading session	12,374	22,661	25,930	14.4 %
Additional tradinng sessions	–	802	2,591	223.1 %
– including after-hours session	–	802	2,437	203.9 %
– including pre-market trading	–	–	154	–
Bond Market trading volumes, RUB billion	**28,219**	**30,617**	**22,433**	**-26.7**
Secondary market, RUB bln	**10,631**	**11,085**	**10,098**	**-8.9**
Sovereign bonds (OFZ)/Bank of Russia bonds (OBR)	7,191	7,674	7,218	-5.9
Other (Eurobonds, bonds of MFOs and foreign countries)	3,440	3,411	2,880	-15.6
Primary market and bond redemptions, RUB billion	**17,588**	**19,532**	**12,335**	**-36.8**

Attracting retail investors

The number of individuals with brokerage accounts on Moscow Exchange increased by almost 13 million in 2021 and reached 27.4 million people. The number of opened individual investment accounts increased by 1.5 million reaching 4.86 million by the end of the year.

The share of retail investors in trading remained at 41%. They are the most active participants of after-hours trading with the volume traded after-hours reaching RUB 2.4 trillion (versus RUB 802 billion in 2020). The volume of pre-market trading generated by retail investors is RUB 153 million.

Private investor activity is growing rapidly. In 2021, 7.2 million clients traded on the Equity Market, with more than 550,000 investors trading daily, 2.5 times more than in 2020.

A total of 1.3 million individual investors traded on the Bond Market in 2021 (+ 60% YoY). The volume of retail bond investments in 2021 was RUB 820 billion (by net turnover on MOEX), up 33% YoY.

International securities

In 2021, the list of available securities expanded each month. A total of 466 shares and depositary receipts of the best known and largest companies in the US and other countries were admitted. By the end of 2021, a total of 521 international stocks and depositary receipts were available for trading. Forty-nine new corporate Eurobonds were also offered. The total number of listed Eurobonds reached 115 issues. The average daily trading volume of Eurobonds in 2021 exceeded RUB 1 billion (+24% YoY).

The trading volume of international stocks in 2021 amounted to RUB 726 billion (RUB 86 billion in 2020), with more than 290,000 investors having traded international stocks during the year.

In September 2021, investors were able to execute trades in the currency of their choice as settlement of trades in US dollars was made available.

During the year, great efforts were made to improve the quality of services related to trading and administrating international stocks. The terms of tax administration for dividends on international stocks were improved:

- from 1 August 2021 to 31 January 2022, NSD run a marketing promotion whereby no fees are charged for accepting and recognizing Individual Identification Form W-8BEN when paying income on US securities
- from 1 October 2021 to 30 June 2022, there will be no fee for services related to acceptance and recognition of Individual Identification Form W-8BEN for income payment on US securities submitted to NSD;
- a marketing period was established to reduce the fee from RUB 2,000 to RUB 300 for services related to processing of tax disclosure forms for payments of income on foreign securities, provided that the tax disclosure form is filed from 1 January to 31 December 2022.

NSD launched a new service for professional market participants, banks and brokerage firms, that provide access to trading in international securities on the Exchange. The service allows NSD to automate the process of accepting electronic individual identification Form W-8BEN when paying income on US securities. Data will be exchanged between NSD and professional participants through the OpenAPI protocol. By using the service, banks and brokers will be able to provide non-U.S. retail investors with the option to complete Form W-8BEN directly in their personal accounts or a mobile application.

In September, NCC was granted the status of Qualified Derivatives Dealer (QDD) by the United States Internal Revenue Service (IRS). QDD status allows Moscow Exchange to facilitate trading in US securities for banks and brokers, as well as on the Money Market. Professional traders are able to make better use of the margin trading mechanism on MOEX's Equity Market for their retail clients. With this status, NCC is now able to administer dividend equivalent income on US securities, in particular income transferred in a repo transaction, where the record date for the dividend falls between the dates of the first and second parts of the repo. This eliminates cascading tax when income is transferred through a chain of repo transactions. Furthermore, NCC relieves the buyer under the first part of the repo transaction from having to make withholding by its own. The tax administration of dividend payments without QDD status does not comply with US law.

From 27 September 2021, NCC has accepted international securities as collateral for trades executed on MOEX's markets. This allows professional market participants and their clients more flexibility in funding their operations on MOEX.

On 25 October 2021, Moscow Exchange expanded opportunities for Money Market participants to enter into repo transactions with the CCP in international securities and clearing participation certificates, as well as direct repo transactions with the CCP. From 25 October, banks and brokers can conclude repo transactions in international securities even if the record date for a dividend is between the settlement dates of the repo's first and second parts.

On 6 December 2021, the most liquid international stocks and DRs were offered for pre-market trading. In addition, the technical launch of the Foreign Liquidity Links on the Securities Market project took place. The functionality for submitting quotes from liquidity providers via the FIX protocol became available.

The trading calendar was also changed. The Exchange has decided that international securities (with the -RM postfix) are traded on official public holidays, if they are available for trading on the market they were listed first on these days. In addition, trading and settlement days in RUB and USD order books were synchronised for securities with the-RM postfix. This technology has been introduced from 1 January 2022.

Exchange-traded funds

In 2021, exchange-traded funds grew rapidly. The total trading volume of exchange-traded funds doubled versus 2020 to RUB 612 billion, while the net asset value exceeded RUB 313 billion, showing an inflow of RUB 155 billion for 2021.

At the end of 2021, 138 exchange-traded funds were available on the Exchange, of which 75 Russian-law and eight ETFs were listed in 2021. ETFs have become widely popular among retail investors due to their high diversification in terms of investment instruments: they offer investments in instruments from 50 countries worldwide. MOEX offers ETFs with different asset management methods: "passive investing", "smart beta" and "managed investing".

In 2021, a gold ETF was launched, linked to the price of gold on the MOEX Precious Metals Market. Money Market ETFs have been becoming more popular. August 2021 saw the launch of trading in the Russian-law ETF on RUSFAR tracking the value of secured money and is calculated by the Exchange based on the most Zliquid segment of the market, CCP-cleared repo in General Collateral Certificates.

The ETF line pertaining responsible investing was actively developed. Several companies created funds with an ESG investment strategy in 2021.

In November, shares of the first Russian-law ETF on the MOEX Shariah Index, 'Halal Investments', started trading. The MOEX Shariah Index is based on the selection of securities of issuers that have passed a verification procedure for compliance with Islamic principles.

Expanding trading hours

From 6 December 2021, the trading day on the Moscow Exchange Equity Market has been extended by three hours to include a morning trading session. Trading on the market now run for 17 hours a day, from 6:50 am to 11:50 pm Moscow time. Clients in the Siberia and Far East as well as the Asia-Pacific region can now benefit from more convenient trading hours offered by MOEX. Market participants are able to respond more quickly to changing global market dynamics and implement additional trading and arbitrage opportunities in the morning hours.

By the end of the year, all shares and depositary receipts on Russian stocks from the MOEX Russia Index as well as the 50 most liquid international stocks were admitted to pre-market trading. The second stage will involve admission of ETFs and Russian-law ETF.

The pre-market trading volume in 2021 was RUB 154 billion; the after-hours trading volume was RUB 2.4 trillion. The share of these additional sessions in 2021 exceeded 8.5% of total trading volume on the Equity Market.

In March 2021, updates to the INAV calculation method allowed admission of ETFs and Russian-law ETFs with rapidly growing INAV (where the market for the underlying asset included in that ETFs is traded in parallel with the fund) to after-hours trading. At the end of 2021, 64% of all ETFs traded on MOEX were also admitted to after-hours trading.

On 27 September 2021, after-hours trading in bonds became available on MOEX. Investors can now trade Russian government bonds (OFZ) and Eurobonds from 19:00 to 23:50 MSK.

In 2021, more than 45,000 clients traded after-hour on the Bond Market. One in six retail investors traded OFZs after-hours. Individuals accounted for 60% of the trading volume of the evening session. In December 2021, the average daily trading volume increased by 33% MoM to RUB 158 million.

Boosting liquidity

On 1 May 2021, Moscow Exchange launched a new marketing promotion for equities aimed at developing financial literacy and popularising investment in Equity Market instruments. As part of the program, Moscow Exchange refunded trading participants half of the fee paid in excess of the established threshold for individual clients' transactions. The threshold for calculating the premium was set to be the volume-related fee on client transactions executed in Q1 2021. To calculate the premium for the second quarter of 2021, transactions executed also in April 2021, were taken into account.

To stimulate additional liquidity during pre-market trading, Moscow Exchange also held a Wake Up MOEX competition for participants of the morning trading session on the Equity Market. The competition was held during the morning trading session (from 7:00 am to 09:50 am) from 6 December 2021 to 4 February 2022 inclusive. Individuals and trading members took part in the competition. There were separate awards for each category.

The year 2021 saw the launch of two OTC bond market products at once. First, the Exchange launched OTC order books with the CCP on Eurobonds (non-listed) for qualified investors. This will significantly expand the list of international bonds available for trading for this category of participants. Second, the Exchange launched settlement services via the CCP for paired orders resulting from OTC transactions of voice brokers.

Four new market maker programs were launched in 2021:

- MOEX GLOBAL USD program for international securities with settlement in USD during the main and evening trading sessions;
- three market maker programs for pre-market trading on the Equity Market - for securities of both Russian and international issuers ("Good Morning", "Good Morning MG RUB", "Good Morning MG USD").

A total of eight programs were up and running at the end of 2021, covering all trading periods: pre-market, main trading session and after-hours trading.

During the year, there was also active development of tripartite individual market-making agreements involving issuers and management companies. For certain ETFs the agreements were concluded on two or even three trading modes with different settlement currencies.

Attracting SMEs

In order to encourage small and medium-sized companies to enter the public market, Moscow Exchange operates the Growth Sector, which aims to raise funding for the most promising companies in the real economy, expand the list of instruments traded on the financial market and diversify investors' investments.

The Growth Sector is supported by the Federal Corporation for Small and Medium-Sized Enterprises (SME Corporation), SME Bank and the Russian Ministry of Economic Development. The Bank of Russia is the main partner in this project.

As part of the Small and Medium-sized Entrepreneurship national project, supporting incentives are available to SME issuers. In order to implement the mechanism to compensate SME issuers for the costs of going public, subsidies are provided to reimburse the issuers' expenses on the services of book runners and rating agencies, as well as on the payment of coupon income on bonds.

SMEs will also receive support in the form of sureties/guarantees for bond issues from SME Corporation and participation of SME Bank as a co-organiser and anchor investor.

In 2021, 17 issuers received RUB 24.65 million in pre-listing subsidies and 20 transactions received coupon interest subsidies totalling RUB 128.3 million.

Moscow Exchange provides support to SME issuers. From 1 January 2020, a preferential listing fee is in effect for SME issuers placing bonds in the Growth Sector, and from 27 April 2020, SME issuers are not charged for listing bonds up to RUB 400 million (the preferential period has been extended to 31 December 2022). In 2021, the volume of SME bond placements in the Growth Sector totalled RUB 7.9 billion, which is RUB 2.9 billion higher than the national project target.

Innovation and Investment Market

Moscow Exchange successfully operates the Innovation and Investment Market (IIM), which was created to to promote investment in the innovation sector of the Russian economy.

By the end of 2021, 28 securities were traded in the IIM Sector. The total capitalisation of the sector amounted to about RUB 460 billion. In 2021, total trading volumes in the IIM Sector exceeded RUB 300 billion (+20% YoY).

In order to encourage technology companies to enter the stock exchange, the following government support tools have been envisaged:

- tax relief on income from the sale or other disposal of shares, bonds of Russian organisations, investment units that are securities of the high-tech (innovative) sector of the economy, provided that they have been continuously owned by the taxpayer for at least one year as of the date of their sale;
- within the framework of the initiative "Takeoff - from Startup to IPO" approved by the Government of the Russian Federation in December 2021, small innovative enterprises will be provided with grant support to co-finance innovative projects from the Federal State Institution "Fund for Assistance to Small Innovative Enterprises in Science and Technology".

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 stock market and protecting the interests of retail and institutional investors.

In 2021, work continued to inform investors about the quality of traded securities: 60 securities of 46 issuers were included in the Increased Investment Risk Companies Sector.

The Sustainability Sector, which targets securities placed to raise funds to finance or refinance environmental and socially important projects, has been enriched with new segments and requirements.

This enabled 9 issuers to place bonds in the sector that comply with international green and social finance principles (International Capital Market Association (ICMA), Climate Bonds Initiative (CBI), Social Bond Principles (SBP), as well as the Russian taxonomy of adaptation projects.

Moscow Exchange actively works with SMEs to support the development of the respective national project. For three consecutive years, Moscow Exchange has provided listing services to SME issuers at preferential rates.

In 2021, a tariff model was developed to provide issuers with accelerated registration of programs to issue exchange-registered bonds, as well as accelerated preliminary review of documents for these services.

As of the end of 2021, 3,548 securities of 1,208 issuers were admitted to trading, including 804 shares and depositary receipts of 754 issuers and 2,495 bonds of 476 issuers.

The Exchange's quotation lists include 1,172 securities of 256 issuers: the Level 1 includes 795 securities of 162 issuers and the Level 2 includes 377 securities of 120 issuers.

In 2021, the following equity issuers entered Moscow Exchange: Fix Price, Segezha, EMC, Renaissance Insurance, Softline, CIAN, GMC Group and Positive Group.

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. Underlying assets include equity indices, shares of Russian and international issuers, federal government bonds (OFZs), currencies, interest rates and commodities (oil, precious and industrial metals, and agricultural products).

The year 2021 saw a range of upgrades, from expanded trading hours to the launch of new futures and options contracts on indices and international securities, amid a massive influx of retail clients to the market.

By year-end 2021, the number of active clients rose 31% YoY to more than 122,000. The number of accounts registered on the Derivatives Market exceeded 6.3 million (+50%, or +2.1 million new accounts). Importantly, approximately half of the trading participants (43%) were individuals.

Trading volumes

In 2021, total trading volumes on the Derivatives Market amounted to RUB 158 trln (versus RUB 129.9 trln 2020), including futures trading volumes of RUB 151.2 trln and options trading volumes of RUB 5.8 trln.

Derivatives Market

	2019	2020	2021	Δ 2021/2020
Derivatives Market trading volumes, RUB billion	**82,370**	**129,873**	**158,009**	**22%**
Futures	77,376	124,525	151,241	21 %
Options	4,994	5,348	6,768	27 %
Futures, RUB bln	**77,376**	**124,525**	**151,241**	**21%**
FX	28,996	63,368	66,691	5 %
Interest rates	12	6	3	–50 %
Single stock	4,345	3,967	7,079	78 %
Indices	16,504	29,810	38,904	31 %
Commodities	27,519	27,375	38,564	41 %
Options, RUB bln	**4,994**	**5,348**	**6,768**	**27%**
FX	1,478	1,654	2,009	21 %
Single stock	51	30	75	150 %
Indices	3,107	3,343	4,358	30 %
Commodities	358	321	326	2 %

In 2021, the trading volume increased by 22% YoY. The growth leaders were commodity contracts (+41% YoY), due to the high volatility in energy prices. Index and single stock contracts also grew (+36%). The most liquid contracts, the Brent oil and the RTS Index futures, saw trading volumes increase by 39% and 29%, respectively. The largest increase in trading volumes, up six times, was recorded in gas futures. The FX section, which is the most popular section of the market, increased by 5%.

In 2021, open interest increased even more significantly: it was half as much as in 2020. By the end of 2021, the average daily open interest on the Derivatives Market increased by 50% YoY to RUB 838 billion.

New product offering

In 2021, the Derivatives Market continued to actively develop a range of derivatives on various types of assets in order to provide additional trading opportunities for both private clients and professional participants and portfolio managers, as well as to hedge investment portfolios. At the beginning of 2022, 82 futures and 47 options were traded on the Derivatives Market.

Trading in the SPDR S&P 500 ETF Trust futures and options was launched in May. In just one year, the contract has become one of the most liquid contracts on the market. Options on this futures contract were launched in July 2021. In the short time since its launch, the new futures entered the top 10 instruments of the Derivatives Market, with daily turnover exceeding RUB 16 billion. Trading in futures on Alibaba and Baidu depositary receipts was launched in the summer.

In 2021, Moscow Exchange significantly expanded its range of single-stock derivatives. Options on futures on X5, Tinkoff, Mail.ru, Sistema, Inter RAO, Polymetal and Yandex shares as well as futures and options on OZON shares were launched.

The first futures contract on a company from the construction sector of the Russian economy, PIK-SZ futures, was introduced in the stock section of the Derivatives Market. At the beginning of 2022, the Exchange launched a futures contract on the Moscow Real Estate Index, which will enable investment funds and private investors to implement strategies aimed at profiting from changes in real estate prices.

A mini RTS futures contract became available to private investors, with a feature that the nominal volume of the contract is 10 times smaller than that of the classic RTS Index futures.

The money section of the Derivatives Market now accounts for almost half of the average daily trading volume. Currency pair contracts are the most popular with all types of investors. Cross-currency futures (Euro-Japanese yen, Euro-British pound, Euro-Canadian dollar) were launched at the end of the year.

Technological development

The main technological solution for 2021 was the start of an pre-market trading session from 7am MSK on the Derivatives Market, which made the MOEX Derivatives Market more accessible to participants from the eastern and far eastern regions of our country and provided an opportunity to react more quickly to changes in global market conditions.

FX MARKET

Moscow Exchange FX Market 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 a challenging pandemic, the exchange infrastructure is showing its advantages in terms of risk management technology, reliability of transactions and guaranteed settlement. In 2021, the share of MOEX's FX Market in the total volume of FX operations made by Russian banks across all currency pairs was on average 43%, in particular, 52% in USD/RUB trading and 65% in EUR/ RUB trading[1].

The FX Market is a global electronic platform (e-FX MOEX) which, according to annual FX Survey 2021 by Euromoney, was ranked:

- #2 in customer satisfaction among international MDPs;
- #4 in Best ECN category.

FX and Precious Metals Markets

	2019	2020	2021	Δ 2021/2020
FX Market trading volumes, RUB billion	**308,274**	**328,946**	**319,784**	**-2.8 %**
Spot	67,370	96,942	94,835	-2.2 %
Swaps and forwards	240,904	232,003	224,950	-3.0 %
Currency pairs, RUB billion				
USD – RUB	242,627	266,616	259,125	-2.8 %
EUR – RUB	51,571	50,071	43,125	-13.9 %
EUR – USD	13,349	10,880	15,964	46.7 %
CNY – RUB	551	986	1,011	2.5 %
Others	176	393	559	42.4 %
Precious Metals Market trading volumes, RUB billion	**35**	**53**	**209**	**294 %**

Trading volumes

FX Market

In 2021, the gradual growth of the Russian economy and a more predictable pandemic contributed to a reduction in volatility and speculative counterparty activity in the Russian currency market, which was reflected in the stabilisation of on-exchange FX turnover compared to the previous year. In 2021, trading volumes on the FX Market were RUB 320 trln, up 3% YoY. Spot trading volumes decreased by 2% to RUB 95 trln, and swap trading volumes was down 3% to RUB 225 trln.

The structure of trading remained almost unchanged. The spot/swap ratio was 30/70%, similar to the 2020 ratio. There was a slight diversification in the currency trading structure shifting from the main currency pairs USD/RUB and EUR/RUB in favour of the other currency pairs. For instance, volumes in TRY/RUB (up 3.4 times), KZT/RUB (up 2.8 times), and GBP/RUB (up 20%) grew faster. Trading volumes in EUR/USD (up 1.5 times), GBP/USD (up 2.3 times), USD/CNY (+40%) and other currency pairs grew actively in the liquidity service from foreign providers.

[1] Calculated based on data from the Bank of Russia: main indicators of Russian currency market (according to the Bank of Russia methodology). URL: https://cbr.ru/statistics/finr/

Precious Metals Market

In 2021, the physical volume of transactions increased 4.1 times YoY to 48.5 tonnes for gold, and 1.6 times to 40.2 tonnes for silver. In cash terms, the total trading volume in precious metals quadrupled to RUB 209.2 billion (RUB 52.6 billion in 2020).

OTC services development

In 2021, Moscow Exchange consistently expanded opportunities for FX Market participants and their clients to access global OTC markets and best prices using the Exchange's infrastructure and continued to develop new customised services for receiving and providing liquidity adopted in international OTC market practices.

At the end of June, new instruments were launched in the "Clearing via the CCP" mode (CPCL board): new currency pairs US Dollar – Chinese June, British pound – Russian Ruble, British Pound – US Dollar, Swiss franc – Russian Ruble and US Dollar – Swiss franc were introduced.

In September, it became possible to enter into swap transactions in currency pairs Euro – US Dollar and British Pound – US Dollar through Request for Stream (RFS) technology from the world's largest banks which are liquidity providers, with settlement through a central counterparty (CCP).

In addition, market participants are now able to clear OTC swap transactions with the CCP executed via OTC e-platforms. Previously, clearing of OTC trades with the CCP was available only for spot instruments. The new functionality will improve liquidity management and minimise credit and settlement risks by leveraging reliable exchange and settlement infrastructure.

MOEX's Precious Metals market participants have gained access to global gold market liquidity. In September, spot transactions at London gold market prices (Loco London, an XAU/USD instrument with T+2 settlement) were made available. Trades are executed in an automated mode via the central counterparty, subject to the single limit and netting of liabilities.

Efforts to develop and promote OTC services have had an impact on the growth of participant activity in these segments:

- in 2021, the volume of transactions in links (OTCTs, OTCFs, swaps) increased by more than 90%, exceeding RUB 2 trillion;
- in RFS mode the volume of spot transactions increased almost sevenfold, amounting to more than RUB 300 billion;
- in December, the total volume of transactions in all OTC modes exceeded USD 4.8 billion.

Technology initiatives, expanding the range of instruments and trading hours

Pre-market trading on FX and Precious Metals Markets

From March 2021, Moscow Exchange FX and Precious Metals Markets start trading at 7 am MSK. The extension of the trading period to 17 hours is part of a strategy to move closer to the 24/5 time frame of the OTC FX market. Clients in the Siberia and Far East can now benefit from more convenient trading hours offered by MOEX. On average for March to December 2021, the share of spot trades between 7:00 and 10:00 am in total spot transactions was more than 8%.

Along with the early launch of trading, when liquidity is lower, a restriction on aggressive orders was introduced. The Exchange began to limit market orders for major currency pairs when the order exercise price deviated by 0.5% from the best bid/offer available at the time of order submission, and by 1.0% for less liquid currencies.

At the beginning of December, to improve the efficiency of market pricing and reduce the risk of significant fluctuations, an opening auction for all spot instruments was launched in the morning hours of the FX Market from 6:50 am to 7:00 am Moscow time.

Launching "small lots" trading

In recent years one of the main principles of the MOEX FX Market development has been the multi-variant offer of order execution services for different volumes and types of clients.

At the end of April, to make trading more convenient for individuals, MOEX launched US Dollar - Russian Ruble and Euro - Russian Ruble instruments with a lot of one cent, which allowed making conversion transactions from one to 1,000 dollars or euro. These innovations have expanded opportunities for individuals, including in foreign securities trading with respect to coupon and dividend payments, as well as conversion transaction on the individual investment accounts.

Instruments in small lots have complemented the range of trading modes in the FX market, and each client category now has a full range of services and products, from large block trading for banks, corporates and brokers to small lot transactions for retail investors.

With the growth of retail investor transactions and the development of international securities trading, liquidity in the small lot order book began to grow rapidly, with 50 participants operating by the end of the year and volumes exceeding USD 2.9 million in December.

Development of TWAP services

The expansion of the product line and technological innovations provide participants with additional opportunities for diversification of operations and risk management, and help to increase the liquidity of the exchange-based FX market and the efficiency of participants.

Last year saw the launch of the TWAP (Time Weighted Average Price) algorithm, a new way of submitting orders that allows for the uniform realisation of a given volume within a selected timeframe.In December 2021, the average daily trading volume via the TWAP orders more than doubled YoY, exceeding USD 230 million.

Expansion of the client base

Attracting private clients

The development of digital technologies, remote identification and online customer registration systems, existing tax incentives and increased financial literacy of the population have contributed to the mass entry of individuals into financial markets. In 2021, private investors' interest in conversion transactions and investments in foreign currency assets was an important factor in the development of the MOEX FX market.

At the end of the year, the number of registered clients exceeded 16 million increasing twofold YoY (December 2020: 8 million clients). The number of active clients since September 2021 has exceeded 1 million.

In 2021, retail spot turnover was approximately RUB 24 trillion, with a 12.4% share of spot transactions (average for 2020: 12.3%).

Since 29 March, it has been possible to establish qualified investor status online on the FX and Equity Markets. In addition, brokers and banks can quickly issue cross-trade authorisations to their clients, which market participants will now also be able to do online.

With the development of remote access technology, individuals are now able to open a brokerage account online on MOEX's marketplace. Beginner investors can complete training at the Moscow Exchange School, which runs online courses with leading financial experts and experienced traders (https://school.moex.com/#/). Public education is also provided as part of the Bank of Russia's Online Financial Literacy Lessons project, the Literate Investor webinars and online classes for the older people.

Access for corporations

Much attention was paid to interaction and development of services (RFS, TWAP, etc.) aimed at new groups of FX Market clients: corporations, insurance companies, asset management companies and funds.

Last year, the following companies were admitted to trading on the FX Market: August LLC, BIOCAD CJSC, EFCO JSC, Sportmaster LLC, Adepta MC and Ferronordic Machines LLC. At the end of 2021, 45 corporations, including insurance companies, had access to the Exchange's FX Market. Total corporate turnover doubled over the year, exceeding RUB 3.6 trillion. Average daily turnover of corporations in December 2021 reached USD 316 million (December 2020: USD 138 million).

Four asset management companies gained access to the FX Market in 2021: VTB Capital Asset Management, Tinkoff Capital, Adepta Asset Management and Maximum Asset Management.

A special multi-asset web interface (corporate marketplace) - MOEX Treasury (MXT) with access to the FX Market products and services has been developed for corporate clients.

In 2021, the Federal Treasury continued to trade overnight currency swaps (lending rubles against US dollars) on the FX Market.

International presence and attracting international investors

Last year, Moscow Exchange actively worked with foreign clients to attract major international banks offering clearing as ICMs (International Clearing Members) and non-resident clients through the SMA (Sponsored Market Access) scheme via Russian brokers to the FX Market.

- Over 26,000 non-resident clients from 140 countries were registered on Moscow Exchange's FX Market at year-end.
- In 2021, the number of active non-resident clients increased 1.5 times on average, exceeding 2,000.
- In 2021, the turnover of non-resident SMA and ICM transactions grew by 13%, exceeding RUB 40 trillion (2020: RUB 35 trillion). Six trading members registered around 80 SMA logins for clients.
- Despite the growth in volumes under the SMA and ICM schemes, the overall share of non-resident spot clients in 2021 declined slightly to 36% (2020 average: 42.7%), due to faster growth in trading volumes by Russian investors, including by attracting new client segments to the exchange market and providing them with modern instruments and services.

The Exchange's FX Market was promoted to global markets; and active work with non-residents was carried out through conferences and forums such as FX Week, TradeTech, FX Hive, regular publications in the e-FOREX magazine and participation in the annual FX Survey of Euromoney magazine.

Interaction with Eurasian institutions on the development of the EAEU integrated currency market (EAEU ICM) and transactions in national currencies was expanding. Technological cooperation with stock exchanges and infrastructure financial institutions of Kazakhstan, Belarus and other countries played an important role in this area.

The Exchange continued to work actively on the development of the EAEU ICM. In 2021, Arvand Bank (Tajikistan) was granted access to the FX Market. A total of 19 banks from the EAEU/EurAsEC countries, including two international financial institutions, had direct access to the MOEX FX Market at the beginning of 2022: Interstate Bank and Eurasian Development Bank (EDB). In 2021, the turnover of the EAEU ICM members was RUB 2.6 trillion (2020: RUB 2.7 trillion). Banks from the EAEU countries operated in new segments: links with foreign providers and RFS. SberBank (Belarus) and EDB are market makers for the Belarusian ruble and Kazakh tenge.

Expanding the toolkit with ruble currency pairs with the national currencies of the EAEU, BRICS and other countries is one of the important areas of the MOEX FX Market development. Moscow Exchange is actively working to develop trading in national currencies. In 2021 the volume of on-exchange transactions grew 2.8 times for KZT/RUB and 3.4 times for TRY/RUB. Liquid on-exchange markets stimulates the use of national currencies in cross-border economic activity.

Precious Metals Market

There are 67 companies trading on the Precious Metals Market: 47 banks, 3 asset management companies, 3 gold mining companies, 13 professional securities market participants (brokerage companies and their clients) and the Bank of Russia. In 2021, the following asset management companies entered the Precious Metals Market: VTB Capital Investments, Tinkoff Capital and Alfa Capital.

Since the end of June, participants can deposit precious metals (gold and silver) as collateral for repo transactions with clearing participation certificates (GCC) in a separately created property pool, GCC GC Metal. Adding precious metals will expand the list of assets accepted as collateral and used for GCC repo which will allow participants to manage liquidity more efficiently.

Since the end of October, the lot size in GLDRUB_TOM has been reduced to 1 g and participants trading GCC repo can now post precious metals to the GS Expanded pool.

MONEY MARKET

Moscow Exchange's Money Market is one of the most important segments of the Russian financial market through which market participants carry out cash liquidity management, the Bank of Russia implements monetary policy, and the Federal Treasury deposits funds of the federal budget and, funds of the Single Treasury Account.

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 2021, total Money Market trading volumes amounted to RUB 474 trln, up 11.1% YoY.

Repo trading volumes totalled RUB 418.5 trln, accounting for 88% of total Money Market volumes; trading volumes of non-CCP deposit and credit transactions totalled RUB 55.5 trln.

The year-on-year increase in total market trading volumes was the result of a 11.3 increase (to RUB 354.8 trln) in the volume of repo transactions with the CCP. The average daily open position in repos with the CCP in 2021 increased by 30% to RUB 4.76 trln.

GCC repo continues to be the major repo product in 2021: trading volumes increased by 11.6% YoY to RUB 83.8 trln, and the average daily open position added 60% to RUB 1.5 trln.

In April 2020, Federal Treasury funds began to be deposited with the CCP via auctions. The volume of deposited funds in 2021 totalled RUB 14.3 trln.

Money Market

	2019	2020	2021	Δ 2021/2020
Money Market trading volumes, RUB billion	**346,347**	**426,781**	**474,033**	**11.1%**
On-exchange repo, RUB billion	**292,813**	**379,135**	**418,493**	**10.4%**
Direct repo with the CBR	274	2,827	466	-83.5%
Inter-dealer repo	36,441	35,125	22,445	-36.1%
CCP-cleared repo	256,075	318,876	354,775	11.3%
Incl. CCP-cleared GCC repo	54,054	75,069	83,789	11.6%
Repo with the Federal Treasury	23	22,307	40,808	82.9%
Credit Market, RUB billion	**53,534**	**47,647**	**55,541**	**16.6%**

Expanding the range of instruments

In order to provide participants of the repo market with a more flexible approach to liquidity management, MOEX implemented the following projects in 2021:

- The Federal Treasury is allowed to make repo transactions with the CCP in OFZs and government Eurobonds;
- the Federal Treasury is now able to place Treasury Single Account funds as part of on-exchange transactions;
- market participants were given an opportunity to conclude negotiated repo transactions in after-hours trading;
- repo transactions in GCC became available to unqualified investors;
- opportunities to make long-term repo transactions in Eurobonds and foreign securities were expanded;
- tenge-denominated bonds were admitted to trading on the CCP repo market;
- precious metals (gold and silver) can be deposited in GCC collateral pools;
- the clearing terminal is integrated into MOEX Treasury;
- MOEX Treasury has a news widget and a prototype of an "aggregated order book" of the CCP deposit market.

Attracting new categories of participants

MOEX continued to expand direct access to the Money Market for Russian legal entities that are not professional securities market participants.

In 2021, new categories of clients were admitted to the CCP Deposit Market: regional authorities and non-residents from EAEU countries. The Finance Committee of St Petersburg started regular deposit auctions with the CCP in April 2021.

In addition, a number of innovations have been implemented that broaden the scope for corporate clients to operate in the Money Market:

- non-state pension funds as participants of the CCP Deposit Market have been allowed place not only their own funds but also funds from the pension reserves;
- Asset management companies have been allowed to deposit funds of closed-end mutual funds and exchange-traded mutual funds with the CCP without any time limitation;
- Asset management companies have been allowed to deposit funds of endowment funds, pension savings and pension reserves with the CCP.

A total of 28 companies, including production companies, insurance companies, management companies and non-state pension funds, were admitted to trading on the CCP Deposit Market in 2021. The total number of participants in this market reached 148, and the total volume of transactions amounted to RUB 18.4 trillion.

COMMODITIES MARKETS

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

On-exchange trading in agricultural products

In August 2021, trading in wheat on the commodity auction market started. Commodity auctions are a simplified mechanism for trading new products with direct admission to trading for customers and auction participants. Transactions on the market are not cleared. Auction customers are legal entities, such as exporters, processors and producers of agricultural products operating in the market for more than three years, with a turnover of at least RUB 1 billion over the last year. The customer of the auction determines the main parameters of the auction: delivery terms, basis, starting price, minimum price step, etc. Any legal entities and individual entrepreneurs can participate in auctions. Commodity auctions attracted great interest of market participants: in the 6 months of 2021, more than 150 companies joined the auction, including major Russian exporters and agricultural holdings such as OZK Trading, Demetra Trading, Rusagro, Blago and others. The CPT Novorossiysk basis (with delivery to the port of Novorossiysk) has become the most popular base among participants as one of the country's largest grain clusters. In the first five months of 2021, the volume of agricultural products traded on the commodity auction market totalled RUB 11.4 billion, or 656,700 tonnes.

In 2021, trading in sugar continued in the form of a bilateral anonymous auction, where NSD clears and settles sale and purchase agreements concluded on the Exchange. By the end of 2021, trading volume on the sugar market was RUB 2.57 billion (2020: RUB 1.98 billion).

NAMEX is Russia's authorised exchange for state commodity and procurement interventions on the grain market. In 2021, 32,800 tonnes of grain worth RUB 394.5 million were sold from the state intervention fund (2020: 1.78 million tonnes worth RUB 21.43 billion).

Since April 2021, NAMEX has begun calculating commodity indices for wheat, barley and corn based on the prices of over-the-counter contracts registered by market participants on the exchange. Commodity indices reflect the price of wheat, barley and corn on the FOB Novorossiysk basis and are used by the Russian Ministry of Agriculture and the Federal Customs Service to set export duties on these commodities.

	2019	2020	2021	Δ 2021/2020
Grain and Sugar Market trading volumes, RUB billion	**50**	**25**	**14.37**	**-42.5%**
Grain	46	21	11.8	-43.8%
Sugar	1.98	1.98	2.57	29.8%

POST-TRADE SERVICES

CLEARING

The NCC's clearing efforts were focused on the further development of clearing services and services, improvement of the technological platform and creation of additional opportunities for clearing participants to work efficiently, comfortably and in a reliable environment on the financial market.

In doing so, NCC was guided by the Moscow Exchange Group Clearing Development Strategy adopted in 2021 and the Roadmap for implementing this Strategy, which includes a detailed action plan for developing and implementing key projects and tasks.

Key projects in 2021

Development of a new margin model on the Standartised OTC Derivatives Market

A new risk management system which is an innovative margining model for the Standartised OTC Derivatives Market, has been piloted in conjunction with the risk management divisions to improve NCC's risk-protection profile and also to help optimise the Group's costs.

The new model is based on a scenario module, which increases its versatility. In addition, it takes into account adaptive volatility estimation models, historical VaR, scenario changes in risk factors, and allows for better option valuation through a proration model, scenario shifts in risk factors, and additional scenarios.

CCP-cleared OTC transactions

As part of the development of OTC services, the FX OTC Services Development project was implemented, the main objective of which is to expand the Group's services into the OTC FX market and generate additional income from OTC clearing.

In addition, the new service provides post-trade services for transactions as part of the overall netting of participants' positions to the central counterparty (CCP), as well as enabling the expansion of trading opportunities for both local and global consumers and liquidity providers.

Direct access to clearing services for non-residents

In order to provide non-residents with direct access to clearing services on the FX, Securities and Derivatives Markets, as well as the Deposit and Credit Market, in the reporting period a functionality was automated enabling NCC to act as a tax agent in relation to income received by non-resident clearing participants, as well as their clients.

Obtaining QDD status by NCC

In September 2021, NCC was granted Qualified Derivatives Dealer (QDD) status by the US tax regulator (IRS), which allows NCC to administer dividend equivalent income from US securities, in particular income transferred under repo transactions in US securities. Furthermore, NCC relieves the buyer under the first part of the repo transaction from having to make withholding of US tax by its own.

NCC's QDD status allowed US issuers to be admitted to trading on the Exchange.

Development of the risk management system

In accordance with the approved Road Map for development of the risk management system of NCC until 2025, the main efforts in this area were focused on implementation of a set of measures to improve risk management processes, maintaining the quality of CCP management at the level required by the regulator and in accordance with international standards. In addition, the operational processes related to risk management were optimised and automated to improve the reliability and continuity of the systems supporting the risk management system.

NCC projects and objectives

- Implementation of the Model for Adaptive Anti-ProCyclicality, which aims to reduce the pro-cyclicality of NCC's margining and create a more transparent process for stakeholders to raise collateral rates.
- Develop and pilot a new margin model as part of the development of a risk management framework for the Standartised OTC Derivatives Market.

  This model will improve the risk-protection of NCC by applying full revaluation of instruments based on scenario shifts in risk factors, additional scenarios and adaptive volatility estimation models. The work was carried out jointly with the clearing development units.
- Internal validation of risk-parameter models across all markets (except for the Standartised OTC Derivatives Market), resulting in a more systematic procedure for setting and revising risk-parameters.
- Validation and revision of the methodology for determining NCC's internal counterparty ratings. As part of this task, the set of indicators and their thresholds as well as expert adjustments were adjusted, a rating model for leasing companies was developed, and the external rating comparison scale was revised. Approaches to rating individuals, sole proprietorships and representative offices based on recommendations from internal audits are taken into account.
- Revised approach to the calculation of provisions for expected credit losses for the purposes of IFRS 9. Refined methodology for determining the stage of impairment and calculating the probability of default, taking into account the type of legal entity based on international rating agency matrices.
- Implementation of automation of key processes and improvement of approaches to non-financial risk management, provision of comprehensive insurance for NCC activities, as well as updating of the business continuity management system in line with best practices.

From mid-2021, NCC began to make more detailed disclosures about its activities as a central counterparty in accordance with the regulator's new requirements[1]. In addition to the previously published scope of information, the NCC began to disclose in more detail information on risk models, as well as data on aggregate metrics of collateral requirements by market, maximum and average margin requirements and listed variation margin.

[1] Bank of Russia Instruction No. 5452-U of 30 April 2020 "On Requirements to the Composition of Information to be Disclosed by the Central Counterparty, the Procedure and Timing for the Disclosure of Such Information, and the Rules for the Provision of Information by the Central Counterparty to Clearing Members".

NATIONAL SETTLEMENT DEPOSITORY

Non-bank credit institution Joint Stock Company National Settlement Depository (NCO JSC NSD) is the central securities depository of the Russian Federation, that offers clients a wide range of services, including depository, repository, clearing services, settlement and cash services, information services, as well as collateral management and technological services.

Central securities depository

By the end of 2021, the volume of assets held on NSD accounts increased by 13.8% YoY to RUB 72.4 trln. The total amount of issued securities (ISIN) being serviced by the NSD increased by 9.7% to 29.2 thousand. The number of international securities and Eurobonds of Russian Ministry of Finance increased by 10.5% to 20.1 thousand.

At the end of 2021, the balances of Russian government bonds (OFZ) 2021 stood at RUB 15.5 trillion (+13.3% YoY).

OFZ balances in foreign nominee accounts amounted to RUB 3.0 trillion at year-end (RUB 3.1 trillion at year-end 2020). In 2021r, NSD implemented several new projects to develop its depository services:

- 465 US securities were admitted to trading on the Exchange;
- NSD took another step towards integration with the global financial market by providing investment fund services via the Euroclear Bank platform;
- NSD was actively preparing for the entry into force of the new European CSDR Settlement Discipline Regime. The requirements of the regulation are aimed at improving settlement discipline of market participants when executing securities transactions at European ICSDs Euroclear Bank and Clearstream Banking, as well as at the central securities depositories of the local markets of the European Union. As part of the project to adapt NSD's operations to the CSDR requirements, NSD launched two new settlement services: Hold and Release and Partial Release in ICSDs. Also, a process was put in place to inform participants on a daily and monthly basis of the penalties issued by the superior securities depositories and further settlements in respect of the penalties issued based on the results of the reporting period;
- the number of clearing sessions has been increased to nine for the DVP-2 service that uses correspondent accounts with the Bank of Russia.

Corporate Actions Center

In 2021, NSD switched to a new technology that ensures the transfer of lists of persons exercising rights in securities and persons for whose benefit rights in securities are exercised, as well as information about such persons and their securities in a structured form in XML format, including via the Corporate Action (CA) Web Account. The new format was developed jointly with market participants, agreed with relevant SROs and allows information to be transmitted in a single message in STP mode without the possibility of distortion or incorrect interpretation.

In 2021, NSD completed the implementation of the functionality that will enable issuers, registrars and information agencies to transmit to NSD information on CAs in the course of reorganization of joint-stock companies in the ISO 20022 structured format, electronically interact with NSD systems in the course of such CAs, and send confirmations to participants about CAs in accordance with the international standards.

Work has started to convert notices related to payments under a CA into ISO 20022 and ISO 15022 format, which can also be viewed in the CA web account. Notifications in the new format will be implemented in the summer of 2022.

During 2021 issuers initiated 3,997 meetings of securities holders using electronic voting technology, 417 CAs for redemption of securities for the amount of RUB 188.39 billion and 40 CAs related to the exercise of pre-emptive rights.

In total 18,309 correlated documents were initiated in relation to Russian securities in 2021 (+5.9% YoY), while 52,806 correlated documents were initiated in relation to foreign securities (+21.1% YoY). The growth in CAs was primarily driven by acceptance of newly issued securities. The largest increase was recorded in coupon and dividend payments on securities. In 2021, 33 annual general meetings of shareholders were held using e-voting.

Collateral management

The total volume of funds placed under repo transactions with NSD's Collateral Management System (CMS) has exceeded RUB 320 trillion since the system was launched in 2013.

The Russian Federal Treasury's cash placement under repo transactions in 2021 totalled RUB 40.8 trillion, with more than 93% of funds placed at a floating rate for a long term (more than 30 days).

The Bank of Russia's repo transactions with NSD's services totalled RUB 2.3 trillion.

In 2021, NSD continued to develop the OTC platform for inter-dealer repo with CGS. In October, participants of the platform tested a new instrument for secured refinancing in DOM.RF mortgage-backed securities. Inter-dealer repo transactions with NSD's CGS provide market participants with additional liquidity management opportunities through the use of a basket of securities and the ability to replace them throughout the life of the transaction. Transaction volume for 2021 was RUB 201.7 billion.

As part of the development of the government lender liquidity management platform, there were a number of significant events, as well as progressive movement of previously launched services.

In February, the Federal Treasury launched operations to place funds in the Single Treasury Account (STA) in repos with NSD's services. The Single Treasury Account accumulates temporarily idle funds from budgets at various levels, which enabled the Federal Treasury to place funds that had not been placed before. To launch the transactions, NSD implemented a technical solution which made it possible to segregate the margin and record the ECS funds from the federal budget funds. The volume of repo transactions with STA funds for 2021 was RUB 34.5 trillion.

In March 2021, the Federal Treasury and NSD launched repo transactions secured by mortgage-backed bonds and additional collateral in the form of a guarantee from DOM.RF.

This expanded the list of collateral available to banks. The volume of transactions for 2021 amounted to RUB 455.1 billion, with the placement period increasing from 35 to more than 90 days since the launch of operations. Fair prices for these bonds are calculated by NSD's Pricing Centre.

The Finance Committee of St Petersburg is the first constituent entity of the Russian Federation to join NSD's platform for servicing liquidity placement transactions. In 2021, RUB 57.3 billion was placed in repo transactions with collateral management by NSD. In November 2021, the region expanded the list of instruments used and started to conduct repo transactions with the RUONmDS floating rate widely used in Federal Treasury operations.

In February 2021, NSD accepted for servicing another participant, the Finance Committee of the Leningrad Region. The volume of funds placed in repo transactions totalled RUB 70 billion.

In 2021, NSD launched a new digital channel based on the collateral management web account for interaction with NSD's clearing system for the placement of temporarily available budgetary funds of state creditors. This was another milestone in the development of digital technologies and new tools to improve the reliability and security of state allocations. The Finance Committee of the Leningrad Region was a pioneer in using the new technology.

Repository

The year 2021 saw significant growth both in the number of transactions recorded by NSD's repository (45.7 million transactions (+80%)) and their value (RUB 703 trillion (+35%)). Currency instruments and repurchase agreements continued to be the main drivers in repository reporting.

The repository continued to improve services that simplify client interaction and reduce transaction costs for clients:

- as part of the development of a new area, NSD's IT solution for reporting to the repository, a technological solution was developed and offered to a pilot client to set up a direct reporting process from the client's systems to NSD's repository;
- as part of the development of interaction channels, a decision was made to develop a REST API for repository processes (work in this area will continue in 2022).

In connection with the entry into force of new laws and regulations, the following changes were implemented:

- changes related to the reform on the transfer of transactions to a central counterparty. The hedging transaction attribute was implemented in reporting;
- a functionality was developed to aggregate data on customer transactions reported to the repository;
- changes to allow NSD's repository to accept/submit data from the contract register at the client's request.

As part of the development of additional services for commercial products to provide analytical information, NSD's repository implemented customised reports based on participants' individual requests.

For the convenience of clients, flexible statement reports based on existing tabular reports were implemented in the repository's web office. Participants are now able to independently determine the information to be submitted from the register in the form of a report, there is an option to choose: sections of the contract register, forms of questionnaires, counterparties, parameters of contracts, frequency of submission of requested information.

Financial Transaction Registrar

The Financial Transaction Registrar (FTR) is a key element of the financial marketplace, accumulating information on all transactions performed on financial platforms.

In 2021, the functionality of the FTR continued to develop: new clients - operators of financial platforms - were accepted for servicing, the range of registered instruments was expanded, and the formats of extracts and notifications from the FTR that are provided via the unified portal Gosuslugi upon requests from citizens, participants of the marketplace were refined.

At the end of 2021, five financial platform operators were connected to FTR, and transactions involving deposits, bonds, fund units, electronic compulsory car insurance (OSAGO) and loans were reported.

The functionality of FTR has been was refined and prepared for the planned changes in legislation in terms of expanding the categories of participants and the product component.

Settlement and payment system

NSD's settlement services operate as an indepen- dent service area and are integrated into depository and clearing activities, forming comprehensive services.

The volume of money transfers in Russian rubles and foreign currencies in 2021 decreased by 1.1% YoY to RUB 324.7 trillion. In 2021, the volume of transfers in Russian rubles has decreased by 2.7% to RUB 279.9 trillion, while the volume of foreign currency transfers increased by 10.7% to RUB 44.76 trillion.

The number of transactions was 2.09 million, up 35.9% YoY (1.54 million). The number of transactions in RUB increased by 29.5% to 1.15 million, while the number of foreign currency transactions increased by 44.7% to 0.94 million. NSD is one of Russia's largest settlement non-banking credit institutions, a systemically and nationally important payment system in terms of settlement transactions, capitalisation and the number of financial market participants.

In 2021, the number of transactions processed through the mandatory currency control procedures increased by 39% to 750,995 transactions.

Technological services

NSD attaches great importance to developing its IT infrastructure. It offers the market technological solutions that increase the efficiency of clients' internal processes, while ensuring a high level of reliability of the solutions implemented.

SWIFT Service Bureau

In 2021, NSD successfully passed a SWIFT on-site audit as part of the Shared Infrastructure Programme (SIP) for SWIFT service bureau certification. Compliance with SIP requirements confirms a high level of security and reliability of NSD's service bureau operations.

By the end of 2021, the total number of SWIFT service bureau participants was 58. The average monthly message traffic of SWIFT service bureau clients was 748,566 messages, which is 28.9% higher than last year.

Transit 2.0

By the end of 2021, 25 corporate clients had joined the Transit 2.0 platform, 19 of which use the system on a permanent basis to work with counterparty banks on a one-stop-shop basis. Currently, 14 banks are available on the platform.

The functionality implemented for currency transfers and currency control was expanded, and joint work with banks to expand the platform's capabilities for clients is under way. The second stage of integration with MOEX Treasury was launched.

A "light" version of the platform was successfully implemented, with clients coming back with a request for further work on extending the version.

FMS Service Bureau of the Bank of Russia

In 2020, NSD became the first organization in Russia to be granted the FMS Service Bureau status by the Bank of Russia. As of the end of 2021, NSD was the only FMS Service Bureau in Russia connecting foreign counterparties to the system.

In 2021, NSD integrated the FMS functionality into Transit 2.0 to create a unified interface for greater convenience for market participants.

To date, 12 clients have been connected to the system. At the end of the year, the demand for connections increased significantly. There are plans to expand the client geography and enter the Western European market.

Information services

2021 was a year of increased automation and data quality. The number of active commercial information contracts reached 675, an increase of three times over the previous year and three times more than in 2016. Over the same period, NSD's Information Centre revenue grew 3.3 times, increasing by 9% in 2021 alone.

The Information Centre's key development areas remain:

- NSD's traditional provision of reference data on securities and issuers;
- calculation of fair value and other pricing parameters as part of the NSD's Pricing Center;
- NSD's dissemination of information through partner products, RU DATA and Exchange channels;
- analytical products on the ownership structure of various assets and the provision of financial parameters and ratios.

In 2021, technological and qualitative improvements were made to the ownership structure analytical products. As a result of this work, a product analysing the dynamics of non-residents' share in OFZs aroused interest not only among Russian, but also among foreign clients. Also, a product analysing the share of residents in OFZs by area of core business was put into commercial operation. As part of the development of the Reference Data business line, in June 2021 the "My Mailings" service was implemented with the functionality of sending notifications of information on securities published in the "Corporate Center News" newswire. The use of the service significantly reduces the time required to search for and track information messages on the securities of interest. As part of NSD's strategy until 2024, NSD's Information Center is developing a new area, Data Management. In 2021, a data catalogue was launched and an analytics platform project was initiated, which will help increase the speed of bringing information products to market and develop information services based on artificial intelligence.

Identification of financial instruments

NSD is the National Numbering Agency (NNA) for Russia and the Substitute Numbering Agency for the CIS countries, which assign ISIN, CFI and FISN codes to financial instruments. In 2021, NSD allocated ISIN, CFI and FISN codes for 2,131 Russian and 341 CIS financial instruments.

In 2021, NSD once again underwent its annual re- accreditation, confirming its status as a Local Operations Unit (LOU). NSD is the first company in Russia and the CIS countries to have such a status.

As a LOU, NSD serves 30 jurisdictions, including, in addition to the Russian Federation, the CIS countries, Western and Eastern Europe and other countries of the world, whose market participants may apply to NSD for assignment and maintenance of LEI codes. NSD continues to expand the list of jurisdictions serviced on request. In 2021, NSD assigned 65 LEI codes and verified 488 LEI codes.

In the middle of the year, NSD, following the requirements of the global operator, implemented pre-checking of LEI code data through the unified resource GLEIF, which improved the quality of information uploaded to the international database of LEI codes about their holders.

NSD's activities as a Numbering Agency and LOU ensure the implementation of international coding standards in the Russian and CIS markets, which increases their transparency, facilitates integration into the international market infrastructure, and simplifies and optimizes financial market operations.

INFORMATION PRODUCTS AND SERVICES

Moscow Exchange's information services focus primarily on providing market data containing value, quantity and cost parameters for orders 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.

By the end of 2021, the number of index-linked exchange-traded funds replicating Moscow Exchange's benchmark structure reached 27 with assets under management totalling RUB 105.4 billion. In 2021, nine new Russian-law ETFs were created based on the MOEX indices.

New benchmarks

In 2021, a range of sustainability indices, calculated by the Exchange from 2019 in cooperation with the Russian Union of Industrialists and Entrepreneurs (RSPP), was developed. A new version of the Sustainable Development Vector stock index, the MOEX - RSPP Sustainable Development Vector Index of Russian Issuers, was created, which takes into account regulatory requirements for non-state pension funds, making it possible to invest pension savings in an index basket of securities or a financial product whose underlying asset is the new indicator.

Moscow Exchange also started calculating the RSBF-RSPP Sustainable Development Vector Eurobond Index, which is based on the Eurobond loans of Russian corporate issuers included in the RSPP sample. This index was the basis for the creation of the RSHB Asset Management exchange-traded fund.

As of the end of 2021, RUB 1.7 billion was invested in sustainability index funds calculated by the Exchange.

The family of major equity indices was also developed: in April 2021, the calculation of sector indices for two new sectors - indices for construction companies and information technology - was launched.

A new area of focus for Moscow Exchange is the launch of the MOEX Shariah Index to enable Muslim investors to invest in instruments created in accordance with the principles of financial and other economic activities endorsed by Shariah, a set of regulations and rules binding on Muslims.

The index is based on the selection of securities of issuers that have passed the procedure of verification for compliance with the principles of Islamic economy.

ANALYTICAL PRODUCTS

In 2021, the range of analytical products was expanded to include offerings for all categories of clients: private investors, HFTs, brokers, management companies and issuers.

As a result of the massive influx of individuals into the market, professional participants' interest in retail brokerage market analysis increased. In addition, retail analytics became increasingly sought-after by equity, bond and mutual fund issuers. Consequently, the range of statistical indicators within the existing information products was expanded:

- a breakdown by customer segment was introduced;
- methodologies were developed to regularly assess retail client assets, their inflows and outflows.

This information is useful for evaluating the effectiveness of marketing measures, for comparing internal indicators with general market information, as well as for using in your own analytical reports for end investors.

For private investors interested in algorithmic trading, a set of intraday statistical metrics on liquidity analysis and market microstructure has been prepared to facilitate the development of automated solutions.

INFORMATION SERVICES

A new information product, Moscow Exchange FX Fixings, was introduced to users. The product is available through partner vendor channels and via subscription on Moscow Exchange's website.

The service of providing indicative risk rates for instruments not traded on the Exchange was expanded to include new classes of instruments - currency pairs and precious metals.

A broadcasting of news from news agencies in MOEX's trading terminals was launched as a pilot product called "News in Exchange Trading Terminals". The project is being developed in partnership with Interfax.

The Analytical Report of the Trade Organiser for Issuers product was expanded and enriched. Additional indicators were added to it, including a position in the "people's portfolio". The product is actively recruiting clients.

Commercial distribution of Moscow Exchange news via Dow Jones/Factiva, a major international news provider, was launched.

Distribution via partner channels of archived (historical) information with high granularity (full orderlogs of orders and transactions) for foreign users interested in or already working on the Russian stock (equity) market was launched via the platform of aggregator company BMLL Technologies.

In 2021, NSD's analytical products were technologically and qualitatively improved in terms of their ownership structure. A product was put into commercial operation that analyses the share of residents in OFZs by core business area.

As part of the development of Reference Data, in June 2021 a service called "My newsletters" was implemented with the functionality of sending notifications of information on securities published in the newsfeed "Corporate Center News". Using the service significantly reduces the time required to search for and track information on securities of interest.

In 2021, as part of the development of the Pricing Centre, the methodology for calculating the fair value of ruble bonds and bonds with a floating payment structure was significantly improved. Work was carried out to develop a prototype for assessing bond liquidity parameters in order to expand the products offered within the Information Centre.

INFORMATION TECHNOLOGIES

FIFO MFIX Trade network infrastructure upgrade

The network infrastructure of the FIFO MFIX Trade service, the fastest trading protocol for equity and currency markets, launched in 2020, was upgraded in June 2021.

The upgrade significantly increased the solution's capacity so that it can be used by all interested market players and, in response to customer requests, improved the predictability of the network infrastructure and the accuracy of timestamp recording for the TimeStamps service.

Fastest data feed for derivatives

In October 2021, a new high-speed derivatives market data feed, SIMBA, was rolled out. The service allows clients to receive market signals faster than all previously available connectivity methods.

The service speed is ensured by a newly-established software interaction between the SIMBA gateway with the central component of the trading system and a high-speed segment of the network infrastructure designed specifically for transmitting large volumes of data to multiple recipients in real time.

The new service implements the "Public Data First" principle (public market data is made available faster than private data) and eliminates the need to use multiple sources simultaneously to obtain market signals. The protocol is based on the modern Simple Binary Encoding, which significantly speeds up the process of obtaining and processing market data by clients' trading algorithms. Similar technologies are successfully used at the largest exchanges worldwide, supporting the trend of development of high-tech client trading systems.

The new service, combined with the TWIME trading protocol, delivers an optimal IT solution for clients whose trading strategies are extremely sensitive to the speed of market data feed and order entry latency.

CLIENT SERVICES

ACCESS TO THE MARKETS

In 2021, Moscow Exchange continued to improve its client services.

Particular improvements were made to the admission process for new clients. A Candidate's My Account page was created where potential clients began the process of gaining admission to Exchange and NCC services.

By registering in it, clients receive a personalised list of products and markets, as well as a list of documents and reports to be provided as part of the KYC (Know Your Customer) process.

Checking against various directories and reporting is automated.

Thanks to the innovations, customers are provided with a convenient and transparent tool that enables them to access Exchange services as quickly and easily as possible.

In 2022, the Candidate's My Account page will continue to be developed. The client will be able to sign contracts and submit applications in the same interface, which will further improve their client onboarding journey.

On the My Account page of the Trading and Clearing Member, the pre-filling of the client form with information from the Unified State Register of Legal Entities has been implemented; now the client does not need to fill in information from public sources, and the number of fields in the form has been reduced. Earlier, the shortened list of documents provided by the client for KYC was extended to the entire Group. As part of the Single File project, the exchange of client documents within the Group has begun.

For 2021, the process of identifying individuals who are clients of the Finuslugi platform has been organised and continues to be improved.

INFORMATION TECHNOLOGIES

ACCELERATING WITH RELIABILITY

The DevOps production process and development platform was launched in July, including various streamers and services. We managed to unify most development pipelines, validate the target approach for CI/CD processes on the Exchange and launch the MVP development portal. All these activities have accelerated the delivery of new value to the company, simplified and unified IT processes, strengthened the engineering culture, and increased the reliability and stability of developed products.

Processes are being improved and transparency is being increased with Perf, a tool used to obtain detailed information on performance verification and the current status of systems.

Development of data platforms and services

The Master Data Management system for tax agency reducing a number of tax payment procedures through automation was implemented. Implementation of the Issuer Risk Profile Monitoring System reduced regulatory risks and improved the quality of market maker and liquidity management. The launch of a tax monitoring showcase allowed the Exchange to automate and simplify the FTS checks process for the Exchange.

Development of the Data Governance area:

- the data quality governance operating model aimed at minimising risks (reputational, regulatory and operational) and increasing the level of satisfaction of business users with data services was launched;
- the target operating model for the development of data monetisation tasks, aimed at accelerating the development of data monetisation ideas, was approved;
- the development of the DataOps business line started, data depersonalisation platform and practices to accelerate the production of data platforms and services at the expense of external teams was introduced;
- the development of the MLOps platform to reduce the t2m tasks of implementing AI/ML solutions started;
- lifecycle management principles to optimise TCO and improve data efficiency were developed.

IMPLEMENTING BUSINESS AND TECHNOLOGY INITIATIVES

Supporting customer growth

As part of the SDLC 2.0 initiative, work was carried out to configure centralised automated system build and deployment processes, and test scenarios were automated.

The purpose of this work is to minimise possible risks in passing the software product through the lifecycle stages, accelerating the process of building, testing and deploying applications.

In order to maintain a system availability of 99.99 per cent in 2021, the incident handling mechanism in IT was improved. Activities implemented as part of the revamped incident management process resulted in the implementation of at least 50 tasks created in the wake of incidents and addressing the causes of incidents. One of the incident follow-up tasks was to enable dynamic table expansion in the ASTS Trading System, which allowed trading peaks in December 2021 and January 2022 to be passed without technical problems.

CREATING AN INNOVATIVE ENVIRONMENT

IT communities at the Exchange - associations of people linked by common interests and goals on technology practices - are being actively implemented. The main goals of the communities at MOEX are to reduce the time it takes to deliver value, speed up decision-making, create a space for sharing and networking, provide a transparent employee development pathway, and ensure Best practices and "how to".

The launch of the Innovation Lab, a new division of Moscow Exchange that seeks out innovative ideas and technologies to develop the company's information systems and products.

As part of the Innovation Lab, an experiment in graphical data visualisation was conducted for NCC. The tool will make it easier and less time-consuming to perceive large amounts of information and minimise the risk of "missing" information. The Yva.ai employee development and smart feedback system was launched in pilot mode. The tool will allow managers to obtain a comprehensive analysis of the "climate" in the team, identify cases of burnout and take preventive measures to achieve maximum productivity.

STRENGTHENING SYNERGIES WITHIN THE GROUP

The Group-wide IT Architecture Committee was established. This makes it possible to effectively implement a unified IT strategy across the Group, synchronise approaches to IT landscape management and build unified architectural principles. Joint work between the architects of Moscow Exchange, NCC and NSD has become the new norm, providing opportunities for the implementation of cross-team projects. For example, in 2021, an important infrastructure element was implemented to build a cross-group STP process for corporate actions processing: a bridge for the exchange of streaming data between NSD and the Exchange.

One important outcome of the Committee's work in 2021 was the approval of the Group Technical Policy. The new standard sets out the basic principles for the management and use of IT infrastructure across the Group.

The corporate architecture function was strengthened in 2021 with the formation of a Corporate Architecture Department at Moscow Exchange. The role of the corporate architect is embedded in the operating model. Most of the 2021 projects have already been supported by Corporate Architects, allowing the IT landscape change plans to be optimised to support the objectives of these projects.

COMPLIANCE

One of the key areas of work in 2021 in the Group was the development of a corporate compliance culture and the development of unified approaches to compliance risk management.

COMPLIANCE ROADMAP 2024

A detailed Compliance Roadmap to 2024 was developed in conjunction with the expert divisions of Group companies, which takes into account the Group's strategy and is designed to help achieve the Group's mission.

As part of the implementation of the roadmap, a significant number of measures and improvements were implemented in 2021, including:

- at the joint initiative of Moscow Exchange Group, the Bank of Russia, SROs, and trading and clearing participants, a Code of Good Conduct was developed and approved for the trading and clearing participants to which the Group provides its services. A mechanism for adherence to the Code and a hotline on the Code were implemented on Moscow Exchange's website;
- a new Code of Professional Ethics of the Exchange (internal code of Exchange employees) was approved, in the creation of which every employee of the Exchange could take part;
- all key documents included in the Exchange's compliance programme was completed were updates;
- the Exchange joined the Anti-Corruption Charter of Russian Business;
- the Exchange together with NAUFOR developed a typology of unfair practices;
- Moscow Exchange together with Deloitte prepared the study "AML/CFT. Survey of market participants";
- preliminary (scenario-based) control of market anomalies was implemented for prompt implementation of measures to stabilise the market and conduct investigations;
- compliance training courses for Moscow Exchange employees were updated. Materials were brought up to date, including the use of interactive videos and animations in the training;
- a modern automated compliance risk management system was introduced.

CONFIRMATION OF THE EFFECTIVENESS OF COMPLIANCE

In 2021 Moscow Exchange was one of the first organisations in Russia to successfully pass an independent audit and receive a certificate of compliance with international standard ISO 37301:2021 "Compliance Management System".

The certificate confirms that Moscow Exchange's compliance with international standards on:

- anti-corruption;
- combating money laundering and the financing of terrorism;
- preventing the unlawful use of insider information and market manipulation;
- resolution of conflicts of interest;
- exercising internal control over activities of organized trading and financial platform operator;
- economic restrictions.

HUMAN RESOURCES

HR POLICY

The efficiency and results-orientation of Exchange employees is one of the most important factors in achieving the Group's strategic goals. The Exchange's HR Policy aims to achieve three major objectives:

- 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.

An important challenge for Moscow Exchange in 2020 was to safeguard the health of employees in the COVID-19 pandemic, while ensuring the smooth operation of Moscow Exchange's trading and clearing systems and implementation of a number of major projects. As a technology company, Moscow Exchange is focused on developing IT systems and ensuring information security, which was the main driver of headcount growth in 2021 (+4.0%). Other drivers of headcount change in 2021 were the development of the Finuslugi platform (+2.3%) and workforce optimisation through centralisation of functions, which led to the closure of regional branches (-2.3%).

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.

Total number of employees, persons

2018	2019	2020	2021
1,710	1,791	1,981	2,199

Total number of employees in 2021 by gender, (persons):

women – 953, men – 1,246.

TRAINING AND DEVELOPMENT

One of the main approaches to staff training and development at the Exchange is flexibility. Training is quickly adapted to different formats. In 2021, for example, none of the planned training sessions were cancelled due to covid restrictions. The market is analysed and the best solutions for employee training are proposed: INSEAD, Skolkovo and THNK are business schools that have cooperated with Moscow Exchange for a number of years.

The professional training of employees is based on shorter planning cycles (individual development plans are updated quarterly instead of annually). This helps to adjust quickly and help the business achieve its goals. In 2021, 639 employees participated in various educational programmes and trainings.

In a remote working environment, additional emphasis was placed on open formats for training events to compensate for the lack of face-to-face communication with employees and to introduce them to new trends in various business areas in Russia and the world. In 2021, an average of 150 people attended the Let's Talk IT, Development Week and MITAPs with external speakers. A total of 28 events were held in an open format for all employees of the Group.

Openness is another approach that the Exchange takes in staff training. Since 2021, strategic sessions significant to the company have been held in an open format with the opportunity for all Group employees to ask questions, express opinions on plans and goals, and become part of the team to work on initiatives.

An area of continuing relevance for the Exchange is the continuity of knowledge and functions in order to minimise personnel and operational risks. In 2021, the list of successors for key positions was updated, successor readiness was assessed, and a 3-year development plan was drawn up.

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. Priorities for social support include health care of employees and their relatives, 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.

In the COVID-19 pandemic, starting in February 2020, the Exchange continued to compensate for the loss of income of all employees who fall ill, regardless of the cause of the illness. In 2021, the Exchange continued to operate predominantly remotely, providing conditions to reduce the risks of employee illness. To support staff who needed to visit the office, regular (at least once a week) COVID-19 tests were organised in the office. Two mass antibody testing campaigns for all Group employees were also carried out. Employees and family members can be tested at home, if necessary, and are provided with masks, gloves and sanitizers.

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.

OCCUPATIONAL SAFETY AND HEALTH PROTECTION

A responsible attitude to occupational safety is one of Moscow Exchange's core principles. High occupational health and safety standards are maintained and employees are continuously trained to raise their awareness of occupational health and safety issues.

Moscow Exchange organises occupational safety briefings, including introductions to newly hired employees, as well as initial, refresher and unscheduled on-the-job briefings, and has all types of occupational safety and fire safety instructions in place. In 2021, 360 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. Last year, Moscow Exchange rolled out an interactive health and safety video training course in its Kislovsky office. The course is compulsory and covers key health and safety topics that should always be kept in mind.

21 managers received distance health and safety training at a certified training centre.

Annual monitoring of the implementation of sanitary and anti-epidemic and prophylactic measures is carried out.

During the coronavirus pandemic, Group employees working in the offices were provided with antiseptic agents, gloves, personal thermometers and medical masks. Air fumigators were purchased. Protective partitions were installed in workplaces to keep COVID-19 out. Employees with fever were not allowed to work in the office.

Prophylactic disinfection was carried out daily. Final disinfection of the premises as prescribed by Rospotrebnadzor was carried out in order to prevent the prevention and spread of a new coronavirus infection. COVID-19 testing of all employees present in the office and a campaign was conducted twice to test all employees in the Group for antibodies to COVID-19.

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 order to ensure and maintain safe working conditions and prevent occupational injuries and diseases, the Group as a whole identifies potential accidents and establishes procedures to deal with them, taking into account existing and emerging plans for accident response and recovery.

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.

Due to the pandemic, all communication with the professional community in 2021 was promptly transferred to an online format. Meetings of the Exchange Council, user committees and working groups, as well as public events and forums, were held via online conferences. In parallel, a number of new interactive projects were launched aimed at effective interaction with the professional community and private investors.

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 2021, four meetings of the Exchange Council were held to consider the following issues:

- On the development of the exchange-traded fund segment in Russia.
- On a programme to develop investment literacy among private investors.
- On the Code of Good Conduct.
- On trading in foreign securities and mirror contracts during public holidays.
- On the main areas of MOEX's work with issuers.
- On the non-sponsored admission to trading of foreign funds.
- On labelling complex financial products for unqualified investors.
- On development of MOEX's Standartised OTC Derivatives Market.
- On development of the foreign securities trading segment on the Exchange.
- On the progress of the Moscow Exchange Group's customer satisfaction survey.
- On the impact of regulatory changes on the structure of the stock market.
- On the results of Moscow Exchange PJSC for certain periods.
- On the results of the Moscow Exchange Board of Directors' work and identifying priorities for the Exchange Board of Directors' future work.

USER COMMITTEES

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

The composition of most user committees is reviewed each calendar year. The members of the committees represent both professional market participants - banks and brokers - as well as issuers, non-financial companies and the regulator, the Bank of Russia.

For many years, the User Committees have been a means of communication between Moscow Exchange and the market. Members of the Committees formulate proposals to improve the regulatory framework and develop Moscow Exchange's products and services. Issues considered at Committee meetings cover all aspects of the Exchange's activities, from regulation of securities issuance and trading, information disclosure and corporate governance to technological solutions for organising on-exchange trading and clearing and settlements.

Since March, the newly established Credit Market Committee began its work with the main task of representing the interests of market participants who enter into credit contracts in order to fully and comprehensively address their needs.

The effective work of the User Committees in 2021 was maintained at a high level, despite the current epidemiological situation, thanks to the transfer of meetings to a remote format. A total of 100 meetings of the Committees were held during 2021, at which market participants discussed and provided recommendations on amendments to the Exchange rules, technology and tariffs.

EXPERT COUNCIL ON LISTING

The Expert Council on Listing has operated to improve the quality of securities analysis at admission and maintenance of a security in MOEX's list. It is responsible for reviewing, analysing and making recommendations on the listing/ delisting of securities, moving companies between the listing levels, suspending trading in securities and other issues.

The Expert Council on Listing comprises 44 members, including appraisers, auditors, bankers, lawyers, analysts, investors and methodologists.

Meetings of the Expert Council are held in the format of working groups of subject matter experts of 7–10 people approved by the Chairman of the Expert Council to consider issues on the agenda.

In 2021, six meetings of the Expert Council on Listing were held and 14 issues were considered, including the development of recommendations on amendments to the Listing Rules with respect to approaches to the listing of shares and depositary receipts that are not traded on the List of Securities Admitted to Trading.

CORPORATE GOVERNANCE DEVELOPMENT IN RUSSIA

One of the key events in the field of corporate governance and investor relations is the annual report contest which has been held by the Exchange since 1997. The competition helps to increase transparency among public companies and effective information disclosure to investors and customers.

In 2021, 128 companies took part in the 24th annual reports contest, including seven debutants. The contest was run in partnership with Institutional Investor and Joint Stock Company magazines. The jury consisted of 17 experts, including representatives of major investment funds, professional associations, NGOs and regulatory bodies, leading financial analysts, corporate governance and communications specialists.

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 800 portfolio managers and analysts from 628 banks and funds around the world.

Moscow Exchange directors have consistently won prizes in prestigious business awards. In 2021, Oleg Vyugin, Chairman of Moscow Exchange's Supervisory Board, was awarded the Best Independent Director in the Top 1000 Russian Managers, and Igor Marich, Managing Director for Sales and Business Development and member of Moscow Exchange's Executive Board, was awarded the Best Commercial Director.

Oleg Vyugin was also awarded special category Contribution to the Development of the Independent Director Institute in the XVI National Director of the Year award.

Moscow Exchange was a partner of the XV International Forum of Corporate Secretaries, an annual platform for communication and exchange of experience among corporate governance professionals.

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. In 2021, due to the epidemiological situation in the world, the Exchange Forums were held in an online format: a traditional Exchange Forum for the Russian audience was held in spring and the international forum in autumn. 25,000 foreign and Russian investors watched the broadcast. The international event featured one-to-one meetings between heads of 67 Russian corporations and investment funds. Some meetings were held as open sessions for the first time. Everyone was able to connect online or watch recorded meetings.

Moscow Exchange continued elaborating new remote formats to communicate with the professional community. As part of the MOEX Home Talks series of online meetings, Moscow Exchange representatives talk to company CEOs, discussing doing business in a changing environment, as well as development plans and new opportunities for the Russian economy and private investors. In 2021, eight meetings were held with executives of major issuers.

Состоялись 16 онлайн-церемоний по запуску новых продуктов и допуску новых ценных бумаг к торгам на Бирже, в том числе шесть церемоний по итогам IPO.

In addition, in 2021, Moscow Exchange held its annual Structured Products conference, was a partner in the business programme of the St Petersburg International Economic Forum (SPIEF), and supported events organized by self-regulatory organizations – the National Association of Stock Market Traders (NAUFOR) and the National Financial Association (NFA), as well as ACI Russia, the Association of Corporate Treasurers and Cbonds.

At the SPIEF 2021, eight cooperation and understanding agreements were signed with leading Russian and international companies to develop business ties, seek new cooperation opportunities and strengthen the financial market. The Group's executives participated in 10 panel discussions of the forum, including one session organised with the support of Moscow Exchange.

INTERNATIONAL COOPERATION

The Exchange has for many years worked with international financial organizations to learn from global best practices and to exchange experience.

At the SPIEF 2021, a Memorandum of Understanding was signed with the Qatar Stock Exchange aimed at developing cooperation and strengthening partnerships and collaboration between exchanges in all respects. The memorandum foresees exchange of information on financial markets and products of Russia and Qatar, development of business relations between the exchanges and search of new business opportunities to link financial infrastructures of both countries.

In November, at the II International Financial and Banking Forum of CIS member states in Tashkent, Moscow Exchange signed a memorandum of cooperation with the Toshkent Republican Stock Exchange (Uzbekistan). The joint efforts of the exchanges will be aimed at developing exchange instruments, opening new markets and strengthening bilateral relations. According to the memorandum, the parties will consider establishing trading links between the exchanges for cross-listing of securities included in the quotation lists of trading platforms. It also provides for sharing of the Exchange's experience in organising trades in foreign securities.

In November, a memorandum of cooperation was signed with the Uzbek Republican Commodity Exchange (UzRTSB). As part of the memorandum, a project was launched in December to trade cash-settled futures contracts on liquefied gas and cement, whose prices are determined on UzRTSB's spot market, using technology of Moscow Exchange.

IMPROVING FINANCIAL LITERACY

A massive inflow of private investors to Moscow Exchange continued in 2021. The number of individuals who have brokerage accounts with the Exchange almost doubled in 2021 to around 17 million, or more than 10% of Russia's population. Retail investors hold 27.7 million brokerage accounts. To improve the financial literacy of Russians and broaden knowledge of the principles of the exchange
and traded instruments, Moscow Exchange holds specialised events, training seminars and competitions.

In 2021, Moscow Exchange rolled out the Investor's Way, a training course developed with expert support from the Bank of Russia using the methodology of the International Organisation of Securities Commissions (IOSCO). It covers the key principles of effective investing - from understanding the risks of market operations to knowing investor rights - and explains in a simple format how on-exchange trading is organised. The Investor's Way is the first course to be accredited by the Association for the Advancement of Financial Literacy (ARF), confirming its compliance with financial education best practice. The course is available online on the Moscow Exchange School website and is free of charge for anyone. In 2021, the course's audience exceeded 1 million people.

The Moscow Exchange School's training project, the Money Makes Money podcast, was listened more than 1 million in 2021. The podcast is top rated in the Finance and Investment and Business categories on all key podcast platforms. This is a new educational programme format that combines
education with entertainment. The aim of the project is to increase financial literacy of individuals interested in investments. The second series of the project came out in 2021.

A total of 700,000 people have been trained as part of the Moscow Exchange School and more than 1,000 courses have been created.

The Exchange annually organizes competitions for private investors to demonstrate the opportunities and potential profitability of competent trading on MOEX. The 'Best Private Investor' contest has been held since 2003 and is the world's largest exchange competition for traders. In 2021, a record number of investors, more than 26,600, participated in the competition, their total trade turnover amounted to 2.1 trillion rubles. Total prize money awarded exceeded 9.1 million rubles.

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 2021, almost 17,000 investors took part in the competition, of whom more than 2,000 traded actively throughout the event.

MOEX MOSCOW EXCHANGE

04

CORPORATE GOVERNANCE

CORPORATE GOVERNANCE SYSTEM

CORPORATE GOVERNANCE MODEL AND PRACTICE

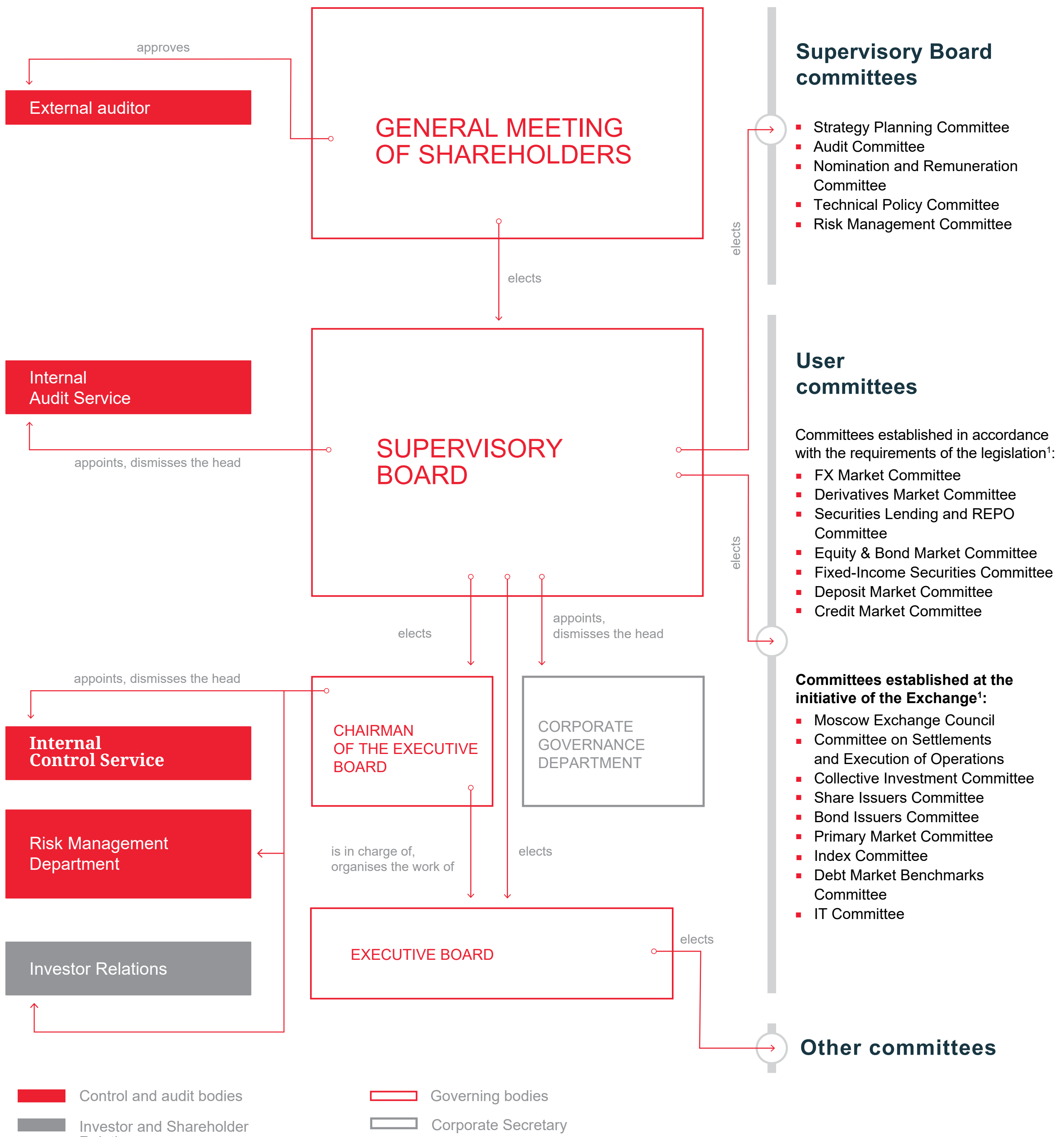
Moscow Exchange is one of Russia's largest public companies. The Bank of Russia, which acts as regulator of the financial market, is one of the Exchange's shareholders. The Exchange is also a market infrastructure operator that establishes rules for other issuers. Because of all these factors, the Exchange must adhere to the highest corporate governance standards. 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 sustain-able 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 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 2021:

- eight 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 Moscow Exchange Charter.

The Annual General Meeting of Shareholders (AGM) of Moscow Exchange was held on 28 April 2021.

In addition to reviewing mandatory and routine issues, the AGM voted for resolutions on approval of new versions of the Charter, Provisions on the Supervisory Board as well as Provisions on Remuneration and Compensation of members of the Supervisory Board.

Given the difficult epidemiological situation around the world, the AGM was held in absentia using electronic voting facilities.

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 in 2021 for preliminary consideration of key issues and preparation of recommendations for the Supervisory Board:

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

Members of the committees are selected annually from among the members of the Supervisory Board. Three of the five Supervisory Board Committees (Audit Committee, Nomination and Remuneration Committee and Strategy Planning Committee) are headed by independent directors and composed only of independent directors. Non-Board member IT experts are also invited to participate in the Technical Policy Committee.

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 and financial reporting. They also have skills in personnel policy and modern approaches to incentivizing top managers.

Following the election at the 2021 Annual General Meeting of Shareholders, the Supervisory Board included six 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 six 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 Securi-ties Market Participants (NAUFOR), for which the Exchange is a significant counterparty and Paul Bodart who is also a member of the Supervisory Board of NSD.

There are no conflicts 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 as elected from 28 April 2020 (Minutes No 61 as of 28 April 2020)	No	Composition of the Supervisory Board as elected from 28 April 2021 (Minutes No 62 as of 28 April 2021)
Independent directors			
1	Ramón Adaragga	1	Ramón Adaragga
2	Maria GORDON	2	Maria GORDON
3	Oleg VIYUGIN	3	Oleg VIYUGIN
4	Alexander IZOSIMOV	4	Alexander IZOSIMOV
5	Maxim KRASNYKH	5	Maxim KRASNYKH
6	Paul BODART	6	Paul BODART
7	Dmitry EREMEEV	7	Dmitry EREMEEV
8	Oskar HARTMANN	8	Oskar HARTMANN
Non-executive directors			
9	Andrey GOLIKOV	9	Valery GOREGLYAD
10	Valery GOREGLYAD	10	Bella ZLATKIS
11	Bella ZLATKIS	11	Vadim KULIK
12	Vadim KULIK	12	Sergey Lykov

Information on the Supervisory Board members elected at the Annual General Meeting of Shareholders held on 28 April 2021

Oleg Viyugin

an independent director was elected as Chairman of the Supervisory Board

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. Since 2007, he has been a professor at the Department of Financial Market Infrastructure, Faculty of Economic Sciences at the Higher School of Economics - National Research University.

- Since 2019, he has been an Adviser to the Director General of SFI. Since 2019, he has been an Adviser to the Director General of SAFMAR Financial Investment. He is Chairman of the Board of Directors of NAUFOR and SFI; a member of the Board of Directors of Unipro and SF Holdings Company Plc; a member of the Presidium of the National Council on Corporate Governance.

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 2021.

Ramón Adarraga

Member of the Supervisory Board, Independent Director

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

Born on 7 October 1963 in Madrid.

In 1986, he graduated from the Universidad Pontificia Comillas (ICADE, Madrid, Spain), with a degree in Economic Sciences and Business Administration.

- Currently, an independent consultant.
- From 2003 to 2019, he was a member of the Top Management Committee of BME – Spanish Exchanges– Director of the International Affairs Division, Director of the Market Data & Value-Added Services Business Unit.
- From 1995 to 2019, he was Secretary General (1995-2005) and Board member (2005-2019) at European Capital Market Institute.
- From 2004 to 2016, he was CEO at Infobolsa, S.A.
- From 2008 to 2014, he was a member of the Board of the Spanish Institute of Financial Analysts (IEAF).
- From 1994 to 2003, he was Head of International Affairs of Madrid Stock Exchange (Bolsa de Madrid).

He was first elected to Moscow Exchange's Supervisory Board on 28 April 2020.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2021.

Paul Bodart

Member of the Supervisory Board, Independent Director

Chairman of the Audit Committee, member of the Strategy Planning 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.
- From 2013 to 2019, he was a professor at Solvay Brussels School (post– degree program in financial markets).
- From 2012 to 2015, he was a non-central bank member of the T2S Board (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, independent director of Belfius Bank S.A. and member of the General Council of Hellenic Financial Stability Fund (HFSF).

He was first 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 2021.

Maria Gordon

Member of the Supervisory Board, Independent Director

Member of the Audit Committee, member of the Nomination and Remuneration Committee.

Born on 13 February 1974 in Vladikavkaz.

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

She is a member of the Supervisory Boards of ALROSA and, Polyus and a member of the Board of Directors of Detsky Mir and TCS Group Holding PLC.

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 2021.

Valery Goreglyad

Member of the Supervisory Board

Member of the Risk Management Committee.

Born on 18 June 1958 in Glussk, Glussk 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. Since 2009, he has been 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; as well as a member of the Supervisory Board of the Russian Union for Collection (ROSINKAS).

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 2021.

Dmitry Eremeev

Member of the Supervisory Board, Independent Director

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

Born on 26 July 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 first 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 2021.

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 2021.

Alexander Izosimov

Member of the Supervisory Board, Independent Director

Chairman of the Nomination and Remuneration Committee.

Born on 10 July 1964 in Yakutsk.

- In 1987, he graduated from the Moscow Aviation Institute with a qualification in System Engineering.
- 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.
- Since 2012, he has been CEO of DRC Advisors AB.
- From 1 October 2020 to17 January 2022, he was the CEO and member of the Executive Board of M.Video and CEO of MBM..

Currently, he is a member of the Boards of Directors of DRC Advisors AB, EVRAZ plc, Nilar AB and Hövding 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 2021.

Maxim Krasnykh

Member of the Supervisory Board, Independent Director

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

Born on 9 September 1982 in Yoshkar-Ola, Mari ASSR.

- In 2004, he graduated from the Finance Academy under the Government of the Russian Federation with a degree in Finance and Credit.
- In 2014, he graduated from Columbia University, MBA.
- Since 2015, COO at Gett representing management in the company's Board of Directors.
- Worked in corporate finance (PwC) and the investment sector (Intel Capital, Alfa Capital Partners, Fleming Family and Partners), where he was responsible for investments and development of technological companies, including marketplaces, and companies dealing with the voice recognition, cloud communications and logistics.
- Currently, he is a member of the Board of Directors at GT Gettaxi Systems IL.

He was first elected to Moscow Exchange's Supervisory Board on 28 April 2020.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2021.

Vadim Kulik

Deputy Chairman of the Supervisory Board

Chairman of the Technical Policy Committee, Chairman of the Risk Management Committee.

Born on 14 August 1972 in Nalchik, the Kabardino-Balkarian Republic.

- In 1996, he graduated from the D. Mendeleev University of Chemical Technology of Russia, with degree in Chemical Technology of Modern Energetics Materials.".
- In 1998, he graduated from the Financial University under the Government of the Russian Federation, Master in Finance.
- He worked at Sberbank for 6 years, became the Deputy Chair of the Executive Board. Was in charge of risk management, information and technical services and operations. Was a member of the Executive Board of Sberbank.
- From 2017 to 2020, he worked at Gazprom as the Deputy Chair of the Executive Board.
- Since 2019, he served as Deputy President – Chair of the Executive Board of VTB Bank, and since 2017, Director of the Digital Competence Centre at the Russian Presidential Academy of National Economy and Public Administration.
- Since 2017, he has been a member of the Supervisory Board of Russian National Reinsurance Company.

Currently, he is a member of the Supervisory Board of the Association for Development of Financial Technologies, member of the Boards of Directors of JSC VTB Capital Holding and JSC MultiCarta, as well as Chairman of the Board of Directors of Distributed Ledger Technology LLC.

He was first elected to Moscow Exchange's Supervisory Board on 28 April 2020.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2021.

Sergey Lykov

Member of the Supervisory Board

Member of the Risk Management Committee.

Born on 12 December 1952 in Mytishchi Moscow Region.

- Graduated from the Moscow Institute of Finance as an economist in 1975", and from the All– Union Correspondence Institute of Finance and Economics in 2018; PhD in Economics.
- In 2018, by Presidential Decree No. 513, he was awarded the honorary title "Honoured Economist of the Russian Federation".
- From 2012 to 31 March 2021, he worked as Deputy Chairman of VEB.RF, from 1 April 2021 to the present time, he has been the Chief Trustee of VEB.RF;
- in 2019 -2020, he was Chairman of the Supervisory Board of NCC; in 2016 -2019 - Deputy Chairman of the Supervisory Board of NCC. Since 2017, he has been a member of the Supervisory Board of NSD.
- He was a member of the Supervisory Board of Moscow Exchange from 2004 to 2016, a member of the Board of Directors of Belvnesheconombank (2008– 2016), Interregional Commercial Bank for Communications and Informatics Development (2009-2017), Russian Export-Import Bank (2006-2015), VEB Asia Limited (2013-2015) and VEB-Leasing (2015-2016).

He was first elected to Moscow Exchange's Supervisory Board on 28 April 2021.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2021.

Oskar Hartmann

Member of the Supervisory Board, Independent Director

Member of the Strategy Planning Committee.

Born on 14 July 1982 in Jambyl, Kazakhstan.

- In 2008, he graduated from the WHU with a degree in International Management, International Economics.
- Since 2010, he has been founder and president at Hartmann Holdings.
- Since 2012, he has been president of the Charitable Foundation to support and develop the Russian economy.
- Since 2015, he has been founder and president at Aktivo.
- Since 2017, he has been founder and CEO at Polyanka OOO.
- Since 2013, he has been co-founder and chairman of the board of directors at SELANIKAR LLC (CarPrice).
- Since 2017, he has been a member of the board of directors at Alfa Bank, and since 2020, a member of the board of directors at Samolet Group.

He was first elected to Moscow Exchange's Supervisory Board on 28 April 2020.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange in 2021.

Information on the Supervisory Board members before 28 April 2021

Andrey Golikov

Deputy Chairman of the Supervisory Board

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

Born on 14 March 1969 in Volzhsky, Volgograd region.

- In 1991, he graduated from the Lomonosov Moscow State University 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 Board of CCP NCC, and co-Chairman of the Board of Directors of NFA.

He was first elected to Moscow Exchange's Supervisory Board on 24 April 2003.

He has no interest in the share capital of Moscow Exchange. He reported no transactions involving shares of Moscow Exchange by 28 April 2021.

Activities of the Supervisory Board in 2021

From 1 January 2021 to 31 December 2021, the Supervisory Board held 21 meetings (including five in-person meetings).

Seven meetings of the Supervisory Board were held prior to and 14 meetings after the Annual General Meeting of Shareholders on 28 April 2021.

Board members' attendance at Meetings of the Supervisory Board

Full name	Length of service	Year of election
Ramón ADARRAGA	2	2020
Oleg VIYUGIN	5	2017
Maxim KRASNYKH	2	2020
Sergey LYKOV	1	2021
Maria GORDON	6	2016
Valery GOREGLYAD	8	2014
Vadim KULIK	2	2020
Bella ZLATKIS	11	2011
Oskar HARTMANN	2	2020
Alexander IZOSIMOV	4	2018
Dmitry EREMEEV	3	2019
Paul BODART	3	2019

The cumulative length of service on the Supervisory Board of all its members is 49 years.

Board members' attendance at Meetings of the Supervisory Board

Full name	Number of meetings attended	% of meetings attended
Ramón ADARRAGA	21	100
Paul BODART	21	100
Oleg VIYUGIN	21	100
Andrey GOLIKOV (member of the Supervisory Board until 28 April 2021)	7	100
Maria GORDON	21	100
Valery GOREGLYAD	21	100
Dmitry EREMEEV	21	100
Bella ZLATKIS	21	100
Alexander IZOSIMOV	21	100
Maxim KRASNYKH	20	95
Vadim KULIK	20	95
Sergey LYKOV (member of the Supervisory Board since 28 April 2021)	13	93
Oskar HARTMANN	17	81

In 2021, the Supervisory Board considered issues relating to the performance of its main functions, including:

- **strategy issues:**
  - approval a list of strategic areas overseen by the Supervisory Board;
  - endorsement of amendments and supplements to Strategy of the Moscow Exchange Group 2024;
  - Review of the Executive Board's report on the implementation of Moscow Exchange Group's strategy.
- **personnel issues:**
  - approval of the Succession Policy for Supervisory Board members;
  - review of the executive succession programme progress;
  - 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 the Marketing Programs on Equity, Bond and Money Markets trading fees as well as an update to the Regulations on Fees for Participation in Trading on the Equity and Bond Market and Deposit and Credit Markets.
- **key documents of the 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:**
  - endorsement of the Operational Risk Management Policy, the Financial Risk Management Policy, the Regulatory Risk Management Policy and the Risk Management Rules for Activities by the Exchange;
  - Approval of changes to risk appetite indicators for the Group and their ranges for 2021-2024.

Appointment, induction and training of 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 2 March 2021, 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 2021; all three were included in the list for voting at the General Meeting of Shareholders.

In accordance with 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 2021-2022 corporate year (including three candidates nominated by shareholders of the Exchange) in the list of candidates for election to Moscow Exchange Supervisory Board at the 2020 Annual General Meeting of Shareholders. In total, 12 candidates were nominated to the Supervisory Board.

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 01.01.2021–28.04.2021		Over the period 28.04.2021–31.12.2021		Total in 2021
	in-person	remote	in-person	remote	
Strategy Planning Committee	3	1	4	2	10
Audit Committee	2	1	3	4	10
Nomination and Remuneration Committee	3	2	5	3	13
Risk Management Committee	2	1	6	3	12
Technical Policy Committee	2	–	4	–	6

Board members' attendance at committee meetings

Full name	Strategy Planning Committee	Audit Committee	Nomination and Remuneration Committee	Risk Management Committee	Technical Policy Committee
Ramón ADARRAGA	100	100			
Paul BODART	100	100			
Oleg VIYUGIN	90		100		
Andrey GOLIKOV (member of the Supervisory Board until 28 April 2021)	100			100	
Maria GORDON		100	100		
Valery GOREGLYAD				100	
Dmitry EREMEEV	80				50
Bella ZLATKIS					
Alexander IZOSIMOV		100	92		
Maxim KRASNYKH	100		100		67
Vadim KULIK				100	100
Sergey LYKOV (member of the Supervisory Board since 28 April 2021)				100	
Oskar HARTMANN	100				100

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:
- Paul Bodart, Chairman of the Committee;
- Members of the Committee: Ramón Adarraga, Maria Gordon.

54 issues were considered at meetings of the Audit Committee in 2021.

The main issues considered by the Committee in 2021 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 status of the Exchange's compliance, preliminary results of the audit of Group companies, implementation of the consolidated business plan, implementation of the Group's Internal Audit Development Strategy, as well as the audit of the Group's corporate culture.

The Committee gave an assessment of MOEX's existing risk management system, considered and recommended to the Supervisory Board to adopt, the Internal Audit Policy (Standard), Internal Control System Principles, as well as Regulations on Identifying and Preventing Conflicts of Interest by Moscow Exchange while Acting as Trading Organiser and Financial Platform Operator.

In 2021, the Supervisory Board recommended that the General Meeting of Shareholders select Ernst and Young LLC as external auditor upon the recommendation of the Audit Committee and the corresponding decision was made at the Annual General Meeting.

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 con-trolled 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:
- Alexander Izosimov, Chairman of the Committee;
- Members of the Committee: Oleg Viyugin, Maria Gordon, Maxim Krasnykh.

54 issues were considered by the Nomination and Remuneration Committee of the Supervisory Board in 2021.

The main issues considered by the Committee in 2021 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, training of members of the Supervisory Board of the Exchange, nomination of candidates for the Supervisory Board, 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, Supervisory Board and management succession program and early termination or extension of powers of the Chairman of the Executive Board, members of the Executive Board as well as selection of new members 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 con-trolled by the Exchange in the long and medium term.

Composition of the Committee:

- Ramón Adarraga, Chairman of the Committee;
- Members of the Committee: Paul Bodart, Oleg Viyugin, Dmitry Eremeev, Maxim Krasnykh, Oscar Hartmann.

59 issues were considered at the meetings of the Strategy Planning Committee of the Supervisory Board in 2021.

The main issues considered by the Committee in 2020 and on which recommendations were given to the Supervisory Board related to further development of the marketplace Finuslugi, the Exchange joining the Russian Derivatives Council, the Exchange's position in a competitive environment, and consolidated business planning issues.

Risk Management Committee

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

Composition of the Committee:

- Vadim Kulik, Chairman of the Committee;
- Members of the Committee: Valery Goreglyad, Sergey Lykov

37 issues were considered by the Risk Management Committee of the Supervisory Board in 2021.

The main issues considered by the Committee in 2021 and on which relevant recommendations were given to the Supervisory Board related to the revision of the Rules and Policies for managing various types of risks at the Group, including business continuity, operational, non-financial, non-economic, compliance and other types of risk. At the meetings of the Committee, special attention was paid to the follow-up of the Committee's previous recommendations.

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:

- Vadim Kulik, Chairman of the Committee;
- Members of the Committee: Dmitry Eremeev, Maxim Krasnykh,

29 issues were considered by the Technical Policy Committee of the Supervisory Board in 2021.

The main issues considered by the Committee in 2021 and on which recommendations were given to the Supervisory Board related to the implementation of the IT strategy of the Group and its technical policy, the Strategy for Introducing Cloud Technologies, the Artificial Intelligence Competence Centre and the main directions of innovation development.

ASSESSMENT OF SUPERVISORY BOARD AND COMMITTEE PERFORMANCE

In accordance with the recommendations of the Bank of Russia Corporate Governance Code and best international practices, Moscow Exchange assesses internally the performance of the Supervisory Board on an annual basis; once in three years, the Nomination and Remuneration Committee of the Supervisory Board regularly engages an external consultant for an independent assessment (scheduled for 2022).

In 2021, a self-assessment of the Supervisory Board was performed internally which monitored the dynamics of changes in the activities of the Supervisory Board and the committees as well as determined the priority areas for the Board for the next corporate year. The assessment was performed via an online platform that ensured the anonymity for the Board members thereby improving the credibility of the system and giving the ability to express criticism where necessary. Ten directors participated in the self-assessment that allowed to achieve adequate representativeness of the answers.

Assessment results

Most of the aspects related to the Supervisory Board practices were highly rated by the members of the Board, with the overall average rating of the Supervisory Board being 5.8 out of 7 (in 2020, 5.3).

All participants of the assessment acknowledged that meetings of the Board are held in a right place with the enough number of directors participating and that meeting materials are provided using modern technologies. The members of the Supervisory Board were unanimously commended for complying with the confidentiality policy with regard to information that becomes available to the members of the Supervisory Board and for applying it appropriately. The Supervisory Board's practices of monitoring the performance of the Chairman and members of the Executive Board, assessing their performance at least once a year, making decisions regarding senior management, including appointment and termination, remuneration and benefits, were generally recognised.

The assessment confirmed regular meetings with the company's external independent auditor and receipt of its opinions, taking reasonable steps to ensure timely and regular provision of accurate reporting on the company's financial results to the regulators in accordance with accepted accounting and financial reporting principles, and the involvemen of the Supervisory Board in the selection of the external independent auditor. The participants were unanimous in their appreciation of the Supervisory Board's practice of monitoring operational and financial performance, as well as of the approval of all relevant corporate policies and procedures, monitoring compliance with them and making material changes to the existing corporate policies. The active involvement of independent directors is confirmed - the independent directors are well informed and prepared for the Board meetings and actively participate in the meetings, while the number of independent directors is sufficient for the Supervisory Board to objectively review issues within its competence. The Chairman of the Supervisory Board also received overall high praise - he is well prepared for the meetings and actively participates in the meetings, as well as devotes time and energy to learning more about the company and its activities, and participates in company events outside the Supervisory Board meetings, but most importantly, adds quality and value to the Supervisory Board meetings.

However, the self-assessment highlighted the need to further improve the regulations for board and committee meetings, to seek greater compactness and substance in the material provided, to return to a in-person meeting format (subject to epidemiological limitations), and to pay greater attention to the corporate culture and ethical principles in the company. Board members recognised that there had been insufficient progress over the past period in directors' awareness of other directors' improvement of their skills and their level of knowledge and awareness of the company, as well as insufficient opportunity for directors to receive feedback on the company's performance from middle management, without the involvement of senior management.

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.

Since October 2013, Alexander Kamensky has served as Director of the Corporate Governance Department.

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 2014–2021, 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.

He reported the following transactions involving shares in Moscow Exchange in 2021.

Date	Purchase (in shares)	Sale (in shares)	Balance	Equity interest, (%)
01 January 2021			8	0.00000035
12 May 2021	300,000		300,008	0.013
12 May 2021		200,723	99,285	0.004
15 September 2021		20,000	79,285	0.003
22 September 2021	20,400		99,685	0.004
30 November 2021		50,000	49,685	0.002
01 December 2021		49,000	685	0.00003
10 December 2021	50,000		50,685	0.002
13 December 2021	50,000		100,685	0.004

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.

FURTHER DEVELOPMENT OF CORPORATE GOVERNANCE

In 2020, the Supervisory Board defined the following main priorities on the basis of self-assessment: to arrange monitoring over the implementation of the Group's strategy using the certain metrics, to focus resources on achieving results compared to competitors, and to increase revenue from market data. As for the Exchange's subsidiaries, the focus was on the progress of the implementation of the Memorandum of Understanding between NCC and Moscow Exchange, as well as the Shareholders' Agreement concluded in respect of NSD. Significant attention is planned to be paid to management succession planning. It is planned to monitor changes in the level of engagement and NPS of Moscow Exchange in line with the approved corporate KPI.

In 2021, the Supervisory Board amended and supplemented Moscow Exchange Group's Strategy 2024, reviewed Moscow Exchange Group's sustainability objectives, decided to reappoint the Chairman of the Executive Board, approved the Code of Good Conduct, approved the Code of Ethics of Moscow Exchange, policies (standards) on internal audit of Moscow Exchange, Regulations on Identification and Prevention of Conflict of Interest in Activities of Moscow Exchange as the Market Operator and Financial Platform Operator, Regulatory Risk Management Policy of Moscow Exchange and Succession Policy for Members of the Supervisory Board of Public Joint-Stock Company Moscow Exchange MICEX-RTS, Listing Rules of Moscow Exchange, Financial Risk Management Policy of Moscow Exchange, Operational Risk Management Policy of Moscow Exchange, Business Continuity Plan of Moscow Exchange, new versions of the Rules for Risk Management in Trading Organisation Activities, Regulations on the Share-Based Long-Term Incentive Programme for Moscow Exchange employees with key expertise, reviewed the Moscow Exchange Group's Clearing Development Strategy 2024, decided on Moscow Exchange's participation in the Russian Derivatives Council, and explored opportunities to increase revenue from Moscow Exchange Group data sales.

MOSCOW EXCHANGE'S CORPORATE GOVERNANCE CODE

In 2019, the Exchange's Supervisory Board approved a new version of Moscow Exchange's Corporate Governance Code.

The Code complies with 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, other principles of corporate governance, recommended by recognised international organisations; it complements the Exchange's corporate governance system with procedures that comply with high standards of corporate governance.

The main purpose of the Code is to describe the corporate governance system currently applied on the Exchange to protect the rights and interests of its shareholders, enhance the efficiency of the activities of the Exchange, as well as improve the transparency and attractiveness of the Exchange for shareholders and consumers.

The Exchange's Code describes the system, principles and practices of corporate governance of the company, risk management and internal control. It provides for principles designed to ensure the protection of legitimate rights and interests of shareholders and the equal treatment of all shareholders when they exercise their rights. Additionally, the Code contains the Exchange's corporate social responsibility goals and principles, the principles of interaction with shareholders, service users and other stakeholders and the principles of corporate governance at Group companies.

A distinctive feature of the document is that it provides the background and mechanisms for the further improvement of the corporate governance system of the Exchange as well as 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. To achieve these goals, the Supervisory Board adopted the Exchange Information Policy. The document is available on the Exchange's website (https://fs.moex.com/files/11122).

The information policy is a body of rules that the Exchange (including members of its management bodies, officials and employees) adheres to 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 management principles set out in the Bank of Russia's Corporate Governance Code

Methodology used by the Exchange to assess compliance with the corporate management 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 Governance Code.

The results of the assessment are contained in the Report on compliance with the principles and recommendations of the Corporate Governance 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 Governance Code. An annual analysis of the results of the corporate governance assessment shows an increasing trend in the number of principles and recommendations observed.

DIRECTORS' LIABILITY INSURANCE

The liability of Moscow Exchange's directors and officers (including independent directors), as members of the Company's management bodies, is insured on annual basis. 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 2021, the insurance premium is USD 520,000, 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:

Ernst & Young LLC.

INN (Taxpayer Identification Number): 7709383532.

OGRN (Primary State Registration Number): 1027739707203.

ORNZ (Principal Number of Registration Entry): 12006020327.

Located at: 115035 Sadovnicheskaya naberezhnaya 77 bld.1 Moscow Russian Federation.

Full name of the self-regulatory organisation of auditors of which the auditor is a member: Self-regulated organisation of auditors Association Sodruzhestvo.

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

Auditing Team:

- Maria Ignatieva, Project Partner;
- Dmitry Vainshtein, Partner, Quality Control;
- Anastasia Erokhina, Senior Audit Manager;
- Elina Bakieva, Audit Manager;
- Irina Zlobich, Business Assessment Partner;
- Nikolay Samodaev, Partner, IT and IT Risk;
- Roman Moraru, Senior Manager, IT and IT Risk;
- Alena Gikalova, Business Assessment Manager;
- Oleg Chernyshev, Director, Financial Risks;
- Ivan Sychev, Tax Audit Partner;
- Margarita Igelnik, Senior Tax Audit Manager.

The fee for the audit of the annual accounting (financial) statements of Moscow Exchange and of the consolidated statements of Moscow Exchange Group for 2021, as well as the review of the consolidated statements for 6M 2021 was RUB 18,780 thousand, including VAT.

Ernst & Young LLC rendered other services to Moscow Exchange in 2021 under agreed procedures beyond audit services. The amount of the services rendered was RUB 2,580 thousand, including value added tax.

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 ap-prove 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") and by the latest version of the Remuneration and Compensation Regulation (the "Regulation") approved by the Annual General Meeting of Shareholders in April 2021.

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 Moscow Exchange Supervisory Board.

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.

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, also 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.

The amount of the basic and supplementary remuneration of a member of the Supervisory Board 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.

Apart from the remuneration for work on the Supervisory Board and Supervisory Board Committees, 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 per-forming 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.

Payments (by types of remuneration), RUB thousand

No	Full name	Total remuneration for work in the Board and Committees incl. indexation	Travel expenses and other payments	Remuneration for work in governance bodies of subsidiaries	Total amount of all payments and compensation		
					2021	2020	2019
1	Ramón Adarraga	12,583	0	0	12,583	0	0
2	Paul Bodart	15,280	0	5,770	21,050	15,569	5,820
3	Oleg Viyugin	20,510	1,850	0	22,360	24,627	17,800
4	Andrey Golikov	14,843	0	3,822	18,665	26,108	20,029
5	Maria Gordon	13,764	714	0	14,478	14,726	8,332
6	Valery Goreglyad	0	0	0	0	0	0
7	Dmitry Eremeev	10,930	0	0	10,930	10,433	0
8	Bella Zlatkis	5,398	0	7,029	12,427	12,056	8,750
9	Alexander Izosimov	13,764	0	0	13,764	15,379	9,321
10	Maxim Krasnykh	12,954	0	0	12,954	0	0
11	Vadim Kulik	11,065	0	0	11,065	4,000	3,250
12	Oskar Hartmann	11,335	0	0	11,335	0	0

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.

Information on the Chairman of the Executive Board

Yury Denisov

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. By resolution of the Supervisory Board (Minutes No 11 of 27 October 2021), Yury Denisov was re-elected as Chairman of the Executive Board for a term from 13 May 2022 to 12 May 2025.
- In 2003-2015, he was co-chair of the National Foreign Exchange Association.
- In 2013-2020, he was a member of the Supervisory Board of Moscow Exchange.
- He is the Chairman of the Supervisory Boards of CCP NCC and a member of the Supervisory Board of NSD, as well as a member of the Executive Board of the Russian Union of Industrialists and Entrepreneurs.

He reported the following transactions involving shares in Moscow Exchange in 2021.

Date	Purchase (in shares)	Sale (in shares)	Balance	Equity interest, (%)
02 July 2021	1,666,667		1,666,667	0.073
02 July 2021		869,918	796,749	0.035

Information on Members of the Executive Board

Andrey Burilov

Chief Information Officer (CIO)

Born on 18 March in 1975 in Chelyabinsk.

- He graduated from Lomonosov Moscow State University with a qualification in Computational Mathematics and Cybernetics.
- Prior to joining Moscow Exchange, Mr. Burilov served as vice president and IT director at SMP Bank. From 2013 to 2018, he was department director and a member of the Executive Board at Sberbank Technologies. From 2005 to 2013, he worked at Renaissance Capital. He began his professional IT career in 2001 at Deutsche Bank, where he created, developed and maintained an equity trading platform.
- In June 2020, Andrey Burilov was appointed Chief Information Officer and approved as a member of Moscow Exchange Executive Board. His term of office is until 8 June 2023.

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

He reported no transactions involving shares of Moscow Exchange in 2021.

Maxim Lapin

Chief Financial Officer (CFO)

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 February 2014 to July 2016, he headed the Business Development & Performance Management Department of the Magnitogorsk Iron and Steel Works.
- In August 2017, he became an Advisor to Moscow Exchange. From 2 October 2017 to 10 December 2021, he was a member of the Executive Board of Moscow Exchange.

He reported the following transactions involving shares in Moscow Exchange in 2021.

Date	Purchase (in shares)	Sale (in shares)	Balance	Equity interest, (%)
01 January 2021			146,152	0.0064
02 September 2021		10,000	136,152	0.006
09 November 2021		30,000	106,152	0.0046

Igor Marich

Managing Director for Sales and Business Development

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 until 18 July 2024.
- 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 a member of the Board of Directors of the National Financial Association and NAUFOR.

He reported the following transactions involving shares in Moscow Exchange in 2021.

Date	Purchase (in shares)	Sale (in shares)	Balance	Equity interest, (%)
01 January 2021			148,189	0.0065
05 March 2021	197,036		345,225	0.015

Dmitry Shcheglov

Chief Operating Officer (COO)

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 3 April 2020 to 31 March 2023.

Number of shares held / equity interest in the Exchange: 130,426 shares/0,0057%.

He reported no transactions involving shares of Moscow Exchange in 2021.

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 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.

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. From 2021, corporate indicators has been having more impact on the size of the bonus for Executive Board members: the ratio of corporate and individual indicators was 40:60 before 2021, it was set at 50:50 in 2021 and will be 70:30 from 2022. Furthermore, from 2020, for the Chairman of the Executive Board, corporate key performance indicators are also his individual ones, i.e. they account for almost 100%.

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 2021 will be made in 2022, 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. From 2 July 2020, a new programme has been in place, under which the right to obtain shares becomes effective in stages: over periods of three, four and five years after the programme start, provided that the contracts of the members remain 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.

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.

The Exchange does not lend to members of management bodies and does not enter into civil law contracts with them for the provision of services to the Exchange, including any contracts on non-market terms.

Remuneration and Compensation Paid to Executive Board Members in 2021, thousand RUB

	Amount
Remuneration specifically paid for participating in work of the Executive Board	0.00
Salary/wage	145,779.27
Bonus	148,671.83
Commission fees	0.00
Remuneration for work in governance bodies of subsidiaries	
Expense reimbursement	0.00
Other types of remuneration	7,456.82
TOTAL	**301,907.92**

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 Russian and other regulatory bodies ("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 and Compliance Department, Internal Control Service, Security Department and Legal Department as well as certain employees and divisions of the Financial Division, which carry out continuous risk monitoring and management also 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, terrorism financing and corrupt practices;
- 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 Stabilization 3.0 project The Internal Control System was subject to an independent audit conducted by EY in 2019, which assessed the system maturity level as "developed". In 2021, the Moscow Exchange Group companies completed the implementation of the EY audit recommendations. The Group continues to enhance its internal control system to improve effectiveness and maintain the system at a high level, which will be confirmed annually by passing supporting audits according to the international standard ISO 37301:2021 - Compliance Management Systems.

RISK MANAGEMENT

KEY RISKS

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, Moscow Exchange, being the parent company of the Group, assumes the risks of a market operator, risks related to operations in its assets as well as risks of a financial platform 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 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;
- Settlement and clearing system;
- Trade repository;
- Tripartite services;
- Corporate actions 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 2021, the Exchange was reaffirmed under the ISO/IEC27001:2013 (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 Ex-change and NCC fully meet over 100 technical and administrative requirements in the area of information security and business continuity.

In 2021, Moscow Exchange renewed insurance contracts covering Electronic and Computer Crime and Personal Indemnity to mitigate operational and information security risks.

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 deter-mining 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, in 2021, companies of the Group revised the risk appetite of the Moscow Exchange Group set by the Supervisory Board of Moscow Exchange in 2020. The Group's risk appetite is designed to help the Supervisory Board of Moscow Exchange, as the Group's parent company, manage the Group's overall risk level taking into account all intragroup effects and to set a target risk/return ratio for the Group.

The Group's risk appetite is set in relation to risks recognised as significant at the Group level, and inherent to all Group companies and equally measurable. The risk appetite of each company within the Group consists of a decomposed part of the Group's risk appetite and individual indicators reflecting the specific risks of a particular company.

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.
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.
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 recordkeeping 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.

Risk	Description	Actions
Compliance (regulatory) risk	Risk of losses caused by non-compliance with the laws, internal regulations, self-regulating organizations' standards (if mandatory), as well as by sanctions and/or other actions taken by regulatory authorities	The compliance risk is managed by the Group's responsible business units within the Group's unified compliance structure. As part of the activities of the Compliance Committee managed by the Chairman of the Executive Board of Moscow Exchange, Group companies seek to unify their approaches and implement best Russian and global practices in compliance risk management.
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 Moscow Exchange Group's development; ▪ controlling the consistency of the risk management parameters with the Exchange's current condition and its development strategy
Tax risk	uncertainty regarding the achievement of a business goal as a result of factors related to the taxation process, which may manifest itself as financial losses or other negative consequences resulting from current or future events and processes in the area of tax legal relations and tax accounting, or events or processes affecting tax legal relations and tax accounting.	Tax risk may arise in all areas of the Exchange's activities without exception, as well as have different causes (factors): both related to the Exchange activities and under its control (internal tax risks), and caused by external factors beyond the Exchange's control (external tax risks). The Exchange's main goal in managing tax risks is to limit the negative consequences of tax risks (reputational, financial, personal liability for the Exchange's management and others) for the Exchange. This goal is achieved through the use of effective tax risk management methods and mechanisms compliant with the requirements of regulators and best practices, including raising awareness of the Exchange's management bodies of the level of risk taken when making management decisions, as well as ensuring a common understanding of tax risk and acceptable level of tax risk for the Exchange.
Information security risk	risk associated with the potential loss of the security properties (confidentiality, integrity, availability) by the Company's information assets as a result of the occurrence of information security threats.	Information security is understood as the protection of information and means of its processing from accidental or intentional impacts of natural or artificial nature. The main objective of the measures aimed to ensure information security is to achieve adequate protection of the Company's business processes and minimize information security risks when organizing trading and providing services on the Equity & Bond, Derivatives, FX and Money Markets. This goal is achieved by ensuring and constantly maintaining the confidentiality, integrity and availability of the Company's protected information assets.

RISK MANAGEMENT STRATEGY

In 2021, the following Exchange and Group strategies approved by decisions of the Supervisory Board continue in force:

- Moscow Exchange's Information Technology Strategy through 2024 (approved on 1 October 2020);
- Moscow Exchange Group's 2024 Risk Management Strategy (approved on 29 October 2020);
- Moscow Exchange Group's Information Security Strategy for 2021-2024 (approved on 10 December 2020).

In 2021, the roadmaps developed earlier under the 2024 Risk Management Strategy continued to be implemented.

The Information Security Strategy sets out measures aimed at reducing the likelihood of actual threats to the information security of Moscow Exchange and defines key performance indicators for the implementation of the 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 Commit-tee 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.

At the end of 2021, the Supervisory Board also developed and approved a Financial Stability Recovery Plan for Moscow Exchange, taking into account the interaction with other companies from the Group.

The Exchange is constantly developing and improving its risk management system to reduce the vulnerability of business pro-cesses 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.

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 has developed and approved the Regulations on Managing the Risks of a Market Operator and the Regulations on Managing the Risks of a Financial Platform Operator. In addition, the Exchange has also set up a separate structural unit aiming to identify and assess risks in a timely manner and to develop mitigation measures.

In addition, the Group's Risk Management Development Strategy through 2024 was developed and, as a follow-up, roadmaps were approved that include a description of specific objectives in such areas as risk management development, risk culture, deepening of core markets, balance sheet management, treasury and capital management. In particular, in pursuance of this Strategy, the Supervisory Board of Moscow Exchange approved the Group's risk appetite indicators and their thresholds.

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.

Entering a new market and receiving the status of a Financial Platform Operator by Moscow Exchange entail new risks, in particular information security risks and reputational risks came from the arrival of a new category of customers - individuals.

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 3.0 programs being implemented results in the re-duction 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 are analysed and assessed for the possibility of achieving strategic objectives, as well as substantial delays and/or negative variances in implementation of the budget for strategic projects and initiatives considering the Group's 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
Number of shares purchased by the company	0 shares

In 2021, Moscow Exchange's share capital remained unchanged. As of 31 December 2021, 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 also 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. They are also in the sectoral index for Finance and the equity sub-index of the Pension Savings Assets Index. As of 14 February 2022, Moscow Exchange shares were included in four thematic sustainability indices: MOEX-RSPP Responsibility & Transparency Index, MOEX-RSPP Sustainability Vector Index, MSCI Europe and Middle East ESG Leaders Index and FTSE4Good Emerging 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.

Moscow Exchange ownership structure

Shareholder	31 December 2020		31 December 2021	
	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	120,472,902	5.292
Capital Research and Management Company	130,253,299	5.722	14,398,523	0.633
MICEX-Finance	18,551,238	0.815	18,922,617	0.831
Free float (excl. MICEX-Finance; incl. Capital Research and Management Company)	1,432,544,332	62.930	1,449,872,953	63.691

The Exchange has no shareholders possessing 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 2021, the total number of MOEX shareholders was 379,018, including 377,912 individual shareholders. MICEX-Finance, a controlled entity of the Exchange, held 18,922,617 shares (0.831% of the share capital).

In 2021, the Exchange executed no special-purpose related-party transactions with its shareholders. All transactions were of market nature and were executed on terms and conditions similar to those applied in transactions with other counterparties of the Exchange.

REGISTRAR

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

Full company name	Joint-Stock Company "Registry company STATUS"
Place of business:	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
Licence	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 Fax: +7 (495) 678-71-10 E-mail: office@rostatus.ru

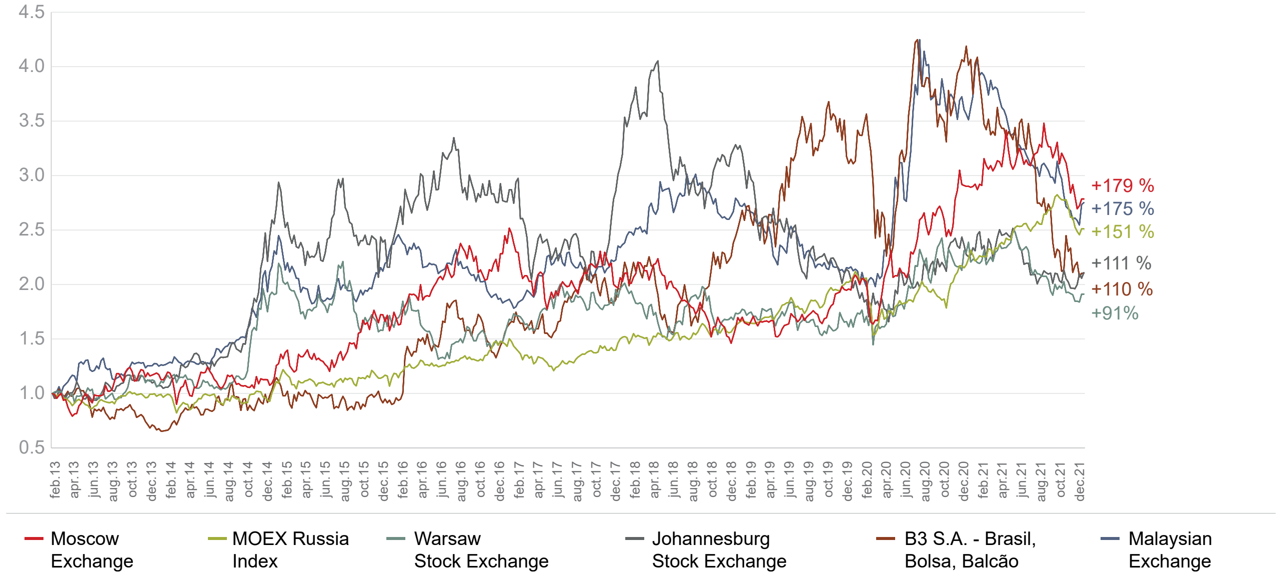
For more details, please visit the company's website: www.rostatus.ru.

MOEX SHARE PERFORMANCE

As of the end of 2021, Moscow Exchange's market capitalization was RUB 348,8 bn (versus RUB 362.5 as at the end of 2020). Since MOEX's IPO in 2013, the share price has increased by 179% excluding dividend payments.

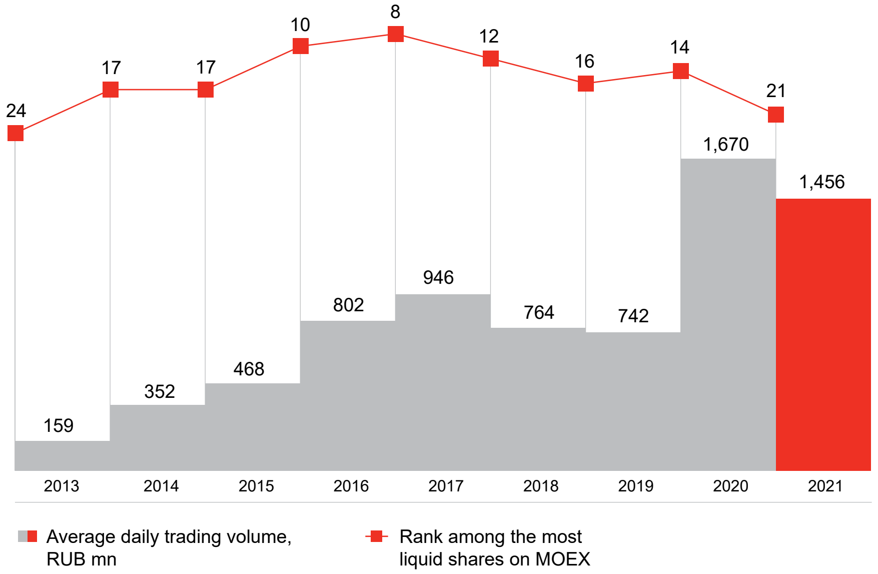
In 2021, the average daily trading volume (ADTV) of the company's shares was more than RUB 1 billion for the second consecutive year.

Performance of MOEX share versus MOEX Russia Index and peer shares in 2013–2021 (February 2013 = 100%)*



* All quotes are in RUB.

ADTV and liquidity position versus most liquid shares**

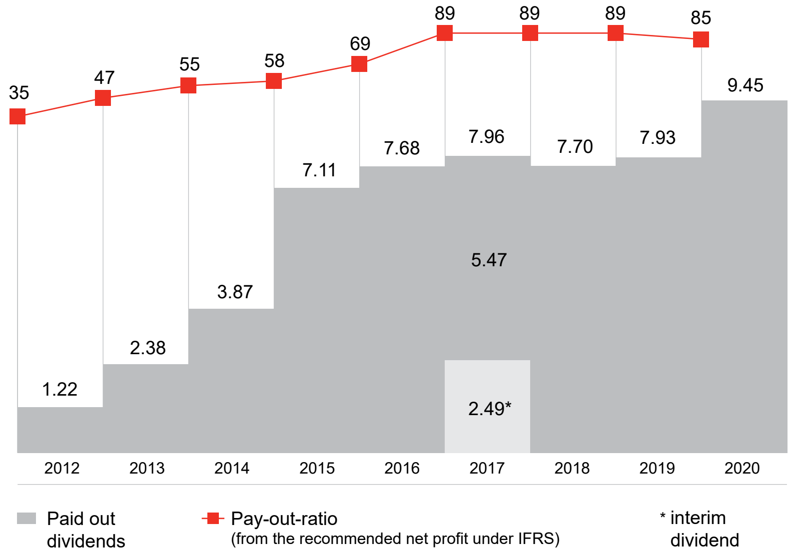


** Versus ordinary and preferred shared admitted to trading on MOEX's Equity Market, by trading volume in the main trading mode.

DIVIDENDS

For 2020, Moscow Exchange's Annual General Meeting of Shareholders (AGM) resolved to distribute dividends in the amount of RUB 9.45 per share. In total, RUB 21.5 bn was allocated for the payment of dividends, equivalent to 85% of the 2020 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).

Dividends per share in 2012-2020 (RUB)



Dividend payment in 2012–2020

Dividend payment year	Dividend period	Announcement date, shareholders meeting minutes No.	Total pre-tax amount of dividends declared and paid (RUB)	Dividend record date
2013	for 2012	25 May 2013, Minutes of AGM No. 49	2,901,756,800	20 May 2013
2014	for 2013	26 June 2014, Minutes of AGM No. 52	5,423,154,900	11 July 2014
2015	for 2014	28 April 2015, Minutes of AGM No. 53	8,818,323,227.91	12 May 2015
2016	for 2015	29 April 2016, Minutes of AGM No. 54	16,201,105,465.23	16 May 2016
2017	for 2016	28 April 2017, Minutes of AGM No. 56	17,482,763,197.44	16 May 2017
2017	for H1 2017	14 September 2017, Minutes of AGM No. 57	5,668,239,600	29 September 2017
2018	for 2017	26 April 2018, Minutes of AGM No. 58	12,451,915,975.26	15 May 2018
2019	for 2018	25 April 2019, Minutes of AGM No. 59	17,528,291,226.60	14 May 2019
2020	for 2019	28 April 2020, Minutes of AGM No. 61	18,051,863,561.94	15 May 2020
2021	for 2020	28 April 2021, Minutes of AGM No. 62	21,511,993,778.10	14 May 2021

In accordance with the Federal Law on Joint Stock Companies, the deadline for payment of dividends to a nominee registered in the shareholder register should not exceed 10 business days, and to other persons registered in the shareholder register - 25 business days from the dividend record date.

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.

Amid the pandemic, communication with shareholders and investors went to an online - format. In 2021 Moscow Exchange's management held 241 meetings (also online) with institutional investors and analysts and took part in 15 international conferences for investors. It held online roadshows in cooperation with global brokers. It held online roadshows in cooperation with global brokers.

Years	2013	2014	2015	2016	2017	2018	2019	2020	2021
Number of meetings with investors	180	236	270	349	355	326	318	261	241

In total, in 2021, Moscow Exchange's management contacted 121 institutional investors who, according to Nasdaq IR Insight, at the end of 2021 owned 44% of the company's free float (as compared to 38% in 2020). 27% business contacts were investors from North America, 26% from the UK, 17% from continental Europe, 10% from Russia, 10% from Africa, 8% from Asia and 2% from other regions.

Geography of institutional investors that had business contact with the Exchange (%)

Region	2020	2021
North America	31	27
United Kingdom	22	26
Continental Europe	24	17
Russia	12	10
Asia	3	8
Others	7	2

MOEX also places strong emphasis on engaging with retail investors. The number of retail shareholders exceeded 377,000 as of the end of 2021. Against the backdrop of the growing activity of individuals on the stock market, Moscow Exchange is implementing a number of initiatives aimed at improving the financial literacy of individual investors (see the "Exchange and the Community" chapter). Moscow Exchange management participates in a wide range of public events and webinars organised by Moscow Exchange and external partners. 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. At another such event on 14 April 2021, the management of the Exchange spoke about new projects and the company's development prospects, as well as answered questions about corporate governance and initiatives to attract private investors to the Russian financial market.

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 2021 (%)

	No response	Good	Very good	Excellent
Knowledge of the business	4	0	24	72
Quality of IR materials	4	0	16	80
Quality of conference calls and webcasts	8	0	20	72
Confidence and transparency	4	0	32	64
Responsiveness	4	0	20	76
Friendliness/helpfulness	4	0	12	84
Access to the management	12	4	28	56

ANALYSTS

MOEX's performance is closely monitored by leading Russian and international banks. They publish regular reports on MOEX's shares as well as provide stock recommendations and financial forecasts.

Sell-side covering analysts

Company	Analyst	Telephone number	Tel.
Bank of America	Olga Veselova	+7 (495) 662 6080	olga.veselova@bofa.com
Citigroup	Samarth Agrawal	+44 (20) 7986 4225	samarth.agrawal@citi.com
Goldman Sachs	Makhail Butkov	+7 (495) 645 4073	mikhail.butkov@gs.com
HSBC Bank plc	Andrzej Nowaczek	+44 (20) 7991 6709	andrzej.nowaczek@hsbcib.com
Raiffeisen Centrobank	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
Sinara FC	Olga Naidyonova	+7 (495) 771 7095	NaidenovaOA@sinara-finance.ru
SOVA Capital	Andrey Mikhailov	+7 (495) 213 1829	andrey.mikhailov@sovacapital.com
Wood & Company	Paweł 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
VTB Capital	Svetlana Aslanova	+7 (495) 663 4788	svetlana.aslanova@vtbcapital.com
	Mikhail Shlemov	+7 (495) 663 4701	mikhail.shlemov@vtbcapital.com

As of 31 December 2021, the market consensus forecast for MOEX shares based on forecasts of thirteen analysts was RUB 191.08 per share.

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APPENDICES

INFORMATION ON MAJOR TRANSACTIONS AND INTERESTED-PARTY TRANSACTIONS

MAJOR TRANSACTIONS AND INTERESTED-PARTY TRANSACTIONS

In 2021, the Exchange did not perform transactions recognized as major transactions in accordance with Federal Law of the Russian Federation No. 208-FZ as of 26 December 1995 “On Joint Stock Companies”. The Exchange Charter does not establish other transactions, which are subject to the procedure for approval of major trans-actions

In the reporting year of 2021, the Exchange performed transactions recognized as interested-party transactions. Information on transactions performed in 2021 is contained in the Report on major and interested-party transactions performed by Moscow Exchange in 2021. The report was approved by the decision of Moscow Exchange Supervisory Board dated 25 March 2022 (Minutes No. 21) and posted on the Exchange website (http://moex.com/s1457).

KEY PERFORMANCE INDICATORS

The Supervisory Board set MOEX KPIs for 2021 to measure performance in the core two areas:

- **Financial efficiency:** F&C income and net profit growth and cost control. F&C income grew by 21.3% to RUB 41.5 billion. Net profit was RUB 28.1 billion, up 11.6% YoY. As a result, the cost-to-income ratio decreased as compared to 2020, and financial efficiency was enhanced.
- **New products & services:** In 2020 – 2021, Moscow Exchange expanded trading hours to increase the availability of services throughout the Russian Federation and the world. In 2021, a morning session was launched on the FX and Derivatives Markets. Pre-market trading volumes already account for a significant share of trading in the main session.
- Moscow Exchange is consistently introducing new products and services. In 2021, OTC services of the FX Market were actively developed.
- Moscow Exchange’s key project for the coming years is the personal finance platform Finuslugi. In 2021, new products were launched and 27 new financial institutions were engaged to cooperate with Finuslugi.

REPORT ON MOSCOW EXCHANGE COMPLIANCE WITH THE PRINCIPLES AND RECOMMENDATIONS OF THE CORPORATE GOVERNANCE CODE

This Report on Compliance with the Principles and Recommendations of the Corporate Governance Code was reviewed by the Supervisory Board of Moscow Exchange at the meeting held on the Supervisory Board meeting on March 25, 2022 (Minutes No. 21).

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 2021 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	Explanations of deviation from the assessment criteria of compliance with the corporate governance principle
1	2	3	4	5
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 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 partially complied with not 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 partially complied with not 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	3	4	5
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 partially complied with not complied with	This recommendation concerning shareholders' posing questions to members of executive bodies and members of the board of directors of the company in the course of the general meeting is not applicable was not applicable, as no general meetings were held in the form of joint attendance of shareholders in the reporting period.
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 60 days from the end of the respective calendar year a minimum, 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 partially complied with not complied with	
1.1.5	Each shareholder should be able to freely exercise his right to vote in a straightforward and most convenient way.	1. The Charter of the company includes provisions for filling in the electronic form of the ballot on the website specified in the notice of the General Meeting of Shareholders.	✓ complied with partially complied with not 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	3	4	5
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, shareholders were provided with opportunity to express their opinion and ask questions on agenda issues that might be of interest to them. 2. The company invited candidates to the management and control bodies and took all necessary actions to ensure their participation in the general meeting of shareholders, where their candidacies were put to a vote. The candidates to the management and control bodies of the Company attending the general meeting of shareholders were available to answer shareholders' questions. 3. The sole executive body, the person responsible for accounting, the chairman or other members of the audit committee of the board of directors were available to answer shareholders' questions at the general meeting of shareholders held the reporting period.. 4. In the reporting period the Company either used telecommunications tools to provide shareholders with remote access to participate in the General Meetings, or made decisions that it was not necessary (not possible) to use such tool in the reporting period. .	✓ complied with partially complied with not complied with	In the reporting period the Company did not hold general meetings of shareholders in the form of joint attendance of shareholders.

#	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	3	4	5
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 provisions of the Company were developed, approved by the Board of Directors, and disclosed at the Company's website. 2. If the Company produces consolidated financial statements and its dividend policy uses these financial statements to determine the amount of dividends, the relevant dividend policy provisions incorporate the consolidated measures of financial statements. 3, Rationale for the proposed net profit distribution, including for dividend payments and for the company's own needs, along with compliance assessment in respect of the company's dividend policy and explanations and economic substantiation of the need to allocate a certain portion of net profit for the company's own needs in the reporting period were included in the materials for the general meeting of shareholders, where the agenda of the meeting included an item on profit distribution (including the payment (announcement) of dividends)	✓ complied with partially complied with not complied with	
1.2.2	The company should not make a decision on the payment of dividends, if such decision, without formally violating limits set by law, is unjustified from the economic point of view and might lead to the formation of false assumptions about the company's activity	1. In addition to statutory restrictions, the Company's dividend policy clearly indicates financial/economic circumstances when the Company should not pay dividends	✓ complied with partially complied with not 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	3	4	5
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 partially complied with not complied with	
1.2.4	The company should strive to rule out any ways through which its shareholders can obtain any profit or gain at the company's expense other than dividends and distributions of its liquidation value	1. During the reporting period, other ways of obtaining profit or gaining at the expense of the Company by persons controlling the company other than dividends (for example, through transfer pricing, unreasonable provision of services to the Company by the controlling person at higher prices, through internal loans substituted for dividends to the controlling persons and (or) controlled persons) were not used	✓ complied with partially complied with not complied with	
1.3	**The system and practices of corporate governance should ensure equal terms and conditions for all shareholders owning shares of the same class (category) in a company, including minority and foreign shareholders, as well as their equal treatment by the company**			
1.3.1	The company should create conditions which would enable its governing bodies and controlling persons to treat each shareholder fairly, in particular, which would rule out the possibility of any abuse of minority shareholders by major shareholders	1. During the reporting period the persons, controlling the Company, did not abuse their authorities towards shareholder, no conflicts between controlling persons and shareholders existed, and, if such conflicts existed the Board of Directors paid enough attention to address them	✓ complied with partially complied with not 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 partially complied with not complied with	
1.4	**Shareholders should be provided with reliable and efficient means of recording their rights in shares as well as with the opportunity to freely dispose of such shares in a non-onerous manner**			
1.4	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 and ensure that shareholder rights are accounted for and exercised in the most efficient way	✓ complied with partially complied with not 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	3	4	5
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 Charter to appoint, dismiss, and determine conditions of the contracts, with respect to members of executive bodies. 2. In the reporting period, the Nominations Committee <3> considered how the professional qualifications, skills and experience of the members of the executive bodies meet the current and expected needs of the company, prompted by the approved strategy of the company. 3. In the reporting period, the Board of Directors reviewed the report(s) of the sole executive body and members of the collegial executive body on fulfilment of the Company's strategy	✓ complied with partially complied with not 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 partially complied with not 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	3	4	5
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 principles of and approaches to the risk management and internal control system in the Company are set forth by the Board of Directors and documented in the Company's internal regulations defining the risk management and internal control policy. 2. In the reporting period, the Board of Directors approved (revised) the acceptable level of risk (risk appetite) of the Company, or the Audit Committee and (or) Risk Committee (if any) considered the expediency of bringing the issue of risk appetite revision to the attention of the Board of Directors	✓ complied with partially complied with not complied with	
2.1.4	The board of directors should determine the company's policy on remuneration due to and/or reimbursement of costs incurred by its board members, members of its executive bodies and other key managers	1. The Company has developed and implemented the policy(-ies) approved by the Board of Directors on remuneration and reimbursement of costs incurred by the members of the Board of Directors, the Company's executive bodies and other key managers of the Company. 2. The meetings of the Board of Directors reviewed issues related to the above policy (-ies) during the reporting period	✓ complied with partially complied with not complied with	
2.1.5	The board of directors should play a key role in prevention, detection and resolution of internal conflicts between the company's bodies, shareholders and employees	1. The Board of Directors plays a key part in prevention, detection, and settlement of internal conflicts. 2. The Company has established the system to identify transactions related to the conflict of interest and the system of efforts designed to settle such conflicts	✓ complied with partially complied with not 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	3	4	5
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. Company's internal documents list the persons responsible for information policy implementation	✓ complied with partially complied with not 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 self-assessment results and (or) external assessment in relation to the corporate governance practice in the Company	✓ complied with partially complied with not 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 Board of Directors and committee meeting attendance by individual directors. 2. The annual report contains information on the principal findings of the Board of Directors' performance self-assessment (assessment) in the reporting period	✓ complied with partially complied with not complied with	
2.2.2	The chairman of the board of directors must be available to communicate with the company's shareholders	1. The Company has a transparent procedure that enables shareholders to submit their questions and their standpoint thereon to the Chairman of the Board of Directors and, if applicable, to the senior independent director and get feedback from them	✓ complied with partially complied with not complied with	
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. In the reporting period, the Board of Directors (or its Nominations Committee) assessed the nominees to the Board of Directors in terms of the required experience, expertise goodwill, lack of the conflict of interests, etc.	✓ complied with partially complied with not complied with	

#	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	3	4	5
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 agenda of the General Meeting of Shareholders held in the reporting period included election of the Board of Directors d, the Company provided shareholders with biographical data for all the nominees to the Board of Directors, results from assessment of whether the candidates' professional qualifications, experience and skills meet the company's current and expected needs performed by the Board of Directors or Nominations Committee, and information on conformity of the nominees to the independence criteria, according to the recommendations in paragraphs from 102 to 107 of the Code and the nominees' written consent to be elected to the Board of Directors	✓ complied with partially complied with not complied with	
2.3.3	The composition of 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, and identified competencies required for the Board of Directors in the short and long term	✓ complied with partially complied with not complied with	
2.3.4	The membership of the board of directors of the company must enable the board to organize its activities in a most efficient way, in particular, to create committees of the board of directors, as well as to enable substantial minority shareholders of the company to elect a candidate to the board of directors for whom they would vote	1. In the reporting period, the Board of Directors reviewed whether the size of the Board of Directors met the company's needs and the interests of the shareholders	✓ complied with partially complied with not 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	3	4	5
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.	✓ complied with partially complied with not complied with	
2.4.2	It is recommended to evaluate whether candidates nominated to the board of directors meet the independence criteria as well as to review, on a regular basis, whether or not independent board members meet the independence criteria. When carrying out such evaluation, substance should take precedence over form.	1. In the reporting period, the Board of Directors (or the 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 (after their election) 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 partially complied with not 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	3	4	5
2.4.3	Independent directors should account for at least one-third of all directors elected to the board of directors.	1. Independent directors account for at least one third of the Board of Directors.	✓ complied with partially complied with not complied with	
2.4.4	Independent directors should play a key role in prevention of internal conflicts in the company and performance by the latter of material corporate actions.	1. Independent directors (who do not have any conflicts of interest) preliminarily estimate the substantial corporate actions related to a potential conflict of interests, and the findings of such assessment are submitted to the Board of Directors.	✓ complied with partially complied with not complied with	In the reporting year 2021, the Company did not record any material corporate actions related to a potential conflict of interest.
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 <4> 2. The role, rights and duties of the Chairman of the Board of Directors (and, if applicable, the senior independent director) are duly determined in the Company's internal documents.	✓ complied with partially complied with not complied with	
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 partially complied with not complied with	
2.5.3	The chairman of the board of directors should take any and all measures as may be required to provide 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 partially complied with not 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	3	4	5
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 require that a member of the Board of Directors should 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 has establishes the procedure that enables the Board of Directors to obtain professional advice on issues falling within its competence, at the Company's expense.	✓ complied with partially complied with not complied with	
2.6.2	Rights and duties of board members should be clearly stated and documented in the company's internal documents	1. The Company adopted and published the internal document that clearly determines rights and duties of members of the Board of Directors	✓ complied with partially complied with not complied with	

#	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	3	4	5
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 (self-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	✓ complied with partially complied with not complied with	
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 information and documents necessary for them to perform their duties, 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 implements a formalized onboarding program for newly elected members of the Board of Directors	✓ complied with partially complied with not complied with	
2.7	**Meetings of the Board of Directors, preparation for them, and participation of Board members therein should ensure efficient work of the Board.**			
2.7.1	It is recommended to hold meetings of the board of directors as needed, with due account of the company's scope of activities and its then current goals	1. The Board of Directors held at least six meetings in the reporting year	✓ complied with partially complied with not 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	3	4	5
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 five (5) days prior to the meeting 2. In the reporting period, members of the Board of Directors who were not in attendance at the meeting were given the opportunity to participate in the discussion of the agenda items and voting remotely via conference and videoconference calls	✓ complied with partially complied with not 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	3	4	5
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 Charter 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	✓ complied with partially complied with not complied with	According to the Charter, the issues listed in Recommendation 168 of the Code (except for material related party transactions and placing the issue of delegating the CEO's powers to the asset management company for the AGM for consideration) are decided at the meetings held in person. Issues of material related party transactions are not 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. The Company has set materiality thresholds in terms of amount and subject of a transaction, regardless of parties to the transaction. Therefore, interested-party transactions shall be considered at in-person meetings of the Supervisory Board if the amount and/or subject matter of such transactions meet the established materiality criteria. However, the Company is considering whether to determine the materiality criteria for interested-party transactions in its internal documents and add the approval of such transactions to the scope of issues to review at in-person meetings of the Supervisory Board.Placing the issue of delegating the sole executive body's powers to the asset management company before the AGM does not fall 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). However, the Company is considering whether to determine the materiality criteria for interested-party transactions in its internal documents and add the approval of such transactions to the scope of issues to review at in-person meetings of the Supervisory Board. 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
1	2	3	4	5
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 Charter 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	✓ complied with partially complied with not complied with	Partly compiled 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 a majority of all votes The list did not include the matters regarding (1) approval of priority activities, 2) placing listing issues before the AGM. The Company has no plans to include approval of priorities to such issues, since priorities are normally described in the strategy approved by a three fourths majority vote of all Supervisory Board members attending the meeting. According to the Company, a preliminary and thorough discussion of most issues including those specified above, by the relevant ad-hoc committees, as a rule, allows the Supervisory Board to make decisions unanimously and helps reduce risks related to non-compliance with the principle specified above. Submitting issues on listing to the consideration by the AGM is not on the list as these listing issues are referred to the Supervisory Board competency (3/4 majority vote), but not to the AGM

#	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	3	4	5
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, the objectives contained in Recommendation 172 of the Code 3. At least one member of the Audit Committee, which is an independent director, has experience and expertise in drafting, reviewing, assessment and audit of financial statements (accounts) 4. Meetings of the Audit Committee were held at least quarterly during the reporting period	✓ complied with partially complied with not complied with	

#	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	3	4	5
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 Remuneration Committee is an independent director, who is not concurrently the Chairman of the Board of Directors. 3. The Company's internal documents determine the objectives of the Remuneration Committee, including those contained in Recommendation 180 of the Code and the circumstances (events), upon the occurrence of which the Remuneration Committee shall consider revising the Company's remuneration policy with respect to members of the Board of Directors, executive bodies, and other key executives	complied with ✓ partially complied with not complied with	1. Complied with 2. Complied with 3. Partly complied with At present, the Company's internal documents do not set forth the circumstances (events), upon the occurrence of which the Remuneration Committee shall consider revising the Company's remuneration policy with respect to members of the Board of Directors, executive bodies, and other key executives. The company will shortly determine in the internal documents of the Exchange the circumstances (events) which, when they occur, will require the Remuneration Committee to consider reviewing the company's policy on remuneration for members of the Board of Directors, executive bodies and other key executives. At the same time, the Company implements this principle on a regular basis. Thus, every three years, with the assistance of an independent consultant engaged for this purpose, the Company revises the remuneration system for members of the Supervisory Board. Between these cycles, remuneration due to members of the Supervisory will be adjusted for inflation in accordance with the Regulations on Remuneration and Compensation due to Members of the Supervisory Board of the Moscow Exchange. Once a year, and where appropriate, more frequently, while formulating the Key Performance Indicators for the executive bodies and other key executives of the Company for the following year, the Nominations and Remuneration Committee reviews the executive remuneration policy principles and rules for the executive bodies and other key executives of the 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
1	2	3	4	5
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[5]), 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 3. For the purposes of forming the board of directors that best meets the Company's goals and objectives, during the reporting period the Nominations Committee independently or jointly with other committees of the board of directors or the authorised division of the Company for shareholder relations arranged for interactions with shareholders, including but not limited to the major shareholders, in the context of selecting candidates for the Company's Board of Directors	✓ complied with partially complied with not complied with	
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 partially complied with not 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	3	4	5
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 differing opinions	1. In the reporting period the Committees of the Board of Directors (Audit Committee, Nominations Committee, or a committee which combines the functions) were 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 (or a committee which combines the functions), may attend meetings of the committees upon invitation of the Chairman of the respective committee only	✓ complied with partially complied with not complied with	
2.8.6	The chairmen of the committees should inform the board of directors and its chairman of the work of their committees on a regular basis	1. During the reporting period, the chairmen of the committees reported on the committees' operations to the Board of Directors on a regular basis	✓ complied with partially complied with not complied with	
2.9	**The Board of Directors should evaluate of the quality of its work and that of its committees and Board members.**			
2.9.1	Evaluation of quality of the board of directors' work should be aimed at determining how efficiently the board of directors, its committees and board members work and whether their work meets the company's needs, as well as at making their work more intensive and identifying areas of improvement	1. The internal documents of the Company set out procedures for assessment (self-assessment) of quality of the Board of Director's work 2. 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 3. The findings of assessment (self-assessment) of the Board of Directors in the reporting period were reviewed at the personal meeting of the Board of Directors	✓ complied with partially complied with not 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	3	4	5
2.9.2	Quality of work of the board of directors, its committees and board members should be evaluated on a regular basis, at least once a year. To carry out an independent evaluation of the quality of the board of directors' work, it is recommended to retain a third-party entity (consultant) on a regular basis, at least once every three years	1. For independent quality assessment of the Board of Directors' performance, an external company (advisor) was engaged by the Company at least once in three recent reporting periods	✓ complied with partially complied with not complied with	
3.1	**The company's corporate secretary shall be responsible for efficient interaction with its shareholders, coordination of the company's actions designed to protect the rights and interests of its shareholders, and support 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's website and the annual report include biographical information about the corporate secretary (including age, education, qualifications, experience), as well as information about the positions in the management bodies of other legal entities held by the corporate secretary during at least the last five years	✓ complied with partially complied with not complied with	
3.1.2	The corporate secretary should be sufficiently independent of the company's executive bodies and be vested with powers and resources required to perform his/her tasks	1. The Company adopted and disclosed an internal document, the Regulation on the Corporate Secretary 2, The Board of Directors approves a candidate for the role of Corporate and terminates Corporate Secretary's powers, considers the matter of extra remuneration due to the Corporate Secretary 3. Company's internal documents secure the Corporate Secretary's right to request and obtain documents and information from the Company's management bodies, divisions and officials	✓ complied with partially complied with not 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	3	4	5
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 level of remuneration due to members of the Board of Directors, executive bodies and to other key managers is set based on remuneration level benchmarking among peer companies	✓ complied with partially complied with not complied with	
4.1.2	The company's remuneration policy should be developed by its remuneration committee and approved by the board of directors. With the help of its remuneration committee, the board of directors should monitor implementation of and compliance with the remuneration policy by the company and, should this be necessary, review and amend the same	1. In the reporting period, the Remunerations Committee reviewed the remuneration policy(-ies) and the practice of its/their implementation, assessed whether they were efficient and transparent, and, where it was necessary, submitted the relevant recommendations to the Board of Directors	✓ complied with partially complied with not 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	3	4	5
4.1.3	The company's remuneration policy should provide for transparent mechanisms to be used to determine the amount of remuneration due to members of the board of directors, the executive bodies, and other key managers of the company, as well as to regulate any and all types of payments, benefits, and privileges provided to any of the above persons	1. The Company's remuneration policy(-ies) contain(s) transparent arrangements on determining the amount of the remuneration of members of the Board of Directors, executive bodies and other key managers of the Company and govern(s) all types of fees, benefits and advantages provided to these persons	✓ complied with partially complied with not complied with	
4.1.4	The company is recommended to develop a policy on reimbursement of expenses which would contain a list of reimbursable expenses and specify service levels provided to members of the board of directors, the executive bodies, and other key managers of the company. Such policy can form part of the company's policy on compensations	1. The remuneration policy(-ies) or other internal documents of the Company establish(-es) the rules on reimbursement of expenses to the members of the Board of Directors, executive bodies and other key employees of the Company	✓ complied with partially complied with not complied with	

#	Corporate governance principles	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	3	4	5
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. In the reporting period the Company paid remuneration due to members of the Board of Directors pursuant to the Company's remuneration policy 2. In the reporting period the Company did no use short-term incentives based on the company's performance indicators, neither the Company paid a fee for participation in individual meetings of the Board of Directors or its committees	✓ complied with partially complied with not complied with	
4.2.2	Long-term ownership of shares in the company contributes most to aligning financial interests of board members with long-term interests of the company's shareholders. However, it is not recommended to make the right to dispose of shares dependent on the achievement by the company of certain performance results; nor should board members take part in the company's option plans	1. If the Company's internal document(s), such as the remuneration policy(-ies), envisage(s) granting of shares to members of the Board of Directors, clear rules for holding shares by members of the Board of Directors, intended to encourage long-term ownership of such shares, should be available and disclosed	✓ complied with partially complied with not complied with	Company's internal documents do not provide for the provision of shares to 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 any other circumstances	✓ complied with partially complied with not 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	3	4	5
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. While setting the size of remuneration due to members of the executive bodies and other key managers, the Company proceeds from risk the Company bears, so to avoid creating incentives for highly risky management decisions	complied with ✓ partially complied with not complied with	1. Complied with. 2. Partly complied with. In the reporting year 2021, there was neither assessment of the remuneration payable to executive body members, no special discussion among members of the Nominations Committee of a ratio between fixed and variable portions of remuneration In the reporting year 2021, the Nominations Committee reviewed the remuneration practices for members of the Executive Board and developed recommendations for changes in the remuneration of Executive Board members. The Supervisory Board considered that issue, including in terms of extending the powers of Executive Board members 3. Compiled with
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. In case the Company has introduced a 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), the program 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	✓ complied with partially complied with not 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	3	4	5
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 partially complied with not 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 partially complied with not complied with	
5.1.2	The company's executive bodies should ensure the establishment and continuing operation of the efficient risk management and internal control system in the company	1. The Company's executive bodies ensured allocation of the functions and powers as concerns risk management and internal control among their subordinate managers (heads) of business units and divisions	✓ complied with partially complied with not complied with	
5.1.3	The company's risk management and internal control system should enable one to obtain an objective, fair and clear view of the current condition and prospects of the company, integrity and transparency of its accounts and reports, and reasonableness and acceptability of risks being assumed by the company	1. The Company approved the anti-corruption policy. 2. The Company established a secure, confidential and affordable method to notify the Board of Directors or the Board of Directors Audit Committee on actual violations of the laws, internal procedures, and the Company's ethics code	✓ complied with partially complied with not complied with	

#	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	3	4	5
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 is included into the Company's annual report. 1. In the reporting period, the Board of Directors (the Audit Committee and (or) Risk Committee (if applicable), arranged for assessing the reliability and effectiveness of the risk management and internal control system. 2. In the reporting period, the Board of Directors reviewed findings of assessment of Company's risk management and internal control system efficiency. Information about the results of the review is presented in the Company's annual report	✓ complied with partially complied with not 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**	**3**	**4**	**5**
5.2	**To independently evaluate, on a regular basis, reliability and efficiency of the risk management and internal control system and corporate governance practices, the company should arrange for internal audits.**			
5.2.1	It is recommended that internal audits be carried out by a separate structural division (internal audit department) to be created by the company or through retaining an independent third-party entity. To ensure the independence of the internal audit department, it should have separate lines of functional and administrative reporting. Functionally, the internal audit department should report to the board of directors, while from the administrative standpoint, it should report directly to the company's one-person executive body	1. For the purposes of internal audit, the Company established a separate business unit for internal audit, which functionally reports to the Board of Directors or the Audit Committee, or engaged an independent external company with the same principle of reporting	✓ complied with partially complied with not complied with	
5.2.2	When carrying out an internal audit, it is recommended to evaluate efficiency of the internal control system and the risk management system, as well as to evaluate corporate governance and apply generally accepted standards of internal auditing	1. In the reporting period, as part of internal audit, the internal control and risk management system efficiency was assessed. 2. In the reporting period, the internal audit assessed corporate governance practices (individual practices), including those relating to internal control and risk management) across all company's management levels, and stakeholder relationship procedures were assessed either	✓ complied with partially complied with not 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**	**3**	**4**	**5**
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. During the reporting period, the Board of Directors (or one of its committees) reviewed whether the Company exchanged information with its shareholders, investors and other stakeholders efficiently and whether it was expedient (necessary) to revise the Company's information policy	✓ complied with partially complied with not complied with	
6.1.2	The company should disclose information on its corporate governance system and practices, including detailed information on compliance with the principles and recommendations of this Code	1. The Company discloses its corporate governance system and the general corporate governance principles applied, in particular,on 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 the Company has a controlling person, the Company publishes the memorandum of the controlling person concerning such person's plans for corporate governance in the Company	✓ complied with partially complied with not complied with	1. Compiled with 2. Compiled with 3. The Company has no controlling persons

#	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	3	4	5
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 has a procedure for coordinating the work of all company divisions and employees associated with the disclosure of information or whose activities may require the disclosure of 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 partially complied with not complied with	1. Complied with 2. Not applicable, as the Company securities do not trade on foreign regulated markets 3. Complied with

#	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	3	4	5
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. The Company's information policy sets out the approaches to and criteria for determining the information that may materially influence the value or prices of its securities and disclosure of information not required by law. 2. The Company discloses comprehensive information on the Company's capital structure, according to Recommendation 290 of the Code in the annual report and on the Company's website. 3. The Company discloses information on the controlled entities that are material to it, including their key activities, methods for ensuring accountability of controlled entities, the powers of the Company's Board of Directors regarding strategy definition and evaluation of the controlled entities' performance 4. The Company discloses a non-financial report, the ESG or any other report containing non-financial information, including factors related to the environment (inclusive of environmental factors and factors related to climate change), society (social factors) and corporate governance, except for the report of the issuer of issue-grade securities and the annual report of a joint stock company	✓ complied with partially complied with not 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	3	4	5
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 findings of the audit committee's review in respect of external and internal audit processes. 2. The Company's annual report contains information on environmental and social dimensions of the Company's business.	✓ complied with partially complied with not complied with	1. Complied with 2. 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 (internal documents setting the information policy) defines an easy procedure for providing access for shareholders to Company's information and documents upon their request. 2. The Company's information policy (internal documents setting the information policy) include provisions requiring that if a shareholder requests information on entities under the company's control, the company shall make the necessary efforts to obtain such information from the relevant entities under the company's control	complied with ✓ partially complied with not complied with	1. Complied with. 2. Partly complied with. The current laws do not require joint-stock companies provide information on the controlled entities upon shareholder's requests, therefore the Company's data policy does not include such provisions. In referring to the above, the Company does not plan to achieve full compliance with this recommendation of the Code in this respect but will strive to provide the shareholder with the requested information guided by the principle of reasonableness.
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 any shareholders' requests for information or such denials were reasonable. 2. In cases determined in the Company's information policy, shareholders are warned of the confidential nature of the information and undertake to keep it confidential.	✓ complied with partially complied with not complied with	

#	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	3	4	5
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 Charter determines a list of transactions and other efforts that constitute material corporate actions. According to the Company's Charter, 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.	complied with ✓ partially complied with not complied with	1. Partly complied with. The list of material corporate actions is not defined 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's 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.

#	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	3	4	5
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 partially complied with not 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 Charter, established lower minimum criteria for classifying the Company's transactions as major corporate actions than envisaged in law, taking account of specifics of Company's operatiolns. 2. During the reporting period, all material corporate actions were approved prior to their implementation.	✓ complied with partially complied with not complied with	
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. If the Company implemented any material corporate actions during the reporting period, such actions were disclosed by the Company in a timely and detailed manner, including the reasons, terms of such actions, and their consequences for shareholders	✓ complied with partially complied with not complied with	In 2021, the Company did not conduct material corporate actions.

#	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	3	4	5
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 define when and how to engage 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. If a member of the board of directors, the sole executive body, a member of the collegial executive body of the company or a person who controls the company, or a person who has the right to give the company binding instructions, has no formal interest in transactions of the company, but has a conflict of interest or any other de facto interest, the internal documents of the company require that such persons shall not participate in voting on the approval of such transaction.	complied with ✓ partially complied with not complied with	1.Partly complied with In February 2019, the new Corporate Governance Code of the Company was adopted, allowing for the engagement of an appraiser when purchasing or selling assets under major transactions. In February 2019, the new Corporate Governance Code of the Company 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 of the Company 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 Code's principle described above. 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. Compiled 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 criterisifa. If the Company indicated the «complied with» status, no explanations are required.
[3] Hereinafter, the Nominations Committee
[4] 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
[5] If the objectives of the Nominations Committee are only implemented as part of another committee, indicate its name.

REPORT ON THE ADHERENCE TO THE MOSCOW EXCHANGE CORPORATE GOVERNANCE CODE

(hereinafter, the "MOEX CGC") and the Results of the Implementation of Governance Principles Presented in MOEX CGC[1]

Moscow Exchange (hereinafter, MOEX) fully complies with its own Corporate Governance Code whose new version was approved by the Resolution of the Supervisory Board of 14/10/2019.

Information on the results of the implementation of corporate governance principles set out in Chapter I, Section 4, Clause 4.2 of MOEX CGC:

N	Principle	Implementation Results
1	Support of MOEX governance system that corresponds to its strategic goals, corporate values, activity peculiarities and clients' needs and interests	A special feature of MOEX is that, on the one hand, it is a public company with shares traded on the regulated market and, on the other hand, it sets corporate governance standards for Russian public companies (including itself) as a part of the listing procedure. In this regard, active participation of MOEX and MOEX Group (hereinafter, the Group) in improving the level of corporate governance of Russian companies is one of its strategic initiatives, set out in its strategy. Compliance with the principles and best practices of corporate governance, as well as Group's strategy, is a key condition for MOEX successful development. MOEX aims to set the example for other public companies in implementing high standards of corporate governance. MOEX's corporate governance system includes the system of governing bodies, supervisory bodies and other MOEX bodies and the system of the relationship between governing bodies, supervisory bodies and other MOEX bodies and its shareholders and stakeholders. *The system of MOEX bodies engagement with MOEX shareholders and stakeholders is based on the following principles:* ▪ safety and effective use of shareholders' funds; ▪ mitigation of risks that investors are unable to assess; ▪ corporate accountability; ▪ respect for the interests of MOEX customers; ▪ disclosure of the information in order to ensure transparency of MOEX activities to stakeholders.

[1] In accordance with Bank of Russia Ordinance No. 5062-U of 17 January 2019.

N	Principle	Implementation Results
2	**Support of MOEX Supervisory Board's activities based on the following:**	
	▪ strategic governance;	*In accordance with MOEX Charter, the Supervisory Board performs strategic governance of MOEX through the following:* ▪ identification of the priorities and main focuses of the activity; ▪ participation in the development and approval of the strategy, supervision of its implementation, as well as determination of the development strategy and evaluation of the results of controlled companies' activity; ▪ approval of the budget (business plan), amendments to the budget (business plan), as well as approval and evaluation of its implementation. MOEX strategic goals are defined under the MOEX Group Strategy. Strategic goals of MOEX are subject to continuous monitoring based on the Strategy of the Group. Thus, in 2019, the Supervisory Board approved by its Resolution dated 14/10/2019 the MOEX Group Strategy (previously considered at the meeting of the Strategy Planning Committee of the Supervisory Board). The Strategy defines MOEX strategic goals until 2024. *In 2021 the Supervisory Board reviewed and (or) approved the following strategies of MOEX and the MOEX Group:* ▪ Clearing Development Strategy of the MOEX Group for 2024 (resolution of 04/03/2021); ▪ amendments and addenda to Strategy 2024 of the MOEX Group (resolution of 23/04/2021). Also in 2021, the Supervisory Board approved the new version of the consolidated business plan of the MOEX Group for 2021-2023 (resolution of 30/09/2021) and corporate key performance indicators (targets) of the Moscow Exchange for 2022 (resolution of 09/12/2021).
	▪ MOEX Supervisory Board's supervision of activities of MOEX executive bodies, as well as of decision-making aimed at the elimination of faults in the activity of MOEX executive bodies, in the case of their detection as a result of such supervision;	*The Supervisory Board of MOEX controls activities of executive bodies by means of the following:* ▪ election of sole (temporary sole) and collegiate executive bodies, early termination of their powers and approval of terms of employment contracts with them, including the establishment of the amount of their remuneration; ▪ approval of positions overlapping by members of executive bodies in governing bodies of other organisations; ▪ approval of the policy on remuneration payable to executive bodies and control of its implementation; ▪ control of strategy implementation; ▪ consideration of annual reports and, if necessary, interim reports of the Chairman of the Executive Board and members of the Executive Board on their performance, as well as quarterly reports of the Executive Board on the results (including financial highlights) of MOEX activity and decision-making on the results of their consideration, including decisions on bonus payment; ▪ approval and assessment of corporate and individual key performance indicators (targets) achievement by the Chairman of the Executive Board and members of the Executive Board for the reporting year. *In 2021 the MOEX Supervisory Board reviewed and took under advisement the following documents:* ▪ report of the MOEX Executive Board on performance, financials and implementation of the MOEX Group Strategy in 2020 (resolution of 04/03/2020); ▪ reports on performance in 2020 (meeting individual KPIs/targets for 2020) of members of the Executive Board of MOEX (resolution of 04/03/2020); ▪ report of the MOEX Executive Board on operational and financial highlights of the MOEX Group in Q1 and April-May 2021 (resolution of 24/06/2021); ▪ report of the MOEX Executive Board on MOEX performance (including financial highlights) in Q2 and July-August 2021 (resolution of 30/09/2021); - report of the MOEX Executive Board on MOEX Group performance (including financial highlights) following 11 months into 2021 and forecast for the execution of the consolidated budget of the MOEX Group in 2021 (resolution of 09/12/2021). On 4 March 2021, the Supervisory Board decided to pay out bonuses to members of the Executive Board based on 2020 performance. On 9 December 2021, the Supervisory Board approved individual KPIs (targets) principles for members of the Executive Board, individual KPIs (targets) with their weights, thresholds and annual bonus calculation algorithms linked to KPIs for 2022 for the MOEX CEO (Chairman of the Executive Board) and individual KPIs (targets) with their weights, performance levels (including minimum and maximum percentages of targets achievement and bonus calculation algorithm) for the Executive Board members for 2022.

N	Principle	Implementation Results
	▪ Assessment of working efficiency of the MOEX Supervisory Board, as well as assessment of the quality of committees work under the MOEX Supervisory Board and disclosure of the results of such assessments;	The MOEX Supervisory Board assesses its own performance and performance of its members, as well as performance of committees under the Supervisory Board. Working efficiency of the Supervisory Board and committees of the Supervisory Board is assessed based on the MOEX Methodology of Corporate Governance Assessment approved by the MOEX Supervisory Board on 21 October 2016. Performance assessment is carried out in the form of internal assessment (self-assessment and competence assessment) – once a year, and independent evaluation (with the involvement of an independent expert) – once in 3 years. Thus, in spring 2019, an external independent consultant, LEADERSHIP VECTOR company, assessed the Supervisory Board's performance. The findings of the external assessment (Report of the independent consultant On the Results of the External Assessment) were considered at the in-person meeting of the MOEX Supervisory Board on 25 April 2019. A substantial part of the recommendations mentioned in the Report was implemented, while some recommendations are in the process of implementation. In 2020-2021, an internal assessment of performance of MOEX Supervisory Board and committees under the Supervisory Board was conducted. Based on the performance assessment results, the Director of the Corporate Governance Department reviewed and prepared a report along with an action plan to improve current corporate governance processes related to the performance and delineation of authorities of governing bodies. Information on performance assessment of the Supervisory Board and committees under the Supervisory Board is included in the annual report and is disclosed on the official website of MOEX.
	▪ Separation of supervision functions and governance responsibilities and of individual and collective responsibility of members of the MOEX Supervisory Board.	MOEX Supervisory Board's governance and control functions are segregated according to the Charter. *The Supervisory Board controls, among other things, the following:* ▪ corporate governance practices, including those related to material corporate actions[1]; ▪ financial-economic and business activity; ▪ executive bodies' activities. In regard to governance functions, the Supervisory Board provides, among other things, overall management of MOEX, namely, it determines the main guidelines, development strategy and priorities, approves the consolidated business plan (budget) of the MOEX Group and defines principles and approaches to the organisation of risk management, internal control and internal audit systems. Members of the Supervisory Board in the exercise of their rights and duties act in the interests of MOEX in good faith and reasonably. They are obliged to reimburse MOEX and shareholders acting in the interests of MOEX, for losses caused to the Company through their fault, if it is proved that the member of the Supervisory Board acted in bad faith or unreasonably in exercising his/her rights and duties, including if his/her actions (omissions) were not consistent with the ordinary terms of civil-law transactions or normal business risk.

1 The list of material corporate actions is specified in Chapter II, Section 8, Clause 8.1. of MOEX CGC

N	Principle	Implementation Results
3	Ensuring the functioning of internal control, internal audit, MOEX risk management system	MOEX has in place the risk management and internal control system that complies, among others, with the requirements of the Russian legislation applicable to MOEX as trade organiser, as well as with international recommendations for building risk management and internal control systems. The risk-oriented approach is applied to the internal control system. Internal control is ensured by MOEX governing bodies (General Meeting of Shareholders, Supervisory Board, Executive Board and the Chairman of the Executive Board), Audit Committee of the Supervisory Board, external auditor, Internal Audit Service, Internal Control Service, Internal Control and Compliance Department, risk and business continuity management subdivisions, security subdivisions and other subdivisions and employees of MOEX (including the Chief Accountant and his or her deputies), that ensure control within the scope of their authorities, as outlined in MOEX internal documents. The internal control follows the three lines of defence principle, which is in line with the best international practices. **The first line of defence** means all employees of MOEX business functions and operation subdivisions involved in the detection, assessment, and management of risks inherent in daily activity, as well as in development and implementation of policies and procedures that govern existing business processes. *The second line of defence comprises the Department for Operational Risk, Information Security and Business Continuity, Internal Control and Compliance Department, Internal Control Service, Security Department, Legal Department and certain Finance Unit employees and subdivisions. The second line of defence performs continuous monitoring and risk management, controls MOEX compliance with the federal laws and regulations adopted in accordance therewith and compliance with trading rules and MOEX constituent and internal documents as part of the following areas:* ▪ ensuring information security, inclusive of protection of interests (goals) of MOEX in the information domain; ▪ ensuring compliance with the legislation of the Russian Federation and with MOEX constituent and internal documents; ▪ ensuring non-involvement of MOEX and its employees in illegal or unfair activities, including legalisation (laundering) of criminal proceeds and financing of terrorism; ▪ eliminating illegal use of insider information and (or) market manipulation; ▪ eliminating conflicts of interest, including identification, control and prevention of any consequences thereof. **The second line of defence** supports the first line of defence on the matters regarding identification of regulatory risks, development and implementation of control procedures, clarification of applicable law requirements and preparation of monitoring reports for governing bodies. **The third line of defence** is the Internal Audit Service that independently assesses the efficiency of processes developed by the first and second lines of defence and delivers independent and objective information to governing bodies on efficiency and effectiveness of financial and economic activity, efficiency of assets and liabilities management, including assets safety, and efficiency of management of trade organiser risks. The governing bodies of MOEX define internal control and risk management principles and approaches.

N	Principle	Implementation Results
		MOEX has in place a risk management system that is appropriate to the nature and scope of its transactions and includes risk mitigation measures; risk monitoring system that ensures submission of necessary information to MOEX governing bodies; and the process to manage major risk types that may adversely affect its activities as trade organiser and financial platform operator. Risk management functions are distributed between the Supervisory Board and its committees, executive bodies, heads of subdivisions responsible for particular directions of MOEX activities where risks may arise, special subdivision responsible for risks arising in the activities of the trade organiser, Internal Control Service, as well as consultative and advisory bodies of MOEX. From 2021, MOEX risk management priorities shifted to predicting potential risks inherent to business processes. In 2021, implementation of MOEX Group's Risk Management System Development Strategy 2024 (hereinafter, RMS Strategy 2024), approved by the Supervisory Board in October 2020, continued. In 2021, the Risk Management Committee of the Moscow Exchange Supervisory Board approved the RMS Strategy 2024 Roadmap. *The Risk Management Strategy 2024 outlined the following areas of risk management development:* ▪ supporting the key business development areas identified in the RMS Strategy 2024; ▪ improving risk and capital management tools and processes at the Group level; ▪ maintaining the infrastructural role of the Group; ▪ risk-culture development across the Group. *The Risk Management Strategy 2024 defined the following priorities in management of non-financial risks:* ▪ strengthening the current risk management tools; ▪ finding and implementing new tools; ▪ risk-culture development. The Risk Management Strategy 2024 also identified the system's success criteria, risks related to the RMS 2024 implementation and measures aimed at preventing such risks. Information on the risk management system is brought to shareholders, trading and clearing members, the Bank of Russia and other stakeholders on a regular basis either in the form of reports or on the website. Stabilisation 3.0 programme, which comprises independent assessment of the internal control system and operational and compliance risk mitigation efforts is implemented at the level of MOEX Group. One of the main focuses of the programme is to improve compliance culture and develop new channels for risk communication among employees of MOEX Group companies. Seeking to develop a unified approach to compliance risk management in the Group companies and to coordinate the relevant divisions of the Group companies, the Company has established the Steering Committee for Compliance under the Chairman of the MOEX Executive Board. The main objective of the established Committee is to develop unified compliance risk management policies and procedures for the Group companies. MOEX ensures independent internal audit function (Internal Audit Service) by segregating its functional and administrative accountability.

N	Principle	Implementation Results
		Within functional accountability, the Supervisory Board took the following resolutions: ▪ approve the Internal Audit Policy (Standard) of the Moscow Exchange. Audit reports (resolution of 26/03/2021); ▪ approve the Internal Audit Policy (Standard) of the Moscow Exchange. Provision on the Internal Audit Unit (resolution of 26/03/2021); ▪ approve the Internal Audit Policy (Standard) of the Moscow Exchange. Programme to ensure ongoing and follow-up quality control of internal audit (resolution of 26/03/2021); ▪ approve the Internal Audit Policy (Standard) of the Moscow Exchange. Risk-oriented planning (resolution of 26/03/2021); ▪ approve the Internal Audit Policy (Standard) of the Moscow Exchange "Conduct of audits" (resolution of 26/08/2021); ▪ review the report of the Head of the Internal Audit Service (IAS) of the Moscow Exchange on the performance of the IAS of the Moscow Exchange in 2020 (resolution of 04/03/2021); ▪ approve amendments to the Moscow Exchange Internal Audit Service Plan for 2021 (resolution of 26/03/2021 and 25/05/2021); ▪ approve amendments to the terms and conditions of the employment contract with the Head of the Moscow Exchange Internal Audit Service (resolution of 29/04/2021); ▪ approve the maximum amount of salary of the Moscow Exchange Internal Audit Service employees (exclusive of the IAS Head) (resolution of 27/09/2021); ▪ approve amendments to the Moscow Exchange Internal Audit Service structure (resolution of 27/09/2021); ▪ approve the Moscow Exchange Internal Audit Service Plan for 2022 (resolution of 22/12/2021); ▪ review report on the audits performed and the Moscow Exchange Internal Audit Service's results for H1 2021 (resolution of 30/09/2021); ▪ approve key performance indicators (targets) of the Head of the Moscow Exchange Internal Audit Service for 2022 (resolution of 22/12/2021). *Within administrative accountability, the Chairman of the Executive Board:* ▪ allocated the necessary funds within the approved budget of the Internal Audit Service; ▪ provided support in dealing with the divisions of MOEX. Internal audits at MOEX, including relations between the Internal Audit Service and other divisions and the external auditor of MOEX, are organised and performed in accordance with the Provision on the Internal Audit Service. Internal audit employees operate within the framework of applicable laws and professional standards.

N	Principle	Implementation Results
4	Ensuring prevention, identification, and settlement of conflicts of interest related to MOEX activity as well as the fight against corruption	Measures taken by MOEX as a trade organiser and financial platform operator to prevent conflicts of interest are regulated by MOEX internal documents, including the Provision on Identifying and Preventing Conflicts of Interest in the Exercise of Trade Organiser and Financial Platform Operator Activities by the Moscow Exchange, which was approved in 2021. Such measures aim to prevent situations in which personal interest of MOEX employees may affect their fair and efficient discharge of duties. In terms of managing corruption risks, MOEX follows key principles set out in the Anti-corruption Policy approved in 2020. Namely, a zero tolerance approach to corruption; employee engagement; development and implementation of measures to minimise the likelihood of involvement of MOEX and its employees in corruption practices; investigations into good-faith reports of violations of procedures for preventing and combating corruption and holding the guilty persons liable regardless of their position, length of service or other conditions, if they commit corruption offences as part of their duties; mandatory screening of counterparties; and monitoring of the efficiency of the anti-corruption standards and procedures that are in effect. *MOEX prevents and detects corruption and manages anti-corruption efforts through the instruments described in the Policy, namely:* ▪ anti-corruption efforts: – existence of a body that controls procurement procedures to decide on contract awards; – counterparty due diligence, including checking for conflicts of interest and relations with public officials and Exchange employees; and inclusion of anti-corruption provisions (clauses) in contracts; – establishment of criteria for identifying gifts and procedure of gift-taking and gift-giving by employees; – possibility of reporting corruption risks (also anonymously) by employees through the Speak Up! whistleblowing helpline; – management of conflicts of interest; – monitoring and assessment of corruption risks; ▪ setting procedures to identify violations; ▪ setting procedures for in-house investigations; ▪ defining measures to respond to confirmed cases of corruption. Measures aimed at the management of conflicts of interest, arising in cases of conflict between MOEX interests and personal interests of the members of governance bodies due to their business, friendly, family and other ties and relations, as well as in cases of conflict between their responsibilities in relation to MOEX and to other persons, are defined in The Policy on the Management of a Conflict of Interests and Corporate Conflict in Moscow Exchange approved by the Supervisory Board. The Policy defines obligations of the governing body members related to the implementation of measures to manage conflicts of interest. It outlines approaches and methods to prevent and detect conflicts of interest, including identification of transactions involving a conflict of interest (including transactions with securities of MOEX, interested-party transactions and transactions made outside the ordinary course of business that carry a potential conflict of interest).

N	Principle	Implementation Results
5	Ensuring equal and fair attitude towards all shareholders (participants) in exercising their right to participate in MOEX governance as well as the balance between the rights and interests of customers, MOEX contractors and other stakeholders	MOEX ensures equal and fair attitude towards all shareholders in exercising their right to participate in the governance of the Company. One special feature of MOEX's shareholding structure is the absence of a controlling shareholder. Each shareholder is entitled to take part in the General Meeting of Shareholders held in the form of joint presence, exercising their right to vote in a convenient manner: by sending voting bulletin by mail, personally participating or using an electronic form of voting. In the reporting period, the General Meeting of Shareholders was held in the form of absentee voting (without joint presence of shareholders to discuss agenda items and take decisions on issues put to a vote) in accordance with the applicable law. Each shareholder was allowed to take part in the General Meeting of Shareholders held in the form of absentee voting, exercising their right to vote in a convenient manner: by sending voting bulletin by mail, using an electronic form of voting or giving voting directions (instructions) to record keepers of rights to MOEX's shares in accordance with the Russian law on securities. MOEX shareholders are allowed to vote electronically by filling in an electronic voting ballot on the website. To ensure equal attitude towards all shareholders, MOEX provides information on holding the meetings, including materials for the meeting, both in Russian and in English. Voting ballots are also available in English, which, in accordance with OECD recommendations, eliminates voting obstacles for foreign shareholders. In preparation for the AGM, MOEX holds the Shareholder Day in the form of an Internet conference where MOEX management presents yearly results and answers questions of the conference participants in real time. At General Meetings held in the form of joint presence shareholders are given the opportunity to communicate with MOEX management and receive feedback on the issues of interest to them, whereas members of the executive bodies and the Supervisory Board, the Chief Accountant, representatives of the auditor, and candidates nominated for election to the Supervisory Board are always invited to attend the Annual General Meeting. Given that many of the MOEX's shareholders are also its customers, MOEX ensures equal treatment of customers in offering its services, thereby avoiding any unfair advantage. MOEX follows the principle of respecting the best interests of MOEX and MOEX Group service users through creating user committees by type of activities carried out by financial market participants, type of contracts executed in organised trading and type of securities placed by issuers. Along with user committees, which simultaneously serve as market section councils according to law on organised trading, MOEX has voluntarily established individual committees to ensure a regular dialogue with its customers and their participation in shaping business initiatives. The user committees review most of the business innovations that MOEX implements, as well as tariff policy and technological solutions. Moreover, MOEX strives to build long-term and sustainable mutually beneficial relations with its contractors. MOEX has in place a competitive procedure for selecting contractors that makes the contracting process transparent and allows to select the best contractors for the company.

N	Principle	Implementation Results
6	Ensuring transparency of MOEX activity and effective communication with its shareholders (participants) and other stakeholders	MOEX sees timely and full disclosure of information as an important tool for building long-term confidence-based relations with shareholders, adding to MOEX's value and its ability to raise capital and to maintain confidence of shareholders, investors and other stakeholders. MOEX seeks to ensure that its shareholders and other stakeholders have access to information on all material facts of MOEX's operations to enable them to make informed investment and management decisions. The main approaches and principles of information disclosure by MOEX are established by the Information Policy whose new version was approved by the Supervisory Board in 2020. *According to the Information Policy, information disclosed by MOEX is divided into three groups:* ▪ information about MOEX activities as an issuer of securities and as trade organiser subject to mandatory disclosure under the legislation and regulatory documents; ▪ information subject to voluntary disclosure at the discretion and choice of MOEX; ▪ information made available at the request of stakeholders. For user convenience, Information Disclosure and Compliance sections are available on the official website of MOEX. The Information Disclosure section comprises the following subsections: Issuer's Information Disclosure, Trade Organiser's Information Disclosure, Financial Platform Operator's Information Disclosure and Other Disclosures. Information is also disclosed in the news feed. Compliance section comprises the following subsections: MOEX Compliance, Codes of Good Practice and Compliance Hotline. For foreign shareholders and investors a special section https://www.moex.com/en/ is available on the English page of the MOEX website. It contains news for investors, key information on MOEX shares, dividend policy and payments, financial and operating results of MOEX activities, compliance, corporate governance, past and upcoming events for investors and shareholders, as well as contact information. The Head of Investor Relations is responsible for shareholder and investor communications. Contact details are available on the website of MOEX. MOEX management regularly communicates with investors and shareholders and their representatives through news feeds, press releases, annual reports, presentations and other investor materials, meetings and special events for analysts and investors, road shows, investor conferences, as well as quarterly conference calls and webcasts for analysts and investors, featuring financial highlights for the reporting period and management commentary. The listed special events were mostly digital in 2021. MOEX management also actively engages with the media. These measures help both investors and shareholders stay posted to be able to take informed investment decisions. Communications with current shareholders of MOEX and, if necessary, with shareholders/participants of MOEX Group companies, including during the preparation for the General Meetings of Shareholders, are ensured by the Corporate Governance Department.
7	Striving for further progress with a view to sustainable development of MOEX and increased return on investments in the equity capital	Seeking to ensure sustainable development and increase the return on investments in the equity capital in the long term, MOEX governing bodies acknowledge the need for continuous improvement of MOEX corporate governance system, taking into account its level of development and the impact of external factors, as well as the need for ongoing control over the observance of the rights and interests of shareholders and other stakeholders.

CONTACTS

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SCOPE OF THE REPORT

Moscow Exchange (the "Exchange") declares that the information contained in the Annual Report is accurate as of 31 December 2021. All provisions of the Annual Report, which in one way or another reflect the Exchange's plans, shall be considered without regard to events occurring after the reporting date (31 December 2021).

The Exchange does not assume any liabilities with regard to the information stated in this Annual report not related to the reporting period.

This Annual Report has been prepared by PJSC Moscow Exchange MICEX-RTS ("Moscow Exchange", "the Exchange" or "MOEX").

It reviews the consolidated performance in 2021 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 ("NAMEX").

COMPLIANCE

Information in this report has been consolidated in accordance with Bank of Russia Instruction No 714-P of 27 March 2020 and the Bank of Russia Corporate Governance Code of 2014 and GRI G4 Sustainability Reporting Guidelines.

CONSOLIDATED FINANCIAL STATEMENTS

For the Year Ended December 31, 2021

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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 profit or loss, the consolidated statement of comprehensive income for the period ended 31 December 2021, the consolidated statement of financial position as at 31 December 2021, and the consolidated statement of cash flows, the consolidated statement of changes in equity for the year then ended 31 December 2021, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2021 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' (IESBA) International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) together with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Russian Federation, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Assessing the impairment of goodwill and intangible assets	
We considered this matter to be a key audit matters as the carrying amount of goodwill and other intangible assets, which are represented mainly by the client base, is material for the Group's consolidated financial statements. The assessment of goodwill and other intangible assets is a complex process which requires management to apply judgment when identifying indicators of impairment and when performing the testing for impairment. The information on goodwill and intangible assets is disclosed in Note 21 and Note 20 to the Group's consolidated financial statements, respectively.	We analyzed the Group's accounting policies for goodwill and other intangible assets. We assessed the judgments and the calculation methodology applied for impairment testing of goodwill and other intangible assets. We involved business valuation specialists to assist us in analyzing management's calculations, assumptions and judgments applied when identifying impairment indicators and when performing the impairment testing of goodwill and other intangible assets. We assessed management's assumptions and judgments with respect to allocating goodwill and other intangible assets to cash-generating units and making projections of cash flows for these units. We analyzed the inputs of models used in the impairment testing of goodwill and other intangible assets, reconciled them with historical trends of items in the Group's consolidated financial statements and market indicators, analyzed the discount rate and macroeconomic indicators used in the model for projecting future cash flows. We verified the mathematical accuracy of models and performed a sensitivity analysis for key assumptions (projected cash flows, discount rates) of calculation models and analyzed key assumptions having the most significant effect on the measurement of the recoverable amount of the cash-generating units. We analyzed the disclosure of goodwill and other intangible assets in the Group's consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Recognition of fee and commission income and interest income	
Fee and commission income and interest income are the most material items of the Group's statement of profit or loss. The recognition of fee and commission income and interest income is closely interrelated with the proper functioning of highly complex IT systems of the Group. Fee and commission income and interest income are recognized on the basis of automated data processing, and there is a risk of technical failures, including the risk that the automated accounting procedures and related manual control procedures are inappropriately designed or operating. Functioning of the Group's IT systems largely depends on the reliability of relevant information systems and the effective control procedures. Therefore, we included the recognition of fee and commission income and interest income in the key audit matters. The information on fee and commission income and interest income is disclosed in Note 5 and Note 6 to the Group's consolidated financial statements.	We focused on the most significant IT systems, such as trading-clearing systems and accounting system. We tested the design and operational efficiency of general IT controls and a number of automated application controls within significant IT systems that support and automate accounting and preparation of the consolidated financial statements. We obtained an understanding of key IT control procedures with respect to these IT systems and tested their operational efficiency, including the following areas: Access management, including granting and revoking user access rights; Change management – testing and approving changes in algorithms and key reports used for preparing the consolidated financial statements; Control over data transfer ensuring the safety and completeness of data transferred to and from the accounting system.
Changes in the Group's structure	
We believe that this matter was one of the most significant matters for our audit of the consolidated financial statements, since in 2021, the Group acquired controlling interests in companies and made significant judgments with respect to the measurement of the fair value of identifiable assets and liabilities at the acquisition date. The information on changes in the Group's structure is disclosed in Note 4 to the Group's consolidated financial statements.	We reviewed the Group's accounting policy addressing the business combination. We analyzed judgments and methodologies applied to measure the fair value of identifiable assets and liabilities of the companies at the acquisition date, focusing on the measurement of the cost of goodwill and intangible assets. We involved business valuation specialists to assist us in analyzing calculations, management's assumptions and judgments as part of the fair value measurement of intangible assets, such as software and customer base at the acquisition date. We performed a sensitivity analysis for key assumptions (projected cash flows, discount rates, terminal value) of calculation models and analyzed key assumptions having the most significant effect on the final fair value measurement of intangible assets. Our audit procedures also included the collection and analysis of accounting data of the consolidated companies used to measure the fair value of identifiable assets and liabilities of the companies at the acquisition date. We analyzed the disclosure of changes in the Group's structure in the consolidated financial statements of the Group.

Other matter

The audit of the consolidated financial statements of the Group for 2020 was conducted by another auditor, who expressed an unmodified opinion on these statements on 5 March 2021.

Other information included in the Annual report of Public Joint-Stock Company "Moscow Exchange MICEX-RTS"

Other information consists of the information included in the Annual report of Public Joint-Stock Company "Moscow Exchange MICEX-RTS" other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and the Supervisory Board, the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Supervisory Board, the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Supervisory Board, the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Supervisory Board, the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is M. Ignatjeva.

M. Ignatjeva,
acting on behalf of Ernst & Young LLC
on the basis of power of attorney dated 1 March 2022, partner in charge of the audit resulting in this independent auditor's report (main registration number 21906108628)

4 March 2022

Details of the auditor
Name: Ernst & Young LLC

Record made in the State Register of Legal Entities on 5 December 2002, State Registration Number 1027739707203.

Address: Russia 115035, Moscow, Sadovnicheskaya naberezhnaya, 77, building 1.

Ernst & Young LLC is a member of Self-regulatory organization of auditors Association "Sodruzhestvo". Ernst & Young LLC is included in the control copy of the register of auditors and audit organizations, main registration number 12006020327.

Details of the audited entity
Name: Public Joint-Stock Company "Moscow Exchange MICEX-RTS"

Record made in the State Register of Legal Entities on 16 October 2002, State Registration Number 1027739387411.

Address: Russia 125009, Moscow, Bolshoy Kislovsky per., building 13.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

for the Year Ended December 31, 2021
(in millions of Russian rubles)

	Notes	Year ended December 31, 2021	Year ended December 31, 2020
Fee and commission income	5	41 554,0	34 268,2
Interest income calculated using the effective interest method	6	13 836,4	14 718,1
Other interest income	6	439,5	457,5
Interest expense	7	(1 190,1)	(1 984,1)
Net (loss)/gain on financial assets at fair value through profit or loss		(96,4)	102,2
Net gain on financial assets at fair value through other comprehensive income	8	589,7	930,9
Foreign exchange losses less gains	9	(676,9)	(65,9)
Other operating income		412,7	164,1
Operating Income		**54 868,9**	**48 591,0**
General and administrative expenses	10	(10 632,9)	(8 290,7)
Personnel expenses	11	(9 881,7)	(8 459,3)
Profit before Other Operating Expenses and Tax		**34 354,3**	**31 841,0**
Movement in allowance for expected credit losses	12	627,4	(0,9)
Profit before Tax		**34 981,7**	**31 840,1**
Income tax expense	13	(6 884,2)	(6 669,6)
Net Profit		**28 097,5**	**25 170,5**
Attributable to:			
Equity holders of the parent		28 095,1	25 158,0
Non-controlling interest		2,4	12,5
Earnings per share (rubles)			
Basic earnings per share	28	12,45	11,16
Diluted earnings per share	28	12,35	11,14

Chairman of the Executive Board

Y.O. Denisov

4 March, 2022
Moscow

Chief Financial Officer, Executive Board Member

A.Y. Seliuk

4 March, 2022
Moscow

The notes 1-36 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the Year Ended December 31, 2021
(in millions of Russian rubles)

	Notes	Year ended December 31, 2021	Year ended December 31, 2020
Net profit		**28 097,5**	**25 170,5**
Other comprehensive income/(loss) that may be reclassified subsequently to profit or loss:			
Exchange differences on translating foreign operations		5,0	8,1
Movement in investment revaluation reserve for financial assets at fair value through other comprehensive income		(6 352,0)	962,2
Movement in revaluation reserve associated with changes in expected credit losses on financial assets at fair value through other comprehensive income	12	(106,4)	22,6
Net gain on investments at fair value through other comprehensive income reclassified to profit or loss	8	(589,7)	(930,9)
Income tax relating to items that may be reclassified	13	1 409,6	(10,8)
Other comprehensive (loss)/income that may be reclassified subsequently to profit or loss		**(5 633,5)**	**51,2**
Total comprehensive income		**22 464,0**	**25 221,7**
Attributable to:			
Equity holders of the parent		22 461,6	25 201,1
Non-controlling interest		2,4	20,6

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

as at December 31, 2021
(in millions of Russian rubles)

	Notes	December 31, 2021	December 31, 2020
Assets			
Cash and cash equivalents	14	471 283,4	471 793,0
Financial assets at fair value through profit or loss	15	15 639,1	18 852,2
Due from financial institutions	16	102 970,6	154 815,4
Central counterparty financial assets	17	5 256 071,2	4 050 837,6
Financial assets at fair value through other comprehensive income	18	237 821,2	193 302,7
Investments in associates and joint ventures		99,2	329,0
Property and equipment	19	6 896,2	6 459,9
Intangible assets	20	16 971,1	16 868,6
Goodwill	21	17 267,2	15 971,4
Current tax prepayments		205,1	516,2
Deferred tax asset	13	2 563,7	72,6
Other assets	22	15 650,3	2 777,6
Total assets		**6 143 438,3**	**4 932 596,2**
Liabilities			
Balances of market participants	23	718 395,2	716 893,1
Due to financial institutions		182,2	–
Central counterparty financial liabilities	17	5 256 071,2	4 050 837,6
Distributions payable to holders of securities	24	17 015,4	15 689,2
Current tax payables		375,8	2 014,4
Deferred tax liability	13	1 602,3	2 167,5
Other liabilities	25	9 625,2	5 704,7
Total liabilities		**6 003 267,3**	**4 793 306,5**
Equity			
Share capital	26	2 495,9	2 495,9
Share premium	26	32 251,4	32 316,7
Treasury shares	26	(1 535,4)	(1 260,9)
Foreign currency translation reserve		5,0	–
Investments revaluation reserve		(3 997,2)	1 641,3
Share-based payments		557,9	295,5
Retained earnings		110 292,8	103 693,8
Total equity attributable to owners of the parent		**140 070,4**	**139 182,3**
Non-controlling interest		100,6	107,4
Total equity		**140 171,0**	**139 289,7**
Total liabilities and equity		**6 143 438,3**	**4 932 596,2**

CONSOLIDATED STATEMENT OF CASH FLOWS

for the Year Ended December 31, 2021
(in millions of Russian rubles)

	Notes	Year ended December 31, 2021	Year ended December 31, 2020
Cash flows from / (used in) operating activities:			
Profit before tax		34 981,7	31 840,1
Adjustments for:			
Depreciation and amortisation charge	10	3 689,5	3 348,8
Revaluation of derivatives		(147,2)	175,2
Share-based payment expense	11	421,9	212,0
Unrealized loss/(gain) on foreign exchange operations		78,3	(14,7)
Gain on disposal of financial assets at FVTOCI		(589,7)	(930,9)
Net change in interest accruals		3 635,9	2 646,8
Net gain on disposal of property and equipment and intangible assets		(37,2)	(3,3)
Change in allowance for expected credit losses	12	(627,4)	0,9
Change in other provisions	25	(14,4)	(17,3)
Gain on disposal of assets held for sale		–	(71,4)
Gain from revaluation of previously held equity interest in the acquiree		(89,4)	–
Cash flows from operating activities before changes in operating assets and liabilities		**41 302,0**	**37 186,2**
Changes in operating assets and liabilities:			
(Increase) / decrease in operating assets:			
Due from financial institutions		52 189,1	(86 549,7)
Financial assets at FVTPL		2 593,3	(1 882,4)
Central counterparty financial assets		(1 199 436,2)	(787 758,2)
Other assets		309,7	1 985,1
Increase / (decrease) in operating liabilities:			
Balances of market participants		7 837,2	54 868,7
Due to financial institutions		228,1	(50 501,1)
Central counterparty financial liabilities		1 199 436,2	787 758,2
Distributions payable to holders of securities		48,9	3 360,1
Margin account		–	(0,6)
Other liabilities		3 627,4	569,2
Cash flows from/(used in) operating activities before taxation		**108 135,7**	**(40 964,5)**
Income tax paid		(9 961,3)	(3 306,4)
Cash flows from/(used in) operating activities		**98 174,4**	**(44 270,9)**

	Notes	Year ended December 31, 2021	Year ended December 31, 2020
Cash flows from / (used in) investing activities:			
Purchase of financial assets at FVTOCI		(113 086,4)	(135 718,1)
Proceeds from disposal of financial assets at FVTOCI		57 703,7	134 672,0
Purchase of property and equipment and intangible assets		(4 147,1)	(3 418,9)
Proceeds from disposal of property and equipment and intangible assets		51,1	22,5
Acquisition of subsidiaries, net of cash acquired	4	(1 119,3)	–
Proceeds from disposal of non-current assets held for sale		–	21,5
Acquisition of investment in associate and joint ventures		(210,7)	(329,0)
Cash flows used in investing activities		**(60 808,7)**	**(4 750,0)**
Cash flows from / (used in) financing activities:			
Dividends paid	27	(21 369,1)	(17 899,4)
Cash outflow for lease liabilities		(163,0)	(178,0)
Acquisition of non-controlling interest in subsidiaries	4	(38,2)	–
Acquisition of treasury shares		(450,0)	–
Cash flows used in financing activities		**(22 020,3)**	**(18 077,4)**
Effect of changes in foreign exchange rates on cash and cash equivalents		(15 854,8)	72 784,1
Net (decrease)/increase in cash and cash equivalents		**(509,4)**	**5 685,8**
Cash and cash equivalents, beginning of period	**14**	**471 793,1**	**466 107,3**
Cash and cash equivalents, end of period	**14**	**471 283,7**	**471 793,1**

Interest received by the Group from operating activities the year ended December 31, 2021, amounted to RUB 17 777,9 million (December 31, 2020: 17 780,7 RUB million).

Interest paid by the Group as part of its operating activities the year ended December 31, 2021, amounted to RUB 1 056,2 million (December 31, 2020: RUB 1 942,4 million) and as part of its financing activities RUB 83,0 million (December 31, 2020: RUB 49,4 million).

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the Year Ended December 31, 2021
(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, 2019	**2 495,9**	**32 199,8**	**(1 504,3)**	**1 598,2**	**457,6**	**–**	**(14,6)**	**96 435,1**	**131 667,7**	**184,7**	**131 852,4**
Net profit	–	–	–	–	–	–	–	25 158,0	25 158,0	12,5	25 170,5
Other comprehensive income	–	–	–	43,1	–	–	–	–	43,1	8,1	51,2
Total comprehensive income for the period	**–**	**–**	**–**	**43,1**	**–**	**–**	**–**	**25 158,0**	**25 201,1**	**20,6**	**25 221,7**
Dividends declared (Note 27)	–	–	–	–	–	–	–	(17 899,4)	(17 899,4)	–	(17 899,4)
Share-based payments	–	117,4	242,9	–	(162,1)	–	–	–	198,2	–	198,2
Disposal of assets held for sale	–	–	–	–	–	–	14,6	–	14,6	(97,9)	(83,3)
Treasury shares transferred	–	(0,5)	0,5	–	–		–	–	–	–	–
Other	–	–	–	–	–	–	–	0,1	0,1	–	0,1
Total transactions with owners	**–**	**116,9**	**243,4**	**–**	**(162,1)**	**–**	**14,6**	**(17 899,3)**	**(17 686,5)**	**(97,9)**	**(17 784,4)**
December 31, 2020	**2 495,9**	**32 316,7**	**(1 260,9)**	**1 641,3**	**295,5**	**–**	**–**	**103 693,8**	**139 182,3**	**107,4**	**139 289,7**
Net profit	–	–	–	–	–	–	–	28 095,1	28 095,1	2,4	28 097,5
Other comprehensive (loss)/income	–	–	–	(5 638,5)	–	5,0	–	–	(5 633,5)	–	(5 633,5)
Total comprehensive income for the period	**–**	**–**	**–**	**(5 638,5)**	**–**	**5,0**	**–**	**28 095,1**	**22 461,6**	**2,4**	**22 464,0**
Repurchase of treasury shares	–	–	(450,0)	–	–	–	–	–	(450,0)	–	(450,0)
Dividends declared (Note 27)	–	–	–	–	–	–	–	(21 369,1)	(21 369,1)	–	(21 369,1)
Share-based payments	–	(65,3)	175,5	–	262,4	–	–	–	372,6	–	372,6
Acquisition of subsidiary (Note 4)	–	–	–	–	–	–	–	–	–	62,0	62,0
Recognition of liabilities reserve for buyout of non-controlling interest (Note 4, 25)	–	–	–	–	–	–	–	(160,0)	(160,0)	–	(160,0)
Acquisition of non-controlling interest (Note 4)	–	–	–	–	–	–	–	33,0	33,0	(71,2)	(38,2)
Total transactions with owners	**–**	**(65,3)**	**(274,5)**	**–**	**262,4**	**–**	**–**	**(21 496,1)**	**(21 573,5)**	**(9,2)**	**(21 582,7)**
December 31, 2021	**2 495,9**	**32 251,4**	**(1 535,4)**	**(3 997,2)**	**557,9**	**5,0**	**–**	**110 292,8**	**140 070,4**	**100,6**	**140 171,0**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

for the Year Ended December 31, 2021
(in millions of Russian rubles, unless otherwise indicated)

1. 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.

The Group has 2 208 employees as at December 31, 2021 (December 31, 2020: 1 980 employees).

Group composition. Moscow Exchange is the parent company of the Group, which includes the following entities:

Name	Principal activities	December 31, 2021 Voting rights, %	December 31, 2020 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	85,08%	65,08%
MICEX Finance LLC (MICEX Finance)	Financial activities	100%	100%
MOEX Innovations LLC (MOEX Innovations)	Fintech start-ups investments, financial activities	100%	100%
MOEX Information Security LLC (MOEX Information Security)	Information security services	100%	100%
MB Marketplace LLC (Disovers LLC)	FinTech	70%	–
Insveb LLC	FinTech	70%	–
BierbaumPro AG	FX OTC trading platform	94,99%	–*
NT Progress LLC	FX OTC trading platform	94,99%	–*

* Before control acquisition on October 26, 2021 BierbaumPro AG and NT Progress LLC were accounted as investments in associates (Note 4).

NCC performs functions of a clearing organization and central counterparty on the financial market and holds licences for clearing operations and banking operations for non-banking credit institutions - central counterparties issued by the Central Bank of Russia (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 CBR.

NAMEX is a commodity exchange operating in Russia.

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.

MB Marketplace LLC (former Disovers LLC) and Insveb LLC are recently acquired Group companies to develop the Finusugi personal finance platform and expand the line of products offered in related markets. The electronic platform INGURU, developed by MB Marketplace (former Disovers LLC) and Insveb LLC was intergrated into Finuslugi platform in third quarter of 2021 and continues to provide interface for comparison and purchases of services (OSAGO insurance, KASKO, mortgages, credit cards, consumer loans, car loans, deposits, debit cards, microloans), which allow clients to choose and obtain the most favorable conditions for insurance products. On November 24, 2021, Disovers LLC changed its name to MOEX Marketplace LLC.

BierbaumPro AG is recently acquired Group company which is 100% owner of NT Progress LLC, the developer and owner of OTC FX trading platform NTPro. The platform offers solutions for liquidity aggregation, matching and algo execution across a wide range of FX instruments, as well as services to connect to more than 60 currency liquidity providers.

Moscow Exchange and all subsidiaries are located in Russia, except for BierbaumPro AG which is located in Switzerland.

Operating environment. The Russian economy continued to be negatively impacted by increased political tension in the region, 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, hampered economic growth and created other negative economic consequences.

Because Russia produces and exports large volumes of oil and gas, its current account and fiscal balance are particularly sensitive to the price of oil and gas on the world market. The Russian economy is vulnerable to market downturns and economic slowdowns elsewhere in the world. The Russian Government has introduced a range of stabilization measures providing support for Russian banks and companies in response to the ongoing global crisis.

As the COVID-19 pandemic continues around the world, and despite vaccination started in 2021, the pandemic situation remains uncertain with regards to addition of new strains of COVID-19. The Group continues to assess pandemic effect and changing micro- and macroeconomic conditions on its activities, financial position and financial results.

This evaluation includes stress-tests adjusted for potential COVID-19 effect on market volatility. Management currently believes that it has adequate capital and liquidity position to continue to operate the business and mitigate risks associated with COVID-19 for the foreseeable future. The Group remains vigilant in monitoring day to day changes as the global situation evolves.

The Group has adapted to mentioned events. To ensure the health of employees and maintain uninterrupted operation, a significant part of the Group's staff is transferred to remote work mode. The Group has a well-established mechanism to ensure continuity of trading and successfully operates in conditions of high volatility and a large number of transactions.

The financial statements approval. Consolidated Financial Statements of the Group were approved for issue by the Management on March 4, 2022.

Statement of compliance

These Consolidated Financial Statements of the Group have been prepared in accordance with the International Financial Reporting Standards ("IFRS").

2. Basis of Preparation and Significant Accounting Policies

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, 2021	December 31, 2020
USD	74,2926	73,8757
EUR	84,0695	90,6824

Adjustments of corresponding figures

In the Consolidated Financial Statement of Profit and loss for the year ended December 31, 2021 the Group has adjusted interest and other finance income by splitting into interest income calculated using the effective interest rate method, Other interest income and Net gain on financial assets at fair value through profit or loss.

The following table below represents the effect of changes mentioned above in the Consolidated Statement of Profit or Loss for the year ended December 31, 2020.

	As previously reported	Adjustments	As presented in these Consolidated Financial Statements
Interest and other finance income	15 277,8	(15 277,8)	–
Interest income calculated using the effective interest method	–	14 718,1	14 718,1
Other interest income	–	457,5	457,5
Net gain on financial assets at fair value through profit or loss	–	102,2	102,2

In the Consolidated Financial Statement of Cashflows for the year ended December 31, 2021 the Group performed adjustments of previously reported cashflows for the year ended December 31, 2020 by moving of the amounts from operating activities to investing activities that represents purchase of financial assets at FVTOCI.

The following changes have been made to the below items of Consolidated Statement of Cash Flows in the data of the year ended December 31, 2020.

	As previously reported	Adjustments	As presented in these Consolidated Financial Statements
Adjustments for:			
Net change in interest accruals	(2 001,7)	4 648,5	2 646,8
Cash flows (used in)/from operating activities	**(48 919,4)**	**4 648,5**	**(44 270,9)**
Purchase of financial assets at FVTOCI	(131 069,6)	(4 648,5)	(135 718,1)
Cash flows used in from investing activities	**(101,5)**	**(4 648,5)**	**(4 750,0)**

Changes in 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, 2020.

The Group applied for the first time certain amendments to the standards, which are effective for annual periods beginning on or after January 1, 2021. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

Interest Rate Benchmark Reform – Phase 2 Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (IBOR reform Phase 2)

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest
- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued
- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component

COVID-19-Related Rent Concessions beyond 30 June 2021 Amendments to IFRS 16

On May 28, 2020, the IASB issued COVID-19-Related Rent Concessions – amendment to IFRS 16 Leases. The amendments provide relief to lessees from applying IFRS 16 guidance on lease modification accounting for rent concessions arising as a direct consequence of the COVID-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a COVID-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the COVID-19 related rent concession the same way it would account for the change under IFRS 16, if the change were not a lease modification.

The amendment was intended to apply until June 30, 2021, but as the impact of the COVID-19 pandemic is continuing, on March 31, 2021, the IASB extended the period of application of the practical expedient to June 30, 2022.The amendment applies to annual reporting periods beginning on or after April 1, 2021.

However, the Group has not received COVID-19-related rent concessions, but plans to apply the practical expedient if it becomes applicable within allowed period of application.

The adoption of these new and revised Standards and Interpretations has not resulted in significant changes to the Group's accounting policies that have affected the amounts reported for the current or prior years.

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 and joint ventures

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.

Joint venture – a joint arrangement whereby two or more parties (one of which is the Group) that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Investments in associates and joint ventures 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 and joint venture. The Group's share of its associates' or and joint ventures' 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 or joint venture equals or exceeds its interest in the associate or joint venture, the Group does not recognise further losses, unless the Group is obliged to make further payments to, or on behalf of, the associate or join venture.

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

The Russian economy was considered hyperinflationary until December 31, 2002. As such, the Group 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.

Financial assets

All regular way purchases and sales of financial assets and liabilities are recognised on the settlement date. Regular way purchases or sales are purchases or sales of financial assets and liabilities that require delivery of assets and liabilities within the period generally established by regulation or convention in the marketplace.

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:
  - (a) financial asset is held within a business model with the objective both to collect the contractual cash flows and to sell the financial assets and
  - (b) the contractual cash flows of financial assets are SPPI;
- all other debt instruments (e.g. debt instruments managed on a fair value basis, or held for sale) and equity investments are subsequently measured at FVTPL.

An assessment of business models for managing financial assets is 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 February 7, 2011 N 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;
- liquidation decision was made in respect of the counterparty.

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 counterparty is included in watch-list by the Group, 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 below).

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.

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. Amounts that are subject to restrictions on their availability, including minimum reserve deposits with the CBR, are not included in cash and cash equivalents for the purpose of consolidated statement of cash flows.

Repurchase and reverse repurchase agreements

Sale and repurchase agreements ("repos") are treated as secured financing transactions. Securities sold under sale and repurchase agreements are retained in the consolidated statement of financial position and, in case the transferee has the right by contract or custom to sell or repledge them, reclassified as securities pledged under sale and repurchase agreements. The corresponding liability is presented within amounts due to financial institutions. Securities purchased under agreements to resell ("reverse repo") are recorded as amounts due from financial institutions. The difference between sale and repurchase price is treated as interest income and accrued over the life of repo agreements using the effective interest method.

Derivative financial instruments

The Group enters into derivative financial instruments, which are held for trading and 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.

Costs related to repairs and renewals are charged when incurred and included in other operating expenses, unless they qualify for capitalization.

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.

Lease

The Group as lessee
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 generally 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.

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.

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 Group as lessor

A lessor classifies 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.

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

The main source of the Group's revenue is through fees for services provided. Revenue is measured based on the consideration specified in a contract with a customer. The Group recognizes revenue as services are performed and as it satisfies its obligations to provide service to a customer.

The Group provides various services on trading in different markets, clearing, settlement and custody, IT services and also services of the financial platform operator related to providing an opportunity to make transactions by trading participants of the financial platform.

Fees and commission income of the Group are divided into fixed and variable.

Fixed fee and commission income revenue from providing services is recognized in the accounting period in which the services are rendered. Revenue is recognized based on the actual service provided up to the end of the reporting period as a proportion of the total services to be provided (i.e. recognition over time).

Variable fee and commission income are transaction or transaction volume-based revenues and are generated by services which are directly related to a single transaction or volume of transactions.

The performance obligation of a service is satisfied when the transaction or order has been executed trades or contracts cleared, custody service provided. Transaction revenues are recognized at a point in time when the Group meets its obligations to complete the transaction or service.

Being the financial platform operator the Group charges fee and commission income for the providing an opportunity to make transactions by trading participants of the financial platform. Such income is recognised at point in time as the service is provide at the moment of conclusion of the transaction.

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 11).

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.

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:

IFRS 17	Insurance Contracts
Amendments to IAS 1	Classification of Liabilities as Current or Noncurrent
Amendments to IFRS 3	Business combinations – Reference to the Conceptual Framework
Amendments to IAS 16	Property and equipment – Proceeds before Intended Use
Amendments to IAS 37	Provisions, contingent liabilities and contingent assets – Onerous Contracts – Cost of Fulfilling a Contract
IFRS 1 First-time Adoption of International Financial Reporting Standards	Subsidiary as a first-time adopter
IFRS 9 Financial Instruments	Fees in the '10 per cent' test for derecognition of financial liabilities
Amendments to IAS 8	Definition of Accounting Estimates
Amendments to IAS 1 and IFRS Practice Statement 2 Disclosure of Accounting Policies	Disclosure of Accounting Policies

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:

Amendments to IAS 1 Classification of Liabilities as Current or Non-current. *In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:*

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

The amendments apply retrospectively to the periods beginning on or after January 1, 2023. Early application is acceptable.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

Amendments to IFRS 3 Reference to the Conceptual Framework. In May 2020, the IASB issued Amendments to IFRS 3 Business Combinations - Reference to the Conceptual Framework.

The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements.

The Board also added an exception to the recognition principle of IFRS 3 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37 or IFRIC 21 Levies, if incurred separately.

At the same time, the Board decided to clarify existing guidance in IFRS 3 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements.

The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

Amendments to IAS 16 Property, Plant and Equipment: Proceeds before Intended Use. In May 2020, the IASB issued Property, Plant and Equipment – Proceeds before Intended Use, which prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities. As part of its 2018-2020 annual improvements to IFRS standards process the IASB issued amendment to IFRS 9. The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

Amendments to IAS 8 Definition of Accounting Estimates. In February 2021, the IASB issued amendments to IAS 8, in which it introduces a definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates.

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted as long as this fact is disclosed.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

Amendments to IAS 1 and IFRS Practice Statement 2 Disclosure of Accounting Policies. In February 2021, the IASB issued amendments to IAS 1 and IFRS Practice Statement 2 Making Materiality Judgements, in which it provides guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures.

The amendments to IAS 1 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. Since the amendments to the Practice Statement 2 provide non-mandatory guidance on the application of the definition of material to accounting policy information, an effective date for these amendments is not necessary.

The management of the Group does not expect that the application of these amendments could have an impact on the Group's financial statements in future periods.

3. 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.

Judgements and critical estimates made by the Group in the process of applying the accounting policies were consistent with those disclosed in the annual consolidated financial statements for the year ended December 31, 2020, except for the following updates made to expected credit loss (ECL) estimation model:

- Refined approach to Probability of Default (PD) estimation:
  - Starting 2021 the Group uses tables of relationships between Credit Ratings and PD made by following rating agencies: Moody's Investors Service, S&P Global Ratings and Fitch Ratings to measure ECL.
- Refined approach to Loss Given Default (LGD) estimation:
  - Starting 2021 the Group uses LGD Moody's Investment Service averages, considering legal entity type and credit rating level;
  - credit quality adjustments depending on country indicators have been excluded;
  - a separate scale for systemically important organizations has been excluded from calculation.
- An impairment indicator has been adjusted by including a rating downgrade indicator (by 6 notches) since initial recognition.

The above changes resulted in decrease in the amount of impairment allowance on cash and cash equivalents, due from financial institutions, financial assets at FVTOCI, other financial assets by RUB 94,5 million.

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 recognised deferred tax assets represent amount of income tax, which may be recovered through future income tax expenses and is recorded in the statement of financial position. Deferred income tax assets are recorded to the extent that realisation of the related tax benefit is probable. The future taxable profits and the amount of tax benefits that are probable in the future are based on management expectations that are believed to be reasonable under the circumstances (Note 13).

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 2 563,7 million and RUB 72,6 million as at December 31, 2021 and 2020, 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 34 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 30 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.

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 32.

Share-based payments
Estimating fair value for share-based payment transactions requires determination of the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determination of the most appropriate inputs to the valuation model including the expected life of the instrument and volatility and making assumptions about them. The assumptions and models used for estimating fair value for share-based payment transactions are disclosed in Note 11.

4. Changes in Group Composition

Acquisition of subsidiaries.

On May 11, 2021, Moscow Exchange acquired 70% of INGURU the electronic platform for selecting insurance and banking products through buying two companies MB Marketplace LLC (formerly Disovers LLC) and Insveb LLC, which are not publicly listed. Within five years, this share may be increased to 100%. The Group recognized liability on non-controlling interest put option to acquire 20% stake (Note 25).

The acquisition of the company is part of Moscow Exchange's strategy to enter related markets. The services of INGURU are integrated into the Finuslugi personal finance platform and expand opportunities for clients and enable them to receive better terms in insurance and banking services.

From the date of acquisition, Disovers LLC and Insveb LLC have contributed RUB 488,2 million of commission income and increased the Group's net profit by RUB 5,5 million. If the combination had taken place at the beginning of the year, the net profit for 2021 of the Group would have been RUB 28 112,2 million, the fee and commission income would have been RUB 41 830,8 million.

The fair value of identifiable assets and liabilities of MB Marketplace LLC (formerly Disovers LLC) and Insveb LLC at the date of acquisition were:

Assets	
Cash and cash equivalents	17,0
Property and equipment	0,5
Intangible assets	25,8
Deferred tax asset	1,7
Other assets	93,6
Total assets	**138,6**
Liabilities	
Other liabilities	32,0
Total liabilities	**32,0**
Net identifiable assets and liabilities	**106,6**

Goodwill arising from the acquisition has been recognised as follows.

Consideration transferred	350,0
Non-controlling interest	32,0
Fair value of identifiable net assets	(106,6)
Goodwill (Note 21)	**275,4**
Cash flow on acquisition	
Consideration paid by cash	(350,0)
Cash acquired with the subsidiary	17,0
Net cash flow on acquisition (included in cash flows from investing activities)	**(333,0)**

As at December 31, 2020 the Group owned 24,99% stake in BierbaumPro AG, which was accounted as investment in associate. During 2021 the Group increased its stake to 29,5%. On October 26, 2021, Moscow Exchange closed the deal on the purchase of 65,5% of BierbaumPro AG shares. Thus, Moscow Exchange's stake in BierbaumPro AG increased to 94,99%. BierbaumPro AG is the 100% owner of NT Progress LLC, the developer and owner of the platform for OTC trading of currency market instruments – NTPro.

The partnership between Moscow Exchange and NTProgress will expand both companies' service offering and allow the two parties to offer clients NTPro's highly flexible advanced FX trading solutions alongside Moscow Exchange's clearing and settlement facilities.

From the date of acquisition, BierbaumPro AG (owns 100% of NT Progress LLC) has contributed RUB 93,0 million of commission income and increased the Group's net profit by RUB 40,7 million. If the combination had taken place at the beginning of the year, the net profit for 2021 of the Group would have been RUB 28 053,8 million, the fee and commission income would have been RUB 41 900,1 million.

The fair value of identifiable assets and liabilities of BierbaumPro AG at the date of acquisition were:

Assets	
Cash and cash equivalents	273,4
Due from financial institutions	30,0
Property and equipment	10,4
Intangible assets	521,4
Right of use assets	15,8
Deferred tax asset	0,3
Other assets	50,0
Total assets	**901,3**
Liabilities	
Lease liabilities	15,8
Deferred tax liability	104,9
Other liabilities	181,4
Total liabilities	**302,1**
Net identifiable assets and liabilities	**599,3**

Goodwill arising from the acquisition has been recognised as follows.

Consideration transferred	1 059,8
Fair value of previously held equity interest in the acquiree	529,9
Non-controlling interest	30,0
Fair value of identifiable net assets	(599,3)
Goodwill (Note 21)	**1 020,4**
Cash flow on acquisition	
Consideration paid by cash	(1 059,8)
Cash acquired with the subsidiary	273,4
Net cash flow on acquisition (included in cash flows from investing activities)	**(786,4)**

Intangible assets acquired within this business combination are represented by NTPro platform software of RUB 363,8 million and customer relationships of RUB 157,6 million (Note 20).

The Group has elected to measure the non-controlling interest in the acquiree at the non-controlling interests's proportionate share of the acquiree's identifiable net assets.

Acquisition of NCI. During 2021 the Moscow Exchange acquired an additional 20% interest in NAMEX, increasing its ownership from 65,08% to 85,08%. The carrying amount of NAMEX's net assets in the Group's consolidated financial statements on the date of acquisition was RUB 203,8 mln.

The following table summarises the effect of changes in the Moscow Exchange's ownership interest in NAMEX.

Carrying amount of NCI acquired	71,2
Consideration paid to NCI in cash	38,2
Total equity attributable to owners of the parent	**33,0**

5. Fee and Commission Income

	Year ended December 31, 2021	Year ended December 31, 2020
Money market	11 699,1	8 612,0
Securities market	8 396,2	7 981,1
▪ quities	5 200,8	4 227,4
▪ bonds	2 431,6	2 942,5
▪ listing and other services	763,8	811,2
Depository and settlement services	8 396,3	6 524,9
Derivatives market	5 198,4	3 939,8
Foreign exchange market	4 191,4	4 276,1
Information services	1 185,8	1 110,6
Sale of software and technical services	1 133,6	956,7
Financial marketplace services	497,0	5,8
Other	856,2	861,2
Total fee and commission income	**41 554,0**	**34 268,2**

6. Interest Income

	Year ended December 31, 2021	Year ended December 31, 2020
Interest income calculated using the effective interest method		
Interest income on financial assets at FVTOCI	8 593,2	8 782,3
Interest on cash and cash equivalents and due from financial institutions	4 215,9	4 382,0
Interest income on balances of market participants	1 027,3	1 553,8
Total interest income calculated using the effective interest method	**13 836,4**	**14 718,1**
Other interest income		
Interest income on financial assets at FVTPL	439,5	457,5
Total other interest income	**439,5**	**457,5**
Total interest income	**14 275,9**	**15 175,6**

7. Interest Expense

	Year ended December 31, 2021	Year ended December 31, 2020
Interest expense on cash and cash equivalents and due from financial institutions	832,9	1 435,9
Interest expense on stress collateral	129,9	146,8
Interest expense on accounts of clearing participants	117,6	212,5
Interest expense on lease liabilities	83,0	49,4
Interest expense on interbank loans and deposits	14,8	138,9
Interest expense on repo agreements and other	11,9	0,6
Total interest expense	**1 190,1**	**1 984,1**

8. Net Gain on Financial Assets at Fair Value through Other Comprehensive Income

	Year ended December 31, 2021	Year ended December 31, 2020
Bonds issued by Russian Federation	402,3	878,4
Bonds issued by foreign companies of Russian groups	221,9	21,4
Bonds issued by Russian companies	(14,8)	32,3
Bonds issued by Russian banks	(11,6)	2,0
Bonds issued by foreign financial organizations	(8,1)	(3,2)
Total net gain on financial assets at FVTOCI	**589,7**	**930,9**

Net gain on financial assets at fair value through other comprehensive income represents reclassification adjustment from other comprehensive income to profit or loss upon disposal of financial assets.

9. Foreign Exchange Losses Less Gains

	Year ended December 31, 2021	Year ended December 31, 2020
Foreign exchange swaps	(623,9)	(109,6)
Net result from other foreign exchange operations	(53,0)	43,7
Total foreign exchange losses less gains	**(676,9)**	**(65,9)**

Net result on foreign exchange swaps includes financial results from swap deals used to hedge open foreign currency position of the Group and financial results from swap transactions used to earn interest income from ruble-denominated funds.

10. General and Administrative Expenses

	Year ended December 31, 2021	Year ended December 31, 2020
Amortisation of intangible assets (Note 20)	2 717,6	2 472,3
Equipment and intangible assets maintenance	1 912,1	1 589,7
Depreciation of property and equipment (Note 19)	971,9	876,5
Advertising and marketing costs	835,5	202,7
Taxes, other than income tax	787,8	647,5
Market makers fees	764,1	572,1
Professional services	629,6	465,6
Registrar and foreign depository services	620,8	454,4
Information services	433,5	380,3
Rent and office maintenance	337,9	329,3
Agent fees	328,6	–
Communication services	104,3	86,4
Charity	34,9	113,2
Security expenses	29,8	30,5
Transport expenses	21,0	23,9
Business trip expenses	16,8	9,1
Loss on disposal of property, equipment and intangible assets	13,5	0,5
Other	73,2	36,7
Total general and administrative expenses	**10 632,9**	**8 290,7**

Professional services comprise consulting, audit, legal and other services.

11. Personnel Expenses

	Year ended December 31, 2021	Year ended December 31, 2020
Employees benefits except for share-based payments	7 839,0	6 865,9
Payroll related taxes	1 620,8	1 381,4
Share-based payment expense on equity settled instruments	372,6	198,2
Share-based payment expense on cash settled instruments	49,3	13,8
Total personnel expenses	**9 881,7**	**8 459,3**

Equity settled share-based program

In July 2020 the new long-term incentive program of equity settled instruments was introduced by the Group (hereinafter – LTIP). Program participants have the right to receive Moscow Exchange ordinary shares granted under conditions set out in the program. The LTIP program vests when employee continues to be employed by the Group at the vesting date and the Group fulfills certain financial performance results set by the program. The maximum contractual term of the contracts is five years. Program participants are entitled to receive fixed and variable number of shares, where variable number is defined as product of fixed number of shares and the sum of dividend yields for the three years preceding the vesting date. The fair value of the rights is measured at the grant date using the observable market price of Moscow Exchange shares at the grant date adjusted to take into account the variable component of the program and vesting conditions upon which the shares are granted.

The previous program of equity settled instruments continues along with the LTIP. 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 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.

The following table illustrates the number and weighted average fair value of shares granted (WAFV) and movements in rights to receive shares under the LTIP:

	Number	WAFV
Outstanding at January 1, 2020	**–**	**–**
Granted	15 787 054	106,00
Forfeited	(349 687)	103,91
Outstanding at January 1, 2021	**15 437 368**	**106,07**
Granted	3 742 192	114,82
Modification	(386 044)	107,73
Forfeited	(2 412 519)	109,46
Outstanding at December 31, 2021	**16 380 997**	**115,84**

The weighted average remaining contractual life of the outstanding instruments under new LTIP as at December 31, 2021 is 2,62 years (December 31, 2020: 3,50 years).

The following table illustrates the number and weighted average exercise prices (WAEP), and movements in rights to purchase equity settled instruments under previous program:

	Number	WAEP
Outstanding at January 1, 2020	**30 466 667**	**109,94**
Exercised (Note 26)	(3 573 530)	111,43
Forfeited	(3 905 000)	112,97
Redeemed	(14 659 804)	111,43
Outstanding at January 1, 2021	**8 328 333**	**104,54**
Exercised (Note 26)	(2 228 138)	108,41
Redeemed	(3 983 529)	108,41
Outstanding at December 31, 2021	**2 116 666**	**93,19**

WAEP for exercised rights in the table above is calculated based on the contractual exercise price.

The number of equity rights under previous program exercisable as at December 31, 2021 is 450 000 with WAEP of RUB 101,04 (December 31, 2020: 2 645 000 with WAEP of RUB 114,50).

The range of exercise prices and weighted average remaining contractual life of equity rights under previous program are as follows:

	December 31, 2021		December 31, 2020	
Exercise price	Number outstanding	Weighted average remaining contractual life	Number outstanding	Weighted average remaining contractual life
77,0 - 102,0	1 916 666	0,32	3 733 333	0,84
102,0 - 122,0	200 000	–	4 595 000	0,14
	2 116 666	0,29	8 328 333	0,45

Cash settled share-based program

In July 2021 the new program of cash settled instruments was introduced by the Group. The amount of cash consideration to be received by the employees is linked to the future market price of the Group's shares. 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.

1 461 336 settled instruments were granted under new cash settled programm during the year ended December 31, 2021. The weighted average remaining contractual life is 1,63 years.

During the year ended December 31, 2021 82 635 cash settled instruments under previous programm with WAEP of RUB 173,33 were exercised (December 31, 2020: 331 150 with WAEP of RUB 104,39).

12. Movement in Allowance for Expected Credit Losses

	Year ended December 31, 2021	Year ended December 31, 2020
Movement in allowance for ECL	627,4	(0,9)
Movement in allowance for expected credit losses	**627,4**	**(0,9)**

The information on the movement in the allowance for expected credit losses of the Group for the year ended December 31, 2021 and December 31, 2020, is provided below.

	Cash and cash equivalents	Due from financial institutions	Financial assets at FVTOCI	Other financial assets	Total
Note	14	16		22	
December 31, 2019	**1,7**	**0,1**	**219,3**	**2 442,3**	**2 663,4**
Net (reversal)/charge for the period	(1,6)	5,8	22,6	(25,9)	0,9
Write–offs	–	–	–	(8,9)	(8,9)
December 31, 2020	**0,1**	**5,9**	**241,9**	**2 407,5**	**2 655,4**
Net (reversal)/charge for the period	0,2	3,9	(106,4)	(525,1)	(627,4)
Write–offs	–	–	–	(990,3)	(990,3)
December 31, 2021	**0,3**	**9,8**	**135,5**	**892,1**	**1 037,7**

In the first quarter of 2019, a subsidiary of the Group that operated as a Commodity Delivery Operator (CDO), during regular inspections of commodities stored in grain warehouses, identified several instances where grain stockpiles used as collateral under swap trades were missing, allegedly due to theft. This risk is related to the 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 was sufficient to cover possible losses based on previous cases in the market. The Group has undertaken all necessary 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.

In 2021 part of receivables from the accredited grain elevators was written-off (RUB 987,4 million) as unrecoverable.

The insurance case under one of the claims filed by the Group was settled in May 2021, and as a result the Group received compensation in the amount of RUB 675,4 million. In this regard, the respective receivables of a grain elevator, which had been included in Other assets in amount of RUB 516,7 million, were derecognised, and the corresponding 100% provision was recovered. The excess of the insurance payment over the amount of derecognized receivables is represented by insurance compensation of previously unrecognized claimed receivables from the grain elevator in the amount of RUB 102,2 million and interest accumulated during the court proceedings in the amount of RUB 56,5 million. The whole amount of the excess payment is included in other income.

The remaining amount receivable from the accredited grain elevators and warehouses is presented as Other assets (Note 22), for which a 100% provision has been created. The total amount of provisions for CDO operations as at December 31, 2021 is RUB 831,9 million (December 31, 2020: RUB 2 350,6 million).

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, 2021 and December 31, 2020 is provided below.

	Cash and cash equivalents	Due from financial institutions	Financial assets at FVTOCI	Other financial assets	Total
Note	14	16		22	
December 31, 2021					
Stage 1 assets	471 283,7	102 951,0	235 608,6	1 616,9	811 460,2
Stage 2 assets	–	–	2 212,6	3,2	2 215,8
Stage 3 assets	–	29,4	–	851,5	880,9
Total financial assets	**471 283,7**	**102 980,4**	**237 821,2**	**2 471,6**	**814 556,9**
Allowance for Stage 1 assets	(0,3)	(9,8)	(134,7)	(40,4)	(185,2)
Allowance for Stage 2 assets	–	–	(0,8)	(0,2)	(1,0)
Allowance for Stage 3 assets	–	–	–	(851,5)	(851,5)
Total allowance for expected credit losses	**(0,3)**	**(9,8)**	**(135,5)**	**(892,1)**	**(1 037,7)**
December 31, 2020					
Stage 1 assets	471 793,1	154 785,3	193 302,7	1 458,2	821 339,3
Stage 2 assets	–	–	–	3,9	3,9
Stage 3 assets	–	36,0	–	2 361,9	2 397,9
Total financial assets	**471 793,1**	**154 821,3**	**193 302,7**	**3 824,0**	**823 741,1**
Allowance for Stage 1 assets	(0,1)	(5,9)	(241,9)	(45,3)	(293,2)
Allowance for Stage 2 assets	–	–	–	(0,3)	(0,3)
Allowance for Stage 3 assets	–	–	–	(2 361,9)	(2 361,9)
Total allowance for expected credit losses	**(0,1)**	**(5,9)**	**(241,9)**	**(2 407,5)**	**(2 655,4)**

During the year ended December 31, 2021 and the year ended December 31, 2020 there were no transfers of Cash and cash equivalents and Due from financial institutions between Stages. All changes in the gross carrying amount of Cash and cash equivalents and Due from financial institutions and in the loss allowance relate to the recognition or derecognition of these financial assets in the normal course of the Group's business.

The tables below analyze information about the significant changes in the gross carrying amount of Financial assets at FVTOCI during the period that contributed to changes in the loss allowance as well as the movement of the loss allowance during the 2021:

	Stage 1	Stage 2	Total
Gross carrying amount at January 1, 2021	**193 302,7**	**–**	**193 302,7**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold, and changes in mark-to-market and forex revaluation	44 575,4	(56,9)	44 518,5
Transfer to stage 2	(4 715,3)	4 715,3	–
Transfer to stage 1	2 445,8	(2 445,8)	–
Gross carrying amount at December 31, 2021	**235 608,6**	**2 212,6**	**237 821,2**
Loss allowance at December 31, 2021	**(134,7)**	**(0,8)**	**(135,5)**
Loss allowance at January 1, 2021	**241,9**	**–**	**241,9**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold, and changes in mark-to-market and forex revaluation	40,6	(0,1)	40,5
Transfer to stage 2	(4,3)	4,3	–
Transfer to stage 1	8,4	(8,4)	–
Net increase/(decrease) in credit risk	(52,1)	5,0	(47,1)
Changes to models and inputs used	(99,8)	–	(99,8)
Loss allowance at December 31, 2021	**134,7**	**0,8**	**135,5**

During the year ended December 31, 2020 there were no transfers of Financial assets at FVTOCI from Stage 1 to the lower stages of impairment.

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 2020:

	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount at January 1, 2020	**721,4**	**358,3**	**2 396,4**	**3 476,1**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	736,8	(354,4)	(25,6)	356,8
Write-offs	–	–	(8,9)	(8,9)
Gross carrying amount at December 31, 2020	**1 458,2**	**3,9**	**2 361,9**	**3 824,0**
Loss allowance at December 31, 2020	**(45,3)**	**(0,3)**	**(2 361,9)**	**(2 407,5)**
Loss allowance at January 1, 2020	**6,2**	**39,7**	**2 396,4**	**2 442,3**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	14,6	(33,4)	(25,6)	(44,3)
Net increase/(decrease) in credit risk	24,4	(6,0)	–	18,4
Write-offs	–	–	(8,9)	(8,9)
Loss allowance at December 31, 2020	**45,3**	**0,3**	**2 361,9**	**2 407,5**

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 2021:

	Stage 1	Stage 2	Stage 3	Total
Gross carrying amount at January 1, 2021	**1 458,2**	**3,9**	**2 361,9**	**3 824,0**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	164,5	(0,2)	(526,4)	(362,1)
Transfer to stage 2	(5,8)	5,8	–	–
Transfer to stage 3	–	(6,3)	6,3	–
Write-offs	–	–	(990,3)	(990,3)
Gross carrying amount at December 31, 2021	**1 616,9**	**3,2**	**851,5**	**2 471,6**
Loss allowance at December 31, 2021	**(40,4)**	**(0,2)**	**(851,5)**	**(892,1)**
Loss allowance at January 1, 2021	**45,3**	**0,3**	**2 361,9**	**2 407,5**
New financial assets originated or purchased less financial assets that have been derecognized due to being redeemed or sold	4,6	(0,1)	(526,4)	(521,9)
Transfer to stage 2	(0,2)	0,2	–	–
Transfer to stage 3	–	(0,4)	0,4	–
Net increase/(decrease) in credit risk	(10,8)	0,2	5,9	(4,7)
Changes to models and inputs used	1,5			1,5
Write-offs	–	–	(990,3)	(990,3)
Loss allowance at December 31, 2021	**40,4**	**0,2**	**851,5**	**892,1**

Reduction of the amount of Other financial assets in Stage 3 during the year ended December 31, 2021 is mainly due to the reversal of the provision for the receivables from one of the grain elevators, which was repaid by insurance compensation following the winning of a lawsuit against the insurance company, and the write-off of part of receivables of the grain elevators.

13. 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, 2021 and 2020, is presented below:

	December 31, 2019	Recognised in profit or loss	Recognised in other comprehensive income	December 31, 2020	Recognised in profit or loss	Recognised in other comprehensive income	Effect of business combination (Note 4)	December 31, 2021
Tax effect from deductible temporary differences:								
Cash, cash equivalents and amounts due from financial institutions	0,4	0,8	–	1,2	0,8	–	–	2,0
Financial assets at FVTPL	87,2	(83,5)	–	3,7	7,8	–	–	11,5
Financial assets at FVTOCI	799,7	(787,9)	–	11,8	468,4	1 409,6	–	1 889,8
Investments in associates	–	5,9	–	5,9	(5,9)	–	–	–
Property and equipment	21,9	3,5	–	25,4	(5,5)	–	–	19,9
Intangible assets	1,6	16,0		17,6	18,0	–	–	35,6
Other assets	711,0	10,3	–	721,3	(223,1)	–	1,7	499,9
Other liabilities	506,4	164,5	–	670,9	271,2	–	0,3	942,4
Balances of market participants	5,2	–		5,2	–	–	–	5,2
Tax loss carried forward	10,1	0,3	–	10,4	2,5	–	–	12,9
Total tax effect from deductible temporary differences	**2 143,5**	**(670,1)**	**–**	**1 473,4**	**534,2**	**1 409,6**	**2,0**	**3 419,2**
Tax effect from taxable temporary differences:								
Due from financial institutions	–	–		–	(4,1)	–	–	(4,1)
Financial assets at FVTPL	(4,6)	(112,0)	–	(116,6)	42,7	–	–	(73,9)
Financial assets at FVTOCI	(6,1)	(862,3)	(10,8)	(879,2)	879,2	–	–	–
Property and equipment	(368,6)	(9,5)	–	(378,1)	58,1	–	–	(320,0)
Intangible assets	(2 417,3)	230,5		(2 186,8)	232,0		(104,2)	(2 059,0)
Other assets	(4,9)	(1,1)	–	(6,0)	6,1	–	(0,1)	–
Other liabilities	(1,5)	(0,1)	–	(1,6)	1,3	–	(0,5)	(0,8)
Total tax effect from taxable temporary differences	**(2 803,0)**	**(754,5)**	**(10,8)**	**(3 568,3)**	**1 215,3**	**–**	**(104,8)**	**(2 457,8)**
Deferred income tax assets	**1 701,5**	**(1 628,9)**	**–**	**72,6**	**1 079,5**	**1 409,6**	**2,0**	**2 563,7**
Deferred income tax liabilities	**(2 361,0)**	**204,3**	**(10,8)**	**(2 167,5)**	**670,0**	**–**	**(104,8)**	**(1 602,3)**

Deferred tax assets increase as at December 31, 2021 was mainly driven by changes in mark-to-market and forex revaluation of financial assets at FVTOCI.

Tax effect from deductible temporary differences on other assets is mainly represented by the differences from created provisions on other financial assets.

Deductible temporary differences on other liabilities is mainly represented by differences from the personnel remuneration provision and other accruals.

Reconciliation of income tax expense and accounting profit for the year ended December 31, 2021 and December 31, 2020, are explained below:

	Year ended December 31, 2021	Year ended December 31, 2020
Profit before income tax	**34 981,7**	**31 840,1**
Tax at the statutory tax rate (20%)	6 996,3	6 368,0
Tax effect of income taxed at rates different from the prime rate	(390,9)	(337,4)
Permanent differences relating to equity-settled share-based program	150,4	149,3
Non-deductible expenses for tax purposes	121,0	107,6
Adjustments in respect of current and deferred income tax of previous years	7,2	382,1
Differences between 20% and income tax rate adopted in jurisdiction of subsidiary	0,2	–
Income tax expense	**6 884,2**	**6 669,6**
Current income tax expense	8 626,5	5 242,1
Current and deferred income tax expense related to previous years	7,2	2,9
Deferred taxation movement due to origination and reversal of temporary differences	(1 749,5)	1 424,6
Income tax expense	**6 884,2**	**6 669,6**

14. Cash and Cash Equivalents

	December 31, 2021	December 31, 2020
Correspondent accounts and overnight deposits with banks	445 355,6	446 844,3
Balances with the CBR	25 920,7	24 921,8
Cash on hand	4,9	3,3
Receivables on broker and clearing operations	2,5	23,7
Total cash and cash equivalents before allowance for ECL	**471 283,7**	**471 793,1**
Less allowance for ECL (Note 12)	(0,3)	(0,1)
Total cash and cash equivalents	**471 283,4**	**471 793,0**

As at December 31, 2021, the Group has balances with five counterparties, each of which is greater than 10% of equity (December 31, 2020: six counterparties). The total aggregate amount of these balances is RUB 426 620,1 million or 91% of total cash and cash equivalents as at December 31, 2021 (December 31, 2020: RUB 447 392,1 million or 95% of total cash and cash equivalents).

15. Financial Assets at Fair Value through Profit or Loss

	December 31, 2021	December 31, 2020
Bonds issued by foreign companies of Russian groups	14 564,3	18 312,0
Derivative financial instruments	542,3	1,2
Shares issued by foreign companies	421,2	412,9
Shares issued by Russian companies	111,3	126,1
Total financial assets at FVTPL	**15 639,1**	**18 852,2**

The table below shows the analysis of derivatives of the Group as at December 31, 2021 and as at December 31, 2020:

	Fair value of principal amount or agreed amount		Assets - positive	Liabilities - negative
	Receivables	Payables	fair value	fair value
December 31, 2021				
Currency swaps	34 290,4	(33 748,8)	542,3	(0,7)
December 31, 2020				
Currency swaps	63 466,9	(63 605,3)	1,2	(139,6)

As at December 31, 2021, the negative fair value of derivative financial instruments in the amount of RUB 0,7 million is included in other liabilities (Note 25) (December 31, 2020: RUB 139,6 million).

16. Due from Financial Institutions

	December 31, 2021	December 31, 2020
Financial assets measured at amortised cost		
Term deposits with the CBR	43 012,7	40 004,6
Interbank loans and term deposits	31 541,5	60 566,5
Reverse repo receivables from financial institutions	23 451,8	49 436,2
Other loans	29,4	36,0
Receivables on broker and clearing operations	1,1	0,6
Total financial assets measured at amortised cost	**98 036,5**	**150 043,9**
Non-financial assets at FVTPL		
Correspondent accounts and deposits in precious metals	4 943,9	4 777,4
Total non-financial assets at FVTPL	**4 943,9**	**4 777,4**
Total due from financial institutions before allowance for ECL	**102 980,4**	**154 821,3**
Less allowance for ECL (Note 12)	(9,8)	(5,9)
Total due from financial institutions	**102 970,6**	**154 815,4**

As at December 31, 2021, the Group has balances with two counterparties, which is greater than 10% of equity (December 31, 2020: four counterparties). The amount of this balance is RUB 66 451,8 million or 65% of the total amount due from financial institutions as at December 31, 2021 (December 31, 2020: RUB 129 442,7 million or 84% of the total amount due from financial institutions).

As at December 31, 2021 the fair value of bonds pledged under reverse repo was RUB 28 697,5 million (December 31, 2020: RUB 60 493,5 million).

As at December 31, 2021, 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 9 370,3 million (December 31, 2020: RUB 9 181,8 million). Balances of market participants include balances due to these clients in respect of those securities in the amount of RUB 9 370,3 million (December 31, 2020: RUB 9 181,8 million).

17. Central Counterparty Financial Assets and Liabilities

	December 31, 2021	December 31, 2020
Repo transactions	5 252 855,2	4 047 661,8
Currency transactions	3 216,0	3 175,8
Total CCP financial assets and liabilities	**5 256 071,2**	**4 050 837,6**

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, 2021 the fair value of securities purchased and sold by the Group under repo transactions is RUB 5 883 202,6 million (December 31, 2020: RUB 4 549 077,2 million). As at December 31, 2021 and December 31, 2020, none of these assets were past due.

As at December 31, 2021, the Group has CCP financial assets balances with thirty eight counterparties, each of which is greater than 10% of equity (December 31, 2020: thirty one counterparties). The total aggregate amount of these balances is RUB 5 018 480,4 million or 95% of total CCP financial assets as at December 31, 2021 (December 31, 2020: RUB 3 855 282,7 million or 95% of total CCP financial assets).

As at December 31, 2021, the Group has CCP financial liabilities balances with fifty counterparties, each of which is greater than 10% of equity (December 31, 2020: forty six counterparties). The total aggregate amount of these balances is RUB 4 927 090,6 million or 94% of total CCP financial liabilities as at December 31, 2021 (December 31, 2020: RUB 3 666 027,5 million or 91% of total CCP financial liabilities).

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 35.

18. Financial Assets at Fair Value through Other Comprehensive Income

	December 31, 2021	December 31, 2020
Bonds issued by the Russian Federation	109 622,4	83 130,0
Bonds issued by foreign companies of Russian groups	57 311,6	53 963,0
Bonds issued by Russian companies	44 166,3	38 424,3
Bonds issued by Russian banks	26 269,7	16 810,8
Bonds issued by foreign financial organizations	451,2	974,6
Total financial assets at FVTOCI	**237 821,2**	**193 302,7**

19. Property and Equipment

	Land	Buildings and other real estate	Furniture and equipment	Construction in progress	Right-of-use assets	Total
Cost						
December 31, 2019	**208,5**	**5 798,6**	**7 392,6**	**50,2**	**284,6**	**13 734,5**
Additions	–	–	866,4	4,0	1 019,6	1 890,0
Reclassification	–	–	49,7	(49,7)	–	–
Disposals	–	–	(236,0)	–	(266,9)	(502,9)
Modification and remeasurement	–	–	–	–	0,1	0,1
December 31, 2020	**208,5**	**5 798,6**	**8 072,7**	**4,5**	**1 037,4**	**15 121,7**
Additions	–	–	1 304,5	17,7	14,2	1 336,4
Acquisition through business combination	–	–	10,9	–	15,8	26,7
Reclassification	–	–	4,0	(4,0)	–	–
Disposals	–	–	(189,4)	–	(22,6)	(212,0)
Effect of movements in exchange rates	–	–	`	–	0,1	0,1
Modification and remeasurement	–	–	–	–	52,6	52,6
December 31, 2021	**208,5**	**5 798,6**	**9 202,7**	**18,2**	**1 097,5**	**16 325,5**
Accumulated depreciation						
December 31, 2019	**–**	**1 672,6**	**6 423,8**	**–**	**191,5**	**8 287,9**
Charge for the period	–	116,4	612,7	–	147,4	876,5
Disposals	–	–	(235,7)	–	(266,9)	(502,6)
December 31, 2020	**–**	**1 789,0**	**6 800,8**	**–**	**72,0**	**8 661,8**
Charge for the period	–	116,1	743,4	–	112,4	971,9
Disposals	–	–	(188,4)	–	(16,0)	(204,4)
December 31, 2021	**–**	**1 905,1**	**7 355,8**	**–**	**168,4**	**9 429,3**
Net book value						
December 31, 2020	**208,5**	**4 009,6**	**1 271,9**	**4,5**	**965,4**	**6 459,9**
December 31, 2021	**208,5**	**3 893,5**	**1 846,9**	**18,2**	**929,1**	**6 896,2**

As at December 31, 2021, historical cost of fully depreciated property and equipment amounts to RUB 6 111,4 million (December 31, 2020: RUB 5 447,7 million).

As at December 31, 2021, the book value of right-of-use assets is represented by leased buildings in the amount of RUB 918,6 million and IT equipment (furniture and equipment) in the amount of RUB 10,5 million (December 31, 2020: RUB 963,4 million and RUB 2 million).

The amounts recognized in profit or loss related to Group's lease contracts are as follows:

	Year ended December 31, 2021	Year ended December 31, 2020
Amounts recognised in profit or loss		
Depreciation expense on right-of-use assets	112,4	147,4
Interest expense on lease liabilities	83,0	49,4
Expense relating to short-term leases	20,1	25,3
Total	**215,5**	**222,1**

20. Intangible Assets

	Software and licenses	Client base	Intangible assets development	Total
Cost				
December 31, 2019	**6 915,6**	**19 606,7**	**1 414,3**	**27 936,6**
Additions	1 527,0	–	843,8	2 370,8
Reclassification	1 015,1	–	(1 015,1)	–
Disposals	(19,8)	–	(0,5)	(20,3)
December 31, 2020	**9 437,9**	**19 606,7**	**1 242,5**	**30 287,1**
Acquisition through business combination	380,7	157,6	8,9	547,2
Additions	1 358,7	–	927,7	2 286,4
Reclassification	677,1	–	(677,1)	–
Disposals	(64,9)	–	(9,6)	(74,5)
December 31, 2021	**11 789,5**	**19 764,3**	**1 492,4**	**33 046,2**
Accumulated amortisation and impairment				
December 31, 2019	**3 485,1**	**7 462,5**	**–**	**10 947,6**
Charge for the period	1 295,9	1 176,4	–	2 472,3
Disposals	(1,4)	–	–	(1,4)
December 31, 2020	**4 779,6**	**8 638,9**	**–**	**13 418,5**
Charge for the period	1 538,3	1 179,3	–	2 717,6
Disposals	(61,0)	–	–	(61,0)
December 31, 2021	**6 256,9**	**9 818,2**	**–**	**16 075,1**
Net book value				
December 31, 2020	**4 658,3**	**10 967,8**	**1 242,5**	**16 868,6**
December 31, 2021	**5 532,6**	**9 946,1**	**1 492,4**	**16 971,1**

The client bases have been recognized on acquisition of subsidiaries by the Group. The Group's purchased client bases represent the customer relationships with professional market participants acquired in 2011 and the customer relationships with financial institutions acquired in 2021. The amortization periods remaining on these assets are between 8,06 to 9,83 years.

Based on the results of the impairment tests performed no impairment of intangible assets was identified in 2021 and 2020.

21. Goodwill

As at December 31, 2021 the Group's goodwill amounted to RUB 17 267,2 million (December 31, 2020: RUB 15 971,4 million).

Goodwill is allocated to the following cash-generating units ("CGU") as at December 31, 2021 and 2020:

	Trading services	Clearing	Depository	MB Marketplace LLC and Insveb LLC *	Bierbaum Pro AG **	Total
December 31, 2020	**10 774,1**	**3 738,7**	**1 458,6**	**–**	**–**	**15 971,4**
Acquisition through business combination	–	–	–	275,4	1 020,4	1 295,8
December 31, 2021	**10 774,1**	**3 738,7**	**1 458,6**	**275,4**	**1 020,4**	**17 267,2**

* MB Marketplace LLC and Insveb LLC business being the part of operating segment "Marketplace" related acquired MB Marketplace LLC (formerly Disovers LLC) and Insveb LLC.
** Bierbaum Pro AG being the part of operating segment "Trading services".

The Group acquired MB Marketplace LLC (formerly Disovers LLC) and Insveb LLC in May 2021 and Bierbaum Pro AG in October 2021, which resulted in additions to goodwill of RUB 275,4 million and RUB 1 020,4 million respectively (Note 4). The goodwill arising on consolidation represents the growth potential synergies expected to be achieved from integrating the companies into the Group's existing businesses.

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.

Trading services, Clearing, Depository
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 five-year period. Discount rate of 13,4% 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). Terminal growth rate applied is 1% p.a.

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, 2021 the sensitivity analysis revealed the cumulative value in use of the segments 9,5% lower or 12,0% higher than the value in use estimated, which does not lead to goodwill impairment in any CGU (December 31, 2020: 11,4% lower or 14,8% higher, which does not lead to goodwill impairment in any CGU).

MB Marketplace LLC and Insveb LLC
The recoverable amount of this CGUs has been determined based on value in use calculations, using discounted cash flow projections prepared by Management of the Group covering the five-year period. Discount rate of 25,9% 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). Terminal growth rate applied is 2,5% p.a.

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, 2021 the sensitivity analysis revealed the cumulative value in use of the segments 2,9% lower or 3,0% higher than the value in use estimated, hich does not lead to goodwill impairment in CGU.

Bierbaum Pro AG
The recoverable amount of this CGUs has been determined based on value in use calculations, using discounted cash flow projections prepared by Management of the Group covering the four-year period. Discount rate of 15,8% 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). Terminal growth rate applied is 5,8% p.a. for the time period 2026-2030 and 4% p.a. starting 2031.

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, 2021 the sensitivity analysis revealed the cumulative value in use of the segments 5,4% lower or 5,8% higher than the value in use estimated, which does not lead to goodwill impairment in CGU.

22. Other Assets

	December 31, 2021	December 31, 2020
Other financial assets:		
Receivables on services rendered and other operations	2 471,6	3 824,0
Less allowance for ECL (Note 12)	(892,1)	(2 407,5)
Total other financial assets	**1 579,5**	**1 416,5**
Other non-financial assets:		
Precious metals	12 146,2	255,1
Prepaid expenses	1 092,3	797,2
Non-current assets prepaid	741,0	202,5
Taxes receivable other than income tax	79,9	88,3
Other	11,4	18,0
Total other assets	**15 650,3**	**2 777,6**

23. Balances of Market Participants

	December 31, 2021	December 31, 2020
Financial liabilities measured at amortised cost		
Accounts of clearing participants	518 140,4	548 847,5
Other current and settlement accounts	141 822,3	141 813,2
Stress collateral	35 972,3	15 387,3
Risk-covering funds	5 370,3	5 812,7
Total financial liabilities measured at amortised cost	**701 305,3**	**711 860,7**
Non-financial liabilities at FVTPL		
Accounts of clearing participants in precious metals	17 089,9	5 032,4
Total non-financial liabilities at FVTPL	**17 089,9**	**5 032,4**
Total balances of market participants	**718 395,2**	**716 893,1**

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).

The Group acting as the central counterparty makes clearing and settlement of all exchange transactions with gold and silver. The delivery of precious metals is performed on unallocated precious metals accounts of clearing participants opened in the Group.

24. 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.

25. Other Liabilities

	December 31, 2021	December 31, 2020
Other financial liabilities		
Trade and other payables	1 321,8	649,9
Lease liabilities	981,0	985,5
Payables to employees	407,3	424,2
The financial liability for the NCI put	160,0	–
Dividends payable	1,6	1,1
Derivative financial liabilities	0,7	139,6
Total other financial liabilities	**2 872,4**	**2 200,3**
Other non-financial liabilities		
Tax agent liabilities regarding distributions payable to holders of securities	3 213,6	422,3
Personnel remuneration provision	2 350,6	2 086,0
Taxes payable, other than income tax	787,0	594,1
Advances received	401,6	387,6
Provision	–	14,4
Total other liabilities	**9 625,2**	**5 704,7**
Maturity analysis of lease liabilities		
Less than one year	171,7	157,2
One to two years	166,2	155,9
Two to three years	164,3	152,0
Three to four years	158,5	149,7
Four to five years	158,5	149,7
More than 5 years	552,2	664,0
Less: unearned interest	**(390,3)**	**(442,9)**
Lease liabilities	**981,0**	**985,5**

The table below details changes in the Group's lease liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

January 1, 2020	**86,6**
Financing cash flows	(178,0)
Modification and remeasurement	0,1
New leases	1 019,6
Other changes	57,2
December 31, 2020	**985,5**
Financing cash flows	(163,0)
Modification and remeasurement	52,6
New leases	14,2
Acquisition through business combination	15,8
Other changes	75,9
December 31, 2021	**981,0**

26. 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, 2019	**2 276 401 458**	**(22 131 768)**
Treasury shares transferred	–	7 000
Exercised equity instruments (Note 11)	–	3 573 530
December 31, 2020	**2 276 401 458**	**(18 551 238)**
Treasury shares transferred	–	483
Purchase of treasury shares	–	(2 600 000)
Exercised equity instruments (Note 11)	–	2 228 138
December 31, 2021	**2 276 401 458**	**(18 922 617)**

Share premium represents an excess of contributions received over the nominal value of shares issued.

As at December 31, 2021 and December 31, 2020, the number of authorized shares is 12 095 322 151.

During the year ended December 31, 2021 the Group distributed to employees 2 228 138 treasury shares under exercised equity instruments (December 31, 2020: 3 573 530 treasury shares) (Note 11).

27. Retained Earnings

During the year ended December 31, 2021 and December 31, 2020 the Group declared and paid to the owners of the parent dividends for the year ended December 31, 2020 of RUB 21 369,1 million (for the year ended December 31, 2019 of RUB 17 899,4 million). The amount of dividends per share is RUB 9,46 per ordinary share (for the year ended December 31, 2019 dividends per share: RUB 7,94).

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.

28. Earnings per Share

The calculation of earnings per share is based on the profit for the period attributable to shareholders of the Group and the weighted average number of ordinary outstanding during the period, calculated as shown below.

	Year ended December 31, 2021	Year ended December 31, 2020
Net profit attributable to ordinary equity holders of the parent	**28 097,5**	**25 158,0**
Weighted average number of shares	**2 257 681 433**	**2 254 888 346**
Effect of dilutive share options	17 885 066	3 907 080
Weighted average number of shares adjusted for the effect of dilution	**2 275 566 499**	**2 258 795 426**
Basic earnings per share, RUB	12,45	11,16
Diluted earnings per share, RUB	12,35	11,14

29. Operating Segments

In 2021 the Group added additional operating segment **"Marketplace"** due to the increase in the business operations volume and significant to the Group, the comparative information was amended accordingly. Thus 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, JPY, 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 depositary-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, depositary 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, commodities, and option contracts on futures.

Operating segment **"Clearing"** includes mainly CCP clearing services and other clearing services.

Listing services – inclusion and maintenance of securities in the List of securities admitted to on-exchange trading.

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 **"Marketplace"** includes income and expenses from Finuslugi project. Finuslugi is a platform for online processing financial services (mortgages, consumer loans, credit cards, car loans, deposits, debit cards, microloans, investment in bonds) and insurance products ("OSAGO" compulsory automobile insurance, "KASKO" comprehensive insurance, mortgage insurance).

Operating segment **"Other services"** includes the Group's results from information products, software and technical services provision.

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.

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 year ended December 31, 2021 and December 31, 2020, is provided below.

					Year ended December 31, 2021	
	Trading services	**Clearing**	**Depository**	**Marketplace**	**Other services**	**Total**
Income						
Fee and commission income	14 329,8	15 638,3	8 812,9	500,6	2 272,4	41 554,0
Net interest and other finance income*	3 539,4	7 133,4	2 229,4	–	–	12 902,2
Other operating income	172,5	206,1	34,1	–	–	412,7
Total income	**18 041,7**	**22 977,8**	**11 076,4**	**500,6**	**2 272,4**	**54 868,9**
Expenses						
Personnel expenses	(4 301,2)	(1 713,9)	(2 591,7)	(532,8)	(742,1)	(9 881,7)
General and administrative expenses	(4 595,1)	(1 195,4)	(2 927,8)	(972,2)	(942,4)	(10 632,9)
Incl. depreciation and amortisation	(1 625,6)	(461,4)	(1 134,3)	(102,8)	(365,4)	(3 689,5)
Total expenses before other operating expenses	**(8 896,3)**	**(2 909,3)**	**(5 519,5)**	**(1 505,0)**	**(1 684,5)**	**(20 514,6)**
Total profit before other operating expenses and tax	**9 145,4**	**20 068,5**	**5 556,9**	**(1 004,4)**	**587,9**	**34 354,3**
Movement in allowance for expected credit losses	8,0	698,2	(0,1)	–	(78,7)	627,4
Total profit before tax	**9 153,4**	**20 766,7**	**5 556,8**	**(1 004,4)**	**509,2**	**34 981,7**

* Including net gain on financial assets at FVTOCI and net financial result from foreign exchange.

					Year ended December 31, 2020	
	Trading services	**Clearing**	**Depository**	**Marketplace**	**Other services**	**Total**
Income						
Commission income	12 567,0	12 885,8	6 820,0	5,8	1 989,6	34 268,2
Net interest and other finance income**	3 461,4	9 302,0	1 395,3	–	–	14 158,7
Other operating income	–	–	–	–	164,1	164,1
Total income	**16 028,4**	**22 187,8**	**8 215,3**	**5,8**	**2 153,7**	**48 591,0**
Expenses						
Personnel expenses	(3 935,0)	(1 416,5)	(2 304,8)	(111,9)	(691,1)	(8 459,3)
General and administrative expenses,	(3 966,8)	(1 144,4)	(2 529,3)	(91,9)	(558,3)	(8 290,7)
Incl. depreciation and amortisation	(1 566,5)	(529,5)	(1 096,7)	(25,2)	(130,9)	(3 348,8)
Total expenses before other operating expenses	**(7 901,8)**	**(2 560,9)**	**(4 834,1)**	**(203,8)**	**(1 249,4)**	**(16 750,0)**
Total profit before other operating expenses and tax	**8 126,6**	**19 626,9**	**3 381,2**	**(198,0)**	**904,3**	**31 841,0**
Movement in allowance for expected credit losses	0,6	(1,6)	–	–	0,1	(0,9)
Total profit before tax	**8 127,2**	**19 625,3**	**3 381,2**	**(198,0)**	**904,4**	**31 840,1**

** Including net gain on financial assets at FVTOCI and net financial result from foreign exchange.

30. 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. Management of the Group believes that such claims may not have a material impact on its financial and operational activities and that no material losses will be incurred, and accordingly no provision has been made in these Consolidated Financial Statements.

Commodities – acting as CDO the Group provides safekeeping of commodities required for clearing purposes. As at December 31, 2021 the Group had 5,1 tonns of grain in safekeeping (December 31, 2020: 1 334 tonns of sugar and 5,1 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, 2021 and 2020, the Group had customer securities totaling 85 967 bln items and 93 607 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 trends in tax law enforcement practice indicate that the tax authorities and courts 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 late payment interest may be assessed by the relevant authorities. Generally fiscal periods remain open and subject to review by the Russian 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.

As at December 31, 2021 management believes that its interpretation of the relevant legislation is appropriate and that the Group's tax, currency and customs positions should be sustained vis-à-vis tax authorities and courts.

31. 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, 2021	December 31, 2020
Other assets	1,2	0,5
Other liabilities	584,7	385,7
Share-based payments	89,0	88,4

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, 2021	Year ended December 31, 2020
Short-term employee benefits	516,9	660,0
Long-term employee benefits	74,2	89,9
Share-based payment expense on equity settled instruments	59,4	45,1
Total remuneration of key management personnel	**650,5**	**795,0**

(b) Transactions with associates and joint ventures

Included in the Consolidated Statement of Financial Position are the following amounts that arose on transactions with associates and joint ventures:

	December 31, 2021	December 31, 2020
Investments in associates and joint ventures	99,2	329,0

Included in the Consolidated Statement of Profit or Loss are the following amounts that arose due to transactions with associates and joint ventures:

	Year ended December 31, 2021	Year ended December 31, 2020
Interest income calculated using the effective interest method	–	0,5
Other operating income	89,4	–
Movement in allowance for expected credit losses	–	15,6

(c) Transactions with government-related entities

As at December 31, 2021 the Russian Federation exercises significant influence over Moscow Exchange.

In the ordinary course of business the Group provides trading, clearing and depositary 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, 2021 and December 31, 2020, and for the year ended December 31, 2021 and December 31, 2020:

	December 31, 2021	December 31, 2020
Assets		
Cash and cash equivalents	55 741,8	89 784,7
Due from financial institutions	57 162,3	82 931,7
Central counterparty financial assets	2 044 507,1	1 339 890,2
Financial assets at FVTOCI	162 212,4	131 410,7
Other assets	656,9	767,4
Liabilities		
Balances of market participants	253 942,8	297 165,6
Central counterparty financial liabilities	3 025 584,7	2 448 407,4
Distributions payable to holders of securities	12 186,9	12 699,4
Other liabilities	213,8	158,1

	Year ended December 31, 2021	Year ended December 31, 2020
Fee and commission income	17 219,1	13 123,1
Interest income calculated using the effective interest method	8 702,6	8 715,6
Other interest income	340,8	170,4
Interest expense	(259,1)	(431,7)
Foreign exchange losses less gains	(144,1)	(197,9)
Other operating income	184,8	16,5
General and administrative expenses	(365,3)	(214,8)

During the year ended December 31, 2021 the Group purchased financial assets at FVTOCI for RUB 67 262,0 million and sell securities for RUB 535,5 million with government-related entities (during the year ended December 31, 2020: purchases for RUB 62 684,4 million, sales for RUB 3 541,2 million).

All transactions were concluded on the arms' length basis.

32. Fair Value Measurements

The Group performs a fair value assessment of its 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 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 and swap contracts are measured based on observable spot and forward exchange rates and the yield curves of the respective currencies.

The fair value of the unquoted securities has been determined using a discounted cash flow model, by reference to quoted market prices for similar instruments and market approach using price/net assets ratio for similar companies.

Gold and other precious metals are recorded at CBR bid prices, which approximate fair values and are quoted at a discount to London Bullion Market rates.

The table below analyses assets and liabilities measured at fair value at December 31, 2021, by the level in the fair value hierarchy into which the fair value measurement is categorised:

				December 31, 2021
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets at FVTPL	14 564,3	542,3	532,5	15 639,1
CCP financial assets and liabilities (currency transactions)	3 216,0	–	–	3 216,0
Financial assets at FVTOCI	232 113,8	5 707,4	–	237 821,2
Non-financial assets measured at fair value				
Due from financial institutions (correspondent accounts and deposits in precious metals)	–	4 943,9	–	4 943,9
Other assets (Precious metals)	–	12 146,2	–	12 146,2
Financial liabilities measured at fair value				
Other liabilities (Derivative financial liabilities)	–	(0,7)	–	(0,7)
Non-financial liabilities measured at fair value				
Balances of market participants (accounts of clearing participants in precious metals)	–	(17 089,9)	–	(17 089,9)

Financial assets and liabilities measured at fair value at December 31, 2020, by the level in the fair value hierarchy into which the fair value measurement is categorised:

				December 31, 2020
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets at FVTPL	18 312,0	1,2	539,0	18 852,2
CCP financial assets and liabilities (currency transactions)	3 175,8	–	–	3 175,8
Financial assets at FVTOCI	183 063,2	10 239,5	–	193 302,7
Non-financial assets measured at fair value				
Due from financial institutions (correspondent accounts and deposits in precious metals)	–	4 777,4	–	4 777,4
Other assets (Precious metals)	–	255,1	–	255,1
Financial liabilities measured at fair value				
Other liabilities (Derivative financial liabilities)	–	(139,6)	–	(139,6)
Non-financial liabilities measured at fair value				
Balances of market participants (accounts of clearing participants in precious metals)	–	(5 032,4)	–	(5 032,4)

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, 2021 and 2020, refer to level 2 hierarchy of fair value.

Management of the Group considers that the fair value of cash and cash equivalents, due from financial institutions (except for correspondent accounts and deposits in precious metals), CCP financial assets and liabilities (REPO transactions), other assets (except for precious metals), balances of market participants (except for accounts of clearing participants in precious metals), due to financial institutions and other liabilities (except for derivative financial liabilities) not carried at fair value in Consolidated Statement of Financial Position approximates their carrying value due to their short-term nature.

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, 2021	Year ended December 31, 2020
From Level 1 to Level 2		
Financial assets at FVTOCI	1 052,1	4 889,4
From Level 2 to Level 1		
Financial assets at FVTOCI	4 570,6	4 205,9

Level 3 fair value measurements reconciliation

In the year ended December 31, 2020 the Group did not recognise a gain in amount of RUB 96,4 million from the difference between the fair value at initial recognition of a financial asset at FVTPL (equity instruments) and the transaction price because the fair value was not evidenced by Level 1 or Level 2 inputs. This difference will be recognised in profit or loss when the observable market data becomes available for the fair value measurement. As at December 31, 2021 this difference remains unchanged at amount of RUB 96,4 million.

The reconciliation of Level 3 fair value measurements of financial assets is presented as follows:

	Financial assets at FVTPL
	Unquoted equities
December 31, 2019	**207,3**
Total gain in profit or loss	41,5
Purchases	597,6
Recognition of financial asset at FVTPL due to ceding control over subsidiary	21,6
Reclassification to investments in associates	(329,0)

	Financial assets at FVTPL
	Unquoted equities
December 31, 2020	**539,0**
Total losses in profit or loss	(30,6)
Purchases	24,1
December 31, 2021	**532,5**

Unobservable inputs used in measuring fair value

The following table sets out information about significant unobservable inputs used at December 31, 2021 in measuring financial instruments categorised as Level 3 in the fair value hierarchy:

Type of financial instrument	Fair values at December 31, 2021	Valuation technique	Significant unobservable input	Estimates used for significant unobservable input
Financial assets at FVTPL (unquoted shares)	532,5	Discounted cash flow model	Discount rate	24,7%
			Long-term growth	3,5%

The Group has performed a sensitivity analysis on how fair value of unquoted shares categorised as Level 3 in the fair value hierarchy will change if the key unobservable inputs used to calculate fair value change by a certain percentage. The table below outlines the change in fair value of unquoted shares with effect on profit or loss if the key unobservable inputs change by plus or minus 3% while all other inputs stay unchanged:

Significant unobservable input	Change in significant unobservable input	Change in fair value
Discount rate	+3%	(12,2)
	-3%	13,9
Long-term growth	+3%	12,6
	-3%	(9,5)

33. 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, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Moscow Exchange	46 086,2	51 315,1	100,0	100,0	164,29	330,96
NCC	80 449,6	73 302,6	300,0	300,0	146,71	148,35
NSD	14 949,5	12 337,9	4 000,0	4 000,0	29,00	27,90
NAMEX	200,9	224,1	100,0	100,0	616,61	261,62

The Group companies had complied in full with all its externally imposed capital requirements at all times.

34. 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.

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 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 in its assessment of significant increase in credit risk as well as in its measurement of ECL. The Group uses CDS curves quotes in its measurement of ECL. The Group has identified and documented the key driver of credit risk and credit losses – CDS of Russia.

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, 2021 if the assumptions used to measure ECL remain as expected (amount as presented in the statement of financial position), as well as if the key assumption used change by plus or minus 25 % (parallel shift of CDS curve).

	As expected	ECL Cumulative
CDS of Russia 1y	+25%	1 065
	–	1 038
	-25%	933
CDS of Russia 2y	+25%	985
	–	1 038
	-25%	1 123

As at December 31, 2021 and 2020, 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, 2021 included into other assets are overdue receivables of RUB 854,7 million (December 31, 2020: RUB 2 365,8million).

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, 2021 and 2020, 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, 2021. Table below does not include equity instruments.

						December 31, 2021
	AA	A	BBB	Less BBB-	Not rated	Total
Financial assets:						
Cash and cash equivalents	367 986,8	39 643,9	60 300,5	176,7	3 170,8	471 278,7
Stage 1 assets	367 986,8	39 643,9	60 300,5	176,7	3 170,8	471 278,7
Financial assets at fair value though profit or loss	–	542,2	11 676,3	2 888,1	–	15 106,6
Due from financial institutions	9 370,3	–	57 039,7	31 587,3	29,4	98 026,7
Stage 1 assets	9 370,3	–	57 039,7	31 587,3	–	97 997,3
Stage 3 assets	–	–	–	–	29,4	29,4
Central counterparty financial assets	–	–	1 441 791,6	1 313 245,3	2 501 034,3	5 256 071,2
Stage 1 assets	–	–	1 441 791,6	1 313 245,3	2 501 034,3	5 256 071,2
Financial assets at FVTOCI	–	326,2	199 840,4	33 230,9	4 423,7	237 821,2
Stage 1 assets	–	326,2	197 627,8	33 230,9	4 423,7	235 608,6
Stage 2 assets	–	–	2 212,6	–	–	2 212,6
Other financial assets	226,8	0,5	529,6	190,1	632,5	1 579,5
Stage 1 assets	226,8	0,5	529,6	189,9	629,8	1 576,6
Stage 2 assets	–	–	–	0,2	2,7	2,9
Stage 3 assets	–	–	–		–	–

The following table details the credit ratings of the financial assets held by the Group as at December 31, 2020. Table below does not include equity instruments.

						December 31, 2020
	AA	A	BBB	Less BBB-	Not rated	Total
Financial assets:						
Cash and cash equivalents	291 118,9	83 901,1	72 765,7	22 719,3	1 284,7	471 789,7
Stage 1 assets	291 118,9	83 901,1	72 765,7	22 719,3	1 284,7	471 789,7
Financial assets at fair value though profit or loss	–	0,5	10 804,0	7 508,7	–	18 313,2
Due from financial institutions	9 215,8	143,3	82 763,7	57 879,2	36,0	150 038,0
Stage 1 assets	9 215,8	143,3	82 763,7	57 879,2		150 002,0
Stage 3 assets	–	–	–	–	36,0	36,0
Central counterparty financial assets	–	–	562 414,3	1 509 083,1	1 979 340,2	4 050 837,6
Stage 1 assets	–	–	562 414,3	1 509 083,1	1 979 340,2	4 050 837,6
Financial assets at FVTOCI	–	336,1	156 257,3	34 526,7	2 182,6	193 302,7
Stage 1 assets	–	336,1	156 257,3	34 526,7	2 182,6	193 302,7
Other financial assets	100,5	2,3	534,1	249,6	530,0	1 416,5
Stage 1 assets	100,5	2,3	533,4	249,0	527,7	1 412,9
Stage 2 assets	–	–	0,7	0,6	2,3	3,6
Stage 3 assets	–	–	–	–	–	–

Geographical concentration

The analysis of the geographical concentration of the financial assets and liabilities of the Group as at December 31, 2021 is presented below:

	Russia	OECD	Other	December 31, 2021 Total
Financial assets				
Cash and cash equivalents	33 041,9	438 006,2	235,3	471 283,4
Financial assets at FVTPL	111,5	15 143,1	384,5	15 639,1
Due from financial institutions	88 627,0	9 370,3	29,4	98 026,7
CCP financial assets	5 256 068,3	–	2,9	5 256 071,2
Financial assets at FVTOCI	180 384,7	57 311,5	125,0	237 821,2
Investments in associates and joint ventures	99,2	–	–	99,2
Other financial assets	1 267,6	284,0	27,9	1 579,5
Total financial assets	**5 559 600,2**	**520 115,1**	**805,0**	**6 080 520,3**
Financial liabilities				
Balances of market participants	666 184,8	25 538,0	9 582,5	701 305,3
Due to financial institutions	182,2	–	–	182,2
CCP financial liabilities	5 254 556,7	1 514,4	0,1	5 256 071,2
Distributions payable to holders of securities	14 336,8	2 354,4	324,2	17 015,4
Other financial liabilities	2 623,8	233,6	15,0	2 872,4
Total financial liabilities	**5 937 884,3**	**29 640,4**	**9 921,8**	**5 977 446,5**

The analysis of the geographical concentration of the financial assets and liabilities of the Group as at December 31, 2020 is presented below:

	Russia	OECD	Other	December 31, 2020 Total
Financial assets				
Cash and cash equivalents	31 245,9	440 292,3	254,8	471 793,0
Financial assets at FVTPL	126,8	18 326,5	398,9	18 852,2
Due from financial institutions	140 642,9	9 359,1	36,0	150 038,0
CCP financial assets	4 050 828,6	–	9,0	4 050 837,6
Financial assets at FVTOCI	138 786,7	53 963,0	553,0	193 302,7
Investments in associates and joint ventures	–	329,0	–	329,0
Other financial assets	1 237,2	173,6	5,7	1 416,5
Total financial assets	**4 362 868,1**	**522 443,5**	**1 257,4**	**4 886 569,0**
Financial liabilities				
Balances of market participants	688 814,8	13 848,6	9 197,3	711 860,7
CCP financial liabilities	4 050 827,0	–	10,6	4 050 837,6
Distributions payable to holders of securities	14 487,5	672,2	529,5	15 689,2
Other financial liabilities	1 765,0	430,4	4,9	2 200,3
Total financial liabilities	**4 755 894,3**	**14 951,2**	**9 742,3**	**4 780 587,8**

As at December 31, 2021, the balances with OECD counterparties include the following balances with OECD subsidiaries of Russian companies:

Cash and cash equivalents in the amount of RUB 29 503,5 mln (December 31, 2020: RUB 64 419,8 mln);

Financial assets at fair value through profit or loss in the amount of RUB 14 564,3 mln (December 31, 2020: RUB 18 312,0 mln);

Financial assets at fair value through other comprehensive income in the amount of RUB 57 311,5 mln (December 31, 2020: RUB 53 963,0 mln);

Balances of market participants in the amount of RUB 9 094,4 mln (December 31, 2020: RUB 13 049,9 mln);

Distributions payable to holders of securities in the amount of RUB 27,7 mln (December 31, 2020: RUB 93,7 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: overdraft 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, 2021						
Financial assets						
Cash and cash equivalents	471 283,4	–	–	–	–	471 283,4
Financial assets at FVTPL	542,3	–	4 797,7	9 766,6	532,5	15 639,1
Due from financial institutions	48 058,3	24 798,8	15 769,9	29,4	9 370,3	98 026,7
CCP financial assets	4 572 963,3	548 931,0	134 176,9	–	–	5 256 071,2

	Up to 1 month	1 to 3 months	3 months to 1 year	More than 1 year	Maturity undefined	Total
Financial assets at FVTOCI	168 381,5	4 250,9	17 126,5	48 062,3	–	237 821,2
Investments in associates and joint ventures	–	–	–	–	99,2	99,2
Other financial assets	1 150,0	429,5	–	–	–	1 579,5
Total financial assets	**5 262 378,8**	**578 410,2**	**171 871,0**	**57 858,3**	**10 002,0**	**6 080 520,3**
Financial liabilities						
Balances of market participants	691 935,0	–	–	–	9 370,3	701 305,3
Due to financial institutions	182,2	–	–	–	–	182,2
CCP financial liabilities	4 572 963,3	548 931,0	134 176,9	–	–	5 256 071,2
Distributions payable to holders of securities	17 015,4	–	–	–	–	17 015,4
Other financial liabilities	1 279,3	174,0	487,1	932,0	–	2 872,4
Total financial liabilities	**5 283 375,2**	**549 105,0**	**134 664,0**	**932,0**	**9 370,3**	**5 977 446,5**
Liquidity gap	**(20 996,4)**	**29 305,2**	**37 207,0**	**56 926,3**	**631,7**	
Cumulative liquidity gap	**(20 996,4)**	**8 308,8**	**45 515,8**	**102 442,1**	**103 073,8**	
December 31, 2020						
Financial assets						
Cash and cash equivalents	471 793,0	–	–	–	–	471 793,0
Financial assets at FVTPL	1,2	–	5 054,8	13 257,2	539,0	18 852,2
Due from financial institutions	82 941,0	34 221,5	23 657,7	36,0	9 181,8	150 038,0
CCP financial assets	3 342 980,1	582 611,5	125 246,0	–	–	4 050 837,6
Financial assets at FVTOCI	135 744,9	5 420,8	5 436,7	46 700,3	–	193 302,7
Investments in associates and joint ventures	–	–	–	–	329,0	329,0
Other financial assets	1 124,5	292,0	–	–	–	1 416,5
Total financial assets	**4 034 584,7**	**622 545,8**	**159 395,2**	**59 993,5**	**10 049,8**	**4 886 569,0**
Financial liabilities						
Balances of market participants	702 678,9	–	–	–	9 181,8	711 860,7
CCP financial liabilities	3 342 980,1	582 611,5	125 246,0	–	–	4 050 837,6
Distributions payable to holders of securities	15 689,2	–	–	–	–	15 689,2
Other financial liabilities	665,8	204,2	422,6	907,7	–	2 200,3
Total financial liabilities	**4 062 014,0**	**582 815,7**	**125 668,6**	**907,7**	**9 181,8**	**4 780 587,8**
Liquidity gap	**(27 429,3)**	**39 730,1**	**33 726,6**	**59 085,8**	**868,0**	
Cumulative liquidity gap	**(27 429,3)**	**12 300,8**	**46 027,4**	**105 113,2**	**105 981,2**	

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, 2021 and 2020, and reasonably possible changes of 250 bps. Corresponding negative and positive results shown on the yield curve are as follows:

	Year ended December 31, 2021		Year ended December 31, 2020	
	Net profit	Equity	Net profit	Equity
250 bp parallel rise	(391,5)	(13 180,7)	(887,6)	(11 933,0)
250 bp parallel fall	319,0	12 010,3	648,4	15 885,0

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, 2021, Total
Financial assets					
Cash and cash equivalents	27 207,3	268 845,5	137 479,6	37 751,0	471 283,4
Financial assets at FVTPL	111,3	14 564,3	36,7	384,5	15 096,8
Due from financial institutions	66 150,5	31 867,5	8,7	–	98 026,7
Central counterparty financial assets	3 790 785,8	1 288 415,3	176 870,1	–	5 256 071,2
Financial assets at FVTOCI	128 387,0	75 756,0	33 678,2	–	237 821,2
Investments in associates and joint ventures	99,2	–	–	–	99,2
Other financial assets	1 221,9	241,4	105,8	10,4	1 579,5
Total financial assets	**4 013 963,0**	**1 679 690,0**	**348 179,1**	**38 145,9**	**6 079 978,0**
Financial liabilities					
Balances of market participants	105 377,3	421 070,1	137 122,8	37 735,1	701 305,3
Due to financial institutions	0,2	182,0	–	–	182,2
Central counterparty financial liabilities	3 790 785,8	1 288 415,3	176 870,1	–	5 256 071,2
Distributions payable to holders of securities	14 349,0	2 497,9	164,1	4,4	17 015,4
Other financial liabilities	2 629,3	113,2	118,6	10,6	2 871,7
Total financial liabilities	**3 913 141,6**	**1 712 278,5**	**314 275,6**	**37 750,1**	**5 977 445,8**
Derivatives	**111,5**	**34 067,4**	**(33 637,3)**	**–**	**541,6**
Open position	**100 932,9**	**1 478,9**	**266,2**	**395,8**	

	RUB	USD	EUR	Other currencies	December 31, 2020, Total
Financial assets					
Cash and cash equivalents	26 033,2	174 308,8	240 555,3	30 895,7	471 793,0
Financial assets at FVTPL	126,1	18 312,0	14,0	398,9	18 851,0
Due from financial institutions	92 156,7	57 875,0	6,3	–	150 038,0
Central counterparty financial assets	3 253 266,9	644 826,7	152 744,0	–	4 050 837,6
Financial assets at FVTOCI	118 491,9	44 974,0	29 836,8	–	193 302,7
Investments in associates and joint ventures	329,0	–	–	–	329,0
Other financial assets	1 294,4	120,4	0,3	1,4	1 416,5
Total financial assets	**3 491 698,2**	**940 416,9**	**423 156,7**	**31 296,0**	**4 886 567,8**
Financial liabilities					
Balances of market participants	117 669,0	356 684,0	206 630,3	30 877,4	711 860,7
Central counterparty financial liabilities	3 253 266,9	644 826,7	152 744,0	–	4 050 837,6
Distributions payable to holders of securities	14 586,5	1 101,9	0,2	0,6	15 689,2
Other financial liabilities	1 916,3	50,3	191,4	42,3	2 200,3
Total financial liabilities	**3 387 438,7**	**1 002 662,9**	**359 565,9**	**30 920,3**	**4 780 587,8**
Derivatives	**103,7**	**63 234,8**	**(63 485,3)**	**8,4**	**(138,4)**
Open position	**104 363,2**	**988,8**	**105,5**	**384,1**	

The following exchange rates are applied during the period:

	December 31, 2021		December 31, 2020	
	USD	EUR	USD	EUR
Minimum	69,5526	80,7019	60,9474	67,8162
Maximum	77,7730	92,3321	80,8815	93,7570
Average	73,6685	87,0861	72,3230	82,8358
Year-end	74,2926	84,0695	73,8757	90,6824

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, 2021 and 2020, and has concluded that the following movements in rates are reasonable levels to measure the risk to the Group:

	December 31, 2021	December 31, 2020
Movement in USD/RUB rate	10%	10%
Movement in EUR/RUB rate	10%	10%

The impact of these movements on post-tax profit for the years ended December 31, 2020 and 2019, and equity as at December 31, 2021 and 2020, is set out in the table below:

	December 31, 2021		December 31, 2020	
	USD	EUR	USD	EUR
	10%	10%	10%	10%
Ruble appreciation	(133,1)	(24,0)	(89,0)	(9,5)
Ruble depreciation	133,1	24,0	89,0	9,5

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.

35. 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 34. 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, 2021			Related amounts not set off in the statement of the financial position		
	Gross claims	Gross liabilities	Net amount presented in financial statements	Financial instruments	Collateral received	Net amount
Due from financial institutions (reverse repo receivables from financial institutions)	23 451,8	–	23 451,8	(23 451,8)	–	–
Central counterparty financial assets (repo transactions)	5 252 855,2	–	5 252 855,2	(5 252 855,2)	–	–
Central counterparty financial assets (currency transactions)	3 216,0	–	3 216,0	(2 386,0)	(830,0)	–
Financial assets at fair value through profit or loss (derivative financial assets)	542,3	–	542,3	(0,7)	(182,0)	359,6
Central counterparty financial liabilities (repo transactions)	–	(5 252 855,2)	(5 252 855,2)	5 252 855,2	–	–
Central counterparty financial liabilities (currency transactions)	–	(3 216,0)	(3 216,0)	2 386,0	830,0	–
Other liabilities (derivative financial liabilities)	–	(0,7)	(0,7)	0,7	–	–

	December 31, 2020			Related amounts not set off in the statement of the financial position		
	Gross claims	Gross liabilities	Net amount presented in financial statements	Financial instruments	Collateral received	Net amount
Due from financial institutions (reverse repo receivables from financial institutions)	49 436,2	–	49 436,2	(49 436,2)	–	–
Central counterparty financial assets (repo transactions)	4 047 661,8	–	4 047 661,8	(4 047 661,8)	–	–
Central counterparty financial assets (currency transactions)	3 175,8	–	3 175,8	(2 660,0)	(515,8)	–
Financial assets at fair value through profit or loss (derivative financial assets)	1,2	–	1,2	(0,5)	–	0,7
Central counterparty financial liabilities (repo transactions)	–	(4 047 661,8)	(4 047 661,8)	4 047 661,8	–	–
Central counterparty financial liabilities (currency transactions)	–	(3 175,8)	(3 175,8)	2 660,0	515,8	–
Other liabilities (derivative financial liabilities)	–	(139,6)	(139,6)	0,5	138,7	(0,4)

36. Events after the reporting date

In February 2022, certain countries announced new packages of sanctions against the public debt of the Russian Federation and a number of Russian banks, as well as personal sanctions against a number of individuals.

Due to the growing geopolitical tensions, since February 2022, there has been a significant increase in volatility on the securities and currency markets, as well as a significant depreciation of the ruble against the US dollar and the euro.

It is expected that these events may affect the activities of Russian enterprises in various sectors of the economy.

In order to adapt the financial sector to increased volatility, the Bank of Russia announced measures to support the financial sector, including certain changes to regulatory requirements.

Due to a significant change in the financial market environment, the Bank of Russia has established for NCC, the Group's subsidiary, new control level of the N1 CC capital adequacy ratio having decreased it from 100% to 50%. As of March 1, 2022 N1 CC ratio comprised 77,5%.

Clearing and trading activities of the Group are carried out in coordination with the Bank of Russia. The regulator also decides on the trading schedule for certain markets.

The exchange rate of the main currencies the Group operates with against the Russian ruble as of the date of issue of the financial statements increased significantly and amounted to:

USD	111,7564
EUR	124,0161

The key rate of the Bank of Russia as of the date of issue of the financial statements was 20% (December 31, 2021: 8,5%).

In order to avoid mass sales of Russian securities and expatriation of funds out of financial market, and support financial stability, the Bank of Russia circulated the ruling by which it temporarily prohibits brokers to execute foreign clients' securities sale orders. Also another ruling circulated to custodians and registrars prohibits outgoing transfers of Russian securities from foreign investors' depo accounts and suspends transfers of payouts on such securities.

The Group regards these events as non-adjusting events after the reporting period, the quantitative effect of which cannot be estimated at the moment with a sufficient degree of confidence.

Currently, the Group's management is analyzing the possible impact of changing micro- and macroeconomic conditions on the Group's financial position and results of operations.