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

> **Oleg Viyugin,** Chairman of the Supervisory Board

# Strategic report

- **12** Industry overview
- 15 Mission and corporate values
- **16** Strategic priorities
- 20 Risks associated
- with implemention of strategy
- 22 Key projects

# **Industry Overview**

## **OVERVIEW OF THE EXCHANGE INDUSTRY**

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

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

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

#### **GLOBAL TRENDS**

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

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

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

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

ABOUT MOSCOW EXCHANGE STRATEGIC REPORT PERFORMANCE REVIEW CORPORATE GOVERNANCE CONSOLIDATED FINANCIAL STATEMENTS APPENDICES

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

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

#### MOSCOW EXCHANGE COMPETITORS

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

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

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

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

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

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

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

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

### **MOSCOW EXCHANGE IN THE GLOBAL CONTEXT**

N⁰	Exchange	Country	Trading volume, USD bln	Including repo	
1	BME	Spain	6,791	$\checkmark$	I то
2	Oslo Borse	Norway	3,885	$\checkmark$	ТО
3	Moscow Exchange	Russia	3,668	√	1
4	Johannesburg SE	South African Republic	2,341	$\checkmark$	
5	Korea Exchange	Когеа	2,193	×	
6	Bolsa de Valores de Colombia	Colombia	333	×	exc
7	LSE Group	UK	297	×	for
8	Shanghai SE	China	295	×	101
9	Nasdaq OMX	USA	277	$\checkmark$	
10	Santiago SE	Chile	249	$\checkmark$	



N⁰	Exchange	Country	Trading volume, contracts, mln
1	CME Group	USA	4,764
2	NSE India	India	3,808
3	BM&FBOVESPA	Brazil	2,246
4	ICE&NYSE	USA	2,212
5	Deutsche Boerse	Germany	1,931
6	Moscow Exchange	Russia	1,499
7	CBOE	USA	1.434
8	Korea Exchange	Когеа	1,411
9	Nasdaq OMX	USA	1,270
10	Shanghai Fut. Exchange	China	1,175



N⁰	Exchange	Country	Market capitalization, USD bln	Number of issuers	Trading volume, USD bln
1	ICE&NYSE	US	20,679	2,285	19,341
2	Nasdaq OMX	US	11,080	4,077	17,639
3	Shenzhen SE	China	2,405	2,134	7,563
4	Japan Exchange	Japan	5,297	3,657	6,297
5	Shanghai SE	China	3,919	1,450	6,116
6	LSE Group	UK	3,638	2,479	2,548
7	Korea Exchange	Когеа	1,414	2,207	2,521
8	HKEx	Hong Kong	3,819	2,315	2,340
9	Euronext	EU	3,730	1,208	2,203
10	Deutsche Boerse	Germany	1,755	514	1,818
24	Moscow Exchange	Russia	576	225	167



N⁰	Exchange	Country	Capitalization, USD bln
1	CME	USA	67.3
2	ICE&NYSE	USA	42.9
3	HKEx	Hong Kong	36.2
4	Deutsche Boerse	Germany	22.8
5	LSE Group	UK	18.0
6	BM&FBovespa	Brazil	14.3
7	Nasdaq OMX	USA	13.4
8	CBOE	USA	11.0
9	Japan Exchange	Japan	8.6
10	ASX	Australia	8.2
11	SGX	Singapore	5.6
12	Euronext	EU	4.0
13	BATS	USA	3.4
14	TMX Group	Canada	2.9
15	Moscow Exchange	Russia	2.7



<sup>тор</sup>

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

publicly traded exchanges

1. Bond market data may be incomparable across the marketplaces due to difference in methods. Data for 2018.

Data for 2018.
Data for 2018.
The largest equity exchanges by equity trading volume (EOB only). The data does not include data on BATS (as figures on its market cap and number of companies on the market is not available). Data for 2018.
Market capitalization of public exchanges as of 31 December 2018 according to Bloomberg.