MOSCOW EXCHANGE

MARKET MAKING
DERIVATIVES MARKET

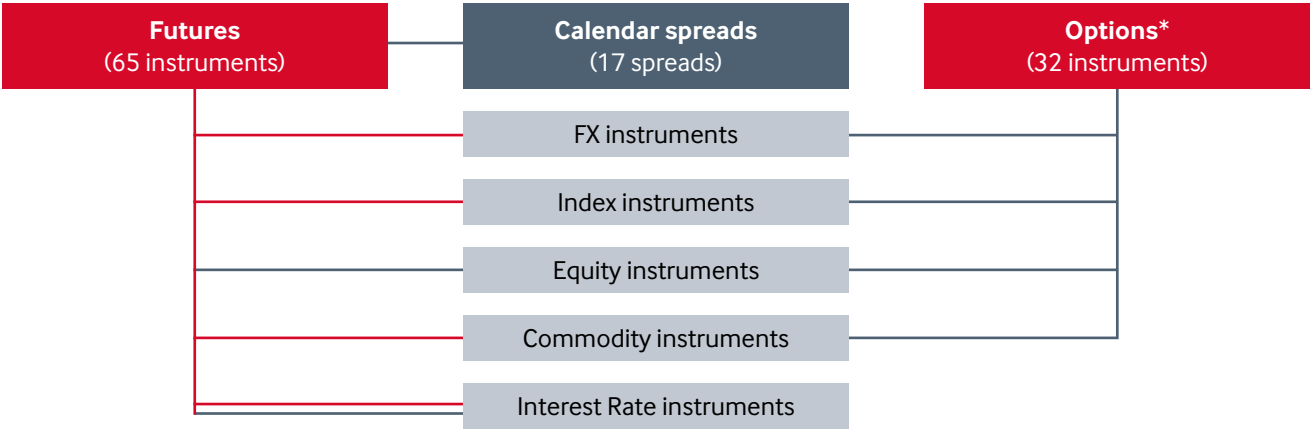# Contents

MOEX DERIVATIVES MARKET

Futures & Options market — a leading marketplace for derivatives trading in Russia and Eastern Europe

Geographical coverage   84 constituent entities of the Russian Federation

Trade figures   Daily turnover reached 8.6 million contracts or RUB 471 billion (November 2016)
52, 857 active client accounts (November 2016)

Market making   Market making covers over 50% of futures and options contracts

Derivative instruments

Futures (65 instruments)	Calendar spreads (17 spreads)	Options* (32 instruments)

- FX instruments
- Index instruments
- Equity instruments
- Commodity instruments
- Interest Rate instruments

— Cash-settled
— Deliverable
* All options are futures-style, American and deliverable on futures

BENEFITS OF BEING A MARKET MAKER IN DERIVATIVES

Market maker programs for all types of instruments
The Exchange offers market maker programs with respect to all types of futures and options (FX, Index, Equity, Commodity and Interest Rate).

Standardisation
The Exchange delivers an equal setting for all market makers with regard to obligations and incentives.

Transparency
Information on market making programs is available on the Exchange's website at http://moex.com/en/futoptmm/.

Reporting
The Exchange provides daily reports on performance of market making obligations.

Lowered requirements to non-effective transactions:
- No trading limits set for low-liquid futures and all options
- With respect to futures (other than low-liquid futures), the fee to transaction ratio is five times less for market makers.

Market maker obligations performance display
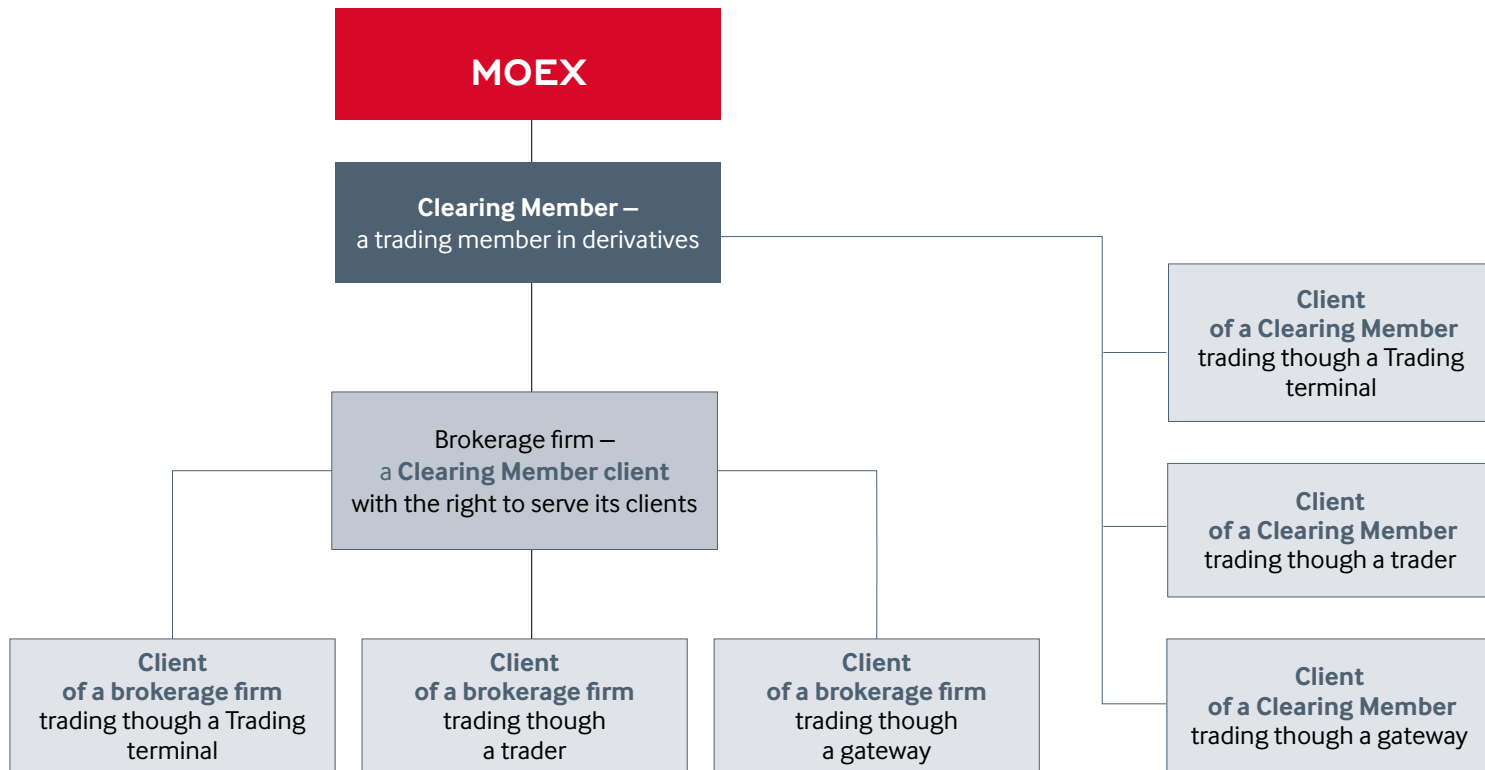The Exchange displays the information on market maker obligation performance online.

Cash requirements
Market makers should post funds in the minimum amount of initial margin to maintain quotes regardless of their accumulated position. Initial margin for maintaining two-sided quotes is determined by the long leg (partially netted positions).

A market maker **has no privileges** over other trading members in submitting and filling orders.

CONNECTION TO MOEX DERIVATIVES MARKET

MOEX

Clearing Member —
a trading member in derivatives

Brokerage firm —
a **Clearing Member client**
with the right to serve its clients

Client
of a brokerage firm
trading though a Trading
terminal

Client
of a brokerage firm
trading though
a trader

Client
of a brokerage firm
trading though
a gateway

Client
of a Clearing Member
trading though a Trading
terminal

Client
of a Clearing Member
trading though a trader

Client
of a Clearing Member
trading though a gateway

HOW TO BECOME A MARKET MAKER

Eligibility criteria

A trading member who is a Clearing Member at the same time is eligible to be a market maker.

Process of registering as a trading member and a Clearing Member is given in the MOEX Derivatives Market Trading Rules and Admission Rules.
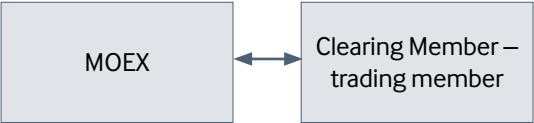
Market maker capabilities

In performing its obligations, a market maker may execute trades only **on its own behalf and on its own account, or on its own behalf and at the expense of a client** if instructed to do so by the client.

Relationships between market makers and their clients are governed by the Trading Rules, Clearing Rules, Derivatives Specifications and contracts and agreements signed between them.
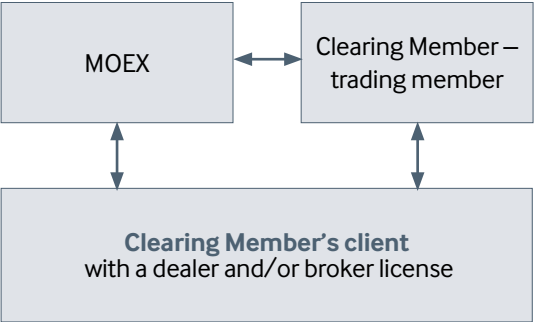
Registration process

To become a market maker, MOEX trading members who are a Clearing Member at the same time **should enter into the market making agreement** with Moscow Exchange.

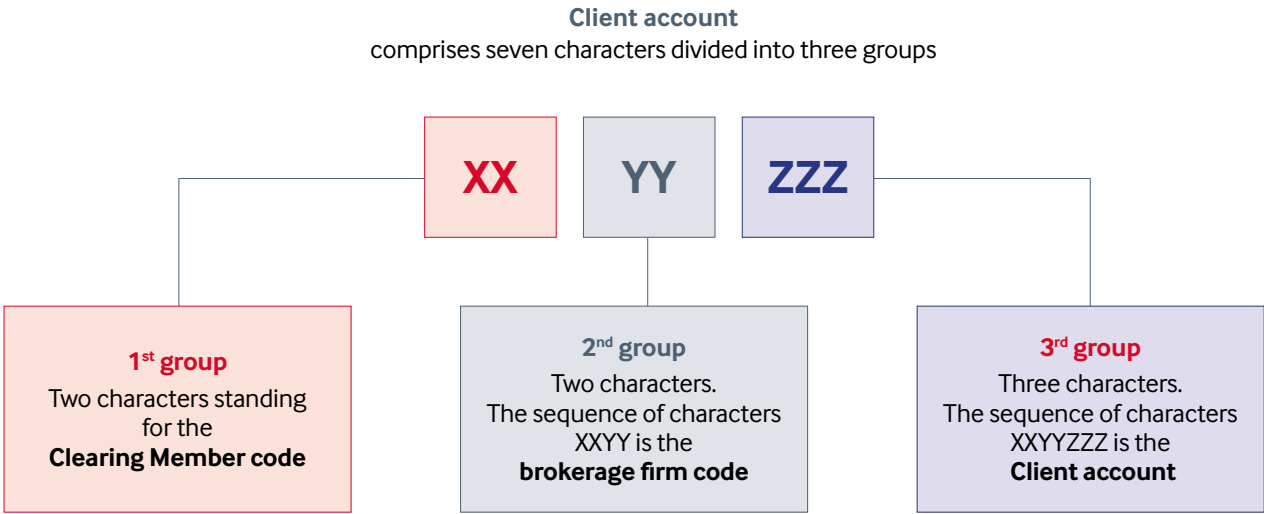The market making agreements have a standard form and are published on the Moscow Exchange's website at http://moex.com/en/futoptmm/.

Bilateral market making agreement

| MOEX | ←→ | Clearing Member — trading member |

Trilateral market making agreement

| MOEX | ←→ | Clearing Member — trading member |

Clearing Member's client
with a dealer and/or broker license

MARKET MAKER ATTRIBUTES

Market makers execute trades based on orders specifying **a client account.** Such **account** is identified in the market maker agreement that determines that all orders entered with the **account** are recorded to be market maker orders. Market maker orders in derivatives have no other attributes.

Client account
comprises seven characters divided into three groups

XX	YY	ZZZ

1st group	**2nd group**	**3rd group**
Two characters standing for the **Clearing Member code**	Two characters. The sequence of characters XXYY is the **brokerage firm code**	Three characters. The sequence of characters XXYYZZZ is the **Client account**

Market makers may change the Client account by sending an official notification to Moscow Exchange via the file gateway of the EDI system. Information on the Client account is given in Article 8, Part V of the NCC Clearing Bank Clearing Rules.

MARKET MAKER OBLIGATIONS

In return for a reward, market makers maintain prices and/or trading volumes of derivative contracts by displaying and maintaining continuous two-sided quotes.

Parameters of two-sided quotes maintenance

I. **Bid-ask spread:** the maximum difference between the best ask and best bid in market maker's orders.

   Not applied to one-sided spread

   Futures: Two-sided spread is the difference between the best bid/ask price across market maker orders and the lower/upper price limit for the contract if the difference between bid/ask price and the power/upper price limit is less than the established two-sided spread.

   Options: Two-sided spread is the difference between the best bid price across market maker orders and zero if the difference between bid price and zero is less or equal to the established two-sided spread.

II. **Minimum quoted size:** total size of all market maker's bids/asks in the contract within the spread.

   Please note that only book orders are taken to measure market maker performance.

III. **Minimum time of spread maintenance:** the market maker must maintain two-sided quotes within the prescribed spread and order size for a certain quantum.

   Quantum means the period of the trading session.

The market maker is considered to **fail to meet its obligations** if one or more of the three above-mentioned parameters was not observed during the trading session.

MARKET MAKING OBLIGATIONS FOR OPTIONS

Spread calculation

The bid-ask spread to be observed by the market maker with regard to options is determined as follows:

$$max(\ a\ *\ (\ \Delta S\ *\ Delta_{type,str}\ +\ SD(\ IV_{cs}\ )\ *\ Vega_{str}\ );\ b\ )$$

a, b — coefficients,
ΔS — volatility of the underlying asset of the option,
$Delta$ — delta coefficient,
$Vega$ — vega coefficient,
$SD (IV_{cs})$ — standard deviation of exchange estimated volatility at the central strike CS.

ATM strike change

If the ATM strike in the market making obligations for options deviates from its current value in the trading system, it can be changed in two ways:

I. By the market maker:

- Via the MOEX Spectra terminal by using function key of recalculating the central strike.
- Via SPECTRA Plaza-2 gateway by using method OptRecalcCS - Recalculate central strike request. For further details, read SPECTRA Plaza-2 gate guide (p. 106) available at ftp://ftp.moex.com/pub/FORTS/Plaza2/docs/p2gate_en.pdf.

II. By the Exchange:

- Before the evening trading session
- Before the main trading session
- During the intraday clearing session

If the ATM strike in the market making obligations differs from its current value in the trading system by more than three strikes

MARKET MAKING OBLIGATIONS DISPLAY

MOEX Spectra terminal

Main menu command "Administration"

Second level's cascading menu command "Market Maker's obligations in options"

Opens window with market making obligations in options that allows monitoring the market maker's performance

Second level's cascading menu command "Market Maker's obligations in future"

Opens window with market making obligations in futures that allows monitoring the market maker's performance

SPECTRA Plaza-2 gateway

You should connect to thread **"FORTS_MM_REPL"** giving information on the market maker's obligations.

For further details, read SPECTRA Plaza-2 gate guide (p. 89) available at

ftp://ftp.moex.com/pub/FORTS/Plaza2/docs/p2gate_en.pdf

MARKET MAKING PROGRAMS

Terms	Standard program	Ranking program
Objective	Facilitating liquidity by continuous pricing	Facilitating liquidity by continuous pricing and improving settlement quality
Major obligations	• Bid-ask spread • Minimum quoted size • Minimum time of spread maintenance	• Bid-ask spread • Minimum quoted size • Minimum time of spread maintenance
Additional obligations	—	**Quality criteria** of the market makers ranking: • Time in force • Trading volume • Open interest • Average effective spread (futures)
Main incentives	**Fixed compensation + variable compensation** in the form of a partial rebate of the exchange fee (per instrument) payable by the market maker and/or its counterparty	**Variable compensation** in the form of a partial rebate of the exchange fee (per instrument) payable by the market maker and/or its counterparty
Additional incentives	—	**Fixed compensation** in the form of a payment for the top position in the market makers ranking
Max number of market makers	Set per instrument	—

MARKET MAKERS RANKING PROGRAM

Quality criteria

The Exchange estimates market makers on a daily basis by the following quality criteria to rank them and determine their monthly remuneration

Quality criteria	Weighting coefficients	Weighting coefficient value
Time of spread maintenance **Pcf**	α	0.50
Volume of "passive" orders **VT**	β	0.45
Open interest **OP**	γ	0.05
Average effective spread AvgEffS (for futures only)	δ	1
Additional coefficient	λ	$\lambda = \begin{cases} 1, & if\ Pcf \geq 70\% \\ 0.8, & if\ 50\% \leq Pcf < 70\% \\ 0.3, & otherwise \end{cases}$

Market makers ranking

Top market makers are announced on a monthly basis on the Exchange's website.

$$R = \alpha * \lambda * Pcf + \beta * VT + \gamma * OP + \delta * \lambda * AvgEffS$$

Remuneration

Money pool is distributed (as fixed compensation) among the leading market makers in addition to their variable compensation (i.e. a partial rebate of the exchange fee payable by the market maker).

REPORTING

Market maker obligations reports

Name: **mmfutXXYY** * —— performance of market maker's obligations in futures
mmopt_strikesXXYY —— performance of market maker's obligations in options (by strikes)
mmopt_averageXXYY —— performance of market maker's obligations in options
(arithmetic mean % of performance by strikes)

Format: csv

Frequency: daily by the end of the main clearing session

Send to: the Clearing Member via the file gate of the EDI system.

Field descriptions: please visit http://fs.moex.com/files/7050/

Payment report

Name: **MM_PAYMENT_XXYY**

Format: xls

Frequency: monthly by the end of the second trading day of the month following the reporting month

Send to: the Clearing Member via the file gate of the EDI system.

Field descriptions: ftp://ftp.moex.com/pub/Reports/FORTS/ (in Russian)

* XXYY —— brokerage firm code

MARKET MAKING SECTION ON MOEX WEBSITE

CONTACTS

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Derivatives market

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