APPROVED

by the Executive Board of Moscow Exchange 13 November 2024, Minutes No. 89
Chairman of the Executive Board
Moscow Exchange

_____V.O. Zhidkov

Regulation on Recalculation of MOEX Indices

1. General provisions

This Regulation on Recalculation of MOEX Indices (hereinafter the "Regulation") outlines the foundational framework that guide Moscow Exchange (hereinafter the "Exchange") in the development, calculation, and distribution of Indices and other benchmarks related to stock, foreign exchange, money, derivatives, and commodity markets. It also provides guidelines for addressing detected errors in the values of Indices.

When calculating Indices, the Exchange has the following objectives:

- to deliver accurate and fully covered market environment and trends through the Indices;
- to maintain the Indices highly representative and clear by using market data in their calculation:
- to calculate all Indices in accordance with their calculation methodologies; and
- to ensure application of high technologies in the index management.

If any error or technical failure occurs, the Indices may be recalculated for the period of such errors or technical failures.

Errors in the Index values may occur due to various factors, such as system issues, incorrect or incomplete input data, complexities in certain corporate events, late-declared or missed dividends, pricing errors, market distortions, operational errors, misapplication of Index criteria and other factors. In such a case, the Exchange will refer to the guidelines detailed in paragraph 3 hereof when making decisions about the recalculation of Indices.

The Exchange shall be liable for losses arising from the use of inaccurate calculation of Indices only in cases stipulated by the current legislation of the Russian Federation.

This Regulation, as amended from time to time, is subject to approval by the Exchange and comes into effect on the date determined by the Exchange. The Exchange discloses information on changes made, and specifically in the form of new version of the Regulation, no later than three working days before the effective date.

2. Errors detection and correction

The Exchange maintains reliable process for Indices calculation errors detection and correction and strives to minimize the effects that errors have on Index users through being active in monitoring and internal error correction procedures, which include the following steps:

- 1. **Error detection.** Errors can be detected through regular checks, alerts from users or internal monitoring systems. All errors detected are checked and analysed by index-management employees of the Exchange.
- 2. Making decisions and Index recalculation. Once an error is detected, the Exchange makes a decision regarding Index recalculation with reference to the guidelines detailed in paragraph 3 hereof. In some cases that involve Index calculation errors, the Exchange retains the right to seek input from user committees created by the Exchange and NSD (hereinafter the "Expert Councils") within their authority as to the most appropriate solution, including whether to recalculate the Indices. If errors are detected before index values are published, the Exchange will correct the error and inform users if there is a delay in data publication. If errors are detected after the values are published and decision is made to recalculate the Index (if applicable), the Exchange will start correction procedures.
- 3. **Recalculation process.** The recalculation procedure may involve correcting wrong values of Indices using correct data, adjusting weights, or making any other necessary changes.
- 4. **Documentation of decisions.** The Index recalculation decision is issued through an order of the Exchange.
- 5. **Notification and publications.** The Exchange notifies users and those concerned about changes in values of Indices in case of recalculations. The Exchanges notifies users through publishing news in the news feed on its website.
- 6. **Documents.** All the errors detected and actions taken to correct them are documented. The Exchange keeps records of corrective actions as part of its management and quality assurance processes for the Indices calculation.

3. Decision-making principles for the recalculation of Indices

The Exchange evaluates the significance of potential impacts of any error, and, if necessary, the issue is brought before the relevant Expert Council for the discussion. The significance is evaluated considering how the recalculation affects Index users and whether the Indices are used as a reference for other financial instruments.

The table below presents the key principles the Exchange follows in making decisions on the recalculation of Indices. The selection of errors presented in the table is not a complete representation. In all other cases, the Exchange reserves the right to decide whether or not to recalculate the Index.

 $\label{thm:continuous} \textbf{Table. The selection of errors and criteria for making decisions.}$

Index type	Error zone	Error description	Comments	Detection period	Index recalculation
Equity indices	Dividends	Wrong dividend amount was accounted for as of the record date			Yes
		Wrong dividend currency			Yes
		Incorrect date dividends are accounted for (before or after the date of record)		Over a period of two years	Yes
		Dividends are not included The dividend adjustment			Yes
		factor KDP is missing			Yes
	Index constituents	Index constituents include non-eligible shares	Exclude or substitute, if necessary, to perform unscheduled rebalancing		No
		Index constituents do not include eligible shares	To be included in the next scheduled rebalancing, if they comply with index constituent eligibility principles	From previous rebalancing	No
	Index constituent parameters	Wrong values of parameters, such as number of shares issued, Free-float, LW, limiting coefficients, exchange rates used in selecting constituents	Perform unscheduled rebalancing	From previous rebalancing	No

		Wrong values of parameters, such as number of shares issued, Free-float, LW, limiting coefficients, exchange rates used when entering constituents into the index calculation system			Yes
		Wrong divisor value			Yes
	Treatment of corporate events	Reverse split/consolidation event is incorrectly factored in		Over a period of two years	Yes
	Closing prices	Wrong price value is included for index calculation		Over a period of two years	Yes
	Exchange rate	Wrong exchange rate value is included when calculating the index		Over a period of two years	Yes
	Wrong tax rates	Wrong tax rates are included to calculate the net total return indices		Over a period of two years	Yes
	Index calculation	Index failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-
	Coupon and accrued coupon income	Wrong coupon amount is accounted for as of the payment date		Over a period of	Yes
Bond indices		Incorrect daily accounting of accrued coupon income		two years	Yes
		Accrued coupon income/coupon is not included			Yes
	Index constituents	Index constituents do not include eligible issues	Inlciude in the next scheduled rebalancing, if they comply with index constituent eligibility principles	From previous rebalancing	No
	Index constituent parameters	Wrong number of shares issued, limiting coefficient value	Perform unscheduled rebalancing	From previous rebalancing	No

		Downgrade or withdrawal of credit rating	Perform unscheduled rebalancing		No
	Treatment of corporate events	The rating is improperly included and categorised into a wrong group	To be included in the nearby rebalancing	Over a period of two years	No
		Inclusion into the HRI Sector (except for high yield bond indices)	Perform unscheduled rebalancing		No
	Price	Incorrect price value is included into the index calculation, missing prices on the supplier's side		Over a period of two years	Yes
	Non-calculated index	Index failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-
RUSFAR	Price	Wrong value of REPO rates is included when calculating the benchmark		Over a period of two years	Yes
	Wrong selection of trades	Wrong selection of trades		Over a period of two years	Yes
	Non-calculated index	Benchmark failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-
FX and Precious Metals	Price	Wrong trade prices and prices in orders are included when calculating fixings		Over a period of two years	Yes
Markets Fixings	Wrong selection of trades	Wrong selection of trades		Over a period of two years	Yes
	Non-calculated index	Fixing failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-
Gold Index	Price	Wrong value of trade prices is included when calculating the benchmark		Over a period of two years	Yes
	Wrong selection of trades	Wrong selection of trades		Over a period of two years	Yes
	Non-calculated index	Benchmark failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-
MOEX Commodity Indices	Data from data providers	Wrong data from data providers		Over a period of two years	Yes
	Exchange rate	Wrong exchange rate value is included when calculating the index		Over a period of two years	Yes
	Index calculation	Index failed to calculate on the trading day	Calculation	For the entire period on index non-calculation	-