|  |  |
| --- | --- |
| **APPROVED**by the Executive Board of Moscow Exchange 23 November 2017 (Minutes No 70)The Chairman of the Board \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ А.Afanasiev |  |

**MICEX 10 Index Methodology**

Moscow Exchange 2017

CONTENTS

[**1.** **Introduction** 3](#_Toc500338305)

[**1.1.** **Terms and definitions** 3](#_Toc500338306)

[**1.2.** **General provisions** 3](#_Toc500338307)

[**2.** **Index calculation** 3](#_Toc500338308)

[**2.1.** **General procedure** 3](#_Toc500338309)

[**2.2.** **Stock price calculation** 4](#_Toc500338310)

[**2.3.** **Weight calculation** 4](#_Toc500338311)

[**2.4.** **Calculation of adjusting coefficient k** 5](#_Toc500338312)

[**3.** **Building and reviewing List of Constituents** 5](#_Toc500338313)

[**3.1.** **Reviewing the List of Constituents** 5](#_Toc500338314)

[**3.2.** **Principles for drawing up the List of Constituents** 5](#_Toc500338315)

[**3.3.** **Treatment of corporate events** 6](#_Toc500338316)

[**4.** **Calculation rules, information disclosure** 6](#_Toc500338317)

[**4.1.** **Calculation time** 6](#_Toc500338318)

[**4.2.** **Procedure for Indices calculation control** 6](#_Toc500338319)

[**4.3.** **Publication** 7](#_Toc500338320)

1. **Introduction**
	1. **Terms and definitions**
		1. For the purpose of this MICEX 10 Index Methodology of the Moscow Exchange (the “Methodology”), the following terms and definitions are applied:
			* + Stocks means any stocks admitted to trading on the Exchange including stocks and depositary receipts representing stocks of foreign issuers with most business activities in the Russian Federation. Stocks do not mean stocks issued by joint stock investment funds.
				+ List of Constituents means a list of securities used to calculate the Index.
				+ The Exchange, Moscow Exchange means Public Joint-Stock Company Moscow Exchange MICEX-RTS.
				+ Index Review Date means a trading day immediately preceding the effective of the updated list of constituents as set forth in Clause 3.1.
				+ Index means an indicator calculated by the Exchange based on on-exchange trades in securities denominated in RUB.
				+ Stock’s Weight means the share in per cent of Stock’s value in the aggregate value of all Stocks in the list of Constituents.
				+ Issuer means any issuer of ordinary, preferred or represented stocks.
		2. Terms not specifically defined herein shall be construed in accordance with other documents of the Exchange as well as laws and regulatory acts of the Bank of Russia.
	2. **General provisions**
		1. The MICEX 10 Index is a composite index of the Russian stock market calculated by the Exchange based on tradable prices of the ten most liquid and highly capitalised securities admitted to trading on the exchange.
		2. The name of the Index is “Индекс ММВБ 10” in Russian and “the MICEX 10 Index” in English.
		3. The methodology as amended and supplemented from time to time is subject to approval by the Exchange. The Methodology as amended and supplemented from time to time becomes effective on a date determined by the Exchange. Any amendments and supplements are only allowed once per quarter.
		4. The text of the Methodology as adopted by the Exchange is made publicly available at least three days before coming into force.
2. **Index calculation**
	1. **General procedure**
		1. The Index is calculated based on Exchange’s market data on Stocks. The Index is calculated during the main and additional (if any) trading sessions unless the Exchange has established a different period for the Index calculation.
		2. Any Stocks including foreign Stocks as well as depository receipts on Stocks are eligible for a List of Constituents.
		3. The Index is calculated in accordance with the following formula:

$$I\_{n}=\frac{k}{10}∙\sum\_{i=1}^{10}\frac{P\_{i}}{P\_{i}^{0}} ,$$

where:

|  |  |
| --- | --- |
| In – | Index's value as of nth  moment; |
| Pi – | The last trade price for the ith  constituent Stock; |
| Pi0 – | The last trade price for the ith  constituent Stock on the Index Review Date;  |
| *k* – | Adjusting coefficient. |
| N –  | The number of Stocks in the List of Constituents. |

* + 1. The following values were fixed at 06:00 pm MSK on 30 December 1997 (the day on which the Index was calculated for the first time) and are used to calculate the Index:
1. Index value (I1) = 100;
2. Adjusting coefficient k0 = 100.
	* 1. The Index’s values are in basis points accurate to two decimal places.
	1. **Stock price calculation**
		1. To calculate the price of the ith  Stocks (Pi), the following data can be used:
			* + Prices of trades executed during the trading period in the T+ Central Order Book;
				+ Stocks’ closing prices.
		2. Market sectors, markets, trading modes, and the periods used to derive data on the ith Stock prices in accordance with the procedure described in Clause 2.2.1, are determined by the Exchange with regard to the requirements set forth in Clause 2.1.1.
		3. The price of the ith Stock (Pi) shall be deemed equal to the price of the last trade executed in this Stock (Pideal) on the Exchange, except for cases indicated in Clauses 2.2.4 and 2.2.5.
		4. For removing nonmarket fluctuations in Stocks’ prices, a fluctuation value from the weighted average price of the preceding 10 trades shall be calculated for each trade. If the value for the last trade of the fluctuation from the weighted average price of the preceding 10 trades exceeds the set value, the preceding price value that meets the following requirement shall be used instead of the last trade’s price:

$P\_{i}=P\_{it-1}, if \left|\frac{P\_{it}^{deal}}{P\_{it}^{avg}}-1\right|>K\_{i}$,

where:

Pit – price of the ith Stock at the moment of the last trade execution (t);

Pit-1 – price of the ith Stock at the moment of execution of the preceding trade (t-1);

Pitdeal – the last trade price;

Ki – maximum fluctuation value is 0.02 unless otherwise specified by the Exchange;

Pitavg – the weighted average price of the last ten trades, calculated by using the formula:

$P\_{it}^{avg}={\sum\_{j=t-10}^{t-1}P\_{ij}^{deal}∙q\_{ij}}/{\sum\_{j=t-10}^{t-1}q\_{ij}}$,

where:

Pijdeal – price of the jth trade;

qij – size of the jth  trade in Stock units.

If fewer than ten trades in the ith Stock have been executed in the relevant trading mode since the start of the main trading session of the current Trading day, the price (Pi) of the ith Stock shall equal to the last trade price (Pitdeal) for the Stock.

* + 1. If the closing price is used to calculate the ith Stock price (Pi) as per clause 2.2.1, at the end of the trading day the ith Stock price (Pi) equals the closing price.
		2. If two or more securities issues from the same issuer and of the same category (type), but with different state registration numbers, are admitted to trading on the Exchange, then the sale/purchase transactions executed with the securities of the main issue shall be used to calculate the price of the ith  Stock, though it is possible to use the price of the additional issue at the Exchange’s discretion.
		3. The ith Stock price (Pi) shall be determined accurate RUB 0.01. If the tick specified in the Exchange’s internal documents regulating trading processes is other than RUB 0.01, the ith Stock price shall be calculated accurate to the tick specified for that Stock.
		4. The procedure for calculating the ith Stock price (Pi) specified in Clauses 2.2.1- 2.2.6 shall not apply in cases described in Clause 3.3.3.
	1. **Weight calculation**
		1. The share of the ith  Stocks value in the total value of all constituent Stocks (the Weight) is calculated as follows:

$$Wght\_{i}=\frac{\frac{P\_{i}}{P\_{i}^{0}}}{\sum\_{i=1}^{N}\frac{P\_{i}}{P\_{i}^{0}}}∙100\%$$

where:

|  |  |
| --- | --- |
| Wghti | The weight of the ith  Stocks; |
| Pi – | The last trade price of the ith  constituent Stock; |
| Pi0 – | The last trade price of the ith constituent Stock on the Index Review Date; |
| N – | The amount of Stocks in the List of Constituents. |

* 1. **Calculation of adjusting coefficient k**
		1. The adjusting coefficient k is calculated when the Index is reviewed and/or a corporate event set forth in Clause 3.3 occurs.
		2. The adjusting coefficient is determined as follows:

$$k\_{new}=I\_{rebalance} ,$$

where:

Irebalance – the closing value of the Index on the Review Date.

* + 1. The adjusting coefficient is determined accurate to four decimal places.
1. **Building and reviewing List of Constituents**
	1. **Reviewing the List of Constituents**

* + 1. Upon a review, Stocks are added to and removed from the List of Constituents.
		2. The Exchange reviews the List of Constituents once a quarter or less often, except for cases provided for in this Methodology. The updates to the list become effective on the next trading day after the end of the main trading session on the third Thursday of March, June, September and December. If such third Thursday is a non-trading day, the updates take effect on the next trading day after the end of the main trading session on the trading day immediately preceding such third Thursday. The Exchange may set other dates for the reviewed List of Constituents to come into force.
		3. In reviewing the List of Constituents, the Exchange is guided by principles set forth in Clause 3.2.
		4. An unscheduled review may be undertaken if a corporate event including that set forth in Clause 3.3, has occurred to a Stock issuer.
		5. Scheduled and unscheduled reviews are announced at least one day before the updated list comes into effect.
	1. **Principles for drawing up the List of Constituents**

* + 1. The Constituent Stocks List include the 10 stocks which have the largest value of the aggregated selection criteria Ki, calculated as follows:

$$K\_{i}=\left(\frac{F\_{i1}}{F\_{1}^{max}}\right)\*\left(\frac{F\_{i2}}{F\_{2}^{max}}\right)\*\left(\frac{F\_{i3}}{F\_{3}^{max}}\right)\*\left(\frac{F\_{i4}}{F\_{4}^{max}}\right)$$

*i* = 1, 2,… N, where

|  |  |
| --- | --- |
| N | The number of Stocks; |
| Fi1 | The number of trading days on which trades in the ith  Stock were made over the quarter preceding the Index Review Date; |
| Fi2 | The number of trades in the ith  Stock for the quarter preceding the Index Review Date; |
| Fi3 | Trading volume in the ith  Stock for the quarter preceding the Index Review Date; |
| Fi4 | The number of trading members trading the ith  Stock during the quarter preceding the Index Review Date; |
| F1max, F2max, F3max, F4max | The maximum values of criteria Fi1, Fi2, Fi3, Fi4, respectively. |

* 1. **Treatment of corporate events**
		1. If represented stocks have been split or consolidated, or the scope of rights and/or procedure for exercising rights carried by the represented stocks pursuant to the foreign law have been changed, the Exchange shall pass a resolution regarding such events subject to an expert opinion.
		2. Suspension of trading in Stocks on the Exchange.

If trading in the ith Stock on the Exchange is suspended for a period exceeding one trading day, then the price used in the Indices shall be the last price calculated before the suspension.

* + 1. Stock splits and consolidation.

In case of the ith  stock being split or consolidated, then on the day the resultant stock is admitted to trading, the price of the ith  stock (Pi0) calculated on day before is to be changed by dividing by the split ratio or multiplying by the consolidation ratio as applicable.

* + 1. Reorganisation of a joint stock company.

When a joint stock company is reorganised, the price of its ith stock (Pi) is fixed at the level of the end of the trading day preceding the fixation day. The date of the fixation day for the price (Pi) of the ith stock and the conditions for the cancellation of the price fixation are established by the Exchange subject to an expert opinion.

1. **Index calculation rules, information disclosure**
	1. **Calculation time**
		1. The Index is calculated on a real time basis (at least once a minute) every trading day upon a trade in a constituent security. The Exchange can change the calculation frequency subject to limits established by the regulatory acts for financial markets. Index values are published every second on Exchange’s official website. The Exchange can change the publication frequency; however, the publication frequency cannot be less than once a day.
		2. The Index is calculated during the main and additional (if any) trading sessions.
		3. Index values published first in the main (additional) trading session are the opening values of the Index with regard to the relevant session.
		4. Index values published last in the main (additional) trading session are the closing values of the Index with regard to the relevant session.
		5. Unless otherwise established by the regulatory acts of the Bank of Russia, the Exchange can change the start and/or end times of the Index calculation. Any decision made by the Exchange under this clause is notified to trading members at least five business days before it takes effect unless the Exchange sets other deadline by giving the relevant notice.
	2. **Procedure for Indices calculation control**
		1. In case of a technical disruption to the process of Index calculation or during securities trading at the Exchange that leads to corruption of data used to calculate the Index, the Index’s values are recalculated, but for a period no earlier than the previous trading day. If the Index’s values are recalculated, the Exchange shall perform such recalculation as soon as possible after the technical error was detected. In this case, the relevant notice is published on Exchange’s official website.
		2. If circumstances occur that may adversely impact how accurately the Index reflects the actual condition of the Russian stock market, the Exchange has the right to undertake any action necessary to ensure the accuracy of the Index, including removing Stocks from the Constituent Stock List, setting values of the parameters used for calculating the indicators specified in this Methodology, etc.
	3. **Publication**
		1. Information on the Indices is published on Exchange’s official website.
		2. Information that is subject to disclosure on Exchange’s official website under this Methodology may be disclosed in other ways, including via information agencies which distribute Exchange market data.