

REGULATION ON DETERMINING THE SECURITIES PRICE INDICES OF THE MONGOLIAN STOCK EXCHANGE

ONE. GENERAL PROVISIONS

- 1.1.The purpose of this Regulation is to regulate the activities concerning to the determination of the securities price index of listed companies on the Mongolian Stock Exchange (hereafter referred to “MSE”).
- 1.2.The following terms used in this Regulation shall have the meaning ascribed to them as follows:
 - 1.2.1.Index – a statistical measure of price change in a portfolio of stocks;
 - 1.2.2.Market capitalization (market cap) – the market value of a company, determined by multiplying the total number of shares outstanding by the closing price of the stock;
 - 1.2.3.Average daily trading volume – the amount of individual securities traded in a day on average over a period of year (excludes block trades);
 - 1.2.4.Adjustment factor (Adj)– the coefficient effect of a company’s floating stocks on its shares outstanding;
 - 1.2.5.Free-float –the company’s outstanding shares minus state owned shares and shareholdings over 5 percent;
- 1.3.MSE shall determine the TOP-20, Tier I and Tier II indices every trading day using its Trading System.
- 1.4.This Regulation may be amended by the Resolution of the Board of Directors of MSE.

TWO. QUALIFICATION PROCEDURES FOR SECURITY INCLUSION IN THE INDICES

TOP-20 index constituent qualifications

- 2.1 The constituents of the TOP20 index will be 20 companies listed on MSE that passed the requirements listed in the provision 2.3.
- 2.2 The constituents of the TOP20 index will be determined in the first 10 business days of January of each year based on the previous year’s trading reports.
- 2.3 The constituents of the TOP20 index will be determined by the following procedure:
 - 2.3.1 Listed companies will be ranked by their market capitalization and daily average trading volume.
 - 2.3.2 The top companies will be re-ranked by the higher of the two performance indicators. The resulting top companies will be selected as the constituents of the index.

- 2.3.3 If the two companies' indicators are equal, the company with the higher market capitalization will be selected.
- 2.3.4 A constituent of the index must have been traded in at least 20 percent of the annual trading days on the secondary market.
- 2.3.5 A company will not be included in the TOP-20 index if its state owned shares and shareholdings over five percent exceed 95 percent.
- 2.3.6 Changes in ranking, inclusion and/or removal of the constituents of the index will be made at any time on the basis of the judgment of Committee of Directors of MSE on the fulfilment of the regulatory obligations of the listed company.

Tier I and Tier II indices constituent qualifications

- 2.4 Tier I index will comprise of all companies listed in the Tier I on the MSE.
- 2.5 Tier II index will comprise of all companies listed in the Tier II on the MSE

THREE. INDEX CALCULATION

3.1 The following steps will be taken to calculate the TOP-20, Tier I and Tier II indices:

- 3.1.1 The market capitalization weight limit W_n of an index constituent will be calculated using the following formula $f(W_n)$.

$$f(W_n) = \begin{cases} W_n = 1.0000 & \text{if } x \geq \frac{P_n * Q_{n,ff}}{\sum_{i=1}^n (P_n * Q_{n,ff})}; \\ \text{or} \\ W_n = \frac{\left(\frac{0.15 * \sum_{i=1}^S (P_s * Q_{s,ff})}{1 - (k - S) * 0.15} \right)}{\left(\sum_{i=1}^n (P_n * Q_{n,ff}) \right)} & \text{if } x < \frac{P_n * Q_{n,ff}}{\sum_{i=1}^n (P_n * Q_{n,ff})} \end{cases}$$

- $Q_{n,ff}$ – Number of free float shares of Company N
- P_n – Stock price of Company N
- P_s – Stock price of Company S of which market cap of free float is equal or less than 'x' percent
- $Q_{s,ff}$ – Number of free-float shares of Company S of which market cap of free float is equal or less than 'x' percent
- K – total number of constituents of a given index
- S – Number of companies S of which market cap of free float is equal or less than 'x' percent

- 3.1.2 The weight limit of a constituent as indicated in the provision 3.1.1 shall be 0.15 for the TOP-20 index, 0.35 for the Tier I index and 0.10 for the Tier II index.
- 3.1.3 The TOP-20 index will be calculated throughout the trading hours and its closing price will be determined by the closing price of its constituents.
- 3.1.4 The adjustment factor for the constituents will be calculated as following:

$$Adj_n = \frac{Q_{n,ff}}{IQ_n} * W_n$$

- Adj_n – the adjustment factor for Company N
- $Q_{n,ff}$ – amount of free-float shares of Company N
- IQ_n – issued quantity of shares of Company N
- W_n – the assigned weight of Company N

- 3.1.5. The following base formula will be used to calculate the index:

$$INDEX_{today} = \frac{\sum_{i=1}^n (IQ_n * P_n * Adj)}{Divisor} * Base Value$$

- $INDEX_{today}$ – index of the given day
- IQ_n – issued quantity of shares of Company N
- P_n – price of stock of Company N
- Adj – adjustment factor.
- $Divisor$ – denominator
- $Base Value$ – base value of the formula

- 3.1.6. The Base value for calculating the index will be a constant number of 19558.19.

- 3.1.7. The Divisor will be recalculated using the following formula in the event of any changes in the index composition in accordance with the provisions 2.2, 2.3.6, 3.2 and 3.3 of this Regulation.

$$Divisor_{new} = \sum_{i=1}^{new} (IQ_{new} * P_{new} * Adj_{new}) * \frac{Divisor_{old}}{\sum_{i=1}^{old} (IQ_{old} * P_{old} * Adj_{old})}$$

- $Divisor_{new}$ – new divisor of the index
- $IQ_{new}, P_{new}, Adj_{new}$ – the issued quantity, price and adjustment factor of the new constituent of the index
- $Divisor_{old}$ – old divisor of the index
- $IQ_{old}, P_{old}, Adj_{old}$ – the issued quantity, price and adjustment factor of the old constituents of the index

- 3.2. The Trading Department of MSE will recalculate the adjustment factor of all indices in the first 10 business days of every quarter. The adjustment factor stated in the provision 3.1.4

will be recalculated if the function $f(W_n)$ does not equal 1.0000 when the variable 'x' is 0.20, 0.45 and 0.15 for the TOP-20, the Tier I and the Tier II indices respectively.

- 3.3. In the event of a change in a number of shares of the listed company, the results calculated under the provisions 3.1.1, 3.1.2 and 3.1.7 will be recalculated and used in the base formula of the index indicated in the provision 3.1.5 of this Regulation on the basis of the decisions of the Directors' Committee of MSE and the Financial Regulatory Commission on listing amendment as well as the decision stated in the provision 2.3.6 of this Regulation.

Four. OTHER

- 4.1. Indices will be disseminated daily through news media outlets.
- 4.2. Indices will be reported as compared to previous day's performance. A plus sign (+) will be added in case of an increase, a minus sign (-) will be added in case of a decrease.
- 4.4 The MSE Trading Department will make any changes in the inputs of indices and renew the constituents with the IT Department without any delay.
