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## **AMNEX 20**

### Methodology

Ver. 1.0

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London, November 2007

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## 1. General Information

**AMNEX 20** is leading index of Anglo Broker JSC designed to represent the performance of companies listed on the Free Market of both Montenegro Stock Exchange and NEX Montenegro. It's essential that this document about **AMNEX 20** be read together with the document **AMNEX Ground Rules**.

## 2. Name of Index

Official Index Name: Anglo Broker's Montenegro's Stock Market Index (AMNEX 20)

Short Name: **AMNEX 20**

## 3. Definition of Index

**AMNEX 20** is free-float market capitalization weighted index, which is not adjusted for paid dividends, and is not protected from dilution effect, which appears as result of dividends payout. **AMNEX 20** is weighted only by free-float market capitalization and consists of shares traded using continuous trading method on both Montenegro and NEX Montenegro Stock Exchanges, which have satisfied criteria for inclusion in the index basket. Influence of the components in the index is limited to maximum 20% of total market capitalization of the index.

## 4. Purpose of the Index

In the past, investors could only utilise indices of either Montenegro Stock Exchange (MOSTE) or NEX Montenegro Stock Exchange (NEX20, NEXPIF) which included only securities traded on each of them respectively. Apart from twenty nine largest companies, listed on Montenegro Stock Exchange, the Exchange includes Privatisation Investment Funds (PIFs) into MOSTE index composition while NEX Montenegro Stock Exchange has a separate index for PIFs (NEXPIF) as well as an index of twenty largest companies listed on this Exchange. In addition, the two exchanges use different methodology for calculation of their respective indices making them incomparable. Furthermore, some securities are traded on one of the exchanges while others trade on both. Moreover, a number of securities have switched trading from one of the exchanges to the other. None of the exchanges considers a free float factor when calculating respective indices. As a result, indices do not necessarily follow each other and occasionally move in opposite directions. Thus investors have not had a comprehensive benchmark for evaluating trading strategies and comparing their return to a market average.

Purpose of **AMNEX 20** is to unify trading data from both Montenegro and Nex Montenegro Stock Exchanges and measure the average price changes of twenty most representative companies – largest as measured by market capitalisation- listed either on one or both of the exchanges. As such **AMNEX 20** serves as a unique benchmark

measuring performance of most liquid part of Montenegro's Capital Market. Both, individual and institutional investors could use the index as the most comprehensive benchmark for evaluating their investment strategies and performance of their investment portfolios. The index is thus expected to be analytical tool for individual or institutional investors, portfolio managers, professional analysts, professional public, as well as for all other entities interested in dynamics of price movements on Montenegro's Equity Market.

## 5. Statement of Principles

The guiding principles behind the calculation method of **AMNEX 20** index are to be found in the Ground Rules applied for **AMNEX** indices.

## 6. Index Calculation Method

Similarly to the calculation method for all AMNEX indices described in the Ground Rules, index formula for **AMNEX 20** is calculated using Laspeyres's formula:

$$\text{AMNEX } 20_t = \frac{\sum_{i=1}^n p_{i,t} * q_{i,t} * ff_{i,t} * w_i}{d_t}$$

where

**AMNEX 20<sub>t</sub>** = value of index of twenty selected securities traded on one or both of Montenegro's Stock Exchanges at time *t*,

*n* = 20 representing number of securities in the index

*i* = 1,2,3,...,20 representing certain component security within index basket

***p*<sub>*i,t*</sub>** = The latest trade price of the component security *i* at time *t* for intra day reporting or the average price at the close of the index on the previous day for daily calculation of the index. The reported price is the simple arithmetic mean (average) which is calculated as a ratio of Turnover (EUR) and Volume of each traded security.

***q*<sub>*i,t*</sub>** = number of shares in issue of the security *i* at time *t*

***ff*<sub>*i,t*</sub>** = free float factor of security *i* at time *t*

***w*<sub>*i*</sub>** = weight of the component security *i*

***d*<sub>*t*</sub>** = index divisor, a figure that represents ratio of the total issued share capital of the index basket and index value, at time *t*. On the starting (base) date divisor is set as follows:



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$$d_t = \frac{\sum_{i=1}^n p_{i,t} * q_{i,t} * ff_{i,t} * w_i}{100}$$

The starting index value is set to equal 100 index points. The starting (base) date is 01.03.2003, thus the same as for MOSTE, NEX20 and NEX PIF, in order to make them easily comparable over time. Weighted free float market capitalisation after close at base date is 27524222.99. Hence the base divisor is equal to **275242.229900731** (27524222.9900731/100).

The divisor stays unchanged unless there is a need to update the index basket. A company may increase number of shares in issue and thus increase own market capitalization as well as market capitalization of index basket. Similarly, a composition of index basket may change. In order to maintain the index value and make it comparable over time a new divisor at time say  $t$  is calculated in the following way:

$$d_t = \frac{\sum_{i=1}^n p_{i,t} * q_{i,t} * ff_{i,t} * w_i}{AMNEX\ 20_t} \quad \text{or New Index Basket/Old Index Basket} * d_{t-1}$$

where **AMNEX 20<sub>t</sub>** is first calculated using the latest index divisor  $d_{t-1}$

## 7. Composition of Index Basket

Index basket consists of common shares traded using the continuous trading method, that have fulfilled criteria for the index basket. Apart from largest market capitalization securities included in the basket have to have at least a hundred (100) transactions in the six months period proceeding index revision. The 100 transactions rule is adjusted considerably at times when market is particularly illiquid. More precisely, since Montenegro's Capital Market was in an infantile stage prior 2005, numbers of transactions required for inclusion in the index basket was reduced to as low as fifteen (15) transaction per period. Moreover, for the period prior to June 2003 this number is further reduced to seven (7) transactions simply because market activity was extremely low. AMNEX index Committee can reduce/increase number of required transaction for inclusion in the index should market liquidity considerably change.

## 8. Review Process

The process of final composition of the index basket is responsibility of the AMNEX Committee, which carries out selection of securities for the index basket. The **AMNEX 20**



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index is reviewed semi-annually using average daily data for the last trading day in June and December of each year. The revision procedure is described in the Ground Rules.

## 9. Index Publishing

Values of **AMNEX 20** index will be calculated and published by Anglo Broker JSC as for the other AMNEX indices described in the Ground Rules. The calculation will be done in real time while publishing may have a slight delay due to commercial interests of the exchanges. Changes of the indices in respect to previous period may be published in absolute and percentage terms. **AMNEX 20** index, as well as other AMNEX indices, is published on Anglo Broker's JSC web site ([www.anglobroker.com](http://www.anglobroker.com)) and on internet tickers of the same site but could be published by other media upon Anglo Broker's JSC approval.

