



**RESOLUTION No. 12**

**"Futures on stocks traded on the Main Market of ATHEX"**

*(Codified into a single text to include the decisions dated 5.2.2015, 1.12.2015 and 6.12.2017 of the Stock Markets Steering Committee of ATHEX).*

**THE STOCK MARKETS STEERING COMMITTEE  
OF ATHENS EXCHANGE S.A.**

(Meeting of 13.11.2014)

Having regard to the provisions of §§ 3.2.3 and 2.4.4 of the ATHEX Rulebook and the need to specify the rules governing the trading of Futures on stocks

**HEREBY RESOLVES AS FOLLOWS**

**SCOPE**

This resolution sets out:

- 1) The characteristics for admission to trading,
- 2) The terms and procedure for admission to trading of series,
- 3) The method for calculating the daily settlement price,
- 4) The specific terms governing block trades,
- 5) The terms governing market making,
- 6) The position limits, and
- 7) The rules governing the adjustment of rights and obligations in cases of corporate actions

**in respect of Futures on stocks traded on the Main Market of ATHEX.**

**Article 1. Characteristics for Admission to Trading**

<b>Contract Type</b>	Standardized Futures Contracts that are settled on their expiry by delivery of the Underlying Asset.
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<b>Underlying Asset</b>	A stock on the Main Market which is traded on the Securities Market of ATHEX. Stocks with respect to which Contracts have been admitted to trading are set out in Annex B "Underlying Assets".
<b>Contract Size</b>	100 shares
<b>Contract Price</b>	The put or call price of the Contract. The Contract price is expressed in euros per share.
<b>Tick Size</b>	From 0 to 0.9999 euro: 0.0010 euro From 1 euro and above: 0.0100 euro
<b>Series</b>	At any given time there are four (4) series trading for the nearest-term months of the quarterly cycle, i.e. March, June, September and December. The number of series that can be traded may be increased or decreased according to the relevant procedure laid down by ATHEX. In addition, there are series of standard combinations in continuous trading between the first and second, and the second and third month of the aforesaid quarterly cycle.
<b>Expiration Year, Month, Day and Time</b>	The Expiration Year, Month, Day and Time is the year, month, day and time at which trading in the respective series and its Futures Contracts ceases.
<b>Expiration Day</b>	The Expiration Day is the third (3 <sup>rd</sup> ) Friday of the Expiration Month. If this day is not a trading day, the Expiration Day is the preceding trading day.
<b>Expiration Time</b>	Expiration Time: 13:45' The Expiration Time may be changed if ATHEX deems this necessary in order to safeguard the smooth operation of the market and investors' interests.
<b>Final day of trading</b>	Expiration Day
<b>Starting Price</b>	The Starting Price, according also to the relevant provisions of the Rulebook, is the Theoretical price of the product, taking into consideration risk management parameters such as the risk-free interest rate, as well as parameters relating to the calculation of the starting price such as dividend yield.
<b>Daily Price Fluctuation Limits</b>	The maximum daily price fluctuation limit is set at +35% or -35% of the starting price (reference price). <sup>1</sup>
<b>Minimum block trading size</b>	6,000 Contracts, and in all cases with a value not less than the amount of €25,000. <sup>2</sup>

<sup>1</sup> The daily price fluctuation limits were revised by virtue of decision 46/5.2.2015 of the Stock Markets Steering Committee of Athens Exchange with effect as of 9.2.2015.

<sup>2</sup> The above figures relating to the minimum block trading size were amended by virtue of decision 161/06.12.2017 of the Stock Markets Steering Committee and are valid as of 11.12.2017 pursuant to the Announcement dated 10.12.2017 of ATHEX.

<b>Daily Cash Settlement</b>	<p>Contracts are subject to Daily Cash Settlement based on the Daily Settlement Price.</p> <p>The payment and collection of Cash Settlement Amounts takes place on the next trading day.</p>
<b>Daily Settlement Price</b>	<p>The price resulting on the basis of the relevant calculation method stipulated by ATHEX for the Contract, rounded to the nearest valid tick size.</p>
<b>Payable/ Receivable Daily Cash Settlement Amount</b>	<p>When the Daily Settlement Price of the Contract, per its respective series, is higher:</p> <ol style="list-style-type: none"> <li>1) With respect to the first Daily Cash Settlement, than the price at which the Contract was entered into,</li> <li>2) With respect to each subsequent Daily Cash Settlement, than the Daily Settlement Price of the immediately preceding trading day,</li> </ol> <p>the buyer is entitled to receive from the seller and correspondingly the seller is obliged to pay to the buyer the Daily Cash Settlement Amount resulting from the difference between the aforesaid prices.</p> <p>When the Daily Settlement Price of the Contract, per its respective series, is lower:</p> <ol style="list-style-type: none"> <li>1) With respect to the first Daily Cash Settlement, than the price at which the Contract was entered into</li> <li>2) With respect to each subsequent Daily Cash Settlement, than the Daily Settlement Price of the immediately preceding trading day,</li> </ol> <p>the seller is entitled to receive from the buyer and correspondingly the buyer is obliged to pay to the seller the Daily Cash Settlement Amount resulting from the difference between the aforesaid prices.</p> <p>The Daily Cash Settlement Amount is determined by the following formula:</p> $\text{Daily Cash Settlement Amount} = (D_{\text{settle}} - P_{\text{future}}) \times M$ <p>Where:</p> <p>D<sub>settle</sub>: The Daily Settlement Price on the current trading day (to four decimal places),</p> <p>P<sub>future</sub>: The price at which the transaction was concluded or the Daily Settlement Price of the immediately preceding trading day,</p> <p>M: The contract size.</p>
<b>Final Settlement</b>	<p>Final Settlement is with cash settlement (Cash Settlement on Expiry) and delivery of the Underlying Asset against payment of the price.</p>
<b>Final Settlement Day</b>	<p>With respect to Cash Settlement on Expiry, Expiration Day plus one business day (T+1).</p> <p>With respect to delivery of the Underlying Asset against payment of the price, Expiration Day plus two business days (T+2).</p>
<b>Final Settlement Price</b>	<p>1. The Final Settlement Price is the price of the Underlying Asset on Expiration Day, as this price results from Method 2 trading (Call Auction) in the ATHEX Securities Market during the time period from 13:45 to 14:00, in respect of that Asset.</p>

	<p>2. If no trades have been executed in the aforesaid Asset during the time period of Method 2, the Final Settlement Price is the Weighted Average (by number of units) of trades executed in the Asset during the last twenty minutes (20') prior to commencement of the aforesaid period of Method 2 trading.</p> <p>3. If no trades have been executed even during the period of the preceding paragraph, then the Final Settlement Price is the Weighted Average of trades executed in the Asset prior to the twenty-minute (20') period of the preceding paragraph (and up until the opening of the trading session for the underlying stock), beginning with the immediately preceding twenty-minute (20') period.</p> <p>4. If no trades have been executed even during the period specified in the preceding paragraph, then the Final Settlement Price is the starting price of the Asset at the opening of the ATHEX Securities Market session.</p> <p>5. In the case of securities traded on ATHEX Markets for which there is no scheduled "intervening Method 2" on the day and time of expiration of the Futures Contract linked to it, then the Final Settlement Price is:</p> <ul style="list-style-type: none"> <li>a) The Weighted Average (by number of units) of trades executed in the security in the respective Market during the time period from 13:45 to 14:00.</li> <li>b) If no trades have been executed during the above-mentioned period, the Final Settlement Price is the Weighted Average (by number of units) of trades executed in the security in the respective Market during the last twenty minutes (20') prior to commencement of the aforesaid period.</li> <li>c) If no trades have been executed in the particular security even during the period of the preceding paragraph, the Final Settlement Price is the Weighted Average of trades executed in the security in the respective Market prior to the twenty-minute (20') period of the preceding paragraph and up until the opening of the trading session for the underlying security, beginning with the immediately preceding twenty-minute (20') period.</li> <li>d) If no trades have been executed in the particular security during the period specified in the preceding paragraph, the Final Settlement Price is the starting price of the security at the opening of the trading session of the respective Market.</li> <li>e) If the Market in question is closed on expiration day, then the Final Settlement Price is the last available closing price of the security.</li> </ul> <p>6. In the event of a change to the Expiration Time due to exceptional circumstances, ATHEX may change accordingly the time periods for trading with the methods of the above paragraphs 1 to 5 for the calculation of the Final Settlement Price or stipulate alternative methods for its calculation, taking into consideration the circumstances prevailing each time.</p> <p>7. ATHEX announces the Final Settlement Price immediately after its calculation in accordance with the stipulations of the above paragraphs.</p>
<b>Payable/</b>	When the Final Settlement Price of the Contract is higher:

<b>Receivable Final Cash Settlement Amount</b>	<p>1) With respect to the first Daily Cash Settlement, than the price at which the Contract was entered into,</p> <p>2) With respect to each subsequent Daily Cash Settlement, than the Daily Settlement Price of the immediately preceding trading day,</p> <p>the buyer is entitled to receive from the seller and correspondingly the seller is obliged to pay to the buyer the Daily Cash Settlement Amount resulting from the difference between the aforesaid prices.</p> <p>When the Daily Settlement Price of the Contract is lower:</p> <p>1) With respect to the first Daily Cash Settlement, than the price at which the Contract was entered into,</p> <p>2) With respect to each subsequent Daily Cash Settlement, than the Daily Settlement Price of the immediately preceding trading day,</p> <p>the seller is entitled to receive from the buyer and correspondingly the buyer is obliged to pay to the seller the Daily Cash Settlement Amount resulting from the difference between the aforesaid prices.</p> <p>The Daily Cash Settlement Amount is determined by the following formula:</p> <p>Daily Cash Settlement Amount = (Fisettle – Pfuture) x M</p> <p>Where:</p> <p>Fisettle: The Final Settlement Price (to four decimal places),</p> <p>Pfuture: The price at which the transaction was concluded or the Daily Settlement Price of the immediately preceding trading day,</p> <p>M: The contract size.</p>
<b>Delivery of Underlying Asset against payment of the price</b>	<p>The obligations to deliver the Underlying Asset against payment of the price are fulfilled as follows:</p> <p>The seller must deliver to the buyer the Underlying Asset and the buyer must pay the respective price. The aforesaid price is defined as the amount resulting on the basis of the Final Settlement Price of the Contract. This amount is determined by the following formula:</p> <p>Price = Fisettle x M</p> <p>Where:</p> <p>Fisettle: The Final Settlement Price (to four decimal places),</p> <p>M: The contract size.</p>
<b>Settlement Currency</b>	<p>Euro</p>

## Article 2. Series

### 2.1 Series naming

The series name for Contracts contains up to fifteen (15) characters.

- 1) Root

The root of series names for Contracts has a maximum of five (5) letters of the Latin alphabet which identify the Underlying Asset and specifically in accordance with Annex B "Underlying Assets".

#### 2) Expiration Year

The Expiration Year of series of Contracts is identified by the last two digits of the year in which the series expires.

#### 3) Expiration Month

The Expiration Month of series of Contracts is identified by one letter of the Latin alphabet, according to the following codification:

Expiration Month	Symbol
January	A
February	B
March	C
April	D
May	E
June	F
July	G
August	H
September	I
October	J
November	K
December	L

#### 4) Issue Modifier

This field consists of one letter of the Latin alphabet which indicates whether there has been any change to the characteristics for the admission to trading of a Contract during its lifetime (e.g. contract size, contract price). The codification uses the Latin alphabet letters x,y,z, depending on whether it is the 1<sup>st</sup>, 2<sup>nd</sup>, etc. change to the aforesaid characteristics.

### **Article 3. Series listing procedure**

#### **3.1 Normal procedure**

New series of Contracts are listed on the trading day following Expiration Day.

#### **3.2 Extraordinary procedure**

New series of Contracts may be listed, outside the normal procedure, provided ATHEX deems this expedient for the functioning of the derivative or ensuring its orderly trading.

#### **Article 4. Method for Calculating the Daily Settlement Price**

The method set forth in the following provisions, based on trades concluded, is used to calculate the Daily Settlement Price of Contracts. For the purpose hereof, "trades" as used in the preceding sentence means trades concluded with Method 1 (Continuous Automatic Matching) as applied in the Derivatives Market in accordance with the stipulations of the ATHEX Rulebook.

##### **4.1 Liquidity Series**

###### **4.1.1 Definition of Liquidity Series**

"Liquidity Series" is defined as the series with the shortest time until its expiration provided more than five (5) days remain until expiration and for which there is a Daily Settlement Price in the immediately preceding session of the Derivatives Market. If no series with a time until expiration of more than five (5) days has a Daily Settlement Price in the preceding session of the Derivatives Market, "Liquidity Series" is defined as the series with the shortest time until expiration which has a Daily Settlement Price in the preceding session of the Derivatives Market. If no series has a Daily Settlement Price in the preceding session of the Derivatives Market, "Liquidity Series" is defined as the series with the shortest time until expiration.

###### **4.1.2 Series with Daily Settlement Price in the immediately preceding session**

In the case of liquidity series for which there is a Daily Settlement Price in the immediately preceding session, Daily Settlement Price is defined as:

- 1) The Weighted Average (WA) of trades concluded in the respective series during the last ten minutes (10') before the end of the final period of trading with Method 1 in the Securities Market with a contract volume higher than or equal to five (5) contracts, which for the purpose hereof is defined as the Minimum Contract Number.
- 2) If no trades were concluded during the aforesaid period and there is no Minimum Contract Number, the Daily Settlement Price of the respective series in the immediately preceding session of the Derivatives Market increased by the percentage variation of the underlying asset.

###### **4.1.3 Series with no Daily Settlement Price in the immediately preceding session**

1. In the case of series for which there is no Daily Settlement Price in the immediately preceding session, Daily Settlement Price is defined as:

- 1) The WA of trades concluded in the respective series during the last ten minutes (10') before the end of the final period of trading with Method 1 in the Securities Market with a contract volume higher than or equal to the Minimum Contract Number.
- 2) If no trades were concluded during the stipulated period and there is no Minimum Contract Number, the WA of trades concluded every ten minutes (10') until the time of commencement

of the Derivatives Market session, beginning before the end of the final period of trading with Method 1 in the Securities Market.

3) If no trades were concluded during the period stipulated in the preceding paragraph, the WA of trades concluded during the period from the end of the final period of trading with Method 1 in the Securities Market until the close of the Derivatives Market session.

2. In the case of series for which there is no Daily Settlement Price in the immediately preceding session of the Derivatives Market and no trades were concluded during the period stipulated in the preceding paragraph, the Daily Settlement Price is zero.

#### **4.2 Other series (apart from Liquidity Series)**

##### **4.2.1 Series with Daily Settlement Price in the immediately preceding session**

In the case of series, other than Liquidity Series, for which there is a Daily Settlement Price in the immediately preceding session, Daily Settlement Price is defined as:

1) The WA of trades concluded in the respective series during the last ten minutes (10') before the end of the final trading period with Method 1 in the Securities Market with a contract volume higher than or equal to the Minimum Contract Number.

2) If no trades were concluded during the period stipulated in the preceding subparagraph but trades were conducted during the session, Daily Settlement Price is defined as the algebraic sum of the Daily Settlement Price of the Liquidity Series and the calculated price deviation of the respective series from the liquidity series, based on the algorithm for calculating the deviation from the liquidity series which is stipulated in the Annex "Calculation of Deviation from Liquidity Series", which is attached hereto and forms an integral part hereof.

3) If it is not possible to calculate the deviation from the Liquidity Series for transactions carried out in the respective series or no trade was concluded in the respective series during the session, the Daily Settlement Price of the immediately preceding day increased by the percentage variation of the Liquidity Series.

##### **4.2.2 Series with no Daily Settlement Price in the immediately preceding session**

1. In the case of series, other than Liquidity Series, for which there is no Daily Settlement Price in the immediately preceding session, Daily Settlement Price is defined as:

1) The WA of trades concluded in the respective series during the last ten minutes (10') before the end of the final period of trading with Method 1 in the Securities Market with a contract volume higher than or equal to the Minimum Contract Number.

2) If no trades were concluded during the aforesaid period and there is no Minimum Contract Number as per the preceding subparagraph but trades were conducted during the session, the algebraic sum of the Daily Settlement Price of the Liquidity Series and the calculated price deviation of the respective series from the liquidity series, based on the algorithm for calculating the deviation from the liquidity series which is stipulated in the Annex "Calculation of Deviation from Liquidity Series", which is attached hereto and forms an integral part hereof.

3) If it is not possible to calculate the deviation from the Liquidity Series for transactions carried out in the respective series or no trades were concluded in accordance with the preceding subparagraph, the WA of trades concluded every ten minutes (10') until the time of commencement of the Derivatives Market session, beginning before the end of the final period of trading with Method 1 in the Securities Market.

4) If no trades were concluded during the period stipulated in the preceding paragraph, the WA of trades concluded during the period from the end of the final period of trading with Method 1 in the underlying market of ATHEX until the close of the Derivatives Market session.

2. In the case of series for which there is no Daily Settlement Price in the immediately preceding session and no trades were concluded during the period stipulated in the preceding paragraph, the Daily Settlement Price is zero.

#### **4.3 Exceptional circumstances**

If, for any exceptional reason such as, by way of example, the malfunctioning of the System, it is not possible to calculate the Daily Settlement Price in accordance with the provisions of paragraphs 1 and 2, the Daily Settlement Price may be calculated as follows:

1) In the case of the Liquidity Series as well as any other series for which there is a Daily Settlement Price in the immediately preceding session of the Derivatives Market, the Daily Settlement Price shall be the daily settlement price of the respective series in the immediately preceding Derivatives Market session increased by the daily percentage variation of the closing price of the underlying asset.

2) In the case of series for which there is no Daily Settlement Price in the immediately preceding session, the Daily Settlement Price may be calculated by applying the provisions of subparagraphs (a) to (c) of paragraph 4.1.3 of article 4.1. on the Liquidity Series, and of subparagraphs (a) to (d) of paragraph 4.2.2 of article 4.2 on other series.

#### **4.4 Parameter modification**

ATHEXClear may modify the parameters for calculating the Daily Settlement Price, as these are stipulated in the provisions hereof, in the event of exceptional circumstances in the markets which necessitate such modification or if there is a change to the Listing Characteristics of Contracts, for example as a consequence of corporate actions.

#### **Article 5. Block Trading**

The block trades (pre-agreed trades) of §2.3.9 of the ATHEX Rulebook are accepted by the System provided they are conducted in accordance with the terms of the above paragraphs and the stipulations of the following provisions:

1) Block trades or cross trades must be conducted in a quantity that is not less than the Minimum Block Trading Size as stipulated above, and at a price within the daily fluctuation limits of the series being traded.

2) For the purpose of calculating the Daily Settlement Price, ATHEXClear does not take into account block trades in Derivatives.

3) Block trades and cross trades are settled on the basis of the Daily Settlement Price. In the case of series for which there is no Daily Settlement Price prior to the session immediately preceding the session during which they were concluded and in respect of which only block trades or cross trades have been entered into during the relevant session exclusively for the settlement needs of the said trades, the Daily Settlement Price shall be determined in accordance with the provisions of the Article 4 as such price results on the basis of the said trades.

#### Article 6. Market-Making Conditions

<b>Quote frequency</b>	<p>Market Makers must:</p> <ol style="list-style-type: none"> <li>1) Continuously enter bid and ask orders (continuous obligation) for the series of Contracts of the nearest-term expiration month.</li> <li>2) In response to a quote request, enter bid and ask orders for the series of the second (2<sup>nd</sup>) nearest-term expiration month, within three (3) minutes from submission of the relevant request (non-continuous obligation). This quote must remain in the System for at least twenty (20) seconds.</li> </ol> <p>Ten (10) days prior to expiration of the nearest-term series, Market Makers must :</p> <ol style="list-style-type: none"> <li>1) Continuously enter bid and ask orders (continuous obligation) also for the series of the second (2<sup>nd</sup>) nearest-term expiration month.</li> <li>2) In response to a quote request, enter bid and ask orders also for the series of the third (3<sup>rd</sup>) nearest-term expiration month within three (3) minutes from submission of the relevant request (non-continuous obligation). This quote must remain in the System for at least twenty (20) seconds.</li> </ol>															
<b>Maximum Price Spread</b>	<p>Market Makers are obliged to post bid and ask orders, in fulfilment of their market-making obligations, at bid and ask prices whose difference does not exceed the Maximum Price Spread as stipulated below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Price interval</th> <th style="text-align: center;">Continuous Obligation</th> <th style="text-align: center;">Non-Continuous Obligation</th> </tr> </thead> <tbody> <tr> <td>From 0 to 10.0000</td> <td style="text-align: center;">0.1000</td> <td style="text-align: center;">0.1500</td> </tr> <tr> <td>10.0001 to 25.0000</td> <td style="text-align: center;">0.3000</td> <td style="text-align: center;">0.4000</td> </tr> <tr> <td>25.0001 to 50.0000</td> <td style="text-align: center;">0.7000</td> <td style="text-align: center;">0.8000</td> </tr> <tr> <td>€50 and above</td> <td style="text-align: center;">1.0000</td> <td style="text-align: center;">1.2000</td> </tr> </tbody> </table>	Price interval	Continuous Obligation	Non-Continuous Obligation	From 0 to 10.0000	0.1000	0.1500	10.0001 to 25.0000	0.3000	0.4000	25.0001 to 50.0000	0.7000	0.8000	€50 and above	1.0000	1.2000
Price interval	Continuous Obligation	Non-Continuous Obligation														
From 0 to 10.0000	0.1000	0.1500														
10.0001 to 25.0000	0.3000	0.4000														
25.0001 to 50.0000	0.7000	0.8000														
€50 and above	1.0000	1.2000														
<b>Minimum lot size</b>	Market Makers must post market-making orders for a lot size that is not less than five (5) Contracts per order.															
<b>Duration of market-making obligations</b>	The obligations of market makers commence fifteen (15) minutes after the end of the pre-call period (Method 2) and cease at the end of the last period of Method 1 trading in the underlying market.															

<p><b>Cases of lifting or modification of market-making obligations</b></p>	<p>The obligations of market makers are immediately lifted:</p> <ul style="list-style-type: none"> <li>a) throughout the activation of a fixed percentage that is 3% smaller or greater than the value of the maximum or minimum fluctuation limits, respectively, with respect to either the Underlying Asset or the Financial Instrument itself, as these limits have been stipulated by provisions in force. In such a case, the lifting of obligations is automatic.<sup>3</sup></li> <li>b) in cases where the Underlying Asset is being traded on the basis of Method 2 as a result of the activation of the Automatic Volatility Interruption Mechanism. In such a case, the lifting of obligations is automatic.</li> </ul> <p>In the case of a sharp variation in any magnitude of the underlying market (e.g. prices, trading volume) in a short space of time, serious technical problems, disruption of normal operation or suspension of operation of the underlying market, or in the event that there is some other substantial reason that increases the risk assumed by a Market Maker from the fulfilment of its obligations, the Market Operations Division of ATHEX may intervene by either modifying the terms of the Market Member's obligations or lifting its obligations with respect to the continuous posting of bid and ask orders for specific series of Contracts for a period of time to be stipulated at its discretion.</p> <p>In such a case, ATHEX will notify members through the System regarding the modification or lifting of market-making obligations. Similarly, it shall provide relevant notification regarding the re-activation of market-making obligations upon expiry of the period of applicability of such modification or lifting of obligations.</p>
<p><b>Non-fulfilment of market-making obligations</b></p>	<p>In the event of non-fulfilment of market-making obligations, the System automatically activates an alarm every two minutes (2') from the moment of non-fulfilment, with a relevant warning to the Market Maker one (1) minute after non-fulfilment.</p> <p>In the event of non-fulfilment following submission of a quote request, the System activates the above alarms for a period that does not exceed nine (9) minutes from the non-fulfilment.</p> <p>The charges for alarms are determined in accordance with the stipulations of Resolution No. 24 of the Board of Directors of ATHEX.</p>

**Article 7. Position Limits**

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<sup>3</sup> Point a) was replaced as above by virtue of decision 82/1.12.2015 of the Stock Markets Steering Committee of Athens Exchange with effect as of 1.12.2015.

There is an open position limit for the Market overall. The number of stocks which corresponds to the aggregate number of net long or net short open positions of series of nearest month futures and options contracts, for each underlying stock, must not at any time exceed 10% of the total number of listed stocks of the respective issuing company.

**Article 8. Rules on Adjustment of Contract Rights and Obligations in cases of Corporate Actions**

1. The following table sets out:

- 1) The rules on the adjustment of contract rights and obligations in cases of corporate actions that affect the characteristics of the Underlying Asset of the contracts, and
- 2) The instances of corporate actions to which these rules apply.

2. Adjustments are made to the contract price or size or to the number of contracts of a position for the purpose of keeping the contract value constant in the instances of the aforesaid corporate actions.

3. These adjustments have effect as of the ex-rights date.

Corporate Actions	Adjustment Rules
<p><b>Share Capital Increase through Distribution of Bonus Shares (Bonus Issue)</b></p>	<p>In cases where bonus shares are distributed to shareholders during the lifetime of a contract, the new size of the contract is adjusted by applying the following formula:</p> $N_{new} = N_{old} \frac{n_{after}}{n_{before}}, \text{ where}$ <p><math>N_{new}</math> : the new number of shares per contract (new contract size)</p> <p><math>N_{old}</math> : the old number of shares per contract (old contract size)</p> <p><math>n_{after}</math> : the number of shares after the corporate action</p> <p><math>n_{before}</math> : the number of shares before the corporate action</p> <p>In addition, the new price of the contract is adjusted by applying the following formula:</p> $P_{new} = P_{old} \frac{n_{before}}{n_{after}}, \text{ where}$ <p><math>P_{new}</math> : the new price of the contract</p>

Corporate Actions	Adjustment Rules
	<p><math>P_{old}</math>: the old price of the contract (contract settlement price prior to the corporate action)</p>
<b>Stock Split</b>	<p>In the event of a stock split of underlying shares during the lifetime of a contract, the new size of the contract is adjusted by applying the following formula:</p> $N_{new} = N_{old} \frac{n_{after}}{n_{before}}, \text{ where}$ <p><math>N_{new}</math>: the new number of shares per contract (new contract size)</p> <p><math>N_{old}</math>: the old number of shares per contract (old contract size)</p> <p><math>n_{after}</math>: the number of shares after the corporate action</p> <p><math>n_{before}</math>: the number of shares before the corporate action</p> <p>In addition, the new price of the contract is adjusted by applying the following formula:</p> $P_{new} = P_{old} \frac{n_{before}}{n_{after}}, \text{ where}$ <p><math>P_{new}</math>: the new price of the contract</p> <p><math>P_{old}</math>: the old price of the contract (contract settlement price prior to the corporate action)</p>
<b>Reverse Split</b>	<p>In the event that the underlying shares are merged during the lifetime of a contract, the new size of the contract is adjusted by applying the following formula: <math>N_{new} = N_{old} \frac{n_{after}}{n_{before}}</math>, where</p> <p><math>N_{new}</math>: the new number of shares per contract (new contract size)</p> <p><math>N_{old}</math>: the old number of shares per contract (old contract size)</p> <p><math>n_{after}</math>: the number of shares after the corporate action</p> <p><math>n_{before}</math>: the number of shares before the corporate action</p>

Corporate Actions	Adjustment Rules
	<p>In addition, the new price of the contract is adjusted by applying the following formula:</p> $P_{new} = P_{old} \frac{n_{before}}{n_{after}}, \text{ where}$ <p><math>P_{new}</math>: the new price of the contract</p> <p><math>P_{old}</math>: the old price of the contract (contract settlement price prior to the corporate action)</p>
<p><b>Share Capital Increase through Rights Issue</b></p>	<p>In cases where subscription rights are allocated to shareholders during the lifetime of a contract and <b>provided the theoretical value of the rights is greater than zero (0)</b>, where the theoretical value of the rights is calculated by applying the formula:</p> $V_{rights} = \max\left\{\left(S_{before} - K_{rights}\right)\left(1 - \frac{n_{before}}{n_{after}}\right), 0\right\}, \text{ where}$ <p><math>K_{rights}</math>: the strike price of the subscription rights</p> <p><math>n_{after}</math>: the number of shares after the corporate action</p> <p><math>n_{before}</math>: the number of shares before the corporate action</p> <p>The new strike price of the contract is adjusted by applying the following formula:</p> $P_{new} = P_{old} \left(1 - \frac{V_{rights}}{S_{before}}\right) = P_{old} \times \frac{S_{after}}{S_{before}}, \text{ where}$ <p><math>P_{new}</math>: the new price of the contract</p> <p><math>P_{old}</math>: the old price of the contract (contract settlement price prior to the corporate action)</p> <p><math>V_{rights}</math>: the theoretical value of the rights</p> <p><math>S_{before}</math>: the price of the underlying share before the corporate action</p>

Corporate Actions	Adjustment Rules
	<p><math>S_{after}</math> : the price of the underlying share after the corporate action</p> <p>While in addition, the new size of the contract is adjusted by applying the following formula:</p> $N_{new} = N_{old} \times \frac{1}{\left(1 - \frac{V_{rights}}{S_{before}}\right)} = N_{old} \times \frac{S_{before}}{S_{after}}$ <p style="text-align: right;">, where</p> <p><math>N_{new}</math> : the new number of shares per contract (new contract size)</p> <p><math>N_{old}</math> : the old number of shares per contract (old contract size)</p> <p><math>S_{before}</math> : the price of the underlying share before the corporate action</p> <p><math>S_{after}</math> : the price of the underlying share after the corporate action</p> <p>The adjustment shall have effect as of the ex-rights date.</p>
<b>Conversion</b>	<p>In cases of conversion of underlying shares into new securities, the following formula is applied:</p> $N_{new} = N_{old}n = N_{old} \frac{n_{new}}{n_{old}} \quad (2)$ <p>where</p> <p><math>N_{new}</math> : the new number of securities per contract (new contract size)</p> <p><math>N_{old}</math> : the old number of securities per contract (old contract size)</p> <p><math>n</math> : the ratio of conversion of old to new securities</p> <p><math>n_{new}</math> : the number of new securities, after the corporate action</p> <p><math>n_{old}</math> : the old number of securities, prior to the corporate action</p>
<b>Capital repayment in cash, combined or not with a dividend or interim dividend distribution</b>	<p>In the event of a capital repayment to shareholders in cash, whether combined or not with a dividend or interim dividend distribution, the size and price of the contract are adjusted by applying the following formulas:</p>

Corporate Actions	Adjustment Rules
	<p>1) The size of the contract is adjusted as follows:</p> $N_{\text{New}} = N_{\text{Old}} * \frac{S - D}{S - D - E}$ <p><b>N<sub>new</sub></b>: New number of shares per contract</p> <p><b>N<sub>old</sub></b>: Number of shares per contract before the corporate action</p> <p><b>S</b>: Price of the underlying share before the corporate action</p> <p><b>D</b>: Amount of dividend or interim dividend having the same ex-date as that of the Capital Repayment</p> <p><b>E</b>: Amount of Capital Repayment (corporate action)</p> <p>2) The price of the contract is adjusted as follows:</p> $P_{\text{New}} = P_{\text{Old}} * \frac{S - D - E}{S - D}$ <p><b>P<sub>new</sub></b>: The adjusted settlement price on the day before the ex-date which will be used to calculate daily settlement on the ex-date</p> <p><b>P<sub>old</sub></b>: The settlement price of the contract on the day before the ex-date</p>
<p><b>Other Corporate Actions:</b></p>	<p>In respect of any corporate actions supported by ATHEX and ATHEXClear which either do not belong to one of the above categories or do not constitute a combination of the above, ATHEX and ATHEXClear shall be entitled to not apply the above-described adjustment methods if they consider that the result of such adjustment, as it arises from these methods, does not reflect the true financial change in the rights and obligations emanating from the respective contracts.</p>

**Article 9. Entry into force**

This resolution has effect as of 1 December 2014. As of the entry into force of this resolution, Resolution No. 12 of 22.7.2008 of the Board of Directors of ATHEX, as in force, is repealed.

This resolution is to be posted on the website of ATHEX ([www.athexgroup.gr](http://www.athexgroup.gr)).