# Extract from Resolution No. 422/2018 of the chief Executive Officer of the Budapest Stock Exchange Ltd. 

18 December 2018, Budapest

In accordance with the authorization granted in Part I. Chapter 3 Section 3.2 of the General Terms of Service of the Budapest Stock Exchange Ltd., Book Five - Regulations on Trading (hereinafter: Regulations on Trading) the CEO of Budapest Stock Exchange Ltd. decides on amendments attached hereto in consolidated form regarding the CEO Resolution 550/2013 effective 2 January, 2019.

Richárd Végh
Chairman and CEO

## Important notice

All information contained within this material is for information purposes only and shall not be considered as an official translation of the CEO Resolution referred to herein. The original Hungarian language version of the CEO Resolution referred to herein remains to be the solely legally binding material in the subject matter.

# Extract from CEO Resolution <br> No. 550/2013 of the Budapest Stock Exchange Ltd. 

on the applied trading parameters of the cash market and derivative

18 December 2018, Budapest

[^0]
## *Text containing the modification of the references of CEO resolution 416/2015 to the regulations of BSE

## Content

Cash Market ..... 4

1. Trading Models ..... 4
2. Tick Sizes in Instrument Groups ..... 5
3. Trading Schedule ..... 8
4. Minimum Order Value of Negotiated Deals ..... 11
5. Available Order types in the different Trading Models ..... 12
6. Order Parameters ..... 13
7. Maximum Order Value and Quantity ..... 14
8. Iceberg Order Minimum Peak Quantity and Minimum Overall Volume ..... 15
9. Dynamic and Static volatility corridors and the multiple value of the Dynamic volatility corridor ..... 16
10. Interactions among the connection technologies ..... 18
Derivative Market ..... 19
11. Maximum Order Value ..... 19
Common rules applying to cash market and derivative market ..... 20
Determination of unexecuted order to transaction ratio (OTR) ..... 20

## Cash Market

In accordance with the authorization granted in Section 3.2 of the Book Five of the General Terms of Service of the Budapest Stock Exchange Ltd. titled Regulations on Trading (hereinafter: "Regulations on Trading"), the CEO determines as follows:

## 1. Trading Models

In accordance with the authorization granted in Section 3.2 b) of the Regulations on Trading, the CEO decides as follows regarding the specification of the Trading Models applicable for the trading of each Exchange Product.

| Instrument category | Trading model |
| :---: | :---: |
| Equities Prime Market | Continuous Trading with Auctions |
| Equities Standard Market | Continuous Trading with Auctions |
| ETF | Continuous Trading with Auctions |
| Equities T Market | Continuous Trading with Auctions |
| Decategorised equities | Auction |
| Investment Notes | Continuous Trading with Auctions |
| Compensation note | Continuous Trading with Auctions |
| Structured bonds | Continuous Trading with Auctions |
| Certificates / Warrants | Continuous auction |
| Government bonds | Continuous Trading with Auctions |
| Mortgage bonds | Continuous Trading with Auctions |
| Corporate bonds | Continuous Trading with Auctions |

## 2. Tick Sizes in Instrument Groups

In accordance with the authorization granted in Section 3.2 o) of the Regulations on Trading the CEO decides as follows regarding the specification of the Tick Size Table Values and the Tick Size values defined in the Product list for the following Instrument Groups.

| Long name | Instrument group | Tick size regime |  | Remark |
| :---: | :---: | :---: | :---: | :---: |
| Investment Notes | BFCD | 0,01-100,00 | Tick size: 0,01 |  |
|  |  | 100,0-1000,0 | Tick size: 0,1 | Investment Notes Closed-end |
|  |  | >1000- | Tick size: 1 |  |
|  | BFOD | 0,0001-10,0000 | Tick size: 0,0001 |  |
|  |  | 10,000-100,000 | Tick size: 0,001 |  |
|  |  | 100,00-1000,00 | Tick size: 0,01 | Investment Notes Open-end |
|  |  | 1000,0-10000,0 | Tick size: 0,1 |  |
|  |  | >10000- | Tick size: 1 |  |
|  | BFCF* | $>=0,0001$ | Tick size: 0,0001 | Investment Notes Closed-end |
|  | BFOF* |  |  | Investment Notes Open-end |
| Structured bonds | BCEX |  |  |  |
| Structured products: Certificates / Warrants | BCEB | 0,1-10,0 | Tick size: 0,1 | Bonus Certificates/Warrants |
|  | BCEI | >10 | Tick size: 1 | Investment Certificates/Warrants |
|  | BCET |  |  | Turbo Certificates/Warrants |
|  | BCIF* | $>=0,0001$ | Tick size: 0,0001 | Investment Certificates/Warrants |
|  | BCTF* |  |  | Turbo Certificates/Warrants |
| Structured bonds | BCXF* |  |  |  |
| Corporate bonds | BBFD | $>=0,0001$ | Tick size: 0,0001 | Corporate bonds Floating rate |
|  | BBFF* |  |  | Corporate bonds Floating rate |
|  | BBXD |  |  | Corporate bonds Fixed rate |
|  | BBXF* |  |  | Corporate bonds Fixed rate |
| Government bonds | BGFD |  |  | Government bonds Floating rate |
|  | BGTD |  |  | Government bonds T-bills |
|  | BGXD |  |  | Government bonds Fixed rate |
| Mortgage bonds | BMFD |  |  | Mortgage bonds Floating rate |
|  | BMXD |  |  | Mortgage bonds Fixed rate |
|  | BMXF* |  |  | Mortgage bonds Fixed rate |

*Traded in foreign currency
Pursuant to point 49 of Directive 2014/65 / EU of the European Parliament and of the Council, by Commission Regulation (EU) No 2017/588 referring to previous point and on the basis of calculations made by ESMA on 6 December 2017, the CEO decides as follows regarding the specification Tick Size values defined for Equities, Compensation Note**, and ETF-s.

The liquidity categories defined by the ESMA, based on the average daily number of transaction

| Average Daily Number of Transac- <br> tion (ADNT) | Liquidity band |
| :---: | :---: |
| $0 \leq$ ADNT < 10 | Liquidity band 1 |
| $10 \leq$ ADNT <80 | Liquidity band 2 |
| $80 \leq$ ADNT <600 | Liquidity band 3 |
| $600 \leq$ ADNT < 2000 | Liquidity band 4 |
| $2000 \leq$ ADNT <9000 | Liquidity band 5 |
| $9000 \leq$ ADNT | Liquidity band 6 |

Tick Size regime specified by ESMA as a function of price and liquidity bands

| Liquidity band | PRICE |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{0} \leq$ price $<\mathbf{0 , 1}$ | $\mathbf{0 , 1} \leq$ price $<\mathbf{0 , 2}$ | $\mathbf{0 , 2} \leq$ price $<\mathbf{0 , 5}$ | $\mathbf{0 , 5} \leq$ price $<\mathbf{1}$ | $\mathbf{1} \leq$ price $<\mathbf{2}$ | $\mathbf{2} \leq$ price $<\mathbf{5}$ |
|  | 0.0005 | 0.001 | 0.002 | 0.005 | 0.01 |  |
| Liquidity band 2 | 0.0002 | 0.0005 | 0.001 | 0.002 | 0.005 | 0.02 |
| Liquidity band 3 | 0.0001 | 0.0002 | 0.0005 | 0.001 | 0.002 | 0.005 |
| Liquidity band 4 | 0.0001 | 0.0001 | 0.0002 | 0.0005 | 0.001 | 0.002 |
| Liquidity band 5 | 0.0001 | 0.0001 | 0.0001 | 0.0002 | 0.0005 | 0.001 |
| Liquidity band 6 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0002 | 0.0005 |


| Liquidity band | PRICE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $5 \leq$ price < 10 | $10 \leq$ price < 20 | $20 \leq$ price $<50$ | $50 \leq$ price < 100 | $100 \leq$ price < 200 | $200 \leq$ price < 500 |
| Liquidity band 1 | 0.05 | 0.1 | 0.2 | 0.5 | 1 | 2 |
| Liquidity band 2 | 0.02 | 0.05 | 0.1 | 0.2 | 0.5 | 1 |
| Liquidity band 3 | 0.01 | 0.02 | 0.05 | 0.1 | 0.2 | 0.5 |
| Liquidity band 4 | 0.005 | 0.01 | 0.02 | 0.05 | 0.1 | 0.2 |
| Liquidity band 5 | 0.002 | 0.005 | 0.01 | 0.02 | 0.05 | 0.1 |
| Liquidity band 6 | 0.001 | 0.002 | 0.005 | 0.01 | 0.02 | 0.05 |


| Liquidity band | PRICE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $500 \leq$ price < 1000 | $1000 \leq$ price <br> 2000 | $\begin{gathered} 2000 \leq \text { price }< \\ 5000 \end{gathered}$ | $\begin{gathered} 5000 \leq \text { price }< \\ 10000 \end{gathered}$ | $\begin{gathered} 10000 \leq \text { price } \\ <20000 \end{gathered}$ | $\begin{gathered} 20000 \leq \text { price }< \\ 50000 \end{gathered}$ | $50000 \leq$ price |
| Liquidity band 1 | 5 | 10 | 20 | 50 | 100 | 200 | 500 |
| Liquidity band 2 | 2 | 5 | 10 | 20 | 50 | 100 | 200 |
| Liquidity band 3 | 1 | 2 | 5 | 10 | 20 | 50 | 100 |
| Liquidity band 4 | 0.5 | 1 | 2 | 5 | 10 | 20 | 50 |
| Liquidity band 5 | 0.2 | 0.5 | 1 | 2 | 5 | 10 | 20 |
| Liquidity band 6 | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 | 10 |

Classification of the Liquidity Band for Equities, Compensation Note and ETF-s traded on BSE

| Liquidity band | SECURITIES |
| :---: | :---: |
| Liquidity band 1 | FORRÁS/T, FORRÁs/OE, 4IG, ELMU, EMASZ, KPACK, BIF, ORMESTER, MASTERPLAST, PLOTINUS, KULCS- |
| SOFT, ALTEO, ALTERA, DUNAHOUSE, EHEP, UBM, KEG, FINEXT, KARPOT** |  |

6 Extract from CEO Resolution No. 550/2013 of the Budapest Stock Exchange Ltd.
**ESMA does not define the Tick Size of Compensation Note, but BSE decided to use ESMA methodology to determine tick size for Compensation Note
***For equity-based ETFs, the highest Liquidity Band is automatically determined in accordance with Commission Regulation (EU) 2017/588

## 3. Trading Schedule

In accordance with the authorization of point 3.2 d ) in the Regulations on Trading the CEO defines the Trading Schedule as follows. At the same time in the Product List "Chapter 5 Setting of the trading hours of the stock exchange products traded in the different sections" point 6 and 7 are modified as follows.

## Equities and Debt Securities Section

For securities traded in the Continuous Trading with Auctions Trading Model:

| Continuous Trading with Auctions Trading Model |  |  |
| :---: | :---: | :---: |
| Trading Phases and Sub-Phases |  | Trading Time |
| Pre-Trading Phase(PRETR) |  | 8.15-8.30 |
| Opening Auction Phase | Auction Call Sub-Phase (OCALL) | 8.30-9.00 |
|  | Price Determination and matching | 9.00 + Random End |
|  | Order book balancing Sub-Phase (OOBB) | max. 2 min. |
| Continuous Trading Phase (TRADE) |  | From the end of Opening Auction Phase until 17.00 |
| Closing Auction Phase | Auction Call Sub-Phase (CCALL) | 17.00-17.05 |
|  | Price Determination and matching | 17.05 + Random End |
|  | Order book balancing Sub-Phase (COBB) | max. 2 min. |
| Post-Trading Phase (POSTR) |  | From the end of Closing Auction Phase until 17.20 |
| End-trading (ENDTR) |  | 17:20 |
| Order book balancing Sub-Phase |  | max. 2 min. |
| Volatility Interruption Phase (VOLA)* |  | $3 \mathrm{~min} .+$ Random End |
| Random End |  | max. 30 sec . |

*: During Volatility Interruption Phase the duration of the Call Sub-Phase and the Extended Call Sub-Phase lasts
3 minutes, not including the Random end.

For securities traded in the Continuous Auction Trading Model:

| Continuous Auction Trading Model |  |  |
| :---: | :---: | :---: |
|  | Trading Phases | Trading Time |
| Pre-Trading Phase(PRETR) |  | 8.30-9.00 |
| Continuous Auction Phase | Continuous Auction Pre-Call Phase (XPREC) / Continuous Auction Call Phase (XCALL) | 9.00-17.00* |
| Post-Trading Phase (POSTR) |  | From the end of Continuous Auction Phase until 17.20 |
| End-trading (ENDTR) |  | 17.20 |
| Continuous Auction Call Sub-Phase (XCALL) |  | max. 30 sec . |

*: The duration of this Trading Phase may be extended by the duration of XCALL phase.

For securities traded in the Auction (Several auction) Trading Model:

| Auction (Several auction) Trading Model |  |  |
| :---: | :---: | :---: |
| Trading Phases and Sub-Phases |  | Trading Time |
| Pre-trading Phase (PRETR) |  | 8.15-8.30 |
| Opening Auction Phase | Auction Call Sub-Phase (OCALL) | 8.30-9.00 |
|  | Price Determination and matching | 9.00 + Random End |
|  | Order book balancing Sub-Phase (OOBB) | max. 2 min. |
| Between Auction Phase (BETW) |  | From the end of Opening Auction Phase until 11.00 |
| Auction Phase | Auction Call Sub-Phase (ICALL) | 11.00-11.30 |
|  | Price Determination and matching | 11.30 + Random End |
|  | Order book balancing Sub-Phase (IOBB) | max. 2 min. |
| Between Auction Phase (BETW) |  | From the end of Auction Phase until 14.00 |
| Auction Phase | Auction Call Sub-Phase (ICALL) | 14.00-14.30 |
|  | Price Determination and matching | 14.30 + Random End |
|  | Order book balancing Sub-Phase (IOBB) | max. 2 min. |
| Between Auction Phase (BETW) |  | From the end of Auction Phase until |
| Closing Auction Phase | Auction Call Sub-Phase (CCALL) | 16.35-17.05 |
|  | Price Determination and matching | 17.05 + Random End |
|  | Order book balancing Sub-Phase (COBB) | max. 2 min. |
| Post-Trading Phase (POSTR) |  | From the end of Closing Auction Phase until 17.20 |
| End-trading (ENDTR) |  | 17:20 |
| Order book balancing Sub-Phase |  | max. 2 min. |
| Market Order Interruption Sub-Phase |  | max. 3 min. + Random End |
| Volatility Interruption Phase* |  | $3 \mathrm{~min} .+$ Random End |
| Random End |  | max. 30 sec. |

*: During Volatility Interruption Phase the duration of the Call Sub-Phase and the Extended Call Sub-Phase lasts 3 minutes not including the Random end.

The validity of Orders, which are entered with Good-for-Day Validity Restriction or Good-till-Date Validity Restriction expire on the given Exchange Day after the end of the Post-trading Phase. The end of the Post-trading Phase and the time stamp of the messages sent from the system about the expiration can differ.

In accordance with the authorization of point 3.2 v ) of the Regulations on Trading the CEO is determining the maximum length of time of the Call phase and Extended Call phase during the Volatility Interruption for each Exchange Product traded in the Continuous Trading with Auctions and Auction Trading Models.

The maximum length of time of the Call phase and Extended Call phase during the Volatility Interruption is determined in 3 minutes. (Not included the duration of the Random End).

In accordance with the authorization of point 3.2 x ) of the Regulations on Trading the CEO is determining the maximum length of time of the Order Book Balancing phase for each Exchange Product traded in the Continuous Trading with Auctions and Auction Trading Models.

The maximum length of time of the Order Book Balancing phase is determined in 2 minutes.
In accordance with the authorization of point 3.2 y ) of the Code of Trading the CEO is determining the maximum length of time of the Market Order Interruption phase for each Exchange Product traded in the Auction Trading Models.

The maximum length of the Market Order Interruption phase is determined in 3 minutes.
In accordance with the authorization of point 3.2 r ) of the Regulations on Trading the CEO is determining the maximum length of time for Random-ends for each Exchange Product traded in the Continuous Trading with Auctions and Auction Trading Models.

The maximum length for Random-ends is determined in 30 seconds.

In accordance with the authorization of point 3.2 s ) of the Regulations on Trading the CEO is determining the maximum length of time of the Call phase in the Continuous Auction Trading Model.

The maximum length of time of the Call phase in the Continuous Auction Trading Model is determined in $\mathbf{3 0}$ seconds.

## 4. Minimum Order Value of Negotiated Deals

In accordance with the authorization of point 3.2 kk ) of the Regulations on Trading the CEO is determining the minimum Order value of Negotiated Deals in case of all securities as follows.

- For all Securities traded in HUF: 25000000 HUF
- For all Securities traded in EUR: 100000 EUR
- For all Securities traded in USD: 100000 USD


## 5. Available Order types in the different Trading Models

In accordance with the authorization of point 3.2 n ) of the Regulations on Trading the CEO specifies the Order types permitted in the Trading System as follows.

| Order types per instrument groups |  |  |
| :---: | :---: | :---: |
| Instrument category | Instrument group* | Order type |
| Equities Prime Market | BEQP, BQPF | Market, Limit, Market to Limit, Iceberg |
| Equities Standard Market | BEQS, BQSF |  |
| ETF | BETF |  |
| Equities T Market | BEQT | Market, Limit, Market to Limit |
| Decategorised equities | BQTF |  |
| Investment Notes | $\begin{aligned} & \text { BFCD, BFOD, BFCF, } \\ & \text { BFOF } \end{aligned}$ |  |
| Corporate bonds | $\begin{aligned} & \text { BBFD, BBFF, BBXD, } \\ & \text { BBXF } \end{aligned}$ |  |
| Government bonds | BGFD, BGTD, BGXD |  |
| Mortgage bonds | BMFD, BMXD, BMXF |  |
| Structured bonds | BCEX, BCXF |  |
| Compensation note | BNOT |  |
| Certificates, Warrants (traded in continuous auction trading model) | $\begin{aligned} & \text { BCEB, BCEI, BCET, } \\ & \text { BCIF, BCTF } \end{aligned}$ | Market, Limit |

* Permitted Order types are identical for all Securities in the same Instrument group listed in this table.


## 6. Order Parameters

In accordance with the authorization of point 3.2 p) of the Regulations on Trading the CEO defines Order Parameters that can be given when entering an Order as follows.

| Order parameters |  |  |
| :---: | :---: | :---: |
| Trading model | Restriction | Order Parameter |
| Continuous trading with auctions | Execution restrictions | Stop |
|  |  | Immediate or Cancel |
|  |  | Fill or Kill |
|  |  | Book or Cancel |
|  | Trading restrictions | Main Trading Phase only |
|  |  | Auctions in Main Trading Phase only |
|  |  | Opening auction only |
|  |  | Closing auction only |
|  |  | Auction only |
|  |  | Accept Surplus |
|  | Validity restrictions | Good-for-Day |
|  |  | Good-till-Date |
|  |  | Good-till-Cancelled |
| Auction | Execution restrictions | Stop |
|  |  | Immediate or Cancel |
|  |  | Fill or Kill |
|  | Trading restrictions | Opening auction only |
|  |  | Closing auction only |
|  |  | Auction only |
|  |  | Accept Surplus |
|  | Validity restrictions | Good-for-Day |
|  |  | Good-till-Date |
|  |  | Good-till-Cancelled |
| Continuous auction | Execution restrictions | Stop |
|  | Trading restrictions | S |
|  | Validity restrictions | Good-for-Day |
|  |  | Good-till-Date |
|  |  | Good-till-Cancelled |

## 7. Maximum Order Value and Quantity

The CEO is determining the standardized Maximum Order Value and Maximum Order Quantity as follows*.

| Maximum Order Value | Maximum Order Quantity |
| :---: | :---: |
| 30.000.000 EUR | 999.999 .999 pcs |

*Note: Members are allowed to detemine lower values for their traders.

## 8. Iceberg Order Minimum Peak Quantity and Minimum Overall Volume

In accordance with the authorization of point 3.2 m ) of the Regulations on Trading the CEO determines the value of Iceberg Orders must reach 10.000 EUR at the entering into the trading system, furthermore the minimum Peak Quantity and minimum Overall Volume of Iceberg Orders as follows.

| Security |  | Minimum <br> peak <br> ticker | Symbol <br> quantity |
| :--- | :--- | ---: | ---: |
| 4IG | umerall vol- <br> uminim total quan- <br> tity) |  |  |
| ALT | 4IG | ALTERA | 2500 |


| ETF |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{c}\text { Instrument } \\ \text { group }\end{array}$ | Security |  | $\begin{array}{c}\text { Minimum } \\ \text { peak } \\ \text { quantity }\end{array}$ | $\begin{array}{c}\text { Minimum overall volume } \\ \text { (Micker }\end{array}$ |
|  |  |  |  |  |$]$| Symbol |
| :---: |

## 9. Dynamic and Static volatility corridors and the multiple value of the Dynamic volatility corridor

In accordance with the authorization of point 3.2 t ) of the Regulations on Trading the CEO determining the percentage values of the Dynamic and Static Price Range for each Exchange Product as follows.

| Default volatility corridors for new listings |  |  |  |
| :--- | :--- | :---: | :---: |
| Security type | Instrument group | Dynamic <br> volatility <br> corridor | Static vol- <br> atility cor- <br> ridor |
| ETF | BETF | $\mathbf{1 0 \%}$ | $10 \%$ |
| Investment Notes | BFCD, BFOD, BFCF, BFOF | $\mathbf{1 0 \%}$ | $10 \%$ |
| Corporate bonds | BBFD, BBFF, BBXD, BBXF | $\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ |
| Government bonds | BGFD, BGTD, BGXD | $\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ |
| Mortgage bonds | BMFD, BMXD, BMXF | $\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ |
| Structured bonds | BCEX, BCXF | $\mathbf{1 0 \%}$ | $10 \%$ |
| Compensation note | BNOT | $10 \%$ | $10 \%$ |
| Certificates | BCEB, BCEI, BCIF | $\mathbf{1 0 \%}$ | $\mathbf{1 0 \%}$ |
| Turbo warrants | BCET, BCTF | $50 \%$ | $50 \%$ |


| Security |  | Dynamic volatility corridor | Static volatility corridor |
| :---: | :---: | :---: | :---: |
| Xetra ticker | Symbol |  |  |
| 4IG | 4IG | 5,00\% | 10,00\% |
| ALT | ALTERA | 5,00\% | 10,00\% |
| ALTEO | ALTEO | 5,00\% | 10,00\% |
| ANY | ANY | 3,00\% | 6,00\% |
| APPEN | APPENINN | 4,00\% | 8,00\% |
| BIF | BIF | 5,00\% | 10,00\% |
| CIG | CIGPANNONIA | 4,00\% | 8,00\% |
| CSEP | CSEPEL | 5,00\% | 10,00\% |
| DHS | DUNA HOUSE | 4,00\% | 8,00\% |
| EHEP | EHEP | 5,00\% | 10,00\% |
| ELMU | ELMU | 3,00\% | 6,00\% |
| EMASZ | EMASZ | 3,00\% | 6,00\% |
| ENEFI | ENEFI | 5,00\% | 10,00\% |
| EST | ESTMEDIA | 5,00\% | 10,00\% |
| FINXB | FINEXT B | 5,00\% | 10,00\% |
| FINXT | FINEXT | 5,00\% | 10,00\% |
| FORRA | FORRAS/T | 5,00\% | 10,00\% |
| FORRB | FORRAS/OE | 5,00\% | 10,00\% |
| FUTUR | FUTURAQUA | 5,00\% | 10,00\% |
| GSP | GSPARK | 3,00\% | 6,00\% |
| KONZ | KONZUM | 4,00\% | 8,00\% |
| KPACK | KPACK | 5,00\% | 10,00\% |
| KSOFT | KULCSSOFT | 5,00\% | 10,00\% |
| MAST | MASTERPLAST | 4,00\% | 8,00\% |
| MOL | MOL | 3,00\% | 6,00\% |
| MTEL | MTELEKOM | 3,00\% | 6,00\% |
| NORD | NORDTELEKOM | 5,00\% | 10,00\% |
| NUTEX | NUTEX | 5,00\% | 10,00\% |
| OPUS | OPUS | 4,00\% | 8,00\% |
| ORM | ORMESTER | 5,00\% | 10,00\% |
| OTP | OTP | 3,00\% | 6,00\% |


| OTT1 | OTT1 | $\mathbf{5 , 0 0} \%$ | $\mathbf{1 0 , 0 0 \%}$ |
| :--- | :--- | :---: | :---: |
| PERGY | PANNERGY | $\mathbf{4 , 0 0} \%$ | $\mathbf{8 , 0 0 \%}$ |
| PLOT | PLOTINUS | $\mathbf{4 , 0 0 \%}$ | $\mathbf{8 , 0 0 \%}$ |
| RABA | RABA | $\mathbf{4 , 0 0 \%}$ | $\mathbf{8 , 0 0 \%}$ |
| RICHT | RICHTER | $\mathbf{3 , 0 0 \%}$ | $\mathbf{6 , 0 0 \%}$ |
| SET | SET GROUP | $\mathbf{5 , 0 0 \%}$ | $\mathbf{1 0 , 0 0 \%}$ |
| TJB | TAKAREKJZB | $\mathbf{5 , 0 0 \%}$ | $\mathbf{1 0 , 0 0 \%}$ |
| UBM | UBM | $\mathbf{5 , 0 0 \%}$ | $\mathbf{1 0 , 0 0 \%}$ |
| WABS | WABERERS | $\mathbf{5 , 0 0 \%}$ | $\mathbf{1 0 , 0 0 \%}$ |
| ZWACK | ZWACK | $\mathbf{3 , 0 0 \%}$ | $\mathbf{6 , 0 0 \%}$ |

In accordance with the authorization of point 3.2 w ) of the Regulations on Trading the CEO determining the multiple value of the Dynamic volatility corridor, that is referred to the triggering of Extended Volatility interruption as follows.

The CEO determining the multiple value of the Dynamic volatility corridor that is referred to the triggering of Extended Volatility interruption as the double of the Dynamic volatility corridor.

## 10. Interactions among the connection technologies

In accordance with the authorization of point 3.2 q ) of the Regulations on Trading the CEO determining the interactions among connection technologies as follows.

## Applied connection technologies:

- J-Trader
- WebTrader
- Values API
- CEE Trader
- CEESEG FIX
- ETS


## In case of J-Trader, WebTrader, Values API:

- Persistent orders sent via J-Trader, WebTrader, Values API are visible, modifiable and erasable. In case of J -Trader, WebTrader the aboves are valid only if the traders are in the same subgroup. Persistent orders sent via ETS, CEE Trader, CEESEG FIX are visible (only if the traders are in the same subgroup) but not modifiable.
- Non-persistent orders and quotes sent via J-Trader, WebTrader, Values API, CEE Trader, CEESEG FIX, ETS are visible. Non-persistent orders and quotes are not modifiable, just erasable. In case of J-Trader, WebTrader the aboves are valid only if the traders are in the same subgroup.


## In case of CEE Trader, CEESEG FIX:

- Persistent orders sent via CEE Trader, CEESEG FIX, ETS are visible, modifiable and erasable. The aboves are valid only if the traders are in the same subgroup.
- Non-persistent orders are not visible, modifiable and erasable.
- Quotes sent via CEE Trader, or CEESEG FIX are visible and erasable. Quotes are not modifiable just erasable. The aboves are valid only if the traders are in the same subgroup.


## In case of ETS:

- Persistent orders sent via J-Trader, WebTrader, Values API, CEE Trader, CEESEG FIX, ETS are visible, modifiable and erasable. The aboves are valid if the "ETS drop copy session Flag" is set.
- Non persistent orders are visible, modifiable and erasable, quotes are visible and erasable, if they were sent with the same "ETS Session" into the trading system.


## Derivative Market

In accordance with the authorization granted in Section 3.2 of the Book Five of the General Terms of Service of the Budapest Stock Exchange Ltd. titled Regulations on Trading (hereinafter: "Regulations on Trading"), the CEO determines as follows:

## 1. Maximum Order Value

In accordance with the authorization granted in Section 3.2 pp ) of the Regulations on Trading, the CEO determines the Maximum Order Value 25.000.000.000 HUF.

## Common rules applying to cash market and derivative market

## Determination of unexecuted order to transaction ratio (OTR)

In accordance with the authorization granted in Section 6/D.2. of Chapter 6 of Part I. of the Book Five of the General Terms of Service of the Budapest Stock Exchange Ltd. titled Regulations on Trading (hereinafter: „Regulations on Trading") and by the Commission Delegated Regulation (EU) 2017/566, the CEO of the Budapest Stock Exchange Ltd. (hereinafter: „BSE") determines the maximum values of the unexecuted order to transaction ratios applicaple from 3 January 2018 as follows, separately for the number of orders (hereinafter: „OTR ${ }_{\text {no") }}$ ) and for the volume of orders (hereinafter: „OTRvol"), jointy: OTR.

In accordance with the authorization granted in Section 6/D.3. of Chapter 6 of Part I. of the Regulations on Trading BSE determines different maximum OTRno and OTRvol values for Members who are willing to take extra trading obligation in order to improve market liquidity based on the fact that this action may coincide with the increase of the OTR indicators (e.g. market makers).

| Instrument <br> group |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Minimum <br> value <br> (OTRno) | OTRno max. (in Market <br> case of non- <br> market ma- <br> kers) | OTRno max. va- <br> lue (in case of <br> market makers) | Minimum <br> value <br> (OTRvol) | OTRvol max. va- <br> lue (in case of <br> non-market ma- <br> kers) | OTRvol max. va- <br> lue (in case of <br> market makers) |  |
| Equities Prime | 1 | 20000 | 100000 | 1000 | 100000 | 1000000 |
| Equities Stan- <br> dard | 1 | 20000 | 100000 | 1000 | 100000 | 1000000 |
| Equities T | 1 | 20000 | 100000 | 1000 | 100000 | 1000000 |
| Decategorised <br> equities | 1 | 20000 | 100000 | 1000 | 100000 | 1000000 |
| ETF | 1 | 20000 | 100000 | 1000 | 100000 | 1000000 |
| Investment <br> certificate | 1 | 50000 | 500000 | 1000 | 500000 | 5000000 |
| Turbo certificate <br> and warrants | 1 | 50000 | 500000 | 1000 | 500000 | 5000000 |
| Investment <br> funds | 1 | 1000 | 5000 | 1000 | 200000 | 2000000 |
| Compensation <br> Note | 1 | 1000 | 50000 | 1000 | 100000 | 1000000 |
| Government <br> bonds | 1 | 1000 | 5000 | 10000 | 200000 | 2000000 |
| Treasury bills | 1 | 1000 | 5000 | 10000 | 200000 | 2000000 |
| Corporate bonds | 1 | 1000 | 5000 | 10000 | 200000 | 2000000 |
| Mortgage bonds | 1 | 1000 | 5000 | 10000 | 200000 | 2000000 |


| BETa market |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instru- <br> ment <br> group | Minimum <br> value <br> (OTRRo) | OTRno max. (in <br> case of non- <br> market makers) | OTRno max. va- <br> lue (in case of <br> market makers) | Minimum <br> value <br> (OTR | OTRol) <br> (in case of non- <br> market makers) | OTRvol max. va- <br> lue (in case of <br> market makers) |  |
| Foreign <br> equities | 1 | 20000 | 200000 | 1000 | 100000 | 1000000 |  |


| Xtend market |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument group | $\begin{gathered} \hline \text { Minimum } \\ \text { value } \\ \left(\text { OTR }_{\text {no }}\right) \\ \hline \end{gathered}$ | $\begin{array}{\|l\|} \hline \text { OTR }{ }_{\text {no }} \text { max. (in } \\ \text { case of non- } \\ \text { market makers) } \\ \hline \end{array}$ | OTR ${ }^{\text {no }}$ max. value (in case of market makers) | $\begin{gathered} \hline \text { Minimum } \\ \text { value } \\ \text { (OTRvol) } \\ \hline \end{gathered}$ | OTR vol max. value (in case of nonmarket makers) | OTR ${ }_{\text {vol }}$ max. value (in case of market makers) |
| Xtend equi- ties | 1 | 100000 | 100000 | 1000 | 100000 | 1000000 |


| Derivatives market |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument group | $\begin{gathered} \hline \text { Minimum } \\ \text { value } \\ \text { (OTRno) } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { OTR } \mathrm{no} \text { max. (in } \\ \text { case of non- } \\ \text { market makers) } \\ \hline \end{array}$ | OTR ${ }^{\text {no }}$ max. value (in case of market makers) | $\begin{gathered} \text { Minimum } \\ \text { value } \\ \text { (OTRvol) } \\ \hline \end{gathered}$ | OTR ${ }^{2}$ max. value (in case of nonmarket makers) | OTR ${ }_{\text {vol }}$ max. value (in case of market makers) |
| Index futures | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Single stock futures | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Currency futures | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Index options | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Single stock options | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Currency options | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |


| Commodity market |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Instrument group | $\begin{gathered} \hline \text { Minimum } \\ \text { value } \\ \text { (OTR }{ }^{\text {no }} \text { ) } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { OTR } \mathrm{no} \\ \text { case of nox. (in- } \\ \text { market makers) } \\ \hline \end{array}$ | OTR ${ }_{\text {no }}$ max. value (in case of market makers) | $\begin{gathered} \hline \text { Minimum } \\ \text { value } \\ \text { (OTRvol) } \\ \hline \end{gathered}$ | OTR ${ }_{\text {vol }}$ max. value (in case of nonmarket makers) | OTR ${ }_{\text {vol }}$ max. value (in case of market makers) |
| Grain futures | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |
| Grain options | 1 | 10000 | 100000 | 10000 | 100000 | 1000000 |

BSE calculates each OTR for each trading day per Exchange Members and per individual instruments using the following formulas for each trading day, taking into account all trading periods of the trading day:
$O T R_{n o}=\frac{\text { Number of orders entered by Exchange Member }}{\text { Number of orders entered and executed by Exchange Member }+ \text { minimum value of denominator }}-$
OTR $R_{\text {vol }}$
The total value of orders entered by Exchange Member (volume)
$=\overline{\text { The total value of entered and executed orders by Exchange Member (volume) }+ \text { minimum value of denominator }}-1$

In the denominator of OTR formulas contains all executed orders including partially executions and minimumum value specified for the given instrument group is also added while in the numerator all orders are aggregated including entered, modified and deleted orders.

Orders that are deleted out of the Exchange Member's intention - e.g. deletion made by the Exchange, orders not accepted at auction, deletion due to lost connectivity or due to activation of Kill funcionality - won't be taken into account while calculation OTR indicators.

When calculating the OTR Rol for different sections the transaction values (volumes) are determined as follows:

- Equities section, BETa market: volume
- Debt security section: nominal value
- Derivatives market, Commodity market: number of contracts

When calculation OTR formulas, type of orders and restrictions are taken into account with the following weighting factors:

| Weights according to the type of order and restrictions |  |
| :--- | :---: |
| Order type | Weight multiplier |
| Limit order enter/deletion | 1 |
| Limit order modification | 2 |
| Market order submission/deletion | 1 |
| Market order modification | 2 |
| Iceberg order submission/deletion | 1 |
| Iceberg order modification | 2 |
| Market-To-Limit order submission/deletion | 2 (in case of activation 2) |
| Market-To-Limit order modification | 2 (in case of activation 3) |
| Quote submission/deletion (Standard Market Maker Order, Indicative <br> quote with volume, Matching quote,Price without turnover quote) | 2 |
| Quote modification (Standard Market Maker Order, Indicative quote with <br> volume, Matching quote,Price without turnover quote) | 4 |
| Order restriction | Weight multiplier |
| Stop | 1 (in case of activation 2) |
| Immediate-or-Cancel | 1 (in case of withdrawal/deletion |
| Fill-or-Kill |  |
| Book or Cancel | 1 |
| Strike Match Order | 1 |

BSE measures OTR indicators for individual instruments on daily basis, and report those formulas to Exchange Members (only the relevant ones) on a monthly basis showing their daily performance and their possible limit exceeds.

If BSE determines that the OTR indicators calculated above exceeds at least one of the predefined maximum value in respect of one or more individual instrument for a given Exchange Member than the Exchange will warn the Exchange Member within 3 trading days and may apply sanctions in accordance with the authorization granted in Section 11 of Chapter 1 of Part II. of the Book Three of the General Terms of Service of the Budapest Stock Exchange Ltd. titled Regulations on Trading as follows:

- In case of first three daily limit exceeds in a given calendar year - regardless the number of instruments and type of OTR formula - BSE will warn the Exchange Member
- In case of every limit exceed following the first three exceeds in a calendar year - regardless the number of instruments and type of OTR formula - BSE will determine a fine of 100.000 HUF per day

The CEO of BSE continously monitors the OTR indicators per Exchange Memeber and per individual instruments, and if justified by market conditions maximum OTR numbers will be modifed.

## Important notice:

All information contained within this material is for information purposes only and shall not be considered as an official translation of the CEO Resolution referred to herein. The original Hungarian language version of the CEO Resolution referred to herein remains to be the solely legally binding material in the subject matter.

Richárd Végh<br>Chairman and CEO


[^0]:    (integrating the provisions of CEO Resolutions 606/2013, 352/2014, 536/2014, 5/2015, 91/2015, 479/2015, 508/2015, 455/2016, 29/2017, 251/2017, 323/2017, 335/2017, 358/2017, 426/2017, 435/2017, 459/2017, 89/2018, 208/2018, 214/2018, 278/2018, 292/2018, 304/2018 and 422/2018 of the Budapest Stock Exchange Ltd.)

