



Public

Resolution No. 47/2019 of the Executive Officer of the Budapest Stock
Exchange Ltd.

Budapest, 21 February 2019

on the trading rules regarding the auction board in the MMTS1
trading system effective as of 22 February 2019



Definitions

- Order Book:** Electronic records continuously accessible to the Exchange Members and the persons with access to the Auction Trading System and to the persons with access to the Auction Trading System designed to systematically capture and structure the Orders for securities. In this resolution, the Order Book is the Auction Order Book.
- Auction Trading System** The auction board in the MMTS1 trading system operated by the Exchange
- Order Price:** Minimum Price in case of sell Auction Order, Maximum Price in case of buy Auction Order.
- ÁKK:** In terms of this resolution, the Hungarian Government Debt Management Agency Ltd.
- Tick Size:** The smallest change in Price specified by the auctioneer for a security.
- Average Price:** The Average Price of a security shall be the mathematical average of the auction trade Prices, weighted with the quantities involved in the transactions.
- Counteroffer:** An Order in the opposite direction.
- Board:** A group of securities with identical trading rules (particularly order types, order methods, Order Book rules and Trade-Matching Algorithm). Board is solely the Auction Board.
- Yield:** For debt securities earning fixed interest or issued at a discount (e.g. bonds, T-bills), a percentage value calculated to two decimal places according to the standard convention of yield calculation in effect as specified by the Government Debt Management Agency.
- Order with Better Price:** In case of bids, the order with the higher Price, and in case of offers, the order with the lower Price. For the purposes of this resolution, in case of Yield, 'lower Price' shall mean higher Yield, whilst 'higher Price' shall mean lower Yield
- KELER:** In terms of the resolution, the collective name for the Central Clearing House and Depository (Budapest) Ltd. and the KELER Central Counterparty Ltd., meaning any or both companies.
- Trading Account ID:** A unique ID that the party entering the order must provide in order to specify whether the transaction is to be settled on its House Account or on a client's Client Account.
- Lot Size:** The smallest, indivisible quantity of an order for a security. Orders for a security can only be entered for a given Lot Size or an integral multiple thereof.
- Highest Quantity that can be matched:** The total volume of securities in AUCTION Counteroffers that can be matched at the Minimum Price Level or at a higher Price in case of an Auction offer, or at the Maximum Price Level or at a lower price in case of an Auction bid.



- LIMIT order:** LIMIT order can be executed at the Price specified in the order or better Price.
- Maximum Price Level:** In case of a buy Auction, the highest Price at which an Auction deal can still be concluded.
- Client Account:** An account specified in the KELER Rules as a “Type ‘M’ securities sub-account for Exchange transactions”.
- Minimum Price Level:** In case of a sell Auction, the lowest Price at which an Auction deal can still be concluded.
- MMTS1 Trading Workstation:** A personal computer used as a trading terminal at the site of the person with access to the Auction Trading System and the MMTS1 Trading Workstation Software, collectively.
- MMTS1 Trading Workstation Software:** The set of software programs and files installed on a personal computer that forms part of the workstation of the person with access to the Auction Trading System and which is designed to ensure the trading functionality of the Workstation.
- MMTS1 Trading System:** The trading system operated by the Exchange, to which the persons with access to the Auction Trading System can connect in order to participate in auctions.
- FILL ANY order:** May be filled partially, even by single Lot Sizes or by matching the order quantity in full.
- House Account:** An account specified in the KELER Rules as a “Type ‘S’ securities sub-account for Exchange transactions”.
- Exchange Day:** Any working day is an Exchange Day, unless the Exchange declares it a non-trading day for the Exchange in advance.
- Exchange Member:** A legal entity having an updated agreement on Exchange membership with the Stock Exchange.
- Trade-Matching Algorithm:** A pre-defined principle and method of calculation that specifies the manner of coupling (matching) orders to create a transaction as well as the quantity and Price at which a transaction is concluded.



SPECIAL TRADING RULES FOR THE AUCTION TRADING SYSTEM

1 Conditions of Accessing the Auction Trading System

1.1 This Regulation contains the terms and conditions for the use of the Auction Trading System operated by the Budapest Stock Exchange Private Limited Company. All users of the Auction Trading System accept and undertake to comply with the provisions of this Regulation.

1.2 All Exchange Member - with membership on the regulated market operated by the Exchange – has the right to access the Auction Trading System for Products according to the Exchange Section for which they have membership, provided that they meet the requirements set out in Section 1.3 g),i),j).

1.3 Legal persons without trading rights in the given section of the regulated market operated by the Exchange may solely acquire access to the Auction Trading System upon the conclusion of an agreement with the Exchange, which will be accepted by the Exchange if the following conditions are met and the documents hereunder listed are submitted:

- a) an application for Auction membership, specifying the Product Group the applicant wishes to trade,
- b) an official document not older than 15 days, certifying that the Applicant is a duly registered company under the law of its registered office,
- c) the applicant has license for investment services for the subject of the auction issued by the competent supervisory authorities of any EEA Member State or the United Kingdom,
- d) when necessary, a certification from a supervisory or other competent authority that the Applicant is entitled to provide cross-border services,
- e) certification that the clearing of the Applicant's auction transactions is ensured, in this subject matter:
 1. For an Applicant with Clearing Membership, a certification from the Clearing organization of Clearing Membership and of having opened the necessary accounts and having fulfilled all additional conditions for Clearing transactions
 2. An Applicant for Sub-Clearing Membership will need:
 - i. A General Clearing Member's statement that it has concluded a Clearing Contract with the Sub-Clearing Member and that the General Clearing Member will serve as a guarantor for the transactions of the Sub-Clearing Auction member, and
 - ii. A statement from the organiser of the exchange clearing confirming clearing membership of the General Clearing Member
- f) an Applicant with Sub-Clearing Membership will submit a declaration from the General Clearing Member performs the clearing services for the Applicant, that the General Clearing Member undertake to comply with the relevant rules of this Regulation,
- g) authorization of at least one Trader to trade in the Auction Trading System,
- h) payment of the Access Fee, if the applicant has not paid an annual minimum section fee for the given calendar year. If the applicant in the given calendar year acquires the right to trade in the relevant section of the Exchange and pays the annual minimum section fee thereof, then the Exchange will refund the access fee for the given year,
- i) establishing connection to the Auction Trading System,
- j) installing the Auction front-end software.



1.4 The Applicant shall attach to the application specified in Section 1.3 an original copy of the application and the attached declaration either in hard copy or electronic form, duly signed as per business documents or by an authorized representative, while the other attachments to the application shall be submitted either as originals or as simple copies, certified by the Applicant's representative. The Exchange will only accept documents submitted in Hungarian or English, as originals or as certified translations. The Exchange may waive the submission of these documents if the existence of these documents may be verified from an authentic and public register.

1.5 The access to the Auction Trading System is granted with the entry into force of the Auction Access Agreement between the Exchange and the applicant.

1.6 A person with access to the Auction Trading System shall continuously comply with the terms and conditions of the access specified in these Rules under the term of their access.

1.7 If the application for access to the Auction Trading System is rejected the CEO shall decide in a formal non-public resolution.

2 The Procedure for Acquiring Access to the Auction Trading System for Applicants Specified in Section 1.3

2.1 The documents and certificates set out in Section 1.3 shall be filed for the application for accessing the Auction Trading System.

2.2 If the application fails to comply with the conditions set forth in this Regulation, the Exchange shall instruct the applicant in writing to submit any missing document and shall identify the inadequate documentation in detail.

2.3 The Applicant shall submit the required documents within 10 (Ten) Exchange Days following receipt of the notice of the deficiencies of the application.

3 Registering, suspending, deleting Traders

3.1 The Exchange registers traders upon the written request of the person with access to the Auction Trading System, if the trader was notified to the Exchange in accordance with the rules in this Regulation.

3.2 The registration of traders shall be requested by completing the form in Annex 4.

3.3 The registration request and the attached declarations shall be submitted as an original copy either in hard copy or electronic form, duly signed as per business documents or by an authorized representative. The Exchange will only accept documents submitted in Hungarian or English, as originals or as certified translations.

3.4 More than one trader may be requested to be registered, but a trader shall be registered solely for one legal person with access to the Auction Trading System.

3.5 Unless otherwise provided in the regulations, the person with access to the Auction Trading System will be identified in the Auction Trading Systems by the user name of the trader of the person with access to the Trading System. For guaranteeing security conditions, accessing the Auction Trading System will require the user name and password.

3.6 The Exchange will provide the user name and password needed to the access to the Auction Trading System in person or in the form of a password-protected file to the person duly authorised by the person with access to the Auction Trading System.

3.7 Both the person with access to the Auction Trading System and the trader shall be held responsible for all consequences related to the handling of the user names and passwords necessary to access the Auction Trading System, to any unauthorized use, as well as to concluded transactions, and to submitting orders and counteroffers in keeping with regulations.

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- 3.8 In the course of the auctions, the Trader may only exercise the rights and obligations in the name of that person with access to the Auction Trading System who duly authorised the trader to trade in such manner.
- 3.9 Upon the request of the person with access to the Auction Trading System, the Exchange shall suspend the traders trading rights – from date requested or, in the absence thereof, within 1 Exchange Day from the receipt of such request – for up to 10 Exchange Days.
- 3.10 The person with access to the Auction Trading System may request the termination of the suspension of his trader in writing at any time during the term of suspension.
- 3.11 In the absence of request for termination of suspension by the person with access to the Auction Trading System regarding his trader, the Exchange will delete the trader from the trader registry on the next day after the maximum suspension term expired.
- 3.12 Upon the request of the person with access to the Auction Trading System, the Exchange shall delete the trader from the trader registry from date requested or, in the absence thereof, within 1 Exchange Day from the receipt of such request.

4 Suspension or Termination of the Access to the Auction Trading System

- 4.1 The Exchange will suspend the access to the Auction Trading System:
- upon the request of the person with access to the Auction Trading System;
 - if a condition for the access is not met by the person with access to the Auction Trading System;
 - within the scope of a sanction applied by the Exchange.
- 4.2 The Exchange shall suspend the access to the Auction Trading System for a Group of Product in the following cases:
- the person with access to the Auction Trading System fails to meet the hedge obligation as set out in the KELER Rules;
 - the person with access to the Auction Trading System fails to fulfill its payment obligations to the Exchange within 3 (three) working days following the written notice.
- 4.3 If the reason for the suspension of the access to the Auction Trading System ceases to exist, the suspension shall be immediately terminated.
- 4.4 The access to the Auction Trading System may be suspended simultaneously on multiple legal grounds.
- 4.5 In addition to the cases specified in Section 4.4 the access to the Auction Trading System by a Sub-Clearing Member shall be suspended:
- if the General Clearing Member performing clearing for such Sub-Clearing Member fails to fulfil the hedge requirements provided in KELER Rules within the relevant deadline;
 - if the General Clearing Member requests in writing that the Exchange to suspend the access to the Auction Trading System of a Sub-Clearing Member for whom it performs clearing;
 - if the General Clearing Member notifies the Exchange in writing that the clearing agreement of a Sub-Clearing Member for whom it performs clearing has been terminated.



4.6 The transactions properly concluded by Sub-Clearing Members before suspension shall be duly performed by the General Clearing Member settling transactions on their behalf.

4.7 The person with access to the Auction Trading System may request the termination of his access without cause in writing at any time.

4.8 The persons with access to the Auction Trading System shall perform its obligations that arose before the termination of their access regardless of such termination.

4.9 In case of termination of access, the person with access to the Auction Trading System shall have no right to claim a refund of fees or other reimbursement from the Exchange.

5 Sanctions Applicable by the Exchange

5.1 The Chief Executive Officer may impose sanctions, included in a decision with an explanation, on persons with access to the Auction Trading System for any failure, incompleteness, or delay in the performance of the obligations provided in this Regulation.

5.2 In the event that the Regulations on the persons with access to the Auction Trading System are violated, the following sanctions may be applied if necessary:

- a) warning,
- b) fine,
- c) suspension of the access to the Auction Trading System,
- d) ban.

5.3 In determining the type and degree of sanction to be applied, the weight of the infringement (such as the size of the disadvantage suffered by other persons, the actual cause leading to the transgression, etc.) shall particularly be taken into account, as shall the frequency at which the given person with access to the Auction Trading System commits infringement, the moral damage done to the Exchange or to other persons with access to the Auction Trading System. For violations of the rules of settlement, the size of the amount and the period it has been outstanding shall be also taken into account.

5.4 The following sanctions may be imposed on traders that infringes the Regulation:

- a) warning;
- b) prohibition from acting as a trader at Auctions.



- 5.5 If the Exchange considers the application of a sanction to be necessary, the Exchange shall notify the person with access to the Auction Trading System or trader in advance, which shall include the brief summary of the facts, the Exchange Rules establishing the application of the sanctions, the notification on the possibility of application of the sanction without indicating the type and the extent of the planned sanction, furthermore a request to the person with access to the Auction Trading System or trader for determine the cause of the infringement specified by Exchange. The Exchange shall send the notice to the email address of the contact person provided by the person with access to the Auction Trading System or of the trader.
- 5.6 The person with access to the Auction Trading System or trader may make observations within 5 (Five) Exchange Days of the sending of the e-mail to determine the cause of the infringement specified by Exchange, or to comment on the application of the sanction.
- 5.7 The notifications described above shall be sent solely by e-mail, and they will not be sent to the recipient by post. The person with access to the Auction Trading System or the trader is not entitled to rely on the fact that the message - properly sent by the Exchange to the registered e-mail address - has not been received. The Exchange may decide on the application of the sanction if the person with access to the Auction Trading System or the trader fails to meet the deadline set out in Section 5.6., provided, that if the person with access to the Auction Trading System or the trader was not able to comment on the notice sent by the Exchange within the deadline for reasons beyond its control, the Exchange examines their comments after the obstacle has been ceased and, if necessary, may modify the sanction applied. If the person with access to the Auction Trading System or trader cannot fulfill its obligations under this clause for a reason beyond its control, it cannot be held responsible for failing to fulfill its obligation until the obstacle has not been ceased. At the request of the Exchange the person with access to the Auction Trading System or trader shall prove that the obstacle has occurred for reasons beyond its control. The Exchange shall be entitled to impose a sanction on the person with access to the Auction Trading System or trader if it has improperly referred to the existence of an obstacle.
- 5.8 If the person with access to the Auction Trading System or trader eliminates the reasons for the sanction and certifies that fact to the Exchange within the deadline specified in Section 5.6, the Exchange will take this fact into account when applying the sanction.
- 5.9 The Exchange shall be entitled, prior to imposing a sanction, to disapply the notification of the person with access to the Auction Trading System or trader pursuant to Section 5.6 and to decide on applying a sanction without prior notice in a justified and urgent case, in particular, in order to protect the interests of the investors.
- 5.10 The Sanctions
- 5.11 Warning
- 5.12 A warning may be used as a sanction in the event of a minor violation the Regulation, with such a sanction including a warning of the future applicability of more serious sanctions.
- 5.13 The Exchange shall warn the persons with access to the Auction Trading System or traders upon a minor violation of a Regulation.
- 5.14 The Exchange shall not publish the fact of warning.
- 5.15 Fine
- 5.16 The CEO may impose a fine on persons with access to the Auction Trading System for more serious violations of a Regulation or for non-compliance with the obligations set therein recurring after a warning.
- 5.17 The fine may be range from HUF 100,000.- (one hundred thousand) to HUF 2,000,000.- (two million).
- 5.18 Fines shall be paid to the account of the Exchange within eight (8) days of receipt of the final decision. In the event of overdue payment, the defaulting person with access to the Auction Trading System shall pay default interest calculated for the period starting when payment falls overdue. For default interest the pertaining rules of the Hungarian Civil Code shall apply.
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- 5.19 The Exchange shall not publish the fact of the fine.
- 5.20 Suspension of the access to the Auction Trading System
- 5.21 The CEO shall suspend the access to the Auction Trading System of the person with access to the Auction Trading System, if:
- further participation of the person with access to the Auction Trading System in trading exposes (or may expose) the security of trading to serious jeopardy,
 - the nature of the violation of the Regulation precludes maintaining the trading licence on the Exchange,
 - the Exchange finds at any time during a review that the person with access to the Auction Trading System is in such material breach of the provisions of this Regulation, the degree of which makes imposing a lighter sanction insufficient.
 - the person with access to the Auction Trading System fails to effect payment of a fine by the deadline set in the notice for payment.
- 5.22 The Exchange shall announce the fact that the access has been suspended by publishing the related resolution.
- 5.23 Ban from the Auctions
- 5.24 In cases involving serious or repeated breaches or infringements under the regulations, the Chief Executive Officer may ban the person with access to the Auction Trading System from the ranks of persons with access to the Auction Trading System by terminating their agreement on accessing the Auction Trading System by public CEO resolution.
- 5.25 Prohibition from Acting as a Trader at Auctions
- 5.26 The Chief Executive Officer may prohibit a trader from acting as a trader upon a serious or repeated violation of this Regulation
- 5.27 The person affected by the prohibition may not participate in Auctions after the prohibition takes effect and during the term thereof.
- 5.28 The term of prohibition shall be set in months or years, with the shortest term being six months and the maximum being three years.

6 AUCTION Order

6.1 General Terms of the AUCTION Orders

- 6.1.1 AUCTION orders and Counteroffer may solely be made by the person with access to the Auction Trading System .
- 6.1.2 AUCTION orders can be both bids and offers as declared by the auctioneer.
- 6.1.3 AUCTION orders are eligible for cancellation until the beginning of the trading hours as specified in the order. The AUCTION order may be amended until its entering into the MMTS1 Trading System in line with the provisions of this Resolution and the terms specified in advance by the auctioneer.

6.2 Information to be included in AUCTION Orders

- 6.2.1 AUCTION orders shall contain at least the following key data:
- The name of the person initiates the Auction (“auctioneer”);
 - Name of security;
 - Order Direction;

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- d) Trade-Matching Algorithm;
- e) For the Multiple-Price Trade-Matching Algorithm: the method of allocation and the number of order-collection periods;
- f) Quantity or value of the securities subject to the AUCTION order.

6.2.2 Trade-Matching Algorithm

Trades can be concluded using the following Trade-Matching algorithms as selected by the auctioneer:

- a) Multiple-Price Trade-Matching Algorithm
- b) Equilibrium-Price-Based Trade-Matching Algorithm

6.2.3 Allocation

In case of a trade resulting from an AUCTION order with Multiple-Price Trade-Matching Algorithm, where not all the AUCTION Counteroffers at the Minimum Price Level can be matched, the auctioneer shall choose, between pro rata allocation or a card-dealing procedure for the purpose of selecting the Counteroffers that can be matched at the Minimum Price Level.

In case of a trade resulting from an AUCTION bid with Multiple-Price Trade-Matching Algorithm where not all the AUCTION Counteroffers at the Maximum Price Level can be matched, the pro rata allocation is applied for the purpose of selecting the Counteroffers that can be matched at the Maximum Price Level.

6.2.3.1 Pro Rata Allocation

When matching orders at the Minimum Price Level in case of an AUCTION offer, and at the Maximum Price Level in case of an AUCTION bid, AUCTION Counteroffers of the persons with access to the Auction Trading System entitled to make AUCTION Counteroffers are matched according to the relative proportions of the respective AUCTION Counteroffers made by such persons with access to the Auction Trading System at the Minimum Price Level in case of an AUCTION offer and at the Maximum Price Level in case of an AUCTION bid. The remaining AUCTION order quantity will not be matched.

6.2.3.2 Card Dealing

When pairing transactions at the Minimum Price Level, all AUCTION Counteroffers at Minimum Price Level made by the persons with access to the Auction Trading System AUCTION Offer are matched as described below. All persons with access to the Auction Trading System that have made a Counteroffer for the AUCTION at the Minimum Price Level shall receive identical quantities to match the total quantity of the Counteroffers they tendered at the Minimum Price Level until the remaining quantity falls short of the number of the persons with access to the Auction Trading System whose Counteroffers tendered for the AUCTION are not completely filled at the Minimum Price Level. If a person with access to the Auction Trading System made more than one Counteroffer for the AUCTION at the given Price Level, these offers will be matched in the order of the offering time up to the above quantity of the persons with access to the Auction Trading System. The remaining AUCTION order quantity will not be matched.



6.2.3.3 In case of Pro Rata Allocation and Card Dealing Allocation, Subsections 6.2.5.1 d) and 6.2.5.1 e) shall be taken into consideration during the hereinabove mentioned order matching.

6.2.3.4 The default allocation procedure in case of an AUCTION offer is card dealing allocation.

6.2.4 Number of Order collection periods

6.2.4.1 The Multiple-Price Trade-Matching Algorithm is divided into a period of collecting competitive orders and – if the auctioneer provides – a period of collecting non-competitive orders, and a transaction period. If a period of collecting non-competitive orders is included, the party entering the order shall specify the maximum market share of non-competitive AUCTION Counteroffers eligible for execution by parties tendering Counteroffers for the AUCTION. By default, the Multiple-Price Trade-Matching Algorithm includes a period for collecting competitive orders, a period for collecting non-competitive orders, and a transaction period.

6.2.5 When providing additional information included in AUCTION orders, the auctioneer may specify the actual content of such information in line with the options detailed below:

- a) Quantity limitations;
- b) Lot Size;
- c) Tick Size;
- d) Price determination;
- e) Trading Hours;
- f) Type of Auction Order Book;
- g) Settlement Date;
- h) Parties authorised to tender AUCTION Counteroffers.

6.2.5.1 Order quantity

The auctioneer may specify in its order:

- a) the amount of the security to be reached or surpassed in a transaction which, if concluded, prevents the AUCTION to be considered unsuccessful
- b) the maximum quantity or value of AUCTION Counteroffers accepted for the AUCTION trade
- c) the minimum quantity or value for which a Counteroffer may be tendered at an AUCTION;
- d) the maximum degree of market share of an Exchange Member making an AUCTION counteroffer, in case the Multiple Price Trade Matching Algorithm is used.
- e) the maximum ratio of the quantity of competitively priced and the quantity of non-competitively priced orders, in case the Multiple Price Trade Matching Algorithm is used.

The quantity settings mentioned above are not subject to restrictions by default - except Subsection 6.2.5.1 e).

6.2.5.1.1 In Subsection 6.2.5.1 d), the maximum market share of a single party making an AUCTION Counteroffer is 100% by default, whilst the ratio of non-competitively priced to competitively-priced AUCTION Counteroffer quantities entered by a single party is 10% by default.

6.2.5.1.2 If the auctioneer fails to specify the acceptable minimum Price in an offer or the acceptable maximum Price in a bid, the auctioneer may provide in the AUCTION order that it is not bound to make its AUCTION order for the pre-announced quantity once the prices of AUCTION Counteroffers are taken into account (Section 7.3.5.7), even if the total quantity of AUCTION Counteroffers is higher than the minimum quantity specified in Subsection 6.2.5.1 a) or the maximum quantity specified in Subsection 6.2.5.1 b).



6.2.5.2 Lot Size

When the Equilibrium-Price-Based Trade-Matching Algorithm is used, the auctioneer may specify in its offer the Lot Size to be used for the AUCTION transactions. The default value of the Lot Size is one (1) pc.

6.2.5.3 Tick Size

The auctioneer shall specify in its offer the Tick Size to be used during the AUCTION..

6.2.5.4 Price determination

The auctioneer may specify a minimum or a maximum acceptable Price in its offer and bid, respectively. If the Price is not set in advance, this fact shall be disclosed. If the auctioneer does not determine the Offered Price in advance, it shall do so upon entering the AUCTION order at the latest, and in accordance with the given Trade-Matching Algorithm.

6.2.5.5 Trading Hours

The auctioneer may specify the trading hours for AUCTION trading in accordance with Subsection 6.3.4 h)

6.2.5.6 Order Book Types

- a) Public Order Book
- b) Non-public Order Book

By default, the Order Book is non-public.

6.2.5.7 Settlement Date

The auctioneer may specify a Settlement Date in the period that is not sooner than T+1 day and not later than T+7 days in case of non-debt securities.

In case of debt securities, the Settlement Date shall be the day corresponding to the settlement cycle applied in the Debt Securities Section of the Exchange.

By default, the settlement day is the day corresponding to the settlement cycle used in the Section where the given security is traded.

6.2.5.8 Entities having the right to enter AUCTION Counteroffers

The auctioneer may specify in its AUCTION order the the person with access to the Auction Trading System that are entitled to tender Counteroffers. The auctioneer is also entitled to make a Counteroffer in the AUCTION, only if the AUCTION Counteroffer is entered via the party's own Trading Workstation. The auctioneer may modify the list of the persons with access to the Auction Trading System that are eligible to submit counteroffer in an official declaration submitted to the Exchange at least 1 hour before the beginning of the auction



6.3 Submitting the AUCTION order to the Exchange

- 6.3.1 The information specified by the auctioneer on the form of ANNEX 3 shall be submitted to the exchange in the form of an official notice, at the latest, by 12 a.m. on the preceding exchange day of the exchange day specified in the auction order. The official notice can be in the form of an email (trading@bse.hu), Fax (+36 1 429 6833) or by personal delivery.
- 6.3.2 The Exchange will examine, whether the submitted AUCITON order complies with the rules stated in this resolution and notifies the auctioneer via email or Fax at the latest by 16:00 on the trading day preceding the trading day specified in the AUCTION order .
- 6.3.3 In case the Auction order is accepted by the Exchange, the Exchange notifies the auctioneer and – if requested by the auctioneer – the person with access to the Auction Trading System entitled to place auction counteroffers on the content of the AUCTION order. The notification is conducted via email.
- 6.3.4 If the auctioneer uses the default values for the key data elements of the AUCTION order specified in Section 6.2 – with the exception of those specified in Subsections 6.2.5.1 a), b) and c) – or specifies such key data elements as set forth below, and if the auctioneer submits its AUCTION order to the Exchange in line with the formal requirements provided in Section 6.3.1 at latest by 15:30 (3:30 p.m.) on a particular Exchange Day, then the AUCTION can be conducted on the next Exchange Day within the period specified in Subsection 6.3.4 h):
- a) 6.2.1 a): name of the person with access to the Auction Trading System: any name in accordance with Section 6.1;
 - b) 6.2.1 b): Security name: any equity;
 - c) 6.2.1 c): buy or sell: either;
 - d) 6.2.1 d): Multiple-Price Trade-Matching Algorithm or Equilibrium-Price-Based Trade-Matching Algorithm: any;
 - e) 6.2.1 f): security quantity or value subject to the AUCTION order: any value in line with Section 6.1;
 - f) 6.2.5.1 a), b) and c) : any value;
 - g) 6.2.5.4: Price determination: any;
 - h) 6.2.5.5: trading hours: between 9:00 (9 a.m.) and 16:30 (4:30 p.m.) CET;
 - i) 6.2.5.6: Order Book type: any;
 - j) 6.2.5.8: any, in accordance with the particular section

7 Rules of Concluding Trades on the Auction Board

7.1 Order Book

The Order Book contains the Counteroffers entered during an AUCTION, arranged into bid and offer sides, with detailed and aggregated break-down by price levels, sorted according to order-entry time, and including the name of the person with access to the Auction Trading System making the AUCTION Counteroffer.

7.1.1 Public order book

In case of an Auction with public order book, the order book during the trade will be made available to the person with access to the Auction Trading System entitled to submit AUCTION counteroffers, without indicating the person with access to the Auction Trading System that submitted the counteroffer, and for the auctioneer, its available via the MMTS1 trader workplace operated by the Exchange.

7.1.2 Non-public order book

When non-public Order Book is used as a mean of concluding AUCTION deals, information on AUCTION Counteroffers in the Order Book is not publicly available to the persons with access to the Auction Trading System entering AUCTION Counteroffers (except for their own AUCTION Counteroffers), whilst such information is made available to the auctioneer, but only via the Trading



Workstation operated by the Exchange. If a non-public Order Book is used, the auctioneer may only enter an AUCTION Counteroffer before the Order Book is made accessible to the auctioneer.

7.2 Method of Concluding AUCTION Deals

- 7.2.1 Submitting the Auction order is only possible at the seat of the Exchange, on the MMTS1 trading workplace operated by the Exchange. For submitting the AUCTION order the Exchange provides the necessary technical conditions by making an MMTS1 trading workplace available and making the proper settings.
- 7.2.2 At the end of the trading hours specified by the auctioneer, the non-filled or partially filled AUCTION orders and AUCTION counteroffers are cancelled.
- 7.2.3 All AUCTION counteroffers shall be treated as FILL ANY and LIMIT orders.
- 7.2.4 Trades from auction orders are excluded from the exchange price determination and from official statistics
- 7.2.5 The auctioneer is entitled to exclude orders, which are not in compliance with this resolution, especially those that are not in line with the price determination process and those that are not counteroffers.

7.3 The Auction Process with the Multiple-Price Trade-Matching Algorithm

- 7.3.1 In case of Multiple-Price Trade-Matching Algorithm the auction is separated to a competitively priced order collection period and/or a non-competitively priced order collection period and a transaction period.
- 7.3.2 Based on the Multiple-Price Trade-Matching Algorithm, every transaction will be concluded regarding every order at the price included in the AUCTION counteroffer, or at the considered price.
- 7.3.3 Order-Collection Period
 - 7.3.3.1 The order-collection period is open solely for entering AUCTION Counteroffers.
 - 7.3.3.2 AUCTION Counteroffers entered in the period for collecting competitive orders shall contain the following information:
 - a) Name of the Board
 - b) Name of the security;
 - c) Quantity;
 - d) Price
 - e) Trading Account ID
 - 7.3.3.3 Auction Counteroffers entered in the period for collecting non-competitive orders shall contain the following information.
 - a) Name of the Board;
 - b) Name of the Security
 - c) quantity;
 - d) Trade Account ID.



7.3.3.4 The proportion of the quantities of competitive and non-competitive orders entered by a single person with access to the Auction Trading System, entitled to enter AUCTION Counteroffers, may not be higher than the value specified by the auctioneer.

7.3.3.5 Az Counteroffers can only be amended or cancelled during the order collection period open to enter them.

7.3.4 Order cancellation period

7.3.4.1 In the order cancellation period, only order cancellation is possible.

7.3.4.2 In the order cancellation period, both competitively priced and non-competitively priced counteroffers can be cancelled.

7.3.5 Transaction Period

7.3.5.1 The auctioneer shall enter its AUCTION order during the transaction period, and this is when the AUCTION order and Counteroffers are matched.

7.3.5.2 In case of AUCTION Counteroffers entered in the period for collecting competitive orders, an AUCTION Counteroffer made at a higher price shall rank higher than an AUCTION Counteroffer made at a lower Price for sell Auctions, and the AUCTION Counteroffer made at a lower Price shall rank higher than the AUCTION Counteroffer placed at a higher Price in case of buy Auctions.

7.3.5.3 The execution of non-competitively priced auction counteroffers are identical to each other. The execution of the counteroffers submitted in the non-competitively priced order collection period compared to the counteroffers submitted in the competitively priced order collection period is the following:

The non-competitively priced counteroffers precede the competitively priced counteroffers

7.3.5.4 Based on the AUCTION Counteroffers ranked by their sequence of execution, the MMTS1 Trading System determines the Average Price and the Minimum Price Level (in case of an Auction offer) or the Maximum Price Level (in case of an Auction bid) at which transactions can be concluded for the smallest quantity, for the total quantity, and for the quantities in between by using increments corresponding to the Tick Size specified by the auctioneer.

7.3.5.5 The MMTS1 trading system takes into account the quantity of non-competitively priced counteroffers that - in case of sell auctions - exceeds the total quantity of the highest priced competitively priced counteroffers - in case of every quantity - at the price level of the average price that belongs to the given quantity.

7.3.5.5.1 The MMTS1 Trading System will ignore any excess quantities as per Subsection 6.2.5.1 e) indicated in Counteroffers over and above the quantity specified by the auctioneer as the maximum market share of non-competitively priced transactions eligible for execution by those tendering Counteroffers in the AUCTION, and will only take into account the partial quantity not exceeding such limit.

7.3.5.5.2 The MMTS1 Trading System will ignore any excess quantities indicated in Counteroffers over and above the quantity specified by the auctioneer as the maximum market share of a single person with access to the Auction Trading System, and will only take into account the partial quantity not exceeding such limit.



- 7.3.5.6 If the total quantity of the AUCTION Counteroffers, as per Section 6.2, falls short of the minimum total quantity of AUCTION Counteroffers specified by the auctioneer, the auctioneer may declare the Auction as unsuccessful.
- 7.3.5.6.1 If the auctioneer does not declare the AUCTION unsuccessful, the auctioneer may modify the minimum total quantity of Counteroffers tendered for the AUCTION in a manner to allow transactions to be concluded in accordance with the Trade-Matching Algorithm.
- 7.3.5.7 Unless otherwise provided by the auctioneer in its AUCTION order, if the auctioneer failed to specify a minimum total quantity for AUCTION Counteroffers, or if the total quantity specified in the AUCTION Counteroffers as per Section 6.2 reaches or surpasses the minimum total quantity set by the auctioneer, then the auctioneer shall – upon calculating the Average Price related to individual quantities and the Minimum Price Level in case of an AUCTION offer, or the Maximum Price Level in case of an AUCTION bid – also record its AUCTION order in the MMTS1 Trading System with the same information as specified in advance by the auctioneer and disclosed by the Exchange to the person with access to the Auction Trading System s entitled to tender AUCTION Counteroffers, namely:
- a) name of the Board;
 - b) name of the security;
 - c) quantity;
 - d) Offered Price;
 - e) Trading Account ID.
- 7.3.5.7.1 Unless otherwise provided by the auctioneer in the AUCTION order, the quantity or the value of the order made by the auctioneer cannot be lower than the quantity or value specified in Subsection 6.2.1 f), if the total quantity or the total value of Counteroffers tendered for the AUCTION as per Section 6.2 reaches or surpasses such quantity or value.
- 7.3.5.7.2 Unless provided in the AUCTION order by the auctioneer, if the auctioneer fails to specify a minimum total quantity for Counteroffers in the AUCTION, and the total quantity or value of Counteroffers tendered for the AUCTION as per Section 6.2 fails to reach the quantity or value specified by the auctioneer as per Section 6.2.1 f), then the quantity of the order entered by the auctioneer may not be lower than the total quantity of the AUCTION Counteroffers tendered.
- 7.3.5.8 After the submission of the Auction order, in case of sell auctions, the highest minimal price level is determined and in case of buy auctions the lowest maximum price level is determined for which the highest quantity that can be matched is equal or higher than the quantity indicated in the AUCTION order.
- 7.3.5.9 If the Highest Quantity that can be matched associated with the Minimum or Maximum Price Level as per Section 7.3.5.8 is equal to the quantity specified by the auctioneer, the Counteroffers tendered for the AUCTION will be matched to form transactions from the highest priced ones in case of an AUCTION offer, or from the lowest priced ones in case of an AUCTION bid, in line with the Price and quantity specified in the AUCTION Counteroffer. Non-competitive Counteroffers are matched to form transactions at the Average Price.



7.3.5.10 Subject to Section 7.3.5.8, if in case of a sell auction order the quantity that can be matched at the minimum price level and in case of buy auction order the quantity of maximum price level is higher than the quantity in the AUCTION order, therefore, not all auction counteroffer can be executed at the best price level, then trades are conducted the in following way: in case of a sell auction, counteroffers with better price than the minimal price level trades are taking place from the highest priced counteroffer. In case of a buy auction, counteroffers with better price than the maximal price level trades are taking place from the lowest priced counteroffer. Trades are made according to the price and quantity in the AUCTION counteroffer. The non-competitively priced counteroffers are matched at the average price. In case of a sell auction order at the minimum price level, in case of buy auction order at the maximum price level the Counteroffer quantities corresponding to the remaining order quantities that can be traded will be matched according to the predetermined allocation process.

7.3.5.10.1 In case of a sell auction

If the Minimum Price Level is identical to the best price level, and there is a non-competitive AUCTION Counteroffer at the Minimum Price Level, then:

- a) if the quantity of competitively Priced Counteroffers is greater than the remaining quantity, the procedure of allocation specified by the auctioneer shall be used for matching such Counteroffers at the Minimum Price Level, and non-competitively Priced Counteroffers shall be ignored;
- b) if the quantity of competitively Priced Counteroffers is equal to the remaining quantity, only such Counteroffers will be matched at the particular minimum Price Level. Non-competitively Priced Counteroffers will not be matched;
- c) if the quantity of competitively Priced Counteroffers is smaller than the remaining quantity, all competitively Priced Counteroffers will be matched at the Minimum Price Level. To match the remaining quantity available for trade, the specified procedure of allocation must be applied among non-competitively Priced Counteroffers.

7.3.5.10.2 In case of an AUCTION offer, if the Minimum Price Level is not identical to the best Price level, and there is a non-competitive AUCTION Counteroffer at the Minimum Price Level, then the remaining quantity shall be allocated between competitively and non-competitively Priced Counteroffers in such way that the proportion of transactions created from non-competitively Priced Counteroffers does not exceed the value specified in Subsection 6.2.5.1 e). The quantities thus becoming available for allocation shall be allocated to competitively and non-competitively Priced Counteroffers separately in accordance with the specified allocation procedure.

7.3.5.10.3 In case of an AUCTION bid, if the Maximum Price Level is identical to the best price level and there are non-competitive Counteroffers for the AUCTION at the Maximum Price Level, the remaining quantity shall be allocated between competitively priced and non-competitively priced Counteroffers in such way that the portion of the transactions created from non-competitively priced Counteroffers shall not exceed the value specified in Section 6.2.5.1 e). The quantities thus becoming available for allocation shall be allocated to competitively and non-competitively Priced Counteroffers separately in accordance with the specified allocation procedure.



7.3.5.11 Examples for the Multiple-Price Trade-Matching Algorithm are given in Annex 2.

7.4 The Auction Process with the Equilibrium-Price Based Trade Matching Algorithm

7.4.1 The Equilibrium-Price Based Trade Matching Algorithm can be applied both to AUCTION bids or offers.

7.4.2 Bids in a buy AUCTION and offers in a sell AUCTION may only be made by the auctioneer.

7.4.3 Equilibrium-Price Based Trade Matching Algorithm is divided into an order-collection period and a transaction period.

7.4.4 Order-Collection Period

7.4.4.1 The persons with access to the Auction Trading System with the right to tender Counteroffers for the AUCTION may enter Counteroffers that include the following information:

- a) name of the Board;
- b) name of the security;
- c) for AUCTION bids: offer, for AUCTION offers: bid;
- d) quantity;
- e) Price;
- f) Trading Account ID.

7.4.4.2 The auctioneer shall also record its AUCTION order in the MMTS1 Trading System during the order collection period with the same information provided in advance, namely:

- a) name of the Board;
- b) name of the security;
- c) for AUCTION bids: offer, for AUCTION offers: bid;
- d) quantity;
- e) Offered Price;
- f) Trading Account ID.

7.4.4.3 If the total quantity of the AUCTION Counteroffers as per Section 6.2 fails to reach the minimum total quantity of AUCTION Counteroffers specified by the auctioneer, the auctioneer may declare the AUCTION to be unsuccessful.

7.4.4.4 All orders may be amended or cancelled during the order-collection period.

7.4.5 Order cancellation period

7.4.5.1 In the order cancellation period, solely counteroffers may be cancelled.

7.4.5.2 In the order cancellation period, both competitive and non-competitive orders may be cancelled.



7.4.6 Transaction period

- 7.4.6.1 During the transaction period, the Price of the auction is determined and the AUCTION transactions are concluded.
- 7.4.6.2 During the transaction period, and based on the orders arranged in the Order Book, orders will be matched and transactions will be concluded by using the Equilibrium-Price-Based Trade-Matching Algorithm specified in Section 5 of Annex 1.
- 7.4.6.3 If not all orders at the minimum price level are matched, then these orders will be fulfilled according to their entry time.
- 7.4.6.4 No orders may be entered, amended or cancelled during the transaction period.

7.5 Procedure Upon a Technical Error

- 7.5.1 In the event of a breakdown of the Trading Workstation of any person with access to the Auction Trading System entitled to enter an AUCTION Counteroffer, the person with access to the Auction Trading System is entitled to use the Stand-by Trading Workstation to enter its Counteroffer.

8 Fees

8.1 General rules regarding fees

- 8.1.1 The fees specified in this resolution are charged by the exchange and shall be paid to the account of the Exchange
- 8.1.2 The fees listed in this resolution does not contain VAT.
- 8.1.3 In case of late payment of the fees specified in this resolution, the Exchange charges default interest . The default interest rate is twice of the current base rate of the Hungarian Central Bank (Magyar Nemzeti Bank). The default interest shall be charged from the first day following the payment deadline. The default interest shall be paid within 8 days after receiving the notification letter on the default interest.

8.2 Fees regarding the use of the Auction Trading System

- 8.2.1 The annual fee of the use of the Auction Trading System:
 - a) in case of securities within the scope of the Debt Securities Section HUF 500,000.-;
 - b) in case of securities within the scope of the Equities Section HUF 1,800,000.-



8.2.2 The use of the Auction Trading System is free of charge for Exchange Members.

8.3 The fees regarding the auctioneer

8.3.1 In case of auction of equity type securities, the auctioneer shall pay for the usage of the Auction platform for each auction or buy-back auction, after every series 0.015 percent (0.00015) of the value of the trades regarding the given auction in Hungarian forints, but maximum 500.000 Ft and minimum 75.000 for each auction or buy-back auction.

8.3.2 In case of auction of debt type securities, the auctioneer shall pay for the usage of the Auction platform for each auction or buy-back auction, after every series 0.004 percent (0.00004) of the value of the trades regarding the given auction in Hungarian forints, but maximum 500.000 Ft and minimum 75.000 for each auction or buy-back auction

8.3.3 The auctioneer must pay minimum amount detailed in Sections 8.3.1 and 8.3.2 in case of an unsuccessful auction as well.

8.4 Transaction (turnover) fees

8.4.1 The auctioneer shall be exempt from payment of further fees in addition to the fees set forth in Section 8.2.

8.4.2 The person with access to the Auction Trading System submitted auction counteroffers shall pay turnover fee based on the total value of the trade.

8.4.3 The fee must be paid until the 10th day of the following month after the Auction.

8.4.4 In case of auction in equity type instruments, the fee per trade is 0.015 (0.00015) percent of the forint value of the transaction, but minimum 50, Ft and maximum 35.000, Ft.

8.4.5 In case of auction in Debt type instruments, the fee per trade is 0.001 (0.00001) percent of the forint value of the transaction, but minimum 50, Ft and maximum 2.000, Ft.

9 Closing provisions

9.1 In addition to the provisions of this resolution, any other terms, rules and even sanctions determined by the auctioneer for the auction shall be applied to the given auction.

9.2 The CEO of BSE may deviate from the present resolution in an individual agreement concluded with the auctioneer in the following subjects:

- a) rules to be applied,
- b) fees to be applied

The present CEO resolution repeals the 358/2018 CEO resolution on a similar subject matter.

István Máté-Tóth
Deputy CEO

on behalf of:

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.



THE EQUILIBRIUM-PRICE-BASED TRADE-MATCHING ALGORITHM

1 Equilibrium-Price-Based Trade-Matching Algorithm

- 1.1 Based on the orders ranked according to their sequence of execution, the total volume for which bids and offers exist shall be determined for each Price for each security in the Order Book, together with the quantity of securities that can be traded at the different Price levels. Based on the above, the Price at which the largest volume can be traded shall be identified, and that will be the transaction Price of the transaction(s).
- 1.2 If there are several Prices at which the tradable volume of a security is identical with the largest possible tradable volume of the security, the transaction Price will be the one at which the unfilled volume of the security is the smallest.
- 1.3 If there are several Prices at which transactions can be concluded for the largest possible volume of a security, and the volume that cannot be filled at such Prices is also identical, then
 - 1.3.1 the highest price shall be determined as the transaction Price of such Prices, if unfilled volume is only on the buy side in the Order Book;
 - 1.3.2 the lowest price shall be determined as the transaction Price of such Prices, if unfilled volume is only on the sell side in the Order Book.
- 1.4 If there are several Prices at which transactions can be concluded for the largest possible volume of a security, and the volume that cannot be filled at such Prices is also identical, further, among such Price levels there are unfilled volumes either on the sell side or the buy side only, or there is no unfilled volume at all in the Order Book,
 - 1.4.1 then the mathematical average of these Prices will be selected as the transaction Price, if the Price matches the Tick size.
 - 1.4.2 and if the mathematical average of these Prices does not match the Tick size, the average shall be rounded – in accordance with the Tick size – towards the Reference Price and the resulting Price shall be the transaction Price. The average shall be rounded downwards in all cases where there is no Reference Price for a security.
- 1.5 In case of the Auctioned security, the Base Price is determined by the Exchange and the auctioneer collectively.



MULTIPLE-PRICE TRADE-MATCHING ALGORITHM

Example 1. of the Multiple-Price Trade-Matching Algorithm

The example below illustrates a case where the auctioneer does not specify a period for collecting non-competitive counteroffers, i.e. non-competitive Counteroffers cannot be submitted:

The Auctioneer has specified (among other things) the following parameters in its order:

- Minimum Order Quantity: **50,000 pcs**
- Maximum market share: **none**
- Allocation: **Card Dealing**

I. After the order-collection periods of the Multiple-Price Trade-Matching Algorithm, the Order Book contains the following orders:

Order #	Quantity	Price	Brokerage	Order #	Quantity	Price	Brokerage
20	30,000	90.0000	A	22	30,000	70.0000	A
11	10,000	90.0000	B	13	10,000	70.0000	B
24	40,000	90.0000	C	26	40,000	70.0000	C
16	20,000	90.0000	D	18	20,000	70.0000	D
21	30,000	80.0000	A	23	30,000	60.0000	A
15	10,000	80.0000	B	14	10,000	60.0000	B
25	40,000	80.0000	C	27	40,000	60.0000	C
17	20,000	80.0000	D	19	20,000	60.0000	D

II. Based on the AUCTION Counteroffers ranked by the sequence of execution, the MMTS1 Trading System determines the Minimum Price Level at which transactions can be concluded for the smallest quantity, for the total quantity, and for the eligible quantities in between by using increments corresponding to the Tick Size (50,000 pieces) specified by the Auctioneer.

Quantity	Minimum Price Level	Average Price
50,000	90.0000	90.0000
100,000	90.0000	90.0000
150,000	80.0000	86.6667
200,000	80.0000	85.0000
250,000	70.0000	82.0000
300,000	70.0000	80.0000
350,000	60.0000	77.1429
400,000	60.0000	75.0000



Case 1

If the Auctioneer specifies 100,000 pieces as the order quantity at order entry:

- the Minimum Price Level associated with that quantity will be 90.0000,
- the related Highest Quantity that can be matched is: 100,000

Since the Highest Quantity that can be matched associated with the Minimum Price Level is identical to the quantity specified by the auctioneer, Counteroffers tendered for the AUCTION will be traded by matching those with the highest price first in accordance with the price and quantity specified in the Counteroffer tendered. The following transactions are concluded:

Order #	Quantity	Price	Brokerage
20	30,000	90.0000	A
11	10,000	90.0000	B
24	40,000	90.0000	C
16	20,000	90.0000	D

Case 2

If the auctioneer specifies 240,000 pieces as the order quantity:

- the Minimum Price Level associated with that quantity will be 70.0000,
- the related Highest Quantity that can be matched is: 300,000

Since the Highest Quantity that can be matched related to the Minimum Price Level is greater than the quantity specified by the Auctioneer, some of the Counteroffers tendered for the AUCTION at the Minimum Price Level related to that quantity will not be traded, and the transactions will be concluded as follows:

Counteroffers tendered for the AUCTION at a Price better than the Minimum Price Level will be traded by matching those with the highest price (90.0000) first, in accordance with the Price and quantity specified in the Counteroffer tendered. The Counteroffer quantities corresponding to the remaining order quantities that can be traded at the Minimum Price Level (40,000¹) will be matched using the allocation procedure specified in advance. The following transactions are concluded:

Order #	Quantity	Price	Brokerage
20	30,000	90.0000	A
11	10,000	90.0000	B
24	40,000	90.0000	C
16	20,000	90.0000	D
21	30,000	80.0000	A
15	10,000	80.0000	B
25	40,000	80.0000	C
17	20,000	80.0000	D
22	10,000	70.0000	A
13	10,000	70.0000	B
26	10,000	70.0000	C

¹ 240 000 – 200 000



18	10,000	70.0000	D
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Example 2. of the Multiple-Price Trade-Matching Algorithm

The example below illustrates a case where the auctioneer specifies 50% as the maximum market share of non-competitive orders:

The Auctioneer has specified (among other things) the following parameters in its order:

- Minimum Order Quantity: **80,000 pcs**
- Maximum market share: **none**
- Allocation: **Card Dealing**

I. After the order-collection periods of the Multiple-Price Trade-Matching Algorithm, the Order Book contains the following orders:

Order #	Quantity	Price	Brokerage	Order #	Quantity	Price	Brokerage
20	30,000	90.0000	A	17	20,000	80.0000	D
11	10,000	90.0000	B	22	30,000	70.0000	A
24	40,000	90.0000	C	13	10,000	70.0000	B
16	20,000	90.0000	D	26	40,000	70.0000	C
37	10,000	non-competitive	A	18	20,000	70.0000	D
36	10,000	non-competitive	C	23	30,000	60.0000	A
21	30,000	80.0000	A	14	10,000	60.0000	B
15	10,000	80.0000	B	27	40,000	60.0000	C
25	40,000	80.0000	C	19	20,000	60.0000	D

II. Based on the AUCTION Counteroffers ranked by the sequence of execution, the MMTS1 Trading System determines the Average Price and the Minimum Price Level at which transactions can be concluded for the smallest quantity, for the total quantity, and for the quantities in between by using increments corresponding to the Tick Size (20,000 pieces) specified by auctioneer.

Quantity	Minimum Price Level	Average Price	Competitive Quantity	%	Non-competitive Quantity	%
80,000	90.0000	90.0000	80,000	100%	0	0%
100,000	90.0000	90.0000	100,000	100%	0	0%
120,000	90.0000	90.0000	100,000	83%	20,000	17%
140,000	80.0000	88.3333	120,000	86%	20,000	14%
160,000	80.0000	87.1429	140,000	88%	20,000	13%
180,000	80.0000	86.2500	160,000	89%	20,000	11%
200,000	80.0000	85.5556	180,000	90%	20,000	10%
220,000	80.0000	85.0000	200,000	91%	20,000	9%



		0				
240,000	70.0000	83.636 4	220,000	92%	20,000	8%

If the auctioneer specifies 190,000 pieces as the order quantity:

- the Minimum Price Level associated with that quantity will be 80.0000,
- the related Highest Quantity that can be matched is: 220,000

Since the Highest Quantity that can be matched related to the Minimum Price Level is greater than the quantity specified by the Auctioneer, some of the Counteroffers tendered for the AUCTION at the Minimum Price Level related to that quantity will not be traded, and the transactions will be concluded as follows:

Counteroffers tendered for the AUCTION at a price better than the Minimum Price Level will be traded by matching those with the highest price (90.0000) first, in accordance with the price and quantity specified in the Auction Counteroffer tendered. The Counteroffer quantities corresponding to the remaining order quantities that can be traded at the Minimum Price Level (70,000²) will be matched using the allocation procedure (card dealing) specified in advance. Non-competitively priced counteroffers will be traded at the Average Price (85.8824³). The following trades are created:

Order #	Quantity	Price	Brokerage
20	30,000	90.0000	A
11	10,000	90.0000	B
24	40,000	90.0000	C
16	20,000	90.0000	D
37	10,000	85.8824	A
36	10,000	85.8824	C
21	20,000	80.0000	A
15	10,000	80.0000	B
25	20,000	80.0000	C
17	20,000	80.0000	D

² 190 000 – 120 000

³ $(100 \cdot 90.0000 + 70 \cdot 80.0000) / 170 = 85.8824$



Example 3. of the Multiple-Price Trade-Matching Algorithm

The example below illustrates a case where the Auctioneer specifies 10% as the market share of non-competitive orders:

The Auctioneer has specified (among other things) the following parameters in its order:

- Minimum Order Quantity: **90,000 pcs**
- Maximum market share: **none**
- Allocation: **Pro Rata**

I. After the order-collection periods of the Multiple-Price Trade-Matching Algorithm, the Order Book contains the following orders⁴:

Order #	Quantity	Price	Brokerage	Order #	Quantity	Price	Brokerage
37	10 000	non-competitive	A	25	40 000	70,0000	C
31	4 000	non-competitive	B	17	20 000	70,0000	D
36	10 000	non-competitive	C	22	30 000	80,0000	A
30	8 000	non-competitive	C	13	10 000	80,0000	B
20	30 000	60,0000	B	26	40 000	80,0000	C
11	10 000	60,0000	B	18	20 000	80,0000	D
24	40 000	60,0000	C	23	30 000	90,0000	A
16	20 000	60,0000	D	14	10 000	90,0000	B
21	30 000	70,0000	A	27	40 000	90,0000	C
15	10 000	70,0000	B	19	20 000	90,0000	D

II. Based on the AUCTION Counteroffers ranked by the sequence of execution, the MMTS1 Trading System determines the Maximum Price Level at which transactions can be concluded for the smallest quantity, for the total quantity, and for the eligible quantities in between by using increments corresponding to the Tick Size (10,000 pieces) specified by the Auctioneer.

Quantity For Sale	Minimum Price Level	Average Price	Competitive Quantity	%	Non-competitive Quantity	%
...						
90 000	60.0000	60,0000	81 000	90%	8 999	10%
100 000	60.0000	60,0000	90 000	90%	10 000	10%
110 000	60.0000	60,0000	99 000	90%	10 999	10%
120 000	70.0000	60,7407	108 000	90%	12 000	10%
130 000	70.0000	61,4530	117 000	90%	12 999	10%
140 000	70.0000	62,0635	126 000	90%	14 000	10%
150 000	70.0000	62,5926	135 000	90%	14 999	10%
160 000	70.0000	63,0556	144 000	90%	16 000	10%
170 000	70.0000	63,4641	153 000	90%	16 999	10%
180 000	70.0000	63,8272	162 000	90%	18 000	10%
190 000	70.0000	64,1520	171 000	90%	18 999	10%
200 000	70.0000	64,4444	180 000	90%	20 000	10%

⁴ The sequence of orders in this case does not correspond to the sequence of execution, since due to the 10% ratio not all competitively priced orders can be considered at the best price level or even the second best.



210 000	70.0000	64,7090	189 000	90%	20 999	10%
220 000	70.0000	64,9495	198 000	90%	22 000	10%
230 000	80.0000	65,5072	207 000	90%	22 999	10%
240 000	80.0000	66,1111	216 000	90%	24 000	10%
250 000	80.0000	66,6667	225 000	90%	24 999	10%
...						

Case 1

If the Auctioneer specifies 100,000 pieces as the order quantity at the order entry, then:

- The Maximum Price Level associated with that quantity is: 60.0000
- the related Highest Quantity that can be matched is: 111,111⁵

Since the Highest Quantity that can be matched related to the Maximum Price Level is greater than the quantity which can be matched as specified by the auctioneer, that is, not all of the AUCTION Counteroffers at the Maximum Price Level associated with the given quantity can be matched to form a transaction, the transactions will be concluded as follows:

The Maximum Price Level is identical to the best price level and there is a non-competitive Counteroffer for the AUCTION at the Maximum Price Level, therefore, the remaining quantity shall be allocated in the following manner:

- Non-competitive quantity (10%): 10,000
- Competitive quantity: 90,000

The quantities thus becoming available for allocation shall be allocated to competitively and non-competitively priced Counteroffers separately, in accordance with the specified allocation procedure (pro rata).

The following trades are created:

Order #	Quantity	Price	Brokerage
37	3,125	60.0000	A
31	1,250	60.0000	B
36	3,125	60.0000	C
30	2,500	60.0000	C
20	27,000	60.0000	B
11	9,000	60.0000	B
24	36,000	60.0000	C
16	18,000	60.0000	D

⁵ Competitive: 100,000; non-competitive: 11,109



Case 2

If the Auctioneer specifies 150,000 pieces as the order quantity at order entry:

- The Maximum Price Level associated with that quantity is: 70.0000
- The related Highest Quantity that can be matched is: 222,220⁶

Since the Highest Quantity that can be matched related to the Maximum Price Level is greater than the quantity that can be matched specified by the auctioneer, that is, not all of the AUCTION Counteroffers at the Maximum Price Level associated with the given quantity can be matched to form a transaction, the transactions will be concluded as follows:

The allocated quantity shall be distributed as follows:

- Non-competitive quantity (10%): 15,000
- Total competitive quantity: 135,000
- The remaining competitive quantity at the Maximum Price Level: 35,000

The quantities thus becoming available for allocation shall be allocated to non-competitively priced and Maximum Price Level Counteroffers separately, in accordance with the specified allocation procedure (pro rata).

Order #	Quantity	Price	Brokerage
37	4,687	62.5926	A
31	1,875	62.5926	B
36	4,687	62.5926	C
30	3,750	62.5926	C
20	30,000	60.0000	B
11	10,000	60.0000	B
24	40,000	60.0000	C
16	20,000	60.0000	D
21	10,500	70.0000	A
15	3,500	70.0000	B
25	14,000	70.0000	C
17	7,000	70.0000	D

⁶ Competitive: 200,000; non-competitive: 22,220



AUCTION ORDER FORM

Name of Auctioneer:	
Name of Security: (ISIN code)	
Exchange Day:	

I. Conditions for Participation*

a) All persons with access to the Auction Trading System	yes	
b) If not:	1.	
	2.	
	3.	
	4.	
	5.	

II. Quantity Terms

a) AUCTION Order quantity	Value:		Pcs:	
b) Minimum total quantity of AUCTION Counteroffers*	Value:		Pcs:	
c) Maximum quantity of a single AUCTION Counteroffer*	Value:		Pcs:	
d) Minimum quantity of a single AUCTION Counteroffer*	Pcs:			

* optional / unlimited by default

Price Terms / Order Book Terms

Tick Size*				
Order Book	Public		Non-Public	
Price determination**	Maximum		Minimum	
If no Price determination is applied, the party entering the order accepts the Counteroffers for the quantities specified in advance in Section II above, regardless of the Price that develops.	Yes		No	

* Optional / defaults to the value used in the cash market** Optional / unlimited by default



Trade-Matching Algorithm Terms

Trade-Matching Algorithm	Multiple-Price		Equilibrium-Price	
Direction of the order	Buy		Sell	

For Multiple-Price Trade-Matching Algorithm:

Maximum market share*			%	
Method of allocation	Pro rata		Card dealing	
Order-collection periods	Competitively priced		Non-Competitively priced	
Trading hours	Competitively priced order-collection	Starts Ends	Non-Competitively priced order-collection	Starts Ends
	Transaction period		Starts Ends	
Ratio of non-competitive Counteroffers to total Counteroffers / at total market level				
Ratio of non-competitive Counteroffers to competitive Counteroffers / per person with access to the Auction Trading System*			%	

For the Equilibrium-Price-Based Trade-Matching Algorithm:

Trading hours	Order-collection	Starts Ends	Transaction period	Starts Ends
Lot Size*				

* Optional / 1 piece by default

Other Terms:

Settlement Date*	T+
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* optional / defaults to the day corresponding to the settlement cycle of the particular Section