

1. Trading Categories, Boards & Methods

1.1 Trading Categories

OASIS system defines market as a number of securities that have been classified in the same group, according to some specific criteria. In each Market:

- There are specific periods of trading
- Specific categories of securities can participate
- Specific methods and trading boards are applied
- Each security is traded in only one market

In ASE Securities Market currently designated the following Trading categories :

Trading Categories	Market ID
Main Market	M
Low Dispersion	B
Surveillance	C
Under Deletion	Z
ETF	T
Alternative Market	F
Bonds	O
Forced Sales	E
Warrants	W

1.2 Trading Boards

In OASIS system and according to the applied methods, are created, with transmission of the corresponding orders and for each trading day, the following **Trading Boards**:

- **Main Board**: In this board can be defined: Method 1 (Continuous Automatic Matching Method-CAMM), Method 2 (Call Auction Method-CAM), Method 3 (At The Close-ATC).
- **Pre-Agreed Trading Board**: In this Board can be defined, methods 6-1, 6-2, 6-3.
- **Special Terms Board**: In this Board can be defined: Method 4 (Hit & Take method).

The last trading board is **currently used only for the bonds market**.

1.3 Trading Methods

The following **Trading Methods** emerge according to the ATHEX Rulebook and the decisions of ATHEX BoD. These methods are supported by OASIS for the securities' trading.

- **Method 1:** Continuous Automatic Matching Method-CAMM. It takes place into the system because of the matching of opposite orders, which follow the Price/Time Priority criterion. This method is described in details in paragraph 3.2.2.1.
- **Method 2:** Call Auction Method-CAM, which is further described in paragraph 3.2.2.2.
- **Method 3:** At the Close method, described in paragraph 3.2.2.3.
- **Method 4:** Hit & Take method, which is described in paragraph 1.1.2.4
- **Method 5:** Forced Sales method, which is described in 1.1.2.5.
- **Method 6:** Pre-Agreed Price Trading method. A pre-agreed price trading is a bilateral trade, with previous agreement of the counterparties. It is described in paragraph 3.2.2.7.

1.3.1 Method 1, Continuous Automatic Matching Method(CAMM)

The Continuous Automatic Method –CAMM- is the main and most well-known trading method on the ATHEX.

According to this method, the members may forward and execute orders non stop in the trading system.

Every newly entered order acquires a time stamp corresponding to the time it was entered in the main OASIS system.

A central book of active orders is maintained continuously in the trading system. There are presented, separately, all unexecuted bid orders and all unexecuted offer orders, as well as the classification in two different groups, purchase and sale, according to price/time priority.

The trades are executed automatically and continuously in the trading system since the matching criteria are satisfied.

The matching criterion for this method is:

- For ask orders: to have lower price or equal to the highest active ask order price.
- For bid orders: to have higher price or equal to the lowest active bid order price.
- The market type of orders satisfies the matching criteria if at the time they are entered, there are opposite orders in the order book.
- No matching and, therefore, no trading can be done with an existing order of a lower ranking, if the higher ranking orders have not been executed first.

For every new entered order, the system examines automatically the following:

- In the case of non-coverage of the matching criteria, the order is registered in the order book at the corresponding ranking, in accordance with ranking criteria. If there is no opposite existing order to be matched, market orders are cancelled.
- In the case of covering the matching criterion by an opposite existing order, trading is realized and is recorded on the system. The trade price is always determined by the price of the existing order. The existing order is removed from the order book simultaneously with the execution of the trade.
- In case that the matching criterion of the new entered order is satisfied by existing orders whose number of shares is not sufficient to fully cover the number of shares of the new entered order, then the unexecuted number of the latter is recorded in the order book at a ranking corresponding to it, in accordance with the ranking criteria. The trading that resulted from the partial matching of the new entered

order with existing orders is recorded in the system. The existing orders that satisfied the matching criterion simultaneously with the trading are removed from the order book. The unexecuted number of the market order that were partially covered is recorded in the order book as a limit order with a price equal to the price of the last trade that was made by the original market order.

- In the case that the matching criteria of the new entered order are satisfied by more than one existing orders, the existing orders are satisfied according to ranking. In the case that the last existing order that satisfies the matching criterion is not fully executed (a large number of shares exists), it takes place in the order book with a volume (number of shares), reduced by the quantity matched with the new entered order.

1.3.2 Method 2, Call Auction Method (CAM)

Call Auction Method includes two stages:

- **Stage 1: Orders' Collection during time**-period (Pre-Call) with pre-determined start and random end which is determined by the rule of Random Time Period-RTP
- **Stage 2: Performance of Auction.** The auction price is calculated during the pre-determined time period (RTP) in accordance with opening **Price Calculation Algorithm**, as well as the phase of matching of orders.

1.3.2.1 Stage 1: Orders' Collection

During the phase of orders' collection, Members may enter orders in the trading system. Every new entry order is recorded in the system in the form of an order record.

The types of orders permitted during this phase are the following:

- **Order Price:** Limit-LMT, Market-MKT, At the Open-ATO, At the Close-ATC
- **Volume of Order:** Multiple of trading unit
- **Order Condition:** STOP, None
- **Order Duration:** Daily (DAY), Good till Cancel (GTC), Good till Date (GTD)

During this phase, a central book of active orders is formed in the trading system, in which all orders entered by the Members are recorded. The life orders from previous trading sessions that remain inactive and are within the permitted daily Ceiling – Floor fluctuation are included in this book. All orders are ranked according to Time/Price priority. During the orders' collection phase the functionality of Projected Auction Price-PAP is provided which allows the participants of market to have an estimated price of the security.

PAP functionality may start either in the beginning of the pre-call phase or in any other specific time-period during the pre-call phase. Respectively, it may finish by the end of pre-call phase or in a specific moment, before the end of the phase. In any of the above cases, PAP functionality can start or end automatically.

During the activation of PAP functionality, the participants of the market may see which the auction price of the security would be, if the calculation of auction price took place in that specific moment. Once a new order is entered for this security in the order book, PAP price is calculated again.

1.3.2.2 Stage 2: Auction

After the end of pre-call phase, system goes automatically to auction stage, which means the calculation of auction price and matching of orders at this specific auction price.

Auction is performed instantly, in a Random Time Period (RTP).

All orders ranked in the order book participate in the procedure of the calculation of auction price, apart from STOP, ATC and unexecuted orders.

After the calculation of auction price, starts the matching of existing orders, according to the following criteria:

- The existing bid orders which have higher price or equal to the opening price, are matched according to the price/time priority.
- The existing offer orders which have price lower or equal to the opening price are matched, according to the price/time priority.
- Unexecuted market order is cancelled automatically and does not move to the next phase of trading. The unexecuted number of shares of market order, which was partially executed, is entered in the order book of the next phase, as a limit order with price equal to the open price and with time stamp equals to the opening time.
- Unexecuted order or partially unexecuted ATO orders are cancelled by the system.

1.3.3 Method 3, At The Close Price Trading (ATC)

During this method trades are executed exclusively at the close price (ATC). The trades which resulted from orders with limit price that have been entered to OASIS during CMM or CAM, which precede the ATC phase and also those orders with ATC price, are executed during the ATC trading period exclusively.

1.3.4 Method 4, Hit & Take

The Special Terms Board and the procedure of orders' matching performed with Hit & Take method, are modified by the classification of bid or ask orders, despite their order condition and according to the following:

- Concerning Price, for bid orders the ranking is declining, while for ask orders the ranking is ascending.
- Entry time concerning orders with the same price.

Orders entered into Special Terms Board are exclusively orders in condition:

- **All or None (AON):** AON condition determines that the order remains in the Special Terms Board until it is fully executed by an opposite order. AON order can not be executed partially but only totally, from one and only opposite order.
- **Minimum Fill (MF):** MF condition defines that the order remains in the Special Terms Board and is executed only under the condition that a minimum number of units will be executed.
- **Multiples Of (MO):** MO condition determines that the order remains in the Special Terms Board and it is not executed unless multiples of certain number of units are executed.

Furthermore, the duration of an order can be only daily (DAY). In Special Terms Board the member has the ability to choose any order existing in order book of this board and not necessarily the best order each time has to be satisfied. Particularly, if a trader notes that in the Special Terms Board, there is an order which satisfies his criteria, then he can choose it "manually" and realize the trade (Hit & Take).

According to the present Rulebook, Forced Sales Concerning Embodied Registered Shares are realized by Hit & Take method. Orders, for the execution of Forced Sales, are placed in Special Terms Board, which is available for five minutes after the starting of the collection of orders stage, until the end of the session, for every bid trading. The Forced Sale is accomplished as follows:

Members enter only day bid orders with "DAY" duration only by "minimum fill condition MF" in which the volume is defined by one unit. During the last ten minutes of forced sale, the ATHEX member which has been determined as the qualified person for the forced sale, chooses the available bid orders, according to the instructions of the issuer, starting from the best one (price/time priority) and goes on until the volume of the forced sale is satisfied.

This specific trading method is not applied for securities and their rights traded in the alternative market.

1.3.5 Method 5-1, Forced Sales

Forced sales method is applied in forced sales market and the trading of securities is performed by CAMM method. The trades that are executed during forced sales period, do not effect the information shown in OASIS, concerning limit up, limit down and indices value.

1.3.6 Method 6, Pre Agreed trades (Block-Trades)

Pre-Agreed Price trading method concerns the execution of trades that have been pre-agreed among ATHEX members or even by a single member, but among different clients. They are divided into:

1. Method 6-1. Simple block trade
2. Method 6-2. Settlement block trade (spot1 & spot2)
3. Method 6-3. Restitution block trade

For the simple block trade of method 6-1 the minimum trading value depends on the Average Daily Trading Value (ADTV):

- a) For shares with ADTV lower than 25,000,000 €, the minimum value of pre-agreed trade cannot be lower than 250,000 €.
- b) For shares with ADTV equal to or higher than 25,000,000 € and lower than 50,000,000 €, the minimum value cannot be lower than 400,000 €.
- c) For shares with ADTV equal to or higher than 50,000,000 €, the minimum value of pre-agreed trade cannot be lower than 500,000 €.

ADT >=	ADT TILL	MINIMUM VALUE
0€	25.000.000€	250.000€
25.000.000€	50.000.000€	400.000€
50.000.000€	9.999.999.999€	500.000€

The simple block trades of fixed income securities are implemented freely, without any restriction or price limit.

Regarding the settlement pre-agreed trades (spot 1 & spot 2) and restoration pre-agreed trades, there is no minimum trading value, the price limits are infinite and no valid price tick is applied.

According to the present Rulebook, the divergence limits may be freely formulated by the parties. The simple block trade must follow the following procedure:

1. The sell order for the implementation of the pre-agreed trade (packet) must be entered first in the system and must contain not only its own data, but also the ID of the counterparty member, which is informed by a system's message to accept the order.
2. The acceptance of sell order from the other counterparty member, must take place within five minutes, from the time the sell order was input, or else this order will be canceled automatically. The exchange is completed with the order's acceptance.

Finally, the pre-agreed trade can be cancelled with the consent of both counterparties, within five minutes from the initial compilation of the trade. In case that the counterparty is a third member, the cancellation application is done by the seller. The whole procedure must be completed within five minutes from the time of the acceptance.