Guidelines for ATHEX Members as a result of MiFID II

Version 3.3







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1 Introduction

The scope of this document is to provide a technical and practical guide to the ATHEX Trading Members with regard to the functionality they use, as a result of the changes in the OASIS Trading System and related ATHEX services, in accordance with MiFID II and MiFIR which will be in force as of 03/01/2018.

The content that refers to services or actions that require prior authorization or approval from the HCMC should be read as subject to said authorization or approval.

In order to comply with MiFID II/MiFIR, ATHEX requires from its Market Participants to provide certain additional information in the order entry messages, as well as to complement them with enhanced information through a new functionality available in the Members Portal, with the objective to minimize the impact on the trading activity and avoid reduction of the latency of its trading system.

Specifically, this document will focus on the following topics:

- The new OASIS Fields: Description and explanation of how they should be filled
- Procedures regarding the Declaration of the Type of Activity (ALGOs, DEA & HFT)
- RDS Service: Description and access to Members and Data Vendors
- ATHEX Members Portal: ORK Service
- Execution Report: Reconciliation File

Furthermore, additional issues regarding the migration plan, the availability of the new OASIS system, the Athens Exchange Services will be described.



2 New OASIS Fields

The new OASIS fields that have been introduced to assist the ATHEX MiFID II/MiFIR compliance are the following:

- Direct Electronic Access
- Client Identification code
- Investment Decision Within Firm ID
- Execution Within Firm ID
- Non Executing Broker ID
- Trading Capacity
- Liquidity Provision

2.1 Direct Electronic Access

Pursuant to Article 4(1)(41) of MiFID II, "Direct Electronic Access (DEA) means an arrangement where a member or participant or client of a trading venue permits a person to use its trading code so that the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (direct market access) and arrangements where such an infrastructure is not used by a person (sponsored access)".

According to the definition in Art. 4(41) of MiFID II, Art.20 of CDR 2017/565, which further detailed in ESMA's Q&A regarding market structure topics:

Persons shall be considered not capable of electronically transmitting orders relating to a financial instrument directly to a trading venue in accordance with Article 4(1) (41) of MiFID II where that person cannot exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the order within that timeframe.

ESMA in its technical advice, identified the ability to exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the orders within that timeframe, as the critical element to qualify an activity as DEA. ESMA clarified in its Q&A in April 2017, that if the user has discretion over the exact fraction of a second an order is sent to the market, it still constitutes DEA, even if subsequent control filters delay the order reaching the matching engine. Therefore, where the submitter of the order does not have control over those parameters, the arrangement would be out of scope of DEA. This also holds for systems that allow clients to transmit orders to an investment firm in an electronic format (online brokerage).

Regarding infrastructures for DEA:

- for DMA the infrastructure that is used to transfer the order is the one that is owned and controlled by the provider, while
- for Sponsored Access it is the infrastructure that is owned and controlled by another third party (other than the infrastructure provider).

The DEA provider has to keep control over the parameters of the pre-trade checks in all circumstances. The **client is considered to lose control over an order** and therefore is **not considered as DEA** if either:



a) the order can be delayed by a non-predictable latency, or

b) there are changes in the order introduced by the DEA provider - for example through an Algo or from human interaction.

The available options for the DEA field are:

- 0 for False (no provision of DEA services)
- 1 for True (provision of DEA services)

Therefore, all the orders in OASIS which are transmitted electronically and directly by the clients of the Members without any non-predictable delay, care or additional editing by the Members, should be considered as DEA.

The ATHEX Trading Members that provide DEA services to their clients, **are obliged** to fulfill a set of requirement according to MiFiD II/MiFIR.

The Market Participant which provides DEA Services to its clients ought to certify not only its algorithm but also its DEA client's algorithm also, following the procedure that is described in section 3.

In case of a DEA order, the following fields have to be filled as following:

Investment Decision Within Firm ID: null
 Execution Within Firm ID: 3 (NORE)

• Trading Capacity: AOTC or MTCH (not DEAL)

(Guidelines Transaction reporting, order record keeping and clock synchronization under MiFID II, 10 October 2016, ESMA/2016/1452, p. 21).

ORAMA orders are not considered as DEA (including clients order via telephone, file import or any other option), **except** where **sponsored access** is provided.

Orders submitted via the ATHEX GW that are not transmitted directly to OASIS and for which the Member delays them in order to check them, are not considered as DEA. Those checks **are the additional** to those that the Member has to perform due to MiFID obligations.

2.2 Client Identification code

The **Client Identification code** is a field which is mapped to satisfy ATHEX ORK needs in accordance with Regulation (EU) 2017/580 (RTS 24).

This field refers to the direct client of the order, it has been introduced to satisfy particular MiFID II/MiFIR requirements and is different from the already existing account field which is mainly used for the smooth post trading process of the trade and relates to the Dematerialized Securities System (DSS).¹ The order entry format of this new field in OASIS has been described in accordance with the "industry standard" agreed to be adopted between users and trading venues.

The available options are:

• In case of legal entity, the short code of the "Legal Entity Identifier" shall be used (Qualifier: L)

¹ Please note that although in a large number of cases (e.g. retail clients) the use of the 2 fields may coincide, that may not be the case for international institutional clients.



- In case of a natural person, the short code of its National_ID (DSS investor code for Greeks/ CONCAT) (Qualifier: N)
- 1 or AGGR if the client belongs to a known group of investors prior to the order entry (Qualifier: null)
- 2 or PNAL if the client belongs to an unknown group of investors prior to the order entry: for example, omnibus account (Qualifier: null)
- 0 or null when the client is unknown, or the Trading Capacity is DEAL as ESMA dictates (Qualifier: null)

In case of a natural person with regard to needs of the ATHEX ORK, the "long code" that is described in ANNEX II of Regulation (EU) 2017/590 (RTS 22), will be used.

As an example:

- In the case of Greek persons, the DSS investor code or, when not available, the CONCAT will be used.
- In the case of Cypriot persons, the national Passport Number or, when not available, the "CONCAT" will be used.
- In the case of other nationalities, the scheme described in ANNEX II of the Regulation (EU) 2017/590 (RTS 22 Annex) should be used.

2.3 Investment Decision Within Firm ID

The Investment Decision Within Firm ID is a field which is mapped to satisfy ATHEX ORK needs in accordance with Regulation (EU) 2017/580 (RTS 24).

This field refers to the person, or algo, that is primarily responsible for the investment decision. The order entry format of this new field in OASIS has been described in accordance with the "industry standard" agreed to be adopted between users and trading venues.

The available options are:

- The short code of National_ID of trader that took the investment decision (DSS investor code for Greeks/ CONCAT) (Qualifier: N)
- The short code of Algorithm, if the investment decision is taken by an algo (Qualifier: A)
- 0 or null when the investment decision is taken directly by the client via DEA or not (Qualifier: null)

2.4 Execution Within Firm ID

Execution Within Firm ID is a field which is mapped to satisfy ATHEX ORK needs in accordance with Regulation (EU) 2017/580 (RTS 24).

This field refers to the person, or algo, within the firm that is responsible for the execution. The order entry format of this new field in OASIS has been described in accordance with the "industry standard" agreed to be adopted between users and trading venues.

The available options are:

- In case of DEA order, the field is sent with 3 (NORE) (Qualifier: null)
- In case of a **not DEA** order, the field is sent with:
 - 3 (NORE) when the client provides all the details of the order and is responsible for the execution



- short code of National_ID of the trader (DSS investor code for Greeks/ CONCAT)
 (Qualifier: N) when the client doesn't provide the full details of the order
- o short code of Algo (Qualifier: A)

2.5 Non Executing Broker ID

Non Executing Broker ID is a field which is mapped to satisfy ATHEX ORK needs in accordance with Regulation (EU) 2017/580 (RTS 24). It indicates the ATHEX Trading Member that submits its orders via another ATHEX Trading Member.

The field is sent with short code of LEI of the Non Executing Broker.

2.6 Trading Capacity

The field is filled with:

- 0 for DEAL (for own account, Market Makers or for client's order with market risk)
- 1 for MTCH (for own account without market risk)
- 2 for AOTC (for client's order without market risk)

Information regarding possible values over the **Trading Capacity** field is summarised in the following two Tables:

	Trading Capacity		
	AOTC	МТСН	DEAL
Client ID	mandatory	mandatory	null
Investment Decision within Firm			mandatory
ID			
Execution Within Firm ID	mandatory	mandatory	mandatory

	Direct Electronic Access=True		
Trading Capacity	Client Id	Investment Decision Id	Execution Within Firm Id
AOTC	Non zero	Blank	NORE (3)

Please note that in case of Trading Capacity = DEAL, then the DEA = FALSE

2.7 Liquidity Provision

The **Liquidity Provision** field indicates if the order was submitted by a Market Participant under a liquidity provision agreement signed with ATHEX or the issuer.

The available options are:

- 0 for False
- 1 for True

The Market Makers orders, Liquidity Provision = 1.

3 Procedure of Type of Activity Declaration (ALGOs, DEA & HFT)

3.1 Declaration of ALGOs, DEA & HFT

The **Compliance Officer** (stated on the Members Profile Form) of the ATHEX Trading Members that provide services of ALGOs, DEA, or HFT, should declare it via the ATHEX Service Desk selecting the option **Trading Relating Issues** Type of Activity Declaration which will be available from **Monday 04/12/2017.**

Moreover, the **Compliance Officer,** should provide to ATHEX additional information regarding their Algorithms in order to verify their functionality, following the instructions on the below paragraph.

3.2 Algorithm Trading activity for Investment Firms

MiFID II requires investment firms engaging in algorithmic trading to perform **annual self-assessment and validation process to ensure compliance with rules on algorithmic trading**. According Regulation (EU) 2017/589 (RTS 6), investment firms have to conduct annual reviews to ensure that their algorithmic trading systems and strategies, governance and controls framework, business continuity arrangements and all other necessary arrangements are compliant with the rules and suitable for conducting algorithmic trading.

ATHEX requirements of its users' undertaking algorithmic techniques according to of MiFID II Art.48 (6) are those of Annex 1 of Regulation (EU) 2017/589 (RTS 6) followed by acknowledgment to ATHEX for performing "algorithmic trading", should provide the below information:

- Name of Algorithm
- Algo ID
- Name of responsible within Member
- Testing means used for the algorithm
- Testing period for the algorithm
- Instrument(s) for which the algorithm is created
- Results of Algorithm Testing
- Algorithm Starting date in Production System

The Compliance Officer via the ATHEX Service Desk selecting the option Trading Relating Issues Algorithms Declaration should provide the above information, until 15/12/2017. The option will be available from Monday 04/12/2017.

3.2.1 Order entry under Algo trading

Investment firms which execute transactions in financial instruments should flag orders/quotes entering the specific Algo Short code into the fields:

- Investment Decision within Firm ID (Qualifier: A)
- Execution Within Firm ID (Qualifier: A)

Notes:

1. Short codes will be translated to Long codes (Short/Long Mapping process) through ATHEX Members Portal in accordance with the specifications of ATHEX Order Record Keeping Service (section 5).



- 2. **Acknowledgment of the algorithm ID** should have been confirmed by the Market Participants to ATHEX before its actual use in the production trading system.
- 3. In case a **DEA client uses an Algo technique**, the DEA provider should be in a position to identify at any moment, upon request, the use of algorithmic trading by its DEA clients.

3.2.2 Transaction Report for Algo Trading

According to Article 26, MiFIR supplemented by Articles 8 and 9, Regulation (EU) 2017/590 (RTS 22), Investment firms which execute transactions in financial instruments shall report complete and accurate details of such transactions to the competent authority as quickly as possible, ie they have to provide Transaction Reports, which are sent to regulators daily.

For each transaction, the Transaction Report will need to include:

- Algorithm identifier if an algorithm within the Investment Firm is responsible for the Investment Decision (field 57).
 - Recital 5 in Regulation (EU) 2017/589 (RTS 6) describes Investment Decision Algorithm as an algorithm which "makes automated decisions by determining which financial instrument should be purchased or sold".
- Algorithm identifier if an algorithm within the Investment Firm is responsible for the Execution (field 59).
 - Recital 5 of Regulation (EU) 2017/589 (RTS 6) clarifies that "Order Execution Algorithms optimise order-execution processes by automatic generation and submission of orders or quotes, to one or several trading venues once the investment decision has been taken".
- "ALGO" flag for each transaction executed as a result of algorithmic trading.
 In accordance to Article 20 of MiFIR supplemented by Annex I- Table 4 of Regulation (EU) 2017/587 (RTS 1), investment firms have to send Trade Reports which are real time feeds of trade data which contribute to price formation and transparency. This flag is provided for in the order entry.

3.3 High-frequency trading (HFT) activity for Investment Firms

According to Delegated Regulation, Algorithmic trading should refer to the automated optimization of order execution processes, in addition to the automatic generation of orders. This includes smart order routers (SORs) only in conjunction with the use of algorithms that determine parameters of the order beyond venue identification.

It does not include automated order routers (AORs) where they only determine the venue without changing any other parameter of the order.

Firms should review their trading activities at least on a monthly basis to self-assess whether an authorisation HFT requirement has been triggered over the course of the period in question.

Upon request, trading venues must provide their members, participants or clients with an **estimate** of the average number of messages per second two weeks after the end of each calendar month. For this purpose, trading venues should only include messages generated by algorithmic trading activity as identified by the member, participant or client. Firms engaged in high frequency trading are required to maintain their (specific format) order record keeping and make it available to competent authorities upon request.

As a result, the ATHEX requirements of its Market Participants undertaking high-frequency algorithmic trading technique according to Art.4 (1) (40) of MIFID II and Art.19 of CDR 2017/565 are the following:

 Acknowledgment to ATHEX for performing "HFT trading" via the ATHEX Service Desk selecting the option Trading Relating Issues → Type of Activity Declaration



 The same requirements as for Algorithmic trading mentioned above, since HFT is a subset of algorithmic trading

Upon request, ATHEX can provide an estimate of average number of messages per second, taking into account messages generated:

- (a) by algorithmic trading activity as identified by the member, participant or client
- (b) proprietary trading (own),

on liquid instruments excluding, in the case of DEA providers, messages sent by DEA clients using the firm's code.

The **estimates** should be provided from 3/1/2018 onwards and, in case records allow for such calculation, they could also be provided for 2017.

The Compliance Officer (stated on the Members Profile Form) that performs HFT, may request the above information from ATHEX, via the Service Desk selecting the option **Trading Relating Issues** Info Regarding HFT, which will be available from **Monday 04/12/2017**.

3.4 Direct Electronic Access (DEA) activity for Investment Firms

The ATHEX **requirements** of its Market participants providing **Direct Electronic Access (DEA)** services according to Art.4(1)(41) of MiFID II and Art.20 of CDR 2017/565 are the following:

- Firms intending to provide DEA are required to adhere to strict requirements and undertake additional **due diligence procedures** including among **other things**:
 - a. Notifying competent authorities of the DEA provider status
 - b. Assessing suitability of clients in terms of their systems and controls, capabilities, financial resources and trustworthiness
 - c. Ensuring a binding written agreement covers the provision of the DEA service
 - d. Preventing clients from exceeding trading thresholds and subjecting them to proper risk controls
 - e. Carrying out review of the client's risk control systems where necessary
- Acknowledgment to ATHEX for providing DEA services. In case of Sponsor Access, further specific user clients should be reported to ATHEX.
- Flag orders/quotes entered into ATHEX by DEA clients through field Direct Electronic Access.

According to ESMA's Q&A regarding market structure topics, a DEA user can also be identified as applying a HFT technique. In the case of DEA users sub-delegating the DEA provider's code message thresholds calculation should exclude messages sent by their own DEA clients.

Market participants should consider all above definitions such as the trading speed as well their own providing direct systems to clients before deciding whether they offer DEA to clients.



4 RDS Service

With the new version of OASIS 5.0 the following messages will be removed from ATHEX GW and will be replaced by the Reference Data Service (RDS) with enhanced information:

- SecurityInfo (CF)
- BondsInformation (CE)
- CombinationInfo (CG)

4.1 Description of RDS Service

As a result of MiFID II/MiFIR a vast number of new fields need to be communicated to Members and Data Vendors. Static date such as ISINs, CFIs, FISNs for securities and derivatives, information regarding the market and other data requirements will be made available through the RDS service which can be easily expanded depending on market and client needs for feeding their trading, middle office and back office systems as well as populating and updating any Reference databases they have in place.

ATHEX Trading Members using the ATHEX GW for order entry and Data Vendors, who have access to the IOCP Data Feed server, are able to receive the static data (Reference Data) of the Market, on the **UAT** via the new RDS service of ATHEX, since 16/10/2017. The Reference Data on **UAT** are available each day at **10:00 (Athens time)** in the following url: https://www.ATHEXgroup.gr/rds.

The Reference Data are available in .csv and .xml formats and can be downloaded by the ATHEX Members before the start of each trading session via https, like they do today with the transaction files.

Details for technical specifications and other information can be found to the MiFID II dedicated area on ATHEX website http://www.athexgroup.gr/web/guest/mifid-ii mifir.

4.2 Access to RDS Service

ATHEX Trading Members and Data Vendors will be able to receive the static data (Reference Data) of the Market, on url: https://www.athexgroup.gr/rds

Access, is granted to the following:

- Head or Responsible for Trading in Cash Market as indicated in the Members Profile Form that you have submitted at ATHEXGroup
- Head or Responsible for Trading in Derivatives Market as indicated in the Members Profile
 Form that you have submitted at ATHEXGroup
- Head or Responsible for IT issues as indicated in the Members Profile Form that you have submitted at ATHEXGroup
- IT Responsible of Data Vendors
- Responsible of Corporate actions of Data Vendors

5 ATHEX Members Portal (AMP) & Order Record Keeping (ORK)

5.1 General Info

The ATHEX Members Portal (AMP) is a central service point which provides ATHEX members and other clients with a variety of services. These services are related, but not limited to MIFID II-MIFIR regulatory obligations.

AMP consists of the following:

- 1. An Authentication-Authorization mechanism, which grants the reporting entities access to AMP and controls access to the different services that AMP offers, according to the corresponding service subscriptions.
- 2. An Information Exchange Interface, which enables the reporting entities to submit data and monitor the status of their submissions. The Information Exchange Interface supports both an interactive Web UI and a machine-purposed REST API.
- 3. A Validation Engine, where all submissions are checked with the appropriate validation rules, in order to ensure data validity. Reporting entities are given the means to spot, correct and resubmit invalid data.
- 4. A Forwarding Engine, which forwards valid, submitted data to a Foreign Application, which can be any application external to AMP. In the case of ORK@ATHEX, this application is the Internal Order Record Keeping (ORK) system of ATHEX
- 5. The Reporting Engine which handles the results from the Foreign Application, and makes them available to the reporting entities.

Users of AMP access all of the above functionality through a single Web UI and/or a set of REST calls. Use of the Web UI and REST is fully equivalent, so a submission can be made through the UI and its status be queried over REST, or vice versa.

5.2 Access to ORK@ATHEX

Registered **ORK@ATHEX** Clients are provided with user-password credentials in order to enter **Web Interface** to upload files or inspect previous submissions status.

The same credentials can be used for uploading and downloading data through REST API interface.

For UAT **ORK@ATHEX**:

Web interface → FORM Authentication over https

• https://t-amp.athexgroup.gr/apex

REST API → Basic Authentication over https:

- https://t-amp.athexgroup.gr/amp/ork/submit_data/ (method:Post)
- https://t-amp.athexgroup.gr/amp/ork/getMappings1_1/ (method:Get)
- https://t-amp.athexgroup.gr/amp/ork/getSubmissions1 1/ (method:Get)

The full functionality of UAT ORK@ATHEX will be available from 28/11/2017.

For Production **ORK@ATHEX**:

Web interface → FORM Authentication over https

https://amp.athexgroup.gr/apex



REST API → Basic Authentication over https:

- https://amp.athexgroup.gr/amp/ork/submit_data/ (method:Post)
- https://amp.athexgroup.gr/amp/ork/getMappings1 1/ (method:Get)
- https://amp.athexgroup.gr/amp/ork/getSubmissions1 1/ (method:Get)

Access to the ORK, is granted to the following:

- Head or Responsible for Trading in Cash Market as indicated in the Members Profile
 Form that you have submitted at ATHEXGroup
- Head or Responsible for Trading in Derivatives Market as indicated in the Members
 Profile Form that you have submitted at ATHEXGroup
- Head or Responsible for IT issues as indicated in the Members Profile Form that you have submitted at ATHEXGroup
- Head or Responsible Compliance Officer as indicated in the Members Profile Form that you have submitted at ATHEXGroup

5.3 Short/Long Mapping process

ATHEX will support a mapping mechanism of short codes to long codes for the following fields:

- Client Identification code
- Investment Decision within the firm ID
- Execution within the firm ID
- Non Executing Broker

Members will use Short Codes during the trading session and will be required to upload a Mapping Table, so that the Short Codes used in a trading session will be mapped to the respective Long Codes, as ESMA dictates. This procedure is called Short/Long Mapping process.

5.4 Description of Short/Long Mapping process

Members can maintain a set of Short/Long mappings by uploading triplets of the form (*codeType*, *shortCode*, *longCode*). New such triplets can be uploaded by means of both CSV and REST.

Each (codeType, shortCode, longCode) triplet is qualified with a validity interval (validFm, validTo), where validFm and validTo are dates. The meaning of a tuple (codeType, shortCode, longCode, validFm, validTo) is that (codeType, shortCode, longCode) is a valid mapping starting from validFm and concluding at validTo (inclusive).

In the case where *validTo* is left blank, the validity is indefinite.

Overlaps in validity intervals for the same (*codeType*, *shortCode*) pair **are not allowed** – at any given time, only one mapping may be in effect for a (*codeType*, *shortCode*) pair.

5.5 Processing Cycles

At regular times, ATHEX's internal Order Record Keeping system reads the mappings in effect for the current date and uses them to complete the Long Codes.

The first mapping will be done on **T+0 at 18:00** Athens time.

In this cycle (on T+0 at 18:00), the following actions take place:

• The effective Short/Long mappings, as they have been formed by new entries and updates, are processed by the internal ORK



- Mappings whose (codeType, shortCode) is found in the orders of the trading session are
 marked as used at date T+0, so that they cannot be updated anymore by the Member for
 dates prior to, and including, T.
- For all unmapped short codes that are found in the orders of the trading session for T, a Miss-type mapping is generated.

If no short/long mapping table is available on AMP till 18:00, a second mapping chance will exist on **T+1** at **23:00** Athens time.

In this cycle (till 23:00 on T+1), the following actions take place:

- Miss-type mappings that have been updated by the Member are processed in the internal ORK. After processing, Miss-type mappings are marked as used at date T+0, as if they had been uploaded at date T+0.
- Unmapped Short codes found in Cycle 1 and created as Miss-type mappings, if not yet updated by the Member, are "frozen" and cannot be updated anymore.

After that, no mapping will be done for the trades of the day T and ATHEX could proceed to fines for the Member that didn't provide a short/long mapping table till 23:00 on T+1.

Note that the clearing and settlement on T+2, will be normally realized and has nothing to do whether the trades of day T are mapped on not.

Details for technical specifications, sample files and other information can be found to the MiFID II dedicated area on ATHEX website http://www.athexgroup.gr/web/guest/mifid-ii mifir.

6 Execution Report-Reconciliation File

The specification of Transaction (Reconciliation) file is available at https://www.athexgroup.gr/web/guest/mifid-ii mifir.

Note that, the Transaction file is uploaded on a daily base:

- for UAT at https://www.ATHEXgroup.gr/el/members-files-shadow
- for Production at https://www.ATHEXgroup.gr/el/members-files

to the users that have the relevant access.

The Transaction file is a common ASCII file with variable length lines. Each line of the file corresponds to a member transaction Message Structure. Each message begins with 2 bytes of message type.

The following message types are logged:

Туре	Function
TB	Confirm of New Order
TC	Confirm of Order Cancellation
TD	Confirm of Order Change
TF	Confirm of Trade
TA	Quote Status Report



7 Additional Information

7.1 General Information for LEI Codes

According to MiFID II, all legal entities should have LEI Code prior to the transaction. No conclusion of transaction is allowed if the LEI code does not exist.

For the ORK@ATHEX purposes, the orders will be stored, as required by Regulation (EU) 2017/580 (RTS 24), with the LEI that the trading member will provide us at the short/long mapping table which is valid for the day of that trade.

7.2 List of all ATHEX MICs

The ATHEX MICs are the following:

- XATH for ATHEX regulated cash market.
- XADE for ATHEX regulated derivatives and repos market.
- ENAX for ATHEX MTF.

7.3 "Kill switch" functionality

A "kill switch" functionality is available for market maker quotes. Withdrawal or halting of algorithms will not be controlled at the level of Algorithm ID. Instead, controls are available at the level of Member ID and User ID.

7.4 Inquiry for client's DSS number

The process for finding the personal investor share code (ie the DSS number) is provided following the submission of an Investor Share Search Application (AIT007), to Athens Exchange Central Securities Depository (ATHEXCSD), either in person by the investor or by post-mail with the provision that the application carries a certification of the authenticity of his/her signature.

The service is provided with a fee (Decision 1 BoD ATHEXCSD / Article 36): € 0.05 per printed page (plus VAT) should be paid by the applicant, with a minimum charge of 5 € (plus VAT).

Note: The service is subject to VAT 24%. Legal entities registered in VAT Exchange Information System as EU Member States residents pay the AXIAlei fees without VAT. Also according to Law 3733/2009 (Article 14), foreign legal entities which carry out transactions outside the intra-Community transport of goods are exempt from VAT.

Fees should be deposited into the following ATHEXCSD's Bank Account:

IBAN: GR38 0140 1010 1010 0200 2063 823

Bank: ALPHA BANK BIC: CRBAGRAAXXX Reason: AIT007 - Name

An alternative solution could be the Clients to receive their DSS numbers directly from the ATHEX Trading members that they cooperate with.



7.5 Valid Tick sizes

As MiFID II dictates, the valid tick size in ATHEX shares and ETFs will be calculated using the Average Daily Number of Transactions (ADNT) and the relevant table of RTS 11, ANNEX.

The new tick sizes will be in force in Production environment from the OASIS v5.0 Go Live day.

The tick sizes and the relevant price tick ladder can be found in the xlsx titled "MiFID II Tick size band of ATHEX shares" in the following link: http://www.athexgroup.gr/el/web/guest/mifid-ii mifir

8 Migration Plan

Key dates for the Migration Plan of OASIS trading System and supporting the new MiFID II functionalities are the following:

MiFID II Migration	Date
Availability of full UAT ORK@ATHEX (participation of Internal ORK)	28/11/2017
Dress Rehearsal with MiFID II parameters:	10/12/2017
- tick size,	
- reconciliation file,	
- trade report,	
- Internal and External ORK Services,	
- RDS Service	
Go live with MiFID II parameters:	11/12/2017
- tick size,	
- reconciliation file,	
- trade report,	
- RDS Service	
Type of Activity Declaration and Algo IDs	15/12/2017
Availability of Production ORK@ATHEX	03/01/2018
MiFID II Obligations	03/01/2018

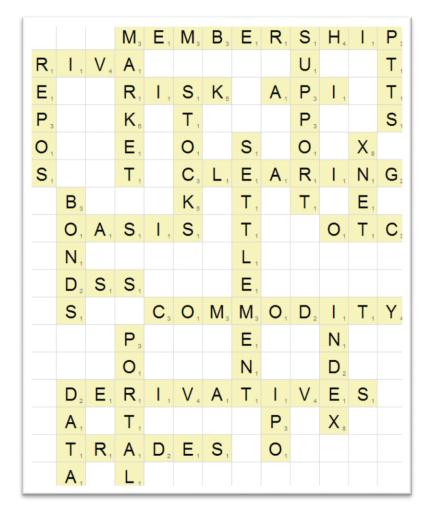
Please note that on 11/12/2017, all the life orders will be deleted from the OASIS trading System.

9 Contacts

For any inquiries in relation to the topics described in this document should be directed to the Members Support DPT:

Service Desk: https://servicedesk.athexgroup.gr/servicedesk/customer/portal/201/group/874

Email: members-support@ATHEXgroup.gr





10 ANNEX – Direct Electronic Access (DEA)

MiFID II, Article 4(1) (41)

Direct Electronic Access means an arrangement where a member or participant or client of a trading venue permits a person to use its trading code so that the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (direct market access) and arrangements where such an infrastructure is not used by a person (sponsored access).

MiFID II, Article 17(5)

An investment firm that provides **Direct Electronic Access** to a trading venue shall have in place effective systems and controls which ensure a proper assessment and review of the suitability of clients using the service, that clients using the service are prevented from exceeding appropriate pre-set trading and credit thresholds, that trading by clients using the service is properly monitored and that appropriate risk controls prevent trading that may create risks to the investment firm itself or that could create or contribute to a disorderly market or could be contrary to Regulation (EU) No 596/2014 or the rules of the trading venue. Direct electronic access without such controls is prohibited.

An investment firm that provides direct electronic access shall be responsible for ensuring that clients using that service comply with the requirements of this Directive and the rules of the trading venue. The investment firm shall monitor the transactions in order to identify infringements of those rules, disorderly trading conditions or conduct that may involve market abuse and that is to be reported to the competent authority. The investment firm shall ensure that there is a binding written agreement between the investment firm and the client regarding the essential rights and obligations arising from the provision of the service and that under the agreement the investment firm retains responsibility under this Directive.

An investment firm that provides direct electronic access to a trading venue shall notify the competent authorities of its home Member State and of the trading venue at which the investment firm provides direct electronic access accordingly.

The competent authority of the home Member State of the investment firm may require the investment firm to provide, on a regular or ad-hoc basis, a description of the systems and controls referred to in first subparagraph and evidence that those have been applied.

The competent authority of the home Member State of the investment firm shall, on the request of a competent authority of a trading venue in relation to which the investment firm provides direct electronic access, communicate without undue delay the information referred to in the fourth subparagraph that it receives from the investment firm.

The investment firm shall arrange for records to be kept in relation to the matters referred to in this paragraph and shall ensure that those records be sufficient to enable its competent authority to monitor compliance with the requirements of this Directive.



Commission Delegated Regulation (EU) 2017/565 of 25.4.2016 supplementing Directive 2014/65/EU as regards organizational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive

o Article 20

Direct electronic access (Article 4(1)(41) of Directive 2014/65/EU)

- 1. A person shall be considered not capable of electronically transmitting orders relating to a financial instrument directly to a trading venue in accordance with Article 4(1)(41) of Directive 2014/65/EU where that person cannot exercise discretion regarding the exact fraction of a second of order entry and the lifetime of the order within that timeframe.
- 2. A person shall be considered not capable of such direct electronic order transmission where it takes place through arrangements for optimization of order execution processes that determine the parameters of the order other than the venue or venues where the order should be submitted, unless these arrangements are embedded into the clients' systems and not into those of the member or participant of a regulated market or of an MTF or a client of an OTF.

o Recitals 20, 25 - 27

- (20) For reasons of clarity and legal certainty and to ensure a uniform application, it is appropriate to provide supplementary provisions in relation to the definitions in relation to algorithmic trading, high frequency algorithmic trading techniques and direct electronic access. In automated trading, various technical arrangements are deployed. It is essential to clarify how those arrangements are to be categorized in relation to the definitions of algorithmic trading and direct electronic access. The trading processes based on direct electronic access are not mutually exclusive to those involving algorithmic trading or its sub-segment high frequency algorithmic trading technique. The trading of a person having direct electronic access may therefore also fall under the algorithmic trading including the high frequency algorithmic trading technique definition.
- (25) The definition of direct electronic access should be further specified. The definition of direct electronic access should not encompass any other activity beyond the provision of direct market access and sponsored access. Therefore, arrangements where client orders are intermediated through electronic means by members or participants of a trading venue such as online brokerage and arrangements where clients have direct electronic access to a trading venue should be distinguished.
- (26) In case of order intermediation, submitters of orders do not have sufficient control over the parameters of the arrangement for market access and should therefore not fall within scope of direct electronic access. Therefore, arrangements that allow clients to transmit orders to an investment firm in an electronic format, such as online brokerage, should be not be considered direct electronic access provided that clients do not have the ability to determine the fraction of a second of order entry and the life time of orders within that time frame.
- (27) Arrangements where the client of a member or participant of a trading venue, including the client of a direct clients of organized trading facilities (OTFs), submit their orders through arrangements for optimization of order execution processes that determine parameters of the order other than the venue or venues where the order should be submitted through SORs embedded into the provider's infrastructure and not on the client's infrastructure should be



excluded from the scope of direct electronic access since the client of the provider does not have control over the time of submission of the order and its lifetime. The characterization of direct electronic access when deploying smart order routers should therefore be dependent on whether the smart order router is embedded in the clients' systems and not in that of the provider.

11 ANNEX – Algorithmic trading

Definition according to Article 4(1)(39) of Mifid II

Algorithmic trading means trading in financial instruments where a computer algorithm automatically determines individual parameters of orders such as whether to initiate the order, the timing, price or quantity of the order or how to manage the order after its submission, with limited or no human intervention, and does not include any system that is only used for the purpose of routing orders to one or more trading venues or for the processing of orders involving no determination of any trading parameters or for the confirmation of orders or the post-trade processing of executed transactions.

12 ANNEX – High Frequency Trading (HFT)

Definition according to Art.4(1)(40) of MIFID II and Art.19 of CDR 2017/565

Infrastructure intended to minimize network and other types of latencies, including at least one of the following facilities for algorithmic order entry: colocation, proximity hosting or high-speed direct electronic access;

System-determination of order initiation, generation, routing or execution without human intervention for individual trades or orders; and

"high message intraday rates" which constitute orders, quotes or cancellations. **This is defined as either:**

- (a) an average of at least 2 messages per second per instrument per trading venue or
- (b) an average of at least 4 messages per second for all instruments on a trading venue. Messages include orders, quotes or cancellations.