Name of Exchange: ATHENS EXCHANGE (ATHEX)

Name and contact details of the person completing the Questionnaire: Nikolaos Porfyris, DCOO, n.porfyris@athexgroup.gr

KEY: blue: our input   red: request for info/feedback

A.   Communication and Collaboration

A.1.   What are your plans for communicating MiFID II updates to your members and participants during 2017?

We are planning to issue the technical specs for Members, system vendors and data vendors and get an initial feedback in order to finalise them by end of May 2017 and then announce the exact project time plan.

A.2.   How are you collaborating with cross exchange groups to develop a consistent approach to the solutions required by MiFID II?

We follow them closely (FIX, "short code" team). We would appreciate your feedback on any report that points towards a harmonization in the implementation of MiFID II/ MiFIR.

A.3.   How are you providing Independent Software Vendor's with MiFID II specific updates & workshops?

Please see A.1.

A.4.   When do you plan to have your changes for MiFID II requirements ready? Will these become mandatory on Jan 3rd 2018 or earlier?

Our plan is to have them mandatory on January 3rd 2018. A test system will be available in parallel.

B.   Treatment of Confidential Information

B.1.   High Priority Question - Can you confirm that confidential personal client information can be sent and received over an interface separate to the order interface, thus will not require encryption being on the same private data circuit, can be sent post trade and will not be leveraged for commercial purposes?

The Members' portal will be separate from the existing interface and will ensure security/confidentiality aspects.

C.   Due Diligence

C.1.   What efforts are you making towards an industry standard on your due diligence approach?

We follow existing global ISO standards. We currently have ISO for business continuity (ATHEXGroup has deployed an integrated Business Continuity Management System – BCMS-

according to the ISO22301:2012 International Standard and has been certified from Lloyd's RQA) and currently working for implementing the ISO in security (ISO 27001).

Regarding Members' due diligence, we have a process (which the ATHEXGROUP members are aware of from our 2016 process) and we would appreciate your input for improving that process/standard and include effectively and efficiently RTS 6 and other MIFID II/MiFIR obligations.

C.2. Will your due diligence be standardised every year?

For ATHEX we currently have standardised for business continuity according the ISO System and re-auditing takes place annually by Lloyd's RQA. We also have the usual annual audit tests (external audit, IT audit, IT penetration etc).

Regarding Members' due diligence we have standardised annually the electronic process (e.g. secure access to our ticketing system / service desk for the compliance officer of the Members) through which we run the due diligence and we would like to have your input of a process/standard that you have in mind for making easier the annual DD process.

D.   Regulatory Data and Data Management

D.1.   High Priority Question - Will you follow short codes on your FIX or native interfaces and will it cover the following fields:

D.1.1.   Member/Participant

We are planning to make use of the short codes in accordance to the industry standard.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).
We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.1.2.   Client ID codes

We are planning to make use of the short codes in accordance to the industry standard.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).
We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.1.3.   DEA Orders

We are planning to make use of the short codes in accordance to the industry standard.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).
We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.1.4.   Investment Decision ID

We are planning to make use of the short code in accordance to the industry standard.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).

We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.1.5.   Execution Decision ID

We are planning to make use of the short code in accordance to the industry standard.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).
We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.2.   Provision of Regulatory Data:

D.2.1.   What are your plans for collecting regulatory data pertaining to Trading Capacity - (e.g. AOTC, DEAL, MTCH)?

We intend to create new field for order entry by the member firm. It will be available both on the execution report to the Member and the transaction report fields populated by the trading venue.

D.2.2.   What are your plans for collecting regulatory data pertaining to on/off venue post-trade indicators for trade reports?

We intend to
- create new fields for order entry by the Member firm in certain cases (see question for D4 below) and
- create new fields and populate them automatically as ATHEX in case they apply to our trading system orders.
In both cases the information will be conveyed back both through Execution Reports and the population of the relevant transactions fields.
We would appreciate your input/feedback/requirements on such fields – in accordance to a sell side standard.

D.2.3.   What are your plans for collecting regulatory data pertaining to non-executing brokers?

We are planning to make use of a short code for entry by the Member firm.
No checks or rejections will be carried out for that Mifid field (except for the NULL value rejection).
We will be providing with a secure, robust access to our database in order to be able to enrich fields after the eod of the trading session.

D.2.4.   Will you return any/all of these details back on order and/or execution events?

We intend to return these details back to the Member on order confirmation and Execution Reports. At the same time the relevant RTS fields (e.g. RTS 22, RTS 24) for order keeping and transactions reporting will be populated accordingly.

D.3.   Provision of data from Exchanges to investment firms:

 D.3.1.   **High Priority Question -** What are your plans for providing market participants with passive/aggressive flags?

We intend to return passive or aggressive indicator back on execution confirmation through the Execution Report. At the same time the relevant RTS fields will be populated accordingly.

D.3.2. What are your plans for providing market participants with the Waiver ID on executions?

We intend to return relevant to ATHEX Waiver ID back on execution confirmation through the Execution Report. At the same time the relevant RTS fields will be populated accordingly.

D.3.3. **High Priority Question -** What are your plans for providing market participants with event time and to what precision/format?

We intend to return UTC short time format back on execution confirmation (meaning no date but only time).

AFME preference would be a concise, faster format. AFME are in support of the FIX proposals on the formatting of market data.

D.3.4. What are your plans for providing market participants with triggered circuit breaker flags?

Triggered circuit breaker flags are currently sent to market participants.

D.4. Is there any additional order/trade/control information you expect from participants? Will you pass back any information not listed above?

From our current analysis and feedback we are planning to create the following NEW FIELDS in the ORDERS (and we will supply it back the info in the Execution Report). Short codes will be used in accordance to the industry standards.

RTS#	Generic description	field#	field name
RTS 1	Trade FLAG	11	ALGO
RTS 1	Trade FLAG	17	DUPL
RTS22	Buyer details	7	Buyer identification code
RTS22	Buyer Decision Maker	12	Buyer decision maker code
RTS22	Seller details	16	Seller identification code
RTS22	Seller Decision Maker	21	Seller decision maker code
RTS22	Transaction details	29	Trading capacity
RTS22	Trader, algorithms, waivers and indicators	57	Investment decision within firm
RTS22	Trader, algorithms, waivers and indicators	59	Execution within firm
RTS24	A. Identification of relevant parties	2	Direct Electronic Access (DEA)
RTS24	A. Identification of relevant parties	3	Client identification code
RTS24	A. Identification of relevant parties	4	Investment decision within firm
RTS24	A. Identification of relevant parties	5	Execution within firm
RTS24	A. Identification of relevant parties	6	Non-executing broker
RTS24	B. Trading Capacity and liquidity provision	7	Trading capacity
RTS24	B. Trading Capacity and liquidity provision	8	Liquidity provision activity

One of our questions is whether participants that execute on-venue client orders through their own VWAP/TWAP order systems, would need to pass through the order (i.e. through the BENC flag) such information to our Trading venue for allowing us to populate the transaction report

fields which they could then enrich further along with long codes etc. Please note that we do not have a VWAP/TWAP-specific order in OUR central system.

We plan to include in the limit order for Market Makers in specific instruments to flag (according to RTS 24, Liquidity Provision Activity, Field 8) if they use a limit order to provide liquidity. (Note that for quotes from market makers we will automatically produce "True" for that flag). Execution Reports and Order Record keeping fields will be also updated.

Please feel free to give us any other input on this Question in order to enable us to provide the draft of our technical specs.

D.5. Halting of Algorithms:

D.5.1. Will you support withdrawal or halting of algorithms according to the Algorithm ID sent and how will this work?

We plan to introduce the ALGO ID in the Member order with the use of a short code by the Member.
Please explain your needs and requirements for implementing different types of ALGOs in our market so that we can elaborate per case such withdrawal or halting.

D.5.2. Will you have a kill switch at the Algorithm ID level and how would it work?

See D.5.1

D.6. Will there be a way for firms to extract all their order and execution details for the day to feed into their surveillance systems and how will it work?

We intend to make available all order and execution details through real time confirmations (execution reports) and end of day gross transaction reports, downloadable from a secured access point of our website.

D.7. Will you require a registered list of people to contact to invoke kill functionality?

Only the registered members' people are contacting the exchange for such issues (On Behalf Of Trader – OBOT services), however please explain further your need and requirement. Do you mean the registered traders that have access to our system or you have in mind an enhanced, possibly more senior list of people?

D.8. What are your plans for harmonising instrument tick sizes against a central standard and will you still have your specific tick size rules?

We intend to be fully harmonised with the central standard.

D.9. Will you continue to publish your own data with regards to tick sizes?

We intend to keep our own tick size regime for non-equity instruments trading through our trading system.

D.10. How are you unbundling your market data products? For instance, to publish independently instrument trading stats and phases (e.g. auction data vs continuous phase data)?

Data Feed will include RTS1 & 2 flags and we will be implementing the MMT v3.02 trading flags standards. All changes in phases per instrument is currently flagged and will be also flagged in the new version.

D.11.   What MiFID II specific changes are you introducing to your market data feeds - additional static data fields, real-time data fields, format changes, tick sizes?

Will come back in our next version of replies and via our technical specs.

D.12.   Do you plan to include the ISO requirement in your market data?

We have already implemented MMT v1.0 and the following ISO standards that are required by MiFID II/MIFIR.

They will also be present in the MMT v3.02 implementation.

Table 2

Symbol table for Table 3

Symbol	Data type	Definition
{ALPHANUM-n}	Up to n alphanumerical characters	Free text field.
{CURRENCYCODE_3}	3 alphanumerical characters	3 letter currency code, as defined by ISO 4217 currency codes
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.ddddddZ. - 'YYYY' is the year; - 'MM' is the month; - 'DD' is the day; - 'T' – means that the letter 'T' shall be used - 'hh' is the hour; - 'mm' is the minute; - 'ss.dddddd' is the second and its fraction of a second; - Z is UTC time. Dates and times shall be reported in UTC.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. - decimal separator is '.' (full stop); - negative numbers are prefixed with '-' (minus); Where applicable, values shall be rounded and not truncated.
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{MIC}	4 alphanumerical characters	Market identifier as defined in ISO 10383

D.13.   Do you intend to inform members of progress (per instrument, per waiver) towards the 4% volume cap and if so, how?

For the time being we don't expect to have such a waiver approved from ESMA falling under volume cap.

D.14. When an instrument is suspended due to exceeding the 4% or 8% cap, will you continue to accept the reporting of negotiated trades provided the size exceeds LIS?

For the time being we don't expect to have such a waiver approved from ESMA falling under volume cap.

D.15. How will negotiated trades be rejected for instruments which have been suspended due to the dark volume caps?

For the time being we don't expect to have such a waiver approved from ESMA falling under volume cap.

D.16. For any instruments prevented from trading under the Double Volume Cap constraints, will you be informing members of an expected date at which trading will be re-enabled?

For the time being we don't expect to have such a waiver approved from ESMA falling under volume cap.

D.17. Do you intend to inform members of the waivers available per instrument on each given trading day and whether the use of any particular waivers has changed compared to the previous day?

We do not intend to make use of waivers that dynamically change from day to day.

D.18. What are your plans with regard to formalising and making public the instruments traded on your venue(s) (particularly with regard to explicitly identifying the admission of multi-listed instruments from non-EEA markets)?

We shall make public the instruments trading on our venue.

Where the admission/listing of such instruments will drive participant and investor obligations in respect of the Trading Obligation and trade/transaction reporting.

D.18.1. Will you rely purely on RTS 23/FIRD notification, or will you publish lists of instruments in a publicly available place?

We intend to make public the instruments trading through the use of our specifications on our venue through our web site.

E. Algorithms and Algorithmic Testing

E.1. High Priority Question - What certification will be required for algorithms and can you confirm that you will not block new Algorithm IDs before retrospective self-certification?

AFME preference would be the self-certification of algorithms which can be retrospectively validated.

We would like you to elaborate further on your Algorithm needs.

E.1.1. What will be the grace period for retrospective self-certification?

E.2. Testing Environments

E.2.1. What are your plans for supporting test instruments on the market?

The UAT environment mirrors the production environment (ISINs, parameters, trading methods & rules etc). Hence, the UAT environment is no inferior at all compared to the production environment.

E.2.2. Will you provide test symbols in the live market?

No.

E.2.3. Do you plan any enhancements to your existing testing environment and how will these work?

Please see the answer to E.2.1

E.3. Many members may use third party vendors for market data. How will testing of market data consumption be tested in regards to algorithmic trading?

Please elaborate further.

E.4. Stress testing

E.4.1. Will testing environments mirror production to enable high volume stress testing?

Yes.

E.4.2. Will you be providing a test system to facilitate your own and investment firms stress testing requirements?

Yes. Please also see the answer to E.2.1**E.4.3.** How often will the stress testing cycle occur? (*Available daily? Repeated every hour?*)

Could be on a Daily basis or even shorter, or in whatever frequency the market needs/asks.

E.4.4. Will there be any auto order generators or other tools deployed, if so how will they operate?

We can have auto orders / transaction generators, parametrized in a way to accommodate the specific needs of every testing session .

E.5. How will maximum order volume checks work, will these be security specific or generic?

It is effectively generic as we have in place pre-trade risk limits per order, per Clearing Account and that account is part of the information provided to the Trading member for each order and trade separately. It is also re-calculated real-time.

E.6. What post trade checks, if any, will you implement?

See above, there already pre-trade checks as well as static and dynamic limits per instrument. There are no trade cancellations and, therefore, a need for post trade checks.

E.7. What circuit breakers have you implemented?

Volatility interrupters by using static and dynamic ranges per instrument, as well as absolute daily price fluctuation limits.

E.7.1. Are you considering altering these or adding new ones?

We do assessment of all parameters for the above implementation and if we see a need we proceed to necessary adjustments (last change 30 January 2017).

E.7.2. How will you support members monitoring DEA or algorithmic orders triggering circuit breakers?

We inform through Execution Reports (real-time) the member regarding the non-execution of the order due to Volatility Interrupter triggering.

E.8. **High Priority Question -** What are your plans with respect to supported "kill switch" functionality?

E.9. What precautionary/absolute measures will venues operating a dark pool put into effect to ensure trading remains below the double volume cap?

n/a

F. **DEA Impacts**

F.1. What information regarding trading controls and organisation will you require from members in relation to sponsored access and how will you provide real time alerts?

F.2. For DEA/SMA trading, what additional enrichment will you be making to exchange drop copies to facilitate new data requirements for MiFID?

We will issue all the above in the technical spec. As a rule of thumb we will provide both Execution Reports and population of transactions reporting / order keeping in parallel.

Please, provide particular needs for fields that you would like to see included in the order and therefore to those 2 communication channels.

G. **Order to Trade Ratio/Market Making**

G.1. What are your plans for collecting regulatory data pertaining to liquidity provision flags?

We intend to create new field for order entry by the member firm (see D4 above) for limit orders and automatically create such flag for quotes.

G.2. How will you monitor compliance with the market making measures? Will this monitoring also include alerting for when market making levels are being approached? If so, how will you inform members of a need to register as a Market Maker?

We intend to monitor through our supervision system (Scylla) and other internal controls for when market making levels are being approached. We shall make public the procedure that will be followed.

G.3.   What are your plans for implementing OTR controls?

We currently intend to create end of day OTR control.

G.3.1.   At what level will you set these and how will you apply the controls?

We intend to apply controls per instrument class level.

G.3.2.   Will OTR be applied at a trader, session or membership level?

We intend to apply OTR per member level.

G.3.3.   What tools/MIS will you produce for members to monitor OTRs and will you plan for daily as well as monthly reports?

We will decide upon reports in due time and after consultation with Members.

G.3.4.   What obligations will you put on members (if any) to monitor the OTR?

We will decide upon OTR obligations in due time.

G.3.5.   Do you have any access linked to OTR that would block trading or prevent access to the market?

We will decide upon OTR obligations in due time.

H.   High Frequency Trading

H.1.   Will you define where a member is using infrastructure intended to minimize network and other types of latencies, and what level will this definition be at (i.e. member, connection etc)?

We do not offer HFT services, and we are not intent to offer them, at least in the near future.

H.2.   Will you monitor firms for use of HFT trading technique?

This will help firms to assess HFT status.

Please see H.1

H.3.   What are your plans for providing monthly estimates of the average messages per second taking into account the preceding 12 months?

Please see H.1