AFME MiFID II Exchange Questionnaire

Executive Summary:

This MiFID II Exchange Questionnaire ("Questionnaire") has been created through collaboration between AFME and major European Equities Exchanges[1]. The purpose of the Questionnaire is to provide a standardised set of questions which can be sent from investment firms to Exchanges that fall under the scope of MiFID II. Exchanges responding to the Questionnaire should note that six questions have been selected as high priority issues and should be addressed in detail, these questions have been underlined.

The Questionnaire is to be sent bilaterally from investment firms to their Exchange counterparts. The information provided in response to the Questionnaire by Exchanges to investment firms is strictly confidential and for the benefit of the recipient firm and its affiliates only. Furthermore, the information provided is valid at the point in time when it is provided. The liability regime for the Questionnaire is established by the Disclaimer included in Annex I, which is provided by the responding Exchange.

The Questionnaire is made available to any party to use in a Microsoft Word format. However, in order to maintain the integrity of the document, we ask users to recognise and respect the numbering and wording of all questions.

The Questionnaire is subject to change and may be updated.

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About AFME:

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society.

AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia.

AFME is listed on the EU Register of Interest Representatives, registration number: 65110063986-76.

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[1] The Questionnaire has been shared with but not necessarily endorsed by individual Exchanges as well as the Federation of European Securities Exchanges and the Futures Industry Association.

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Questionnaire

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Name of Exchange:

- Turquoise

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A. Communication and Collaboration

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

- London Stock Exchange Group hosted MiFID II Client Events in London, Milan, Paris and Amsterdam across March and April to inform clients of the planned content and delivery of MiFID II changes. Further events scheduled for Q3.
- A MiFID II microsite has been launched http://www.lseg.com/resources/mifid-ii and standard communication channels will also be used.
- Draft Millennium Exchange and GTP technical specifications were published at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library and http://www.londonstockexchange.com/products-and-services/millennium-exchange/documentation/documentation.htm in April as communicated by Technical Notice.
- Technical events were held at the end of June in both London and Milan. 121 meetings will be arranged in Paris and Amsterdam. Further events will be scheduled in Q3.

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

- We are following the FIX community proposed approach for MiFID 2 information. We have participated in cross Exchange workshops and been in regular engagement through industry debates primarily via the FIX Trading Community.

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

- Turquoise engages with individual ISVs regularly via the Technical Account Management team, and collectively via Technical User Groups and other client events.

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?

- Turquoise plans to deliver all customer-facing Millennium Exchange changes in November 2017. The Customer Development Service ('CDS') is planned to be available in July 2017. Some system parameters may not be changed until 3 January 2018 but it is the intention to keep such changes to a minimum in order to reduce the scale of impact between Tuesday 2 January 2018 and Wednesday 3 January 2018.

B. Treatment of Confidential Information

B.1. High Priority Question - <u>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?</u>

- Yes, Turquoise will operate a model that requires short codes on order entry with mapping to true identities of persons to be transmitted over a separate secure interface with the information intended to be used solely for regulatory purposes.

C. Due Diligence

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

- Member due diligence is aimed at confirming the compliance of prospective members and members with the requirements set out in the Rules. This includes standardised processes which will be further enhanced to accommodate the requirements defined in RTS 7 Article 7.
- Processes already follow the requirements in REC and the FCA's guidance on Market Operators' oversight of member firm compliance with rules.

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

- Member due diligence is already standardised and includes on-boarding reviews, annual checks and risk-based reviews. These processes are designed to be proportionate and risk-based.

D. Regulatory Data and Data Management

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

- Yes, Turquoise will adopt the short code concept to codify true values for certain fields required for Trading Venue Order Record Keeping.
- Short code formats will be 4 byte UINT32 on the Native interface, and String (range 0 to 4,294,967,295) on the FIX interface.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

D.1.1. Member/Participant

- No. Member / participant information will be retrieved from available configuration of market access interfaces, so it will not be necessary to specify this data in order entry messages.

D.1.2. Client ID codes

- Yes.

D.1.3. DEA Orders

- No. Members / participants will be required to flag order entry messages referring to the trading activity of their DEA clients. However, it will not be required to identify DEA clients via short codes. Flag for DEA orders will be in the format of a 'True' / 'False' binary field.

D.1.4. Investment Decision ID

- Yes.

D.1.5. Execution Decision ID

- Yes.

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)?

- Trading Capacity will be required on order entry. 'Capacity' is used on the Native interface, Order Capacity(528) is used on the FIX interface.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- Turquoise does not intend to offer an off book trade reporting service at this stage.
- Where relevant, post trade flags will be derived from order data in the case of on book executions.

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

- Turquoise does not recognise the concept of non-executing broker across the trading services offered and therefore has no plans to collect such data.

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

- AOTC, DEAL, MTCH will be returned on Execution Reports for order acknowledgements and execution events.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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?

- Turquoise will provide a Liquidity Indicator on Execution Reports denoting aggressive vs. passive vs. auction.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- All relevant waiver flags for Turquoise (for example, RFPT) will be provided in Execution Reports.

- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

> **D.3.3. High Priority Question -** <u>What are your plans for providing market participants with event time and to what precision/format?</u>
> *AFME preference would be a concise, faster format. AFME are in support of the FIX proposals on the formatting of market data.*

- All LSEG equity venues will provide transact time granular to microseconds, and accurate to within 100 microseconds of UTC.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- Turquoise does not intend to operate a conventional circuit breaker mechanism. Price collars will be deployed in order to manage volatility.

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

- Turquoise will require flags to identify orders as being in relation to DEA, Liquidity Provision and Algorithmic Trading.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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?

- Withdrawal or halting of algorithms will not be controlled at the level of Algorithm ID. Instead, controls will be implemented at technical connection level as per the Connectivity Guide at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- No. Kill Switch functionality will be implemented at technical connection level, not at the granularity of Algorithm ID.

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?

- Own Order Book Download and Own Trade Book Download facilities are available.

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

- Members must provide and maintain a list of personnel who are authorised to request order or quote deletions.

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?

- Turquoise will meet the requirements of RTS 11 as documented for shares, depositary receipts and exchange-traded funds with equity underlyings. Tick sizes for other instruments will be communicated in due course.

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

- Tick size tables and related instrument attributes will be published via daily reference data.

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)?

- LSEG will offer additional, more granular disaggregated data products on a commercial basis. In addition, we will provide further bespoke disaggregation on-demand. Disaggregated products will be available to both direct customers and those subscribing through a vendor.

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?

- LSEG is developing a new MiFID II compliant data feed, which will run in parallel to our existing feeds and will carry all of the content and formatting required as set out in the annexes to RTS 1 and 2. Customers will be able to choose between continuing to receive our existing native feeds or taking the new MiFID II feed via GTP.
- Draft MiFID II GTP specifications are available under the Group Ticker Plant section of the technical library at http://www.londonstockexchange.com/products-and-services/millennium-exchange/documentation/documentation.htm
- Additional static data fields will be provided in daily reference data files. Further information is available in the Guide to Reference Data Services at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- The MiFID II GTP Post Trade feed will be compliant with the requirements of RTS 1 and RTS 2.

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

- Since ESMA will be the only official source of trading in each financial instrument on all trading venues across the Union, it is anticipated that this will be the primary method for tracking progress. However, Turquoise may provide its own analysis according to availability of data.

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?

- Turquoise does not intend to offer an off book trade reporting service at this stage.

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

- Turquoise does not intend to offer an off book trade reporting service at this stage.

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?

- Depending on availability of an accurate estimate of a date for which suspensions will be lifted in a particular instrument, Turquoise may communicate this to customers.

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?

- Daily instrument reference data will include a flag to notify if the Reference Price Waiver is available for use on that day. Further information is available in the Guide to Reference Data Services at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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

- Turquoise's obligation is to provide reference data to its competent authority. Competent authorities shall transmit reference data to ESMA. ESMA shall publish the reference data in an electronic, downloadable and machine readable form.
- Turquoise plans to continue to provide reference data via existing channels.

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

- See answer to D.18

E. Algorithms and Algorithmic Testing

E.1. **High Priority Question -** <u>What certification will be required for algorithms and can you confirm that you will not block new Algorithm IDs before retrospective self-certification?</u> *AFME preference would be the self-certification of algorithms which can be retrospectively validated.*

- Members will be required to certify that their algorithms have been tested prior to deployment and to provide details of the means used for testing. This process will be managed through a Membership Portal, which will be launched prior to MiFID II go-live. There are no plans to block new algorithms, however, an end of day process will capture discrepancies and notify clients of any outstanding self-certification issues. Further guidance will be provided on this process in due course.

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

- For any algorithm IDs not registered in advance of first use, Turquoise will expect to receive registration by the end of the trading day of first use.

E.2. Testing Environments

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

- Turquoise intends to continue providing test instruments in the Production environment for restricted period before market open and with associated terms of use. The test environment (CDS) will provide test instruments.

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

- See answer to E.2.1

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

- In order to ensure that members are provided access to a testing environment which reproduces as realistically as possible the production environment, Turquoise intends to offer an additional testing environment to be used ahead of new Production releases.

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?

- Turquoise does not intend to make any changes in relation to its current testing.

E.4. Stress testing

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

- Turquoise test environments and will not be environments on which high load tests can be carried out.
- Turquoise is analysing the possibility of opening the production environment periodically out of market hours (e.g. on occasional Saturdays) for high volume testing, with the further possibility of automatic order generation tools.

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

- See answer to E.4.1

   E.4.3. How often will the stress testing cycle occur? (*Available daily? Repeated every hour?*)

- See answer to E.4.1

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

- See answer to E.4.1

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

- Turquoise intends to set maximum order size checks as a multiple of the ESMA Large In Scale threshold for the specific instrument.

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

- Turquoise will not require further post trade checks after initial certification of an investment firm's algorithms. All trade and order flow across Turquoise will continue to be monitored in real-time and post trade.

E.7. What circuit breakers have you implemented?

- As today, Turquoise will operate price collars rejecting orders whenever priced outside of a range based on pre-determined and published price parameters as a percentage from the prevailing reference price. In such circumstances, the rejection of orders will act as a mechanism to constrain trading. Following such constraints, Turquoise will make an assessment as to whether and when the relevant reference price should be updated to remove the constraint.

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

- No changes are planned.

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

- As per D.3.4, Turquoise does not intend to operate a conventional circuit breaker mechanism. Price collars will be deployed in order to manage volatility.

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

- Turquoise will have the ability to cancel open orders at technical connection level.

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

- No plans exist to implement such measures.

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?

- The Turquoise member questionnaire on system controls includes questions in relation to the member's risk assessment and monitoring procedures for sponsored access clients. Sponsoring members receive alerts through real time drop copy feeds of sponsored access client activity.

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

- Turquoise Drop Copy Gateway specification can be found at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

G. Order to Trade Ratio/Market Making

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

- Turquoise will offer a flag which may be used to identify each order in relation to Liquidity Provision.
- For further information, draft MiFID II technical specifications are available at http://www.lseg.com/markets-products-and-services/our-markets/turquoise/information-centre/document-library

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?

- Turquoise is not required to monitor the trading activity of market participant to verify whether they are obliged to sign a market making agreement according to the provisions of Art. 1 and 2 of RTS 8. So, Turquoise is not planning to introduce controls or to inform market participants in case they are behaving as a 'market making strategy' according to the definitions of Art. 1 of RTS 8.

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

- Turquoise will define max. acceptable OTR according to the requirement of RTS 10, with different max. values for market makers and liquidity providers. In addition, Turquoise will consider the calculated OTR as not significant in case the total number of 'orders' (numerator of the ratio) is below a pre-specified absolute value, or in case the number of trades (denominator of the ratio) is below a pre-specified, absolute value.

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

- Max. OTR levels / thresholds will be communicated in due course. Internal controls on the effective OTR levels for any participant and instrument (see answer to G.3.2) will be executed on a daily basis.

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

- OTR will be calculated at membership / instrument level, as required by Art.1 of RTS 9.

    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?

- No formal tools are planned. Members should be able to count their own order actions and executions accordingly.

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

- No obligations are planned at this time.

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

- No. Turquoise does not intend to use order to trade ratios to automatically block trading or prevent access to the venue.

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)?

- Turquoise does not intend to define where a member is using infrastructure intended to minimize network and other types of latencies.

H.2. Will you monitor firms for use of HFT trading technique?
This will help firms to assess HFT status.

- Turquoise intends to provide support for HFT self-assessment by providing average messages per second information on request.

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

- Turquoise intends to provide average messages per second information on request.

Annex

Annex I – Disclaimer

The replies and information provided in this document represent Turquoise plans and views as of July 2017.

They can change and/or develop differently in the coming months leading to 3 January 2018 and they therefore cannot be relied upon by any reader or participant nor considered as Turquoise final views or decision in any relevant matters.

If and where needed official communications will be released describing how MiFID II and MiFIR provisions will be implemented by Turquoise, also via amendments to the relevant market rules and user agreements.