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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 registered on the EU Transparency Register, registration number 65110063986-76.

About the Global FX Division

The Global FX Division (GFXD) of the Global Financial Markets Association (GFMA) was formed in co-operation with the Association for Financial Markets in Europe (AFME), the Securities Industry and Financial Markets Association (SIFMA) and the Asia Securities Industry and Financial Markets Association (ASIFMA). Its members comprise 25 global foreign exchange (FX) market participants, collectively representing around 85% of the FX inter-dealer market. Both the GFXD and its members are committed to ensuring a robust, open and fair marketplace and welcome the opportunity for continued dialogue with global regulators.

Purpose of the Document

The purpose of the Questionnaire is to provide a standardised set of questions which can be sent from investment firms to entities that may fall under the scope of MiFID II as Trading Venues (MTFs and OTFs). AFME has also published a separate questionnaire¹ that can be sent by MiFID II investment firms to European equities exchanges that are in scope of MiFID II - please be aware that some questions may be repeated in this FIC document.

This Questionnaire has been developed with FIC products in mind, and has some asset class-specific questions, but may also encapsulate cross-asset considerations and be relevant for other instruments. The Questionnaire is to be sent bilaterally from investment firms to their broker/Trading Venue counterparts. The information provided in response to the Questionnaire 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 to be provided by the responding entity.

The Questionnaire is made available to any party to use in a Microsoft Excel 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.

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AFME-GFXD Disclaimer

The Questionnaire is subject to change and may be updated.

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¹ Available at <https://www.afme.eu/globalassets/downloads/industry-guidelines/afme-mifid-ii-exchange-due-diligence-questionnaire.docx>

² Available at <http://www.afme.eu/en/about-us/terms-conditions/>

MiFID II FIC Trading Venues Questionnaire

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| Section | A. Organisational Requirements |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE | |
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| A | a | Are you currently authorised as an MTF? By which national regulator? What is the scope of your current activity conducted on the authorised platform / entity? | <i>A number of LSE plc. entities are already authorised to operate Regulated Markets (RMs) and MTFs. LSE plc. operates 1 RM and 2 MTFs in London, and is regulated by the Financial Conduct Authority.</i> |
| A | b | What decisions have been made regarding MTF and/or OTF registration? What is your rationale for selecting authorisation as an MTF vs. OTF and which NCA will you apply to? | <i>No substantial changes to the current regulatory structure of LSE plc. are currently envisaged.</i> |
| A | c | Will you have a MTF/OTF and non-MTF/OTF and where will these be located? Will you create one or more new legal entities for registration as an MTF/OTF? If so, what will these new legal entities be and can you provide a map of these? | <i>No changes to the current regulatory structure of LSE plc. are currently envisaged. Details regarding the existing regulatory structure of t LSE plc. can be found in response to A(a) above.</i> |
| A | d | Will you have different activities authorised differently? | <i>No changes to the current regulatory structure of LSE plc. are currently envisaged.</i> |
| A | e | Do you have any dual registration plans for SEF and MTF / OTF? | <i>No.</i> |
| A | f | Alternatively, how do you intend to split business between SEF / non-SEF / MTF / OTF / etc? | <i>Not applicable.</i> |
| A | g | Will members be able to access one platform to provide liquidity to, with execution taking place behind the scenes on the appropriate authorised entity, or will platforms be segregated according to authorisation? | <i>Members be able to access the LSE plc. platforms to provide liquidity to, in accordance with their Membership contract.</i> |
| A | h | How, if at all, would liquidity be pooled across both entities? | <i>Not applicable</i> |
| A | i | Will you allow non-EEA entities to price on your venue? | <i>Non-EEA entities will continue to be allowed to join the MTFs and Regulated Market, subject to meeting the relevant participant eligibility criteria outlined in the various trading venue rulebooks and subject to the relevant authorisations granted to LSE plc. by the relevant foreign authorities. In relation to non-MiFID members, including non-EEA members, LSE plc. is exploring technical solutions to collect all of the necessary information required to perform transaction reporting to the relevant Competent Authority.</i> |
| A | j | Will a revised brokerage/price structure be introduced for registered venues, and if so how will it change from current state? | <i>LSE plc. is reviewing its fee structures to assess the possible need for changes in light of MiFID II requirements.</i> |
| A | k | Will the investment firm sales trader in a non-EEA location (e.g. Zurich) be allowed to serve EEA clients on the MTF if the client is papered with the EEA entity? | <i>Non-EEA entities will continue to be allowed to join the MTFs and Regulated Market, subject to meeting the relevant participant eligibility criteria outlined in the various trading venue rulebooks and subject to the relevant authorisations granted to LSE plc. by the relevant foreign authorities. In relation to non-MiFID members, including non-EEA members, LSE plc. is exploring technical solutions to collect all of the necessary information required to perform transaction reporting to the relevant Competent Authority.</i> |

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| A | l | Will all of your existing clients be supported on your authorised venue? What is your plan for communicating on-boarding requirements and schedule to clients? | <p><i>Membership of the LSE plc. trading venues is subject to current and prospective participants meeting the relevant participant eligibility criteria outlined in the various trading venue rulebooks.</i></p> <p><i>The LSE plc. development release schedule has been published on the dedicated MiFID II and Regulatory Updates section of the LSE plc. website:</i></p> <p><i>Technical library: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</i></p> |
| A | m | What are your anticipated opening and closing times? | <p><i>The market opening times at the time of writing can be found below. Please note that these are the current opening times and LSE plc. reserves the right to amend these times as required. The most up to date information regarding opening times can be found in the TRADEcho and Millennium Business Parameters.</i></p> <p><i>LSE plc. Fixed Income markets: 08:00 – 16:30 CET for order-book securities, unless provided differently in a specific market. Other markets may have different opening and closing times.</i></p> <p><i>Millennium Exchange Business Parameters: http://www.londonstockexchange.com/products-and-services/trading-services/millennium-exchange-business-parameters.xls</i></p> |
| A | n | What is your proposed mechanism for managing volatility (RTS 7 Article 19)? | <p><i>Cash markets: Pre-trade controls, for both price and quantity, and trading halts.</i></p> <p><i>Pre-trade controls for both price and quantity are already in place with further enhancements for MiFID II</i></p> |
| A | o | If you do not intend to become authorised as an MTF /OTF, please provide a rationale as to why you believe that your activity is not covered by these obligations? | <p><i>Not applicable. LSE plc. entities will continue to operate trading venues.</i></p> |
| A | p | What outsourcing arrangements will you have in provision of your services to members? | <p><i>LSE plc. has internal intragroup and external agreements for the provision of services. These will comply with MiFID II Article 48 and RTS 7 requirements.</i></p> |
| A | q | Will DMA be allowed for inter-affiliate access? | <p><i>DEA is provided for under the Rules.</i></p> |

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| Section | B. Taxonomy and Scope |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE |
|------|---|---|
| B a | What are your requirements for ISINs and how will an ISIN be communicated? | <i>All financial instruments (bonds) admitted to trade on LSE plc.'s markets will have an ISIN. The ISINs will continue to be managed as today.</i> |
| B b | Will ISIN be available on trade date for intraday products? How will these be applied? | <i>ISINs will always be available for the bonds listed on LSE plc.</i> |
| B c | How will ISINs be applied to the Futures, Options and exotic products? | <i>Not applicable to LSE plc.</i> |
| B d | Which products will you support on 3rd January 2018? Will a full products list be issued? Will you provide a list of instruments subject to trading obligation (for derivatives)? How will you communicate when instruments subject to trading obligation (for derivatives) are supported on your platform? | <i>LSE plc. will support all bonds and other fixed income instruments which meet the eligibility criteria for the respective LSE plc. trading venues on 3rd January 2018. LSE plc. reference data will be distributed to the members by the market protocol, as today.</i> |
| B e | Is the current product scope expected to be expanded, and if so, to what extent? | <i>There are no current plans to expand the product scope specifically for MiFID II purposes, although LSE plc. will continue to innovate and provide markets for its customers in new products whenever required.</i> |
| B f | How will you identify products? | <i>As today, products will be identified by ISIN.</i> |
| B g | What are your criteria for new product on boarding? | <i>The financial instrument admission criteria are laid out in the various Market Rules. There are no changes expected for the purposes of MiFID II.</i> |
| B h | What are your plans as regards formalising and making public the list of instruments traded on your venue(s) [with respect to establishing instruments traded on an EU trading venue]? | <i>LSE plc. reference data will be distributed to the members by the market protocol, as today. LSE plc. trading venues will supply financial instrument reference data for all financial instruments that are admitted to trading or that are traded on the venue to their competent authorities, as required by RTS 23.</i> |
| B i | Please provide a list of your current FX instruments and your plan to migrate to any new industry standard once identified. | <i>Not applicable to LSE plc.</i> |
| B j | What trading models will be live for products on 3rd January 2018? | <i>LSE plc. will operate continuous auction order books, as well as a quote driven markets.</i> |
| B k | Will you have non-MiFID financial instruments (e.g. FX spot) on your MTF / OTF? How do you plan on identifying trades in those instruments? | <i>Not applicable to LSE plc.</i> |
| B l | How are you treating packages? Will you provide a list of packages currently supported on your platforms? | <i>Not applicable to LSE plc.</i> |
| B m | Will voice flow continue to be supported and how will required data be captured for regulatory reporting purposes? | <i>LSE plc. will continue to facilitate a trade reporting service for bilaterally negotiated trades to be concluded off-book, under the rules of LSE plc. trading venues .</i> |
| B n | Does venue support trading of sovereign bonds, how will the Short Selling Indicator (for Transaction Reporting purposes) be implemented and populated? | <i>LSE plc. supports the trading of sovereign bonds. Member firms will be required to submit all of the required transaction reporting data through their chosen ARM.</i> |

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| B | o | Do you expect to have one order book across jurisdictional offerings? | <i>For LSE plc. each bond listed on each trading venue will have its own dedicated order book, and will therefore fall under one jurisdiction.</i> |
| B | p | If the MTF is electronic and the OTF voice could we have a situation where electronic and RFQ are on the same platform? | <i>LSE plc. trading venues only fall under the regulatory status of Regulated Markets and MTFs. LSE plc. trading venues support electronic trading. Trades which are agreed outside of the electronic trading system may be concluded under the rules of the venue subject to meeting the conditions described in B(m) above and in the markets' rules.</i> |
| B | q | Will client price tiering be supported? | <i>LSE plc. does not support price tiering in the public order-book</i> |
| B | r | As an MTF / OTF, will you allow buy-side clients to provide liquidity on your platform? | <i>Membership of LSE plc. trading venues is subject to current and prospective participants meeting the relevant participant eligibility criteria outlined in the various trading venue rulebooks.</i> |
| B | s | As OTF, will you allow buy-side clients to interact directly with other buy side clients to access liquidity? | <i>Not applicable to LSE plc.</i> |
| B | t | Will you be charging additional fees for any new services and if so what will the breakdown of these be? | <i>LSE plc. will confirm any new fees as part of the fee schedule.</i> |

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| Section | C. Handbook and Rulebook |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|---|--|
| C | a | What are your timelines for Handbook, Service Description and/or Rules of Engagement updates? | <p><i>The technical specifications for MiFID II have been published and are available in the Technical Library on LSE plc.'s website: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</i></p> <p><i>The consultation on amendments to the Rules of LSE plc. in preparation for MiFID II is currently open. Details are available through the following link: http://www.londonstockexchange.com/traders-and-brokers/rules-regulations/change-and-updates/stock-exchange-notices/2017/n0617.pdf</i></p> |
| C | b | Will there be a review process for changes to your handbook to capture member feedback and inputs? How will they be communicated? | <i>LSE plc. will have a process in place to evaluate any comments received.</i> |
| C | c | How will changes to existing rulebooks once MiFID is live be communicated to members and feedback gathered? | <i>The updated rulebooks will be published on the LSE plc. website, as happens today.</i> |
| C | d | Will the new venue rulebooks need to be signed by us to continue operating on the venue? | <i>No</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | D. Algorithmic Trading |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|--|--|
| D | a | What steps are you taking to ensure only proprietary trading is taken into account when calculating the average number of message per second from a member? | <i>LSE plc. stores records of all orders and quotes submitted to the trading systems, including updates thereof. Message rates can be generated from these and provided to members upon request.</i> |
| D | b | What testing environments will be provided to support conformance testing and stress testing? Please detail the expectations for algo conformance testing and any associated certification including testing guidance. | <i>LSE plc. trading venues will provide production-like test environments which will include testing symbols. 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.</i> |
| D | c | From when will you be providing HFT message rate estimates for members? | <i>LSE plc. already stores records of all orders and quotes submitted to the trading systems, including updates thereof. Message rates can be generated from these and provided to members upon request.</i> |
| D | d | Does your platform provide a trading UI that contains algo functionality? If yes, how will you approach the registration of that algo? | <i>Not applicable to LSE plc.</i> |

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| Section | E. DEA Impacts |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|--|--|
| E | a | Will you be offering DEA? | <i>Yes, DEA is provided for under the Rules.</i> |
| E | b | What requirements will you expect members to meet in order to provide DEA? | <p><i>A member firm may allow a customer direct electronic access to the trading system under the member firm's trading codes, either by way of direct market access or by providing sponsored access, subject to the member firm having in place adequate systems and controls. A member firm must notify LSE plc. via the Member Portal prior to implementing a direct market access service for its customers or when a member firm discontinues providing such a service for its customers.</i></p> <p><i>A member firm must undertake due diligence on any customer to which it provides or intends to provide direct electronic access, in order to assess the suitability of any such customer to have a direct electronic access connection. The member firm must confirm to the Exchange that such due diligence has been undertaken for either a direct market access or a sponsored access customer.</i></p> <p><i>Member firms are also required to review their due diligence processes annually, and carry out an annual risk-based reassessment of the adequacy of its customers' systems and controls, taking into account any changes to the scale, nature or complexity of their trading activities or strategies, changes to their staffing, ownership structure, trading or bank account, regulatory status, financial position and whether a customer has expressed an intention to sub-delegate the access it receives from the member firm.</i></p> |
| E | c | What standards do you require DEA clients to meet? | <i>As set out above in relation to a member firm's risk based assessment.</i> |
| E | d | Do you expect a DEA client to have a specific regulatory status? | <i>No</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | F. Order to Trade Ratio / Market Making |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE | |
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| F | a | Will registered platforms operate RFQ, CLOB, auction, IOI, voice based or other systems? | <i>LSE plc. markets will operate continuous auction and quote driven order books.</i> |
| F | b | If you offer CLOB, when do you plan to provide order/transaction ratios? | <i>LSE plc. will define max. acceptable OTR according to the requirement of RTS 10, with different max. values for market makers and liquidity providers. In addition, London Stock Exchange 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. OTR levels/thresholds will be communicated in due course.</i> |
| F | c | What kind of order/RFQ entry solutions will be available on the registered venue? | <i>LSE plc. supports all standard trading interfaces.</i> |
| F | d | Is there a requirement for market making obligations in your rulebook? Will Market Making agreements be required? <ul style="list-style-type: none"> • If yes, can you define market making? • If yes, at what level will the obligations apply? Will the obligation be for the whole venue, per instrument, etc? | <i>Market making obligations are set out in the Rules of LSE plc. A market maker must maintain an executable quote, or post firm simultaneous two-way orders, in each security in which it is registered for the period defined within the Rules. A market maker is defined within the Rules, in relation to securities designated by LSE plc., as a member firm which is registered as such and is obliged to quote prices in at least the Exchange market size.</i> |
| F | e | When do you plan to update Market Making agreements? | <i>Market making agreements as set out within the Rules of LSE plc. The draft Rules are out for consultation at present and will be implemented in time for MiFID II live.</i> |
| F | f | What plans do you have for highlighting unregistered market making activity? | <i>As set out in the Rules, members that pursue a market making strategy, as per the MiFID II definition, will be required to declare themselves to LSE plc. and to complete a market making agreement.</i> |
| F | g | Do you intend on publishing lists of market makers on your venue? | <i>LSE plc. expects to publish a list of members that have signed a market making agreement, pursuant to a market making scheme, in accordance with Article 7 of RTS 8.</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | G. EOD Reporting |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lse.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|--|---|
| G | a | <p>Are you considering or would you consider providing Firm X an electronic EOD feed on quotes and orders Firm X has placed on/received from your Trading Venue?</p> <ul style="list-style-type: none"> • If “no”, could you explain why this is not under consideration? • If “no” are you considering an alternative solution, if so please provide the details. | <p><i>LSE plc. provides a drop copy gateway to enable member firms to receive additional copies of their Execution Reports generated by Millennium Exchange. This interface may also be used by clients to download the current status of all their active orders in the event of a failure. In addition, LSE plc. provides a post trade gateway that enables member firms to receive real-time information on executed trades. Neither interface can be used to submit orders, quotes, off-book trades or receive market data.</i></p> |
| G | b | <p>If you are looking to provide an EOD report, are you able to share any details at this stage?</p> | <p><i>As above</i></p> |
| G | c | <p>Do you intend to charge for this service, if yes, do you have any cost indications?</p> <ul style="list-style-type: none"> • If “yes” could you provide a contact person so that we may determine the logistics of data exchange (specifications/ timing / mode of exchange)? | <p><i>As above</i></p> |
| G | d | <p>Will the EOD feed contain all orders submitted by Firm X</p> | <p><i>As above</i></p> |
| G | e | <p>What format of the record and data fields will be provided?</p> | <p><i>As above</i></p> |
| G | f | <p>Will the feed include the time stamp on placement of order and execution in compliance with clock sync requirements?</p> | <p><i>As above</i></p> |
| G | g | <p>Will the feed cover the full set of products supported by your venue (Cash and Derivatives)?</p> | <p><i>As above</i></p> |
| G | h | <p>Will the feed also include ISIN and unique order indicator?</p> | <p><i>As above</i></p> |

MiFID II FIC Trading Venues Questionnaire

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| Section | H. Clearing |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE |
|------|--|-----------------------------------|
| H a | Which clearing houses do you expect to connect to in EEA? Do you expect to be connected to all clearing houses that have been authorised under EMIR as permissible to clear? Please specify if this will differ for MTF / OTF. | <i>Not applicable to LSE plc.</i> |
| H b | Will extraterritoriality play a part for third-country CCPs and have you considered these in your plans? | <i>Not applicable to LSE plc.</i> |
| H c | How do you plan to support FX NDF voluntary clearing workflow post-MiFID II? | <i>Not applicable to LSE plc.</i> |
| H d | What arrangements will be in place between the MTF / OTF and the CCP, to facilitate transfer of trade information to CCPs? | <i>Not applicable to LSE plc.</i> |
| H e | Are you engaged with CCPs and infrastructure providers (e.g. Marketwire)? | <i>Not applicable to LSE plc.</i> |
| H f | What wider reconciliations will you perform? | <i>Not applicable to LSE plc.</i> |
| H g | What are your reconciliatory expectations of the counterparties to the trade? | <i>Not applicable to LSE plc.</i> |
| H h | Can you please confirm if your MTF / OTF will allow to post allocate transactions and how this post allocation process would work (directly at your MTF/OTF platform, through a 3rd party allocation tool such as Truex / Traiana etc. or via a direct allocation at a CCP)? | <i>Not applicable to LSE plc.</i> |
| H i | Do you expect to connect to Traiana for pre-execution limit checking, if not are you able to provide any further insight on how you plan to do pre trade checking? | <i>Not applicable to LSE plc.</i> |
| H j | Can you please confirm if your MTFs / OTFs is expected to benefit from "Clearing certainty" exemption described in article 2.1 of RTS 26 and will this be clarified within your rule book? | <i>Not applicable to LSE plc.</i> |
| H k | What additional information do you require from members to facilitate your obligation to send trades to CCPs? | <i>Not applicable to LSE plc.</i> |
| H l | What are your plans for a pre-execution limit checking tool with respect to clearing-eligible derivatives? How do you anticipate clearing members will be able to setup and maintain credit limits for their clients? Do you plan to connect to any external vendor/credit hub to support pre-trade credit limit checks? | <i>Not applicable to LSE plc.</i> |

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| H | m | Will you generate an Order Ref ID for all transactions submitted to General Clearing Members for limit checking? | <i>Not applicable to LSE plc.</i> |
| H | n | What are your plans for counterparty messaging protocol with regards to clearing? (e.g. Trade failing pre-execution limit checks, trade rejected for clearing, etc.) | <i>Not applicable to LSE plc.</i> |
| H | o | How do the clearing requirements impact block trades that are agreed OTC and booked onto your venue? Will you implement your own timeliness rules for block trades? What levels will you be setting block sizes at? | <i>Not applicable to LSE plc.</i> |
| H | p | What are your plans to track and measure the timeliness of clearing messages? Do you require any changes by participants to ensure the time limit requirements on CCP submissions are met? | <i>Not applicable to LSE plc.</i> |
| H | q | What workflow changes will be implemented for blocks and allocations and how will this link in with the pre-trade check and clearing timelines? | <i>Not applicable to LSE plc.</i> |
| H | r | If you do not intend on registering as an OTF, will you continue to broker products that are not forced onto a Trading venue per the Derivative Trading Obligation? | <i>Not applicable to LSE plc.</i> |
| H | s | How are trades treated if the timeframes of the clearing obligations cannot be met due to CCP EOD closure? | <i>Not applicable to LSE plc.</i> |
| H | t | What workflow changes will be implemented in order to handle voids and resubmission for technical/clerical CCP rejections? | <i>Not applicable to LSE plc.</i> |
| H | u | How will the clearing model (& workflow) operate between counterparties, the MTF / OTF and the CCP? | <i>Not applicable to LSE plc.</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | I. Reporting and Transparency |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE |
|--------|--|--|
| I a | When do you expect to have an updated Interface Specification available for members' review? | <i>The technical specifications for MiFID II are published in the relevant section of the technical library: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</i> |
| I b | What additional connectivity changes are anticipated to support changes to the trading model or newly authorised legal entities? Will any new connections be required? | <i>No connectivity changes are envisaged.</i> |
| I c | What additional data fields will likely be required in order to support the MTF / OTF transparency and record-keeping obligations under MiFID II? | <i>All members will have to provide the following information for the order record keeping (RTS 24) and systems and controls (RTS 7) requirements: - Market participant Legal Entity Identifier (LEI) - Client ID (where applicable) - Investment decision maker ID (where applicable) - Execution ID - Trading Capacity In particular, where the Execution ID is populated with an Algo ID, LSE plc. will require registration of the Algo ID with an explanation of the means of testing (RTS 7 Article 10).</i> |
| I d | How will you, as a venue, record the data for each interaction and provide it to your member in order to enable them to meet their market abuse obligations? In what timeframe and what format will this data be provided? | <i>Members are provided with an audit trail of their interaction with the trading system.</i> |
| I e | Will you provide Best Execution reference prices and/or Best Bid & Offer prices for all products? | <i>Yes, LSE plc. will continue to provide BBO prices.</i> |
| I f | Will you be publishing the Best Execution reports for each financial instrument? Will these be published on your website? | <i>LSE plc. will publish, for each market segment that it operates and each instrument admitted to its market, the information required by RTS 27 in the format required and on at least a quarterly basis. LSE plc. envisages that these reports will be published on its website.</i> |
| I g | Will you provide tagging for identifying orders as passive and aggressive? | <i>We already provide the tag TradeLiquidityIndicator to inform whether the order added or removed liquidity for a trade not executed during an auction</i> |
| I h | What will you do when a trade server clock drifts beyond specified bounds? Will you re-report the trade? | <i>LSE plc. will consider in due course if this will be required or necessary, in the context of changes that are being made to comply with RTS 25 and ESMA guidelines.</i> |
| I i | How will you provide a trading venue transaction ID to firms to report for Transaction Reporting? | <i>This will be available on the execution report</i> |

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| l | j | What functionality do you plan to provide with regards to pre-trade transparency? i.e. Make public and make available under MiFIR Article 18, including the related liquidity and SSTI flags? Please break this down by trading model. | <i>The London Stock Exchange Group (LSEG) has partnered with Boat Services Ltd to build a MiFID II compliant OTC Trade Reporting service. This new service is branded TRADEcho and offers customers a single, multi-asset, pan-European reporting solution that complements their on-venue trading activity and helps them meet their real-time MiFID II OTC trade reporting obligations and Systematic Internaliser pre-trade obligations.</i> |
| l | k | How will you implement pre-trade transparency requirements for your order book (if there is one)? | <i>The LSE plc. market order books are already transparent.</i> |
| l | l | Do you intend to send the following fields for Post trade Transparency / Transaction Reporting: <ul style="list-style-type: none"> • Buyer / Seller code • LEI of CCP if applicable • Venue – seg MIC or operation MIC • Trading Date and Time –UTC and to correct granularity • Instrument identification Code - should specify ISIN • Complex trade id – if executing multiple legs as single • Waiver and OTC post trade indicator - what waiver values will be sent (if any) on the trade messages • Trading Venue Transaction Identification Code - Will you provide a Trading Venue Transaction Identification Code, and will it be a new field or an existing field? <p>If you intend to provide these fields, do you plan to provide in real-time after trade execution? How will you provide this information for voice trades?</p> | <p><i>Responses below:</i></p> <ul style="list-style-type: none"> - Buyer / Seller code. LEI of CCP if applicable Yes - Venue – seg MIC or operation MIC Yes - Trading Date and Time –UTC and to correct granularity Yes - Instrument identification Code - should specify ISIN Yes - Complex trade id – if executing multiple legs as single Not applicable - Waiver and OTC post trade indicator - what waiver values will be sent (if any) on the trade messages Waivers indicators will be sent - Trading Venue Transaction Identification Code - Will you provide a Trading Venue Transaction Identification Code, and will it be a new field or an existing field? Yes, exists already |
| l | m | Will you offer real time order and trade reconciliation capabilities? | <i>We already offer real time order and trade reconciliation through the Drop Copy and Real Time Trade reconciliation through the Post Trade Gateway.</i> |
| l | n | What additional data fields will be provided to members, in order to facilitate members' own reporting and record-keeping obligations? | <i>Please refer to Tech Specs: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</i> |
| l | o | Will the registered venue provide post-trade transparency for eligible trades and FX/PM Spot? | <i>The LSE plc. trading venues will provide post-trade transparency for eligible trades, subject to any applicable MiFID II transparency requirements. The London Stock Exchange Group (LSEG) has partnered with Boat Services Ltd to build a MiFID II compliant OTC Trade Reporting service. This new service is branded TRADEcho and offers customers a single, multi-asset, pan-European reporting solution that complements their on-venue trading activity and helps them meet their real-time MiFID II OTC trade reporting obligations.</i> |
| l | p | Will the registered venue provide data required for order recordkeeping and transaction reporting? | <i>A number of fields will be added to the market protocol, which will enable market participants to record the fields sent as part of messages sent to the market. Please refer to Tech Specs: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</i> |
| l | q | Will the registered venue provide messages time stamped to meet clock synchronization requirements? | <i>Yes.</i> |
| l | r | When do you expect to have a MiFID II updates workshop for members? | <i>LSE plc. has held a number of MiFID II events and maintains a regular contact with its customers as it continues with preparations for MiFID II implementation.</i> |

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| I | s | Is it correct that the determination is yet to be made as to what will be deemed 'sufficiently liquid' in terms of being traded on MTF/OTF, and that it will be case by case? | <i>Not applicable to LSE plc.</i> |
| I | t | Will you permit trades which are negotiated off venue to be formalized on venue? What dependencies do you have on waivers in order to be able to support this? Will you update your rulebook to govern such negotiated trades, and in what scenarios do you foresee it won't be possible to formalise a negotiated trade on your venue? | <i>Yes. LSE plc. plans to allow bilaterally negotiated trades to be concluded under the rules of the trading venues, subject to benefitting from any applicable pre-trade transparency waiver, suspension, or exemption.</i> |
| I | u | 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 vs the previous day? | <i>LSE plc. will notify its participants of the waivers that are available on its markets.</i> |
| I | v | What workflows are you planning for corrections to RTS 2 and 22 reports? | <p><i>If a member firm becomes aware of a trade report it has submitted in error, or of an error in a trade report submitted by it under the Rules of LSE plc. it shall immediately submit a cancellation to the trading system, which shall contain all the original trade report details including the original Trade ID and, where correcting an error in the original trade report, submit a new trade report (which must contain the corrected trade details, the original Trade ID and the "AMND" flag).</i></p> <p><i>Transaction reporting requirements should be discussed with the member firm's chosen ARM.</i></p> |

MiFID II FIC Trading Venues Questionnaire

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| Section | J. Regulatory Data and Data Management |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | Question | Response: LSE |
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| J a | <p>Please confirm that these fields will need to be sent to the venue:</p> <ul style="list-style-type: none"> • Algo ID • Executor • Decision Maker • Client Identification Code <p>Please confirm if there will be fields that will be sent in addition to the above.</p> | <p>All members will have to provide the following information for the order record keeping (RTS 24) and systems and controls (RTS 7) requirements:</p> <ul style="list-style-type: none"> - Market participant Legal Entity Identifier (LEI) - Client ID (where applicable) - Investment decision maker ID (where applicable) - Execution ID - Trading Capacity <p>In particular, where the Execution ID is populated with an Algo ID, LSE plc. will require registration of the Algo ID with an explanation of the means of testing (RTS 7 Article 10).</p> |
| J b | Will you provide MIC codes? | Yes. |
| J c | If supported, which format will you require for short codes? (Assumption is that they will be positive integers) | It is envisaged that short codes will be supported on all of the LSE plc. platforms, although it will not be compulsory to use a short code. Any value with up to 50 alphanumeric characters is expected to be accepted as a short code. This will be confirmed as part of the trading system specifications, which are typically published one month ahead of the release in test. |
| J d | <p>Do you only require short codes for:</p> <ul style="list-style-type: none"> • Algo • Trader • Client Identification Code | These fields may be submitted to the market using short codes. |
| J e | As Algo ID and Trader ID values may be associated with Investment Decision within Firm / Execution within firm values, the assumption is that these IDs be unique across these two groups i.e. if we have an Algo ID of 100 then we cannot also have a Trader ID of 100? | We will use the concept of "qualifiers" introduced by the FIX community to let customer the possibility of having separate sets of short codes for physical persons, Legal Entities and algorithms |
| J f | As Client ID is in a separate field to the IDM / EDM value on the order message, can its value overlap with those used for Algo ID and Trader ID? | <p>We will use the concept of "qualifiers" introduced by the FIX community to let customer the possibility of having separate sets of short codes for physical persons, Legal Entities and algorithms.</p> <p>It is currently under definition whether it will be possible to have separate sets of data for physical persons traders and physical person clients</p> |

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| J | g | <p>How will short codes be loaded?</p> <ul style="list-style-type: none"> • Will there be a bulk upload facility, so this process may be automated at the Member Firm? • If yes, our assumption is that when we bulk upload we may upload the complete list every time • Our assumption is that you will not reject orders that contain short codes (Algo ID, Trader ID or Client ID) that have not been uploaded in advance | <p>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.</p> |
| J | h | <p>How do you plan on implementing RTS 24 obligation to obtain Decision Maker and Executor from participants, noting that the industry does not want to pass this data on a trade by trade basis?</p> | <p>LSE plc. 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.</p> |
| J | i | <p>What security measures will you apply to ensure the data security of all uploaded information?</p> | <p>All services provided by LSE plc. are covered by physical and technical information security policies, which ensure the robustness of systems and facilities, ensure continuity and regularity of performance in services provided and the protection of data.</p> |
| J | j | <p>Will you reject orders that contain short codes (Algo ID, Trader ID or Client ID) that have not been uploaded in advance?</p> | <p>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.</p> |
| J | k | <p>Do you intend to send the following fields for Post trade Transparency / Transaction Reporting:</p> <ul style="list-style-type: none"> • Buyer / Seller code • LEI of CCP if applicable • Venue – seg MIC or operation MIC • Trading Date and Time –UTC and to correct granularity • Instrument identification Code - should specify ISIN • Complex trade id – if executing multiple legs as single • Waiver and OTC post trade indicator - what waiver values will be sent (at all) on the trade messages • Trading Venue Transaction Identification Code - Will you provide a Trading Venue Transaction Identification Code, and will it be a new field or an existing field? | <p>. Buyer / Seller code - not sending</p> <ul style="list-style-type: none"> • LEI of CCP if applicable - No • Venue – seg MIC or operation MIC - Not in the feed but it is available in the Reference Data files. • Trading Date and Time –UTC and to correct granularity - Yes, UTC in microsecond granularity • Instrument identification Code - should specify ISIN - Yes • Complex trade id – if executing multiple legs as single - Yes • Waiver and OTC post trade indicator - what waiver values will be sent (at all) on the trade messages - Yes • Trading Venue Transaction Identification Code - Will you provide a Trading Venue Transaction Identification Code, and will it be a new field or an existing field? - Yes, existing field |
| J | l | <p>What changes or additional data requirements do you anticipate for your order and execution interface?</p> | <p>These are part of the trading system specifications.</p> |
| J | m | <p>What changes or additional data requirements do you anticipate for your market data interface?</p> | <p>These are part of the trading system specifications.</p> |
| J | n | <p>Please detail your MiFID II release timetable.</p> | <p>The technical library contains the detailed specifications for MiFID II releases, including proposals for deployment and the specification changes for Release 9.2: http://www.londonstockexchange.com/products-and-services/technical-library/millennium-exchange-technical-specifications/millennium-exchange-technical-specifications.htm</p> |

MiFID II FIC Trading Venues Questionnaire

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| Section | K. Connectivity and Testing |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|--|---|
| K | a | Which CCPs do you intend to have connectivity to? Do you intend to connect with CCPs directly or via a middleware? | <i>Not applicable to LSE plc.</i> |
| K | b | What arrangements will be in place between the MTF / OTF and the CCP, to facilitate transfer of trade information to CCPs? | <i>Not applicable to LSE plc.</i> |
| K | c | Are there any known changes being made to the FIX protocol? | <i>These are part of the trading system specifications.</i> |
| K | d | What testing will take place prior to 3rd January 2018 go-live? | <i>New Release has been in CDS since 3 August 2017. Customers will need to conform all applications in accordance with LSE plc. certification policy.</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | L. Trading Model |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|---|---|
| L | a | Which trading models will be live for products on 3 January 2018? | <i>LSE plc. will continue to operate continuous order books, quote driven models as well as a Trade Reporting functionality.</i> |
| L | b | What new trade flows do you expect? | <i>Not applicable to LSE plc.</i> |
| L | c | How will quote data be captured in trade processes that do not currently have such functionality? | <i>Not applicable to LSE plc..</i> |
| L | d | To what extent will an Order Book be supported? What take up do you expect for the Order Book? | <i>LSE plc. will continue to operate Order Books.</i> |
| L | e | If your current trading model supports prime brokerage give-up trades, are any changes expected to this model/process? | <i>Give up trades will continue to be permitted under the Rules of LSE plc.</i> |
| L | f | If the current trading model supports prime brokerage give-up trades, are any changes expected to this model / process? | <i>As above</i> |
| L | g | How will the MTF / OTF differentiate between algo trading and non-algo trading? What additional data will be required from members to support the identification of algo trading vs. non-algo trading? | <p><i>Members will be required to certify that their algorithms have been tested prior to deployment, provide details of the means used for testing and the long/short code identifiers used for each algo. This process will be managed through a Membership Portal, which will be launched prior to MiFID II go-live. Where a member firm confirms an order was generated by an algorithm (by providing a short code identifier for the algorithm on the order) this will be deemed as confirmation to the Exchange that the submitting member firm has adequately tested the algorithm, in accordance with the Rule of LSE plc.</i></p> <p><i>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.</i></p> |
| L | h | What is the anticipated process for re-classification of algos? | <i>Market participants will be required to register their algo IDs, as well as to certify and explain the means by which they have tested these in line with the MiFID II requirements.</i> |
| L | i | GFXD believes a FX swap should be represented by 2 separate FX forward ISINs (one forward ISIN per leg) linked with a package ID irrespective of the tenor of each leg (not a single FX swap ISIN nor a FX spot ISIN if short dated. Have you considered this in your builds? | <i>Not applicable to LSE plc.</i> |
| L | j | What new functionality and order types will you offer as part of your MiFID II release? | <i>No new functionality</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | M. Non-EEA Venues |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|--|---|
| M | a | <p>What are your plans for establishing a MiFID-eligible trading venue(s) in non-EU jurisdictions?</p> <ul style="list-style-type: none">• Will these be part of a non-EU or EU entity?• How will you clarify the scope of instruments that will be made available to trade on those venues?• Will the non-EU venues fulfil the MiFID pre- and post-trade transparency requirements when facilitating trading involving EU counterparties? | <p><i>LSE plc. currently has no plans to establish MiFID-eligible trading venues in non-EU jurisdictions or to make its existing platforms in non-EU jurisdictions MiFID II-eligible.</i></p> |

MiFID II FIC Trading Venues Questionnaire

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| Section | N. APIs |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
|------|---|---|--|
| N | a | What changes are you planning on making to your pre and post execution API's (eg Algo ID) | <p><i>Updated technical specifications were made available to customers in April 2017. All technical changes are outlined in this document. Order entry messages have been updated to allow member firms to send in Client ID, Investor ID and Execution ID as well as MiFID II waiver flags.</i></p> <p><i>The GTP Market Data feed will provide a separate post trade feed with all information, including Post Trade flags, in the MiFID II required format.</i></p> <p><i>All specifications can be found on the LSE plc. website.</i></p> |
| N | b | When do you anticipate having pre and post execution API changes ready for testing? | <i>Change have been in the CDS environment since 3 August.</i> |
| N | c | How are you planning on undertaking testing – will this be direct with individual participants or will it require co-ordinated effort across participants (e.g. partnering between two participants)? | <i>Testing of the MiFID II releases of the trading systems will occur in the same way as previous releases.</i> |
| N | d | Are you planning on centrally co-ordinating testing on API changes across participants? | <i>We will offer Customer Dress Rehearsals for LSE plc. These are currently scheduled for 7 October and 28 October</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | O. Stress Testing |
| Company | LSE plc. |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

| Ref. | | Question | Response: LSE |
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| O | a | Are you intending on undertaking stress testing with venue participant involvement, or is this something you will look to do in isolation for the components you are responsible for? | <i>We are currently evaluating this based on market demand. The Customer Development Service (CDS) environment will not support stress testing. We are evaluating other options (such as weekend testing).</i> |

MiFID II FIC Trading Venues Questionnaire

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| Section | Annex I - Disclaimer |
| Company | LSE plc |
| Contact name | Paul Haddock |
| Contact details | phaddock@lseg.com |
| Date | 05-Sep-17 |

Disclaimer

The replies and information provided in this document represent LSE plc plans and views as of August, 2017.

They can change and/or develop differently in the coming months leading to January 3rd, 2018 and they therefore cannot be relied upon by any reader or participant nor considered as LSE plc 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 LSE plc also via amendments to the relevant market rules and user agreements.