

BERNSTEIN AUTONOMOUS LLP SANFORD C. BERNSTEIN IRELAND LIMITED

ORDER EXECUTION POLICY 2023

INTRODUCTION

1. As required by the Markets in Financial Instruments Directive¹ (“**MiFID**”), this document sets out the Order Execution Policy (the “**Policy**”) of Bernstein Autonomous LLP and Sanford C. Bernstein Ireland Limited, alongside the arrangements each firm have adopted in order to comply with the obligation to take all sufficient steps to obtain the best possible outcome for our client’s orders (so called “best execution”).
2. This Policy only applies to our Professional Clients. As detailed in our Terms of Business, you are deemed to have consented to your transactions being handled in accordance with this Policy. References in the Policy to “**we**” or “**us**” are to both Bernstein Autonomous LLP and Sanford C. Bernstein Ireland Limited collectively.
3. Please note that the activities of Sanford C. Bernstein Ireland Limited are limited to the reception and transmission of orders to Bernstein Autonomous LLP for execution or further onward transmission.
4. You acknowledge and accept that no provisions contained in this Policy shall result in us owing you any fiduciary responsibilities.

SCOPE OF OUR BEST EXECUTION OBLIGATION

5. We are required to put in place an Order Execution Policy, and to take all sufficient steps to obtain the best possible result for clients who are ‘legitimately relying’ (see paragraphs 7 and 8 below) on us for the execution or the reception and transmission of client orders in “financial instruments” (as defined in Annex 1, Section C of MiFID). An order is an instruction to buy or sell a financial instrument which is accepted by us for execution or onward transmission to a third party and which gives rise to contractual or agency obligations to the client. Where we transmit a client order to a third party for execution we will act honestly, fairly and professionally in accordance with your best interests as defined pursuant to MiFID.

¹ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast)



6. This Policy covers cash equity products (such as shares, warrants and exchange traded funds (“ETFs”). This Policy does not apply where you have asked us for a quote (RFQ). We generally take the view on RFQs that in the context of the European Commission’s four considerations there is no legitimate reliance being placed on us to meet the relevant best execution requirements. We shall assume that no transactions that we undertake on your behalf are securities financing transactions (“SFTs”) unless we are expressly informed otherwise.
7. A client’s regulatory categorisation, as detailed below, impacts the determination of whether a client is ‘legitimately relying’ on us to protect their interests, and as such whether best execution is owed. For the avoidance of doubt, this Policy does not apply to business conducted with clients who are categorised in accordance with FCA criteria as Eligible Counterparties. As such, we will not owe best execution for transactions entered into with Eligible Counterparties.

For **Professional Clients**, each specific transaction needs to be assessed to determine whether the client is legitimately relying on us to protect their interests, as follows:

- **Four factors approach:** to determine whether a client is in fact legitimately relying on us in relation to a particular client order (whereby best execution is therefore owed to the client), we apply the following four factors:
 - a) **Which party initiates the transaction:** where it is a client that ‘initiates’ a transaction the client is more likely to place legitimate reliance on us. In this context, ‘initiate’ means where the client approaches a client us regarding a potential transaction;
 - b) **Market practice and the existence of a convention to ‘shop around’:** in certain wholesale markets, there is a common practice or convention to ‘shop around’ and obtain quotes from several dealers prior to a client executing any transaction. The existence of such a practice indicates that a client is less likely to place legitimate reliance on us for best execution of the order;
 - c) **The relative levels of price transparency within a market:** in certain markets, transparent prices may not be readily available, and a client may be able to speak to different brokers to get a better view on pricing (see also b) above). This indicates that the best execution obligation is less likely to apply; and
 - d) **The Terms of Business and other information provided to clients should make clear if best execution applies or not.** This must reflect the economic reality of the relationship.

Paragraph 9 onwards provides further guidance as to how best execution applies to Professional Clients, with various trading scenarios and examples provided.

8. All of our employees who, on behalf of Professional Clients, either execute client orders or pass orders for execution to other entities must ensure such activities are conducted in accordance with this Policy.



9. Where a Professional Client legitimately relies on us to protect their interests in relation to the relevant elements of a transaction that may be affected by how we, or the entity to which the order is transmitted, executes the order, then the best execution obligation will apply. For example, a best execution obligation would likely apply where we execute an order by:
 - a) dealing as agent (e.g. we transmit an order for execution to a third party or our execution desk); and
 - b) 'working' an order on behalf of a client (e.g. where we make decisions as to how the order is executed).
10. We are required to have in place policies and procedures that are designed to obtain, on a consistent basis, the best possible result for the execution of client orders, by considering: the nature of the client orders, the priorities placed on us in filling those client orders and the nature of relevant markets. We will ensure that clear instructions are received from clients on the relevant aspects of an order that we execute on the client's behalf, so that where there is a legitimate reliance on us for best execution, we will endeavour to meet its client's expectations.
11. In taking all sufficient steps, we will look to achieve the best balance across a range of sometimes conflicting Execution Factors (see paragraph 12 onwards, below). This does not mean that every individual client order will receive the best outcome, but rather the best possible overall outcome that can reasonably be expected for our clients' orders will be achieved by following this Policy.

EXECUTION FACTORS

12. We will take all sufficient steps to obtain the best possible result for you by considering a range of execution factors, when executing client orders or placing orders with (or transmitting orders to) other entities for execution. The execution factors that we may consider include, but are not limited to:
 - Share Trading Obligation ("STO")
 - price;
 - liquidity quality;
 - latency;
 - likelihood of execution and settlement;
 - costs;
 - size;
 - nature; and / or
 - any other consideration relevant to the execution of the order, taken together, the "Execution Factors".
13. When executing your orders we will determine the relative importance of the Execution Factors based on any information or instructions you give us with your order and market information at the relevant time, taking into account the following criteria: (i) your characteristics including your client categorisation as a Professional Client; (ii) the characteristics of your order; (iii) the characteristics of the financial instrument which is the subject of your order; and (iv) the characteristics of the execution venue(s) to which your order can be directed. For example, where a client instructs us to act aggressively on an order, the style of execution will involve a higher number of execution venues and order types. This will increase fill rates and increase impact cost.



14. In the absence of Specific Instructions from you (see paragraph 15 onwards, below), we will exercise our own judgement, skill and experience, having regard to available market information, when determining the Execution Factors that we need to consider to provide you with best execution, but we will always seek to exercise that judgement to obtain the best possible result for you.

ASSESSING THE DIFFERENT EXECUTION FACTORS

15. Share trading obligation will take priority for clients that are subject to the European STO. Price will likely be the next most significant factor in achieving best execution in accordance with this Policy. However, in certain circumstances, we may, in our absolute discretion, determine that the other Execution Factors above may be more important than price. We may, therefore, place particular significance on probability of fill, probability of finding additional liquidity and liquidity quality. Whilst price is a strong determinative factor in achieving best execution, it should be noted that best execution is broader than the 'best price' as this may not offer the best result for a client if it is associated with higher costs (e.g. cost of market impact, exchange or clearing fees and commission/spreads) or relates to venues with less liquidity. Only in a tied situation among other factors will the cost of trading be incorporated.
16. Subject to any Specific Instructions (see 17 onwards, below) from you, the financial instrument to which the order relates will often dictate the determination and ranking of the relative importance of the Execution Factors. In addition, the diverse markets for different financial instruments, and the types of orders that clients place with us, mean that different Execution Factors could be applicable each time we consider a particular execution strategy.

SPECIFIC CLIENT INSTRUCTIONS

17. If you give us specific instructions as to how you wish your order to be executed ("**Specific Instructions**"), we will execute that order in accordance with those Specific Instructions. Specific Instructions could relate to execution price, venue, method of execution and instructions to use a particular algorithm or individual parameters of an algorithm. If you require us to execute an order adhering to your Specific Instructions, you must clearly state the preferred method of execution at the time you place the order with us.
18. Whenever there is a Specific Instruction from you, we shall consider that following the Specific Instruction as discharging our obligation to take all sufficient steps to obtain the best possible result for you (as per Article 27(1) of MiFID – see paragraph 1 above) in respect of that part of the order to which the Specific Instructions relate.
19. Notwithstanding paragraph 18, to the extent a client's Specific Instructions are not comprehensive, we shall, in seeking to achieve best execution for any remaining part of an order to which Specific Instructions do not relate, continue to assess all other relevant Execution Factors (see also paragraph 16 above).
20. Specific Instructions may prevent us from taking the steps that we have designed and implemented to execute your order in accordance with this Policy and to achieve the best possible result in respect of those elements to which the Specific Instructions relate.

21. Where you transmit orders to us referencing a security symbol which is execution venue or exchange specific, as opposed to a generic identification symbol (e.g. ISIN or CUSIP number), we will consider that we can facilitate trading across all relevant execution venues unless explicitly stated otherwise.
22. Where an algorithm is used in the execution of a client order, then the choice of that particular algorithm is not considered to be a Specific Instruction.

USE OF EXECUTION VENUES FOR EXECUTION

23. Subject to any Specific Instructions, to achieve best execution we consider appropriate execution venues to include:
 - Regulated markets;
 - Multilateral trading facilities (“MTFs”);
 - Systematic Internalisers (“SIs”);
 - Other liquidity provider or an entity that performs a similar function in a third country to the function performed by any of the above.

Best Execution obligations are unlikely to apply where Professional Clients have asked for an order to be traded via a Request-for-Quote (RFQ) and it is determined that there is no legitimate reliance placed on us to meet the relevant Best Execution requirements. However, we will endeavour to provide the best possible outcome to all clients.

24. A list of the execution venues used by us is set out in Appendix 1 to this Policy. This list specifies which execution venues or entities we use for different classes of financial instruments. Our choice of venue aims to obtain, on a consistent basis, the best possible result for the execution of client orders having regard to the Execution Factors.
25. When determining which venues to connect to, we review the rules of the venue, available order types and, on multi-lateral venues, pre-existing liquidity conditions, if available.
26. The execution venues on which we place “significant reliance” in meeting its obligation to take all sufficient steps to obtain, on a consistent basis, the best possible result for the execution of client orders are set out at Appendix 2 to this Policy.
27. We will conduct a formal review of execution venues on a quarterly basis. This incorporates examining trade volume, market share and liquidity quality metrics and data published by individual execution venues. Our algorithms will also manage venue interaction in real time based on liquidity quality metrics and probability of fill.
28. We may also cross your order with a matching order from another Client in a non-systematic manner. The execution price of this cross will depend on several factors including any limits you have applied to your order, the price on the primary market, and any other relevant circumstances such as liquidity of the relevant equity instrument. On most occasions, crosses via us will transact at a price within the primary market spread.



29. Where an execution commission rate is negotiated by you that make access to all venues unprofitable, we will remove higher cost execution venues from the routing decision. Venue exclusions would be clearly highlighted to you during the commission rate negotiation process. We look to pay for higher cost access to premium liquidity where it is deemed beneficial to the overall execution performance.
30. If you wish to choose the execution venues, we can provide our own independent analysis of that venue to assist clients in making an informed decision.

USE OF OTHER BROKER-DEALERS FOR EXECUTION

31. We may use other brokers to execute your orders to achieve best execution, for example, in those jurisdictions where we have no local presence or where an ID market operates. We may also transmit orders to exchanges via direct market access connectivity provided by other brokers. We only select partnering brokers following the execution venue selection process detailed at paragraph 24 above.
32. When we receive a client order and transmit that order to another entity for execution, we will take all sufficient steps to achieve the best outcome, in accordance with this Policy, taking account of the Execution Factors set out above and any Specific Instructions received from the client in relation to that order. When determining the strategy for obtaining the best outcome for a client's order, in the absence of any Specific Instructions, we will consider if it is reasonable to simply transmit the order to another entity or whether it is necessary to exercise additional control when instructing the other entity in relation to that order. Where an affiliate of ours is the entity to which it transmits an order for execution, we will review the quality of the execution in the same way as it would for any other execution venue.
33. Where your order is for the purchase or sale of securities in North America, Latin America or Asia we will, in most cases, transmit your order for execution by our US-regulated affiliate Sanford C. Bernstein & Co., LLC or our Hong Kong regulated affiliate, Sanford C. Bernstein (Hong Kong) Limited, as appropriate. We are satisfied that in doing so, we comply with our overarching obligation to you to consistently achieve the best possible result for you in all circumstances.
34. Where we transmit an order to a broker-dealer (whether our affiliate or otherwise) for execution, we will monitor their executions to check that they are achieving the best possible outcome for our clients. Where we determine that the local broker is not providing best execution, they will be removed from our approved broker list.

EXECUTION STRATEGY: EQUITY AND WARRANT PRODUCTS

35. For Professional Clients trading equity and warrant products using our Cash, Program or Algorithmic trading routes, the execution strategy likely to be employed, along with the relative importance given to the Execution Factors, is set out below:
36. Our portfolio of algorithmic strategies provides for numerous single stock and portfolio executions within a risk-controlled framework. These strategies aim to achieve a variety of different trading objectives which can be determined by the client. The client can further adapt the strategy by adjusting a range of trading parameters. Bespoke customised strategies can also be requested.

37. We aim to achieve the best routing result for our institutional clients. Price, Liquidity Quality, Size and Probability of fill are prioritised over explicit cost.
38. We can incorporate client preferences into the order routing logic. This can include the exclusion of venues and changes to the significance of each of the Execution Factors that influence the routing decision.
39. It should be noted that several possible factors may lead to us not achieving our goal of best execution. Influencing factors include, but are not limited to, latency, speed of client connection, market volatility.

EXECUTION STRATEGY: EXCHANGE TRADED FUNDS

40. Sufficiently liquid ETFs will be executed following a similar process to that described for equities and warrants. For less liquid ETFs, if deemed appropriate, a Request for Quote (RFQ) process may be employed that uses multiple market-leading liquidity providers.

COSTS AND CHARGES

41. We consider that controlling the costs incurred on behalf of clients as being integral to achieving best execution. We distinguish between two broad categories of cost:
 - a) Implicit costs – these arise from how a trade is executed (e.g. immediately or worked over a period of time, in a block, aggregated with other trades, or as child orders sent to multiple execution venues); and,
 - b) Explicit costs – these include commissions, fees, taxes, exchange fees, clearing and settlement costs, or any other costs passed onto the client by intermediaries participating in the transaction.

Please be aware that in our assessment of costs of trading we will often place greater significance on those implicit costs described above rather than on explicit costs.

42. Our commissions and charging structure are designed not to discriminate between venues. Certain venues will be removed from the routing decision where clients choose to pay an exceptionally low commission rate which limits the available sources of liquidity. This will always be made clear to a client pre-trade before any venues are disabled. In 2020, we received a reduced fee tariff when posting passively on CBOE Europe. The reduction does not exceed the fees incurred for posting aggressive trades on this venue.

MONITORING AND REVIEW

43. We monitor the effectiveness of its order execution arrangements. For example, real-time order monitoring and benchmarking by sales traders, supported by real-time performance-based alerts. All executions are reviewed at the end of day against 'best execution' criteria and exception reports are reviewed by senior management. In-house Transaction Cost Analysis ("TCA") is also used in post-trade performance reviews with our clients. We regularly assess whether the execution venues it accesses, and the brokers and dealers to whom we transmit orders, continue to provide for the best possible result for clients.

44. We formally review the quality of execution venues and relevant order types on a quarterly basis. Ad hoc reviews also take place between these diarised events. Venue quality is linked to level of aggression within our algorithms with venues displaying higher transaction cost used for more aggressive orders.
45. We formally review both our order execution arrangements and this Policy at least annually or when a material change occurs in respect of one of our chosen execution venues or otherwise that affects our ability to continue to deliver best execution to clients.

GENERAL PROVISIONS

46. The obligations established in this policy extend to transactions executed with or through Bernstein Autonomous LLP or orders received and transmitted through Sanford C. Bernstein Ireland Limited. This policy does not apply to other Bernstein Autonomous LLP affiliates or AllianceBernstein entities. If, at any time, you have questions or concerns about how an order was handled, we would be pleased to provide a detailed breakdown and the steps taken to achieve best execution.
47. The terms of the Order Execution Policy as may be amended from time to time, will prevail in the event of any conflict between them and the provisions of any Terms of Business that may be agreed between us. You will be notified of any material change to our order execution arrangements.
48. Where we receive a reasonable and proportionate request for information about the firm's policies and arrangements and how they are reviewed, we will answer clearly within a reasonable time.
49. This Policy, including the list of execution venues, can be found at https://www.bernsteinresearch.com/CMSObjectBR/BA_LLP_Order_Execution_Policy.pdf.
50. Further to the client's prior express consent, the entity to which its order is transmitted may execute that order outside a regulated market or an MTF or similar third country venue.
51. If a client gives us a limit order in relation to financial instruments admitted to trading on a UK or EEA Regulated Market, we are required to make such limit orders public to the extent they are not immediately executed under prevailing market conditions unless you consent to us exercising our discretion as to whether to make such limit orders public.



APPENDIX 1: EXECUTION VENUES ACCESSED IN 2022

We are not affiliated with or invested in any execution venues.

MIC	Operating Mic	Execution Venues Accessed	ISO Country	Type
AQEU	AQEU	AQUIS EXCHANGE EUROPE	FR	NSPD
AQEA	AQEU	AQUIS EXCHANGE EUROPE AUCTION ON DEMAND (AOD)	FR	NSPD
AQED	AQEU	AQUIS EXCHANGE EUROPE NON DISPLAY ORDER BOOK (NDOB)	FR	NSPD
AQXE	AQXE	AQUIS EXCHANGE PLC	GB	MLTF
AQXD	AQXE	AQUIS EXCHANGE PLC AMP NON DISPLAY ORDER BOOK	GB	MLTF
AQXA	AQXE	AQUIS EXCHANGE PLC AUCTION ON DEMAND (AOD)	GB	MLTF
XATH	ASEX	ATHENS EXCHANGE S.A. CASH MARKET	GR	RMKT
BBIS	BBIE	BARCLAYS BANK IRELAND PLC - SYSTEMATIC INTERNALISER	IE	SINT
BBSI	BPLC	BARCLAYS BANK PLC - SYSTEMATIC INTERNALISER	GB	SINT
BLOX	XIEL	BLOCKMATCH - UK DARK	GB	MLTF
BRFQ	XIEL	BLOCKMATCH UK RFQ	GB	MLTF
BMTF	BMTF	BLOOMBERG TRADING FACILITY LIMITED	GB	NSPD
XMAD	BMEX	BOLSA DE MADRID	ES	RMKT
XBUD	XBUD	BUDAPEST STOCK EXCHANGE	HU	RMKT
LISX	BCXE	CBOE EUROPE - LIS SERVICE	GB	NSPD
BATD	BCXE	CBOE EUROPE - BXE DARK ORDER BOOK	GB	NSPD
BATE	BCXE	CBOE EUROPE - BXE ORDER BOOKS	GB	NSPD
BATP	BCXE	CBOE EUROPE - BXE PERIODIC	GB	NSPD
CHID	BCXE	CBOE EUROPE - CXE DARK ORDER BOOK	GB	NSPD
CHIX	BCXE	CBOE EUROPE - CXE ORDER BOOKS	GB	NSPD
CEUD	CCXE	CBOE EUROPE - DXE DARK ORDER BOOK (NL)	NL	RMKT
CEUX	CCXE	CBOE EUROPE - DXE ORDER BOOKS (NL)	NL	RMKT
BEUP	CCXE	CBOE EUROPE - DXE PERIODIC (NL)	NL	RMKT
LISZ	CCXE	CBOE EUROPE - LIS SERVICE (NL)	NL	RMKT
CCEU	CCEU	CITADEL CONNECT EUROPE	GB	SINT
CGMD	CGMD	CITIGROUP GLOBAL MARKETS EUROPE AG	DE	SINT
CGMG	CGMG	CITIGROUP GLOBAL MARKETS EUROPE AG - LONDON BRANCH	GB	SINT
CSCF	CSEU	CREDIT SUISSE AES CROSSFINDER EUROPE	GB	NSPD
SICS	CSEU	CREDIT SUISSE SECURITIES (EUROPE) LIMITED	GB	SINT
XFRA	XFRA	DEUTSCHE BOERSE AG	DE	NSPD
XAMS	XAMS	EURONEXT - EURONEXT AMSTERDAM	NL	RMKT
XBRU	XBRU	EURONEXT - EURONEXT BRUSSELS	BE	RMKT
XLIS	XLIS	EURONEXT - EURONEXT LISBON	PT	RMKT
XPAR	XPAR	EURONEXT - EURONEXT PARIS	FR	NSPD
MTAA	XMIL	EURONEXT MILAN	IT	RMKT
MNDK	XCSE	FIRST NORTH DENMARK - AUCTION ON DEMAND	DK	NSPD
DNDK	XCSE	FIRST NORTH DENMARK - NORDIC@MID	DK	NSPD
DSME	XCSE	FIRST NORTH DENMARK -SME GROWTH MARKET	DK	NSPD
MNFI	XHEL	FIRST NORTH FINLAND - AUCTION ON DEMAND	FI	NSPD



DNFI	XHEL	FIRST NORTH FINLAND - NORDIC@MID	FI	NSPD
FSME	XHEL	FIRST NORTH FINLAND - SME GROWTH MARKET	FI	RMKT
MNSE	XSTO	FIRST NORTH SWEDEN - AUCTION ON DEMAND	SE	NSPD
DNSE	XSTO	FIRST NORTH SWEDEN - NORDIC@MID	SE	NSPD
SSME	XSTO	FIRST NORTH SWEDEN - SME GROWTH MARKET	SE	NSPD
XDUB	XDUB	IRISH STOCK EXCHANGE - ALL MARKET	IE	NSPD
JPEU	JPEU	J.P. MORGAN SE	DE	SINT
JPSI	JPSI	J.P. MORGAN SECURITIES PLC	GB	NSPD
JSSI	JSSI	JANE STREET FINANCIAL LTD	GB	SINT
JNSI	JNSI	JANE STREET NETHERLANDS B.V.	NL	SINT
LEUE	LEUE	LIQUIDNET EU LIMITED EQUITY MTF	IE	MLTF
LIQF	LIQU	LIQUIDNET EUROPE LIMITED	GB	NSPD
LIQU	LIQU	LIQUIDNET SYSTEMS	GB	NSPD
XLJU	XLJU	LJUBLJANA STOCK EXCHANGE (OFFICIAL MARKET)	SI	RMKT
XLON	XLON	LONDON STOCK EXCHANGE	GB	NSPD
MSSI	MSIP	MORGAN STANLEY AND CO. INTERNATIONAL PLC - SYSTEMATIC INTERNALISER	GB	SINT
MESI	MSEU	MORGAN STANLEY EUROPE S.E. - SYSTEMATIC INTERNALISER	DE	SINT
MISX	MISX	MOSCOW EXCHANGE - ALL MARKETS*(Accessed from 1/1/2022 to 24/2/2022)	RU	NSPD
XCSE	XCSE	NASDAQ COPENHAGEN A/S	DK	NSPD
MCSE	XCSE	NASDAQ COPENHAGEN A/S - AUCTION ON DEMAND	DK	RMKT
DCSE	XCSE	NASDAQ COPENHAGEN A/S - NORDIC@MID	DK	RMKT
XHEL	XHEL	NASDAQ HELSINKI LTD	FI	NSPD
MHEL	XHEL	NASDAQ HELSINKI LTD - AUCTION ON DEMAND	FI	RMKT
DHEL	XHEL	NASDAQ HELSINKI LTD - NORDIC@MID	FI	RMKT
XSTO	XSTO	NASDAQ STOCKHOLM AB	SE	RMKT
MSTO	XSTO	NASDAQ STOCKHOLM AB - AUCTION ON DEMAND	SE	RMKT
DSTO	XSTO	NASDAQ STOCKHOLM AB - NORDIC@MID	SE	RMKT
XOAD	XOSL	OSLO AXESS NORTH SEA - DARK POOL	NO	NSPD
XOSL	XOSL	OSLO BORS	NO	RMKT
XOSA	XOSL	OSLO BORS - LIT X AUCTIONS	NO	NSPD
XPAC	ITGL	POSIT AUCTION	IE	NSPD
XPAL	VIUK	POSIT AUCTION UK	GB	MLTF
XPOS	ITGL	POSIT DARK	IE	MLTF
XRFQ	ITGL	POSIT RFQ	IE	NSPD
VIUK	VIUK	POSIT UK	GB	NSPD
XPRA	XPRA	PRAGUE STOCK EXCHANGE	CZ	RMKT
SEBS	SEBS	SEB	SE	SINT
SGMV	SGMU	SIGMA X EUROPE AUCTION BOOK	FR	MLTF
SGMU	SGMU	SIGMA X EUROPE NON-DISPLAYED BOOK	FR	MLTF
SGMX	SGMX	SIGMA X MTF	GB	MLTF
SGMY	SGMX	SIGMA X MTF - AUCTION BOOK	GB	MLTF
XSWX	XSWX	SIX SWISS EXCHANGE	CH	RMKT
XVTX	XSWX	SIX SWISS EXCHANGE - BLUE CHIPS SEGMENT	CH	RMKT
XSWM	XSWX	SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT	CH	RMKT
XBSE	XBSE	SPOT REGULATED MARKET - BVV	RO	RMKT



TWEM	TWEU	TRADEWEB EU BV - MTF	NL	MLTF
TREU	TREU	TRADEWEB EUROPE LIMITED	GB	NSPD
TRQX	TRQX	TURQUOISE	GB	NSPD
TQEX	TQEX	TURQUOISE EUROPE	NL	NSPD
TQEM	TQEX	TURQUOISE EUROPE - DARK	NL	NSPD
TQEA	TQEX	TURQUOISE EUROPE - LIT AUCTIONS	NL	NSPD
TRQA	TRQX	TURQUOISE LIT AUCTIONS	GB	NSPD
TRQM	TRQX	TURQUOISE PLATO	GB	NSPD
XWAR	XWAR	WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET	PL	RMKT
WBAH	XWBO	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)	AT	RMKT
XETR	XETR	XETRA	DE	NSPD
XETA	XETR	XETRA - REGULIERTER MARKT	DE	RMKT



APPENDIX 2: EXECUTION VENUES ON WHICH WE PLACE SIGNIFICANT RELIANCE BY CLASS OF INSTRUMENT IN 2022

(a) Equities – Shares & Depositary Receipts – (i) Tick size liquidity bands 5 and 6 (from 2,000 trades per day)

MIC	Operating Mic	Execution Venues Utilised in 2022	ISO Country	Type
AQEU	AQEU	AQUIS EXCHANGE EUROPE	FR	NSPD
AQXE	AQXE	AQUIS EXCHANGE PLC	GB	MLTF
XUBS	XUBS	AQUIS EXCHANGE PLC - AMP - DARK ORDER BOOK	GB	NSPD
AQXA	AQXE	AQUIS EXCHANGE PLC AUCTION ON DEMAND (AOD)	GB	MLTF
XATH	ASEX	ATHENS EXCHANGE S.A. CASH MARKET	GR	RMKT
BCSI	BCSL	BARCLAYS CAPITAL SECURITIES LIMITED - SYSTEMATIC INTERNALISER	GB	SINT
BLOX	XIEL	BLOCKMATCH - UK DARK	GB	MLTF
BRFQ	XIEL	BLOCKMATCH UK RFQ	GB	MLTF
BMTF	BMTF	BLOOMBERG TRADING FACILITY LIMITED	GB	NSPD
XMAD	BMEX	BOLSA DE MADRID	ES	RMKT
XIST	XIST	BORSA ISTANBUL	TR	NSPD
XBUD	XBUD	BUDAPEST STOCK EXCHANGE	HU	RMKT
LISX	BCXE	CBOE EUROPE - LIS SERVICE	GB	NSPD
BATD	BCXE	CBOE EUROPE - BXE DARK ORDER BOOK	GB	NSPD
BATE	BCXE	CBOE EUROPE - BXE ORDER BOOKS	GB	NSPD
BATP	BCXE	CBOE EUROPE - BXE PERIODIC	GB	NSPD
CHID	BCXE	CBOE EUROPE - CXE DARK ORDER BOOK	GB	NSPD
CHIX	BCXE	CBOE EUROPE - CXE ORDER BOOKS	GB	NSPD
CEUD	CCXE	CBOE EUROPE - DXE DARK ORDER BOOK (NL)	NL	RMKT
CEUO	CCXE	CBOE EUROPE - DXE OFF-BOOK (NL)	NL	RMKT
CEUX	CCXE	CBOE EUROPE - DXE ORDER BOOKS (NL)	NL	RMKT
BEUP	CCXE	CBOE EUROPE - DXE PERIODIC (NL)	NL	RMKT
LISZ	CCXE	CBOE EUROPE - LIS SERVICE (NL)	NL	RMKT
CCEU	CCEU	CITADEL CONNECT EUROPE	GB	SINT
CGMU	CGML	CITI MATCH GB CONTRA LIQUIDITY	GB	NSPD
CSSI	CSIN	CREDIT SUISSE INTERNATIONAL - SYSTEMATIC INTERNALISER	GB	SINT
SICS	CSEU	CREDIT SUISSE SECURITIES (EUROPE) LIMITED	GB	SINT
XAMS	XAMS	EURONEXT - EURONEXT AMSTERDAM	NL	RMKT
XBRU	XBRU	EURONEXT - EURONEXT BRUSSELS	BE	RMKT
XLIS	XLIS	EURONEXT - EURONEXT LISBON	PT	RMKT
XPAR	XPAR	EURONEXT - EURONEXT PARIS	FR	NSPD
XMSM	XDUB	EURONEXT DUBLIN	IE	RMKT
MERK	XOSL	EURONEXT GROWTH - OSLO	NO	NSPD
MTAA	XMIL	EURONEXT MILAN	IT	RMKT
MNSE	XSTO	FIRST NORTH SWEDEN - AUCTION ON DEMAND	SE	NSPD
SSME	XSTO	FIRST NORTH SWEDEN - SME GROWTH MARKET	SE	NSPD
JPEU	JPEU	J.P. MORGAN SE	DE	SINT
JPSI	JPSI	J.P. MORGAN SECURITIES PLC	GB	NSPD



JSSI	JSSI	JANE STREET FINANCIAL LTD	GB	SINT
XJSE	XJSE	JOHANNESBURG STOCK EXCHANGE	ZA	NSPD
LEUE	LEUE	LIQUIDNET EU LIMITED EQUITY MTF	IE	MLTF
LIQU	LIQU	LIQUIDNET SYSTEMS	GB	NSPD
XLON	XLON	LONDON STOCK EXCHANGE	GB	NSPD
AIMX	XLON	LONDON STOCK EXCHANGE - AIM MTF	GB	NSPD
XLOM	XLON	LONDON STOCK EXCHANGE - MTF	GB	NSPD
MSCX	MSAX	MORGAN STANLEY MTF - CONTINUOUS CROSS DARK	FR	MLTF
XCSE	XCSE	NASDAQ COPENHAGEN A/S	DK	NSPD
MCSE	XCSE	NASDAQ COPENHAGEN A/S - AUCTION ON DEMAND	DK	RMKT
DCSE	XCSE	NASDAQ COPENHAGEN A/S - NORDIC@MID	DK	RMKT
XHEL	XHEL	NASDAQ HELSINKI LTD	FI	NSPD
MHEL	XHEL	NASDAQ HELSINKI LTD - AUCTION ON DEMAND	FI	RMKT
DHEL	XHEL	NASDAQ HELSINKI LTD - NORDIC@MID	FI	RMKT
XSTO	XSTO	NASDAQ STOCKHOLM AB	SE	RMKT
MSTO	XSTO	NASDAQ STOCKHOLM AB - AUCTION ON DEMAND	SE	RMKT
DSTO	XSTO	NASDAQ STOCKHOLM AB - NORDIC@MID	SE	RMKT
XOFF	XOFF	OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS	ZZ	NSPD
XOSL	XOSL	OSLO BORS	NO	RMKT
XPAC	ITGL	POSIT AUCTION	IE	NSPD
XPOS	ITGL	POSIT DARK	IE	MLTF
XPOL	VIUK	POSIT DARK UK	GB	MLTF
SGMV	SGMU	SIGMA X EUROPE AUCTION BOOK	FR	MLTF
SGMU	SGMU	SIGMA X EUROPE NON-DISPLAYED BOOK	FR	MLTF
SGMX	SGMX	SIGMA X MTF	GB	MLTF
SGMY	SGMX	SIGMA X MTF - AUCTION BOOK	GB	MLTF
XSWX	XSWX	SIX SWISS EXCHANGE	CH	RMKT
XSWM	XSWX	SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT	CH	RMKT
XTAE	XTAE	TEL AVIV STOCK EXCHANGE	IL	NSPD
TWEM	TWEU	TRADEWEB EU BV - MTF	NL	MLTF
TREU	TREU	TRADEWEB EUROPE LIMITED	GB	NSPD
TRQX	TRQX	TURQUOISE	GB	NSPD
TRQD	TRQX	TURQUOISE DERIVATIVES MARKET	GB	NSPD
TQEX	TQEX	TURQUOISE EUROPE	NL	NSPD
TQEM	TQEX	TURQUOISE EUROPE - DARK	NL	NSPD
TQEA	TQEX	TURQUOISE EUROPE - LIT AUCTIONS	NL	NSPD
TRQA	TRQX	TURQUOISE LIT AUCTIONS	GB	NSPD
TRQM	TRQX	TURQUOISE PLATO	GB	NSPD
XUMP	XUBS	UBS MTF LIMITED - PERIODIC AUCTION ORDER BOOK	GB	NSPD
XWAR	XWAR	WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET	PL	RMKT
WBAH	XWBO	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)	AT	RMKT
XETB	XETR	XETRA - FREIVERKEHR	DE	NSPD
XETA	XETR	XETRA - REGULIERTER MARKT	DE	RMKT

**(b) Equities – Shares & Depository Receipts – (ii) Tick size liquidity bands 3 and 4 (from 80 to 1,999 trades per day)**

MIC	Operating Mic	Execution Venues Utilised in 2022	ISO Country	Type
XAIM	XMIL	AIM ITALIA - MERCATO ALTERNATIVO DEL CAPITALE	IT	NSPD
AQEU	AQEU	AQUIS EXCHANGE EUROPE	FR	NSPD
AQXE	AQXE	AQUIS EXCHANGE PLC	GB	MLTF
XUBS	XUBS	AQUIS EXCHANGE PLC - AMP - DARK ORDER BOOK	GB	NSPD
AQXA	AQXE	AQUIS EXCHANGE PLC AUCTION ON DEMAND (AOD)	GB	MLTF
ENAX	ASEX	ATHENS EXCHANGE ALTERNATIVE MARKET	GR	NSPD
XATH	ASEX	ATHENS EXCHANGE S.A. CASH MARKET	GR	RMKT
BCSI	BCSL	BARCLAYS CAPITAL SECURITIES LIMITED - SYSTEMATIC INTERNALISER	GB	SINT
BLOX	XIEL	BLOCKMATCH - UK DARK	GB	MLTF
XMAD	BMEX	BOLSA DE MADRID	ES	RMKT
XBUD	XBUD	BUDAPEST STOCK EXCHANGE	HU	RMKT
LISX	BCXE	CBOE EUROPE - LIS SERVICE	GB	NSPD
BATD	BCXE	CBOE EUROPE - BXE DARK ORDER BOOK	GB	NSPD
BATF	BCXE	CBOE EUROPE - BXE OFF-BOOK	GB	NSPD
BATE	BCXE	CBOE EUROPE - BXE ORDER BOOKS	GB	NSPD
BATP	BCXE	CBOE EUROPE - BXE PERIODIC	GB	NSPD
CHID	BCXE	CBOE EUROPE - CXE DARK ORDER BOOK	GB	NSPD
CHIX	BCXE	CBOE EUROPE - CXE ORDER BOOKS	GB	NSPD
CEUD	CCXE	CBOE EUROPE - DXE DARK ORDER BOOK (NL)	NL	RMKT
CEUO	CCXE	CBOE EUROPE - DXE OFF-BOOK (NL)	NL	RMKT
CEUX	CCXE	CBOE EUROPE - DXE ORDER BOOKS (NL)	NL	RMKT
BEUP	CCXE	CBOE EUROPE - DXE PERIODIC (NL)	NL	RMKT
LISZ	CCXE	CBOE EUROPE - LIS SERVICE (NL)	NL	RMKT
CCEU	CCEU	CITADEL CONNECT EUROPE	GB	SINT
CGMU	CGML	CITI MATCH GB CONTRA LIQUIDITY	GB	NSPD
CSIN	CSIN	CREDIT SUISSE INTERNATIONAL	GB	NSPD
CSSI	CSIN	CREDIT SUISSE INTERNATIONAL - SYSTEMATIC INTERNALISER	GB	SINT
XAMS	XAMS	EURONEXT - EURONEXT AMSTERDAM	NL	RMKT
XBRU	XBRU	EURONEXT - EURONEXT BRUSSELS	BE	RMKT
XLIS	XLIS	EURONEXT - EURONEXT LISBON	PT	RMKT
XPAR	XPAR	EURONEXT - EURONEXT PARIS	FR	NSPD
XMSM	XDUB	EURONEXT DUBLIN	IE	RMKT
XOAS	XOSL	EURONEXT EXPAND OSLO	NO	RMKT
MERK	XOSL	EURONEXT GROWTH - OSLO	NO	NSPD
XESM	XDUB	EURONEXT GROWTH DUBLIN	IE	NSPD
EXGM	XMIL	EURONEXT GROWTH MILAN	IT	NSPD
ALXP	XPAR	EURONEXT GROWTH PARIS	FR	NSPD
MTAA	XMIL	EURONEXT MILAN	IT	RMKT
MNFI	XHEL	FIRST NORTH FINLAND - AUCTION ON DEMAND	FI	NSPD
DNFI	XHEL	FIRST NORTH FINLAND - NORDIC@MID	FI	NSPD
FSME	XHEL	FIRST NORTH FINLAND - SME GROWTH MARKET	FI	RMKT
MNSE	XSTO	FIRST NORTH SWEDEN - AUCTION ON DEMAND	SE	NSPD



SSME	XSTO	FIRST NORTH SWEDEN - SME GROWTH MARKET	SE	NSPD
XDUB	XDUB	IRISH STOCK EXCHANGE - ALL MARKET	IE	NSPD
JPEU	JPEU	J.P. MORGAN SE	DE	SINT
JPSI	JPSI	J.P. MORGAN SECURITIES PLC	GB	NSPD
JSSI	JSSI	JANE STREET FINANCIAL LTD	GB	SINT
LEUE	LEUE	LIQUIDNET EU LIMITED EQUITY MTF	IE	MLTF
LIQU	LIQU	LIQUIDNET SYSTEMS	GB	NSPD
XLON	XLON	LONDON STOCK EXCHANGE	GB	NSPD
AIMX	XLON	LONDON STOCK EXCHANGE - AIM MTF	GB	NSPD
XLOM	XLON	LONDON STOCK EXCHANGE - MTF	GB	NSPD
XCSE	XCSE	NASDAQ COPENHAGEN A/S	DK	NSPD
MCSE	XCSE	NASDAQ COPENHAGEN A/S - AUCTION ON DEMAND	DK	RMKT
DCSE	XCSE	NASDAQ COPENHAGEN A/S - NORDIC@MID	DK	RMKT
XHEL	XHEL	NASDAQ HELSINKI LTD	FI	NSPD
MHEL	XHEL	NASDAQ HELSINKI LTD - AUCTION ON DEMAND	FI	RMKT
DHEL	XHEL	NASDAQ HELSINKI LTD - NORDIC@MID	FI	RMKT
XSTO	XSTO	NASDAQ STOCKHOLM AB	SE	RMKT
MSTO	XSTO	NASDAQ STOCKHOLM AB - AUCTION ON DEMAND	SE	RMKT
DSTO	XSTO	NASDAQ STOCKHOLM AB - NORDIC@MID	SE	RMKT
NSME	XNGM	NORDIC SME	SE	NSPD
XOFF	XOFF	OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS	ZZ	NSPD
XOSL	XOSL	OSLO BORS	NO	RMKT
XPAC	ITGL	POSIT AUCTION	IE	NSPD
XPAL	VIUK	POSIT AUCTION UK	GB	MLTF
XPOS	ITGL	POSIT DARK	IE	MLTF
XPOL	VIUK	POSIT DARK UK	GB	MLTF
XPRA	XPRA	PRAGUE STOCK EXCHANGE	CZ	RMKT
SGMV	SGMU	SIGMA X EUROPE AUCTION BOOK	FR	MLTF
SGMU	SGMU	SIGMA X EUROPE NON-DISPLAYED BOOK	FR	MLTF
SGMX	SGMX	SIGMA X MTF	GB	MLTF
SGMY	SGMX	SIGMA X MTF - AUCTION BOOK	GB	MLTF
XSWX	XSWX	SIX SWISS EXCHANGE	CH	RMKT
XSWM	XSWX	SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT	CH	RMKT
XBSE	XBSE	SPOT REGULATED MARKET - BVB	RO	RMKT
XTAE	XTAE	TEL AVIV STOCK EXCHANGE	IL	NSPD
TRSI	TRSI	TOWER RESEARCH CAPITAL EUROPE LTD	GB	NSPD
TRQX	TRQX	TURQUOISE	GB	NSPD
TQEX	TQEX	TURQUOISE EUROPE	NL	NSPD
TQEM	TQEX	TURQUOISE EUROPE - DARK	NL	NSPD
TQEA	TQEX	TURQUOISE EUROPE - LIT AUCTIONS	NL	NSPD
TRQA	TRQX	TURQUOISE LIT AUCTIONS	GB	NSPD
TRQM	TRQX	TURQUOISE PLATO	GB	NSPD
XUMP	XUBS	UBS MTF LIMITED - PERIODIC AUCTION ORDER BOOK	GB	NSPD
XWAR	XWAR	WARSAW STOCK EXCHANGE/EQUITIES/MAIN MARKET	PL	RMKT
WBAH	XWBO	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)	AT	RMKT



XETB	XETR	XETRA - FREIVERKEHR	DE	NSPD
XETA	XETR	XETRA - REGULIERTER MARKT	DE	RMKT
XETS	XETR	XETRA - SCALE	DE	NSPD
XTXM	XTXM	XTX MARKETS	GB	NSPD

(c) Equities – Shares & Depositary Receipts – (iii) Tick size liquidity bands from 1 and 2 (from 0 to 79 trades per day)

MIC	Operating Mic	Execution Venues Utilised in 2022	ISO Country	Type
AQXE	AQXE	AQUIS EXCHANGE PLC	GB	MLTF
XUBS	XUBS	AQUIS EXCHANGE PLC - AMP - DARK ORDER BOOK	GB	NSPD
BLOX	XIEL	BLOCKMATCH UK DARK	GB	MLTF
LISX	BCXE	CBOE EUROPE - LIS SERVICE	GB	NSPD
BATD	BCXE	CBOE EUROPE - BXE DARK ORDER BOOK	GB	NSPD
BATE	BCXE	CBOE EUROPE - BXE ORDER BOOKS	GB	NSPD
BATP	BCXE	CBOE EUROPE - BXE PERIODIC	GB	NSPD
CHID	BCXE	CBOE EUROPE - CXE DARK ORDER BOOK	GB	NSPD
CHIX	BCXE	CBOE EUROPE - CXE ORDER BOOKS	GB	NSPD
CCEU	CCEU	CITADEL CONNECT EUROPE	GB	SINT
JPSI	JPSI	J.P. MORGAN SECURITIES PLC	GB	NSPD
XJSE	XJSE	JOHANNESBURG STOCK EXCHANGE	ZA	NSPD
LIQU	LIQU	LIQUIDNET SYSTEMS	GB	NSPD
XLON	XLON	LONDON STOCK EXCHANGE	GB	NSPD
AIMX	XLON	LONDON STOCK EXCHANGE - AIM MTF	GB	NSPD
XLOM	XLON	LONDON STOCK EXCHANGE - MTF	GB	NSPD
XOFF	XOFF	OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS	ZZ	NSPD
XPAC	ITGL	POSIT AUCTION	IE	NSPD
XPOS	ITGL	POSIT DARK	IE	MLTF
SGMX	SGMX	SIGMA X MTF	GB	MLTF
SGMY	SGMX	SIGMA X MTF - AUCTION BOOK	GB	MLTF
XSWX	XSWX	SIX SWISS EXCHANGE	CH	RMKT
XSWM	XSWX	SIX SWISS EXCHANGE - SIX SWISS EXCHANGE AT MIDPOINT	CH	RMKT
XTAE	XTAE	TEL AVIV STOCK EXCHANGE	IL	NSPD
TRQX	TRQX	TURQUOISE	GB	NSPD
TRQD	TRQX	TURQUOISE DERIVATIVES MARKET	GB	NSPD
TRQA	TRQX	TURQUOISE LIT AUCTIONS	GB	NSPD
TRQM	TRQX	TURQUOISE PLATO	GB	NSPD
XUMP	XUBS	UBS MTF LIMITED - PERIODIC AUCTION ORDER BOOK	GB	NSPD



APPENDIX 3: RTS28 - INFORMATION ON THE TOP 25 EXECUTION VENUES AND QUALITY OF EXECUTION OBTAINED²

Class of Instrument	Equities – Shares & Depositary Receipts – (i) Tick size liquidity bands 5 and 6 (from 2,000 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 25 execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Borsa Italiana Electronic Share Market [MTAA]	11%	4%	46%	54%	0%
London Stock Exchange [XLON]	9%	4%	51%	49%	0%
Bolsa De Madrid [XMAD]	8%	3%	50%	50%	0%
Nasdaq Stockholm AB [XSTO]	5%	7%	54%	46%	0%
CBOE Europe - DXE Periodic [DXE]	5%	7%	100%	0%	0%

Class of Instrument	Equities – Shares & Depositary Receipts – (ii) Tick size liquidity bands 3 and 4 (from 80 to 1,999 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 25 execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
London Stock Exchange [XLON]	16%	7%	51%	49%	0%
Bolsa de Madrid [XMAD]	6%	5%	37%	63%	0%
Cboe Europe – LIS Service [LISX]	5%	1%	34%	57%	9%
Borsa Italiana Electronic Share Market [MTAA]	4%	5%	46%	54%	0%
CBOE Europe - DXE Periodic [BEUP]	4%	2%	100%	0%	0%

Class of Instrument	Equities – Shares & Depositary Receipts – (iii) Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 25 execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
London Stock Exchange [XLON]	27%	23%	42%	58%	0%
Cboe Europe – LIS Service [LISX]	25%	0%	100%	0%	0%
CBOE Europe - DXE Periodic [BEUP]	6%	8%	100%	0%	0%
CBOE Europe – CXE Order Books [CHIX]	5%	10%	68%	32%	0%
Turquoise Plato (Dark) [TRQM]	5%	3%	85%	15%	0%

² The period of analysis is from 1 January 2022 to 31 December 2022.



APPENDIX 4: INFORMATION ON THE TOP 5 EXECUTING BROKERS AND QUALITY OF EXECUTION OBTAINED³

Class of Instrument	Equities – Shares & Depositary Receipts – (i) Tick size liquidity bands 5 and 6 (from 2,000 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 5 executing brokers ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Credit Suisse Securities (Europe) Ltd	18%	18%	57%	43%	0%
J.P. Morgan Securities Plc	12%	24%	57%	43%	0%
Morgan Stanley & Co. International Plc	11%	6%	54%	46%	0%
Barclays PLC	6%	7%	53%	47%	0%
Goldman Sachs International	5%	5%	64%	36%	0%

Class of Instrument	Equities – Shares & Depositary Receipts – (ii) Tick size liquidity bands 3 and 4 (from 80 to 1,999 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 5 executing brokers ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Credit Suisse Securities (Europe) Ltd	11%	18%	48%	52%	0%
Morgan Stanley & Co. International Plc	10%	9%	45%	55%	0%
BNP Paribas London Branch	6%	2%	28%	72%	0%
Instinet Europe Limited	6%	2%	41%	53%	7%
Barclays PLC	5%	8%	49%	51%	0%

Class of Instrument	Equities – Shares & Depositary Receipts – (iii) Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
Top 5 executing brokers ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders traded as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BNP Paribas London Branch	9%	54%	13%	33%	0%
Morgan Stanley & Co. International Plc	5%	53%	20%	27%	0%
Credit Suisse Securities (Europe) Ltd	4%	61%	30%	9%	0%
Goldman Sachs International	3%	53%	21%	25%	0%
Banque Pictet & Cie SA	3%	52%	24%	24%	0%

³ The period of analysis is from 1 January 2022 to 31 December 2022.