

Best Execution Quality Reporting 2024

Deutsche Bank (Suisse) S.A.

("DB Suisse" hereafter)

Disclosure document related to the Commission Delegated Regulation (EU) 2017/576 of 8 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the annual publication by investment firms of information on the identity of execution venues and on the quality of execution.

Commentary to accompany the RTS 28 Top 5 Venue Report for DB Suisse

Reporting Period: 01st Jan 2024 to 31st Dec 2024

In accordance with EU Commission Delegated Regulation 2017/576 of 8 June 2016 ("Regulatory Technical Standard (RTS) 28") supplementing MiFID (Directive 2014/65/EU), this document provides information on the top 5 venues / brokers (in terms of trading volumes) used by DB Suisse in calendar year 2024, to execute client orders. We also provide below information pertaining to the quality of execution obtained, as asked under Article 3(3) of RTS 28.

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0576&from=EN>

As required under Article 3(3) of MiFID RTS 28	Instrument applicability	Commentary (as applicable to DB Suisse)
<i>a) an explanation of the relative importance the firm gave to the execution factors of price, costs, speed, likelihood of execution or any other consideration including qualitative factors when making assessments of the quality of execution;</i>	All	The execution factors and their relative importance are described in our Order Execution Policy. This can found here: https://deutschewealth.com/content/deutschewealth/en/articles/regulatory_information.html
<i>(b) a description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;</i>	<i>Equities - Shares and Depositary Receipts</i>	There are no close links, conflicts of interests, and common ownerships with respect to any external execution venue / broker used to execute orders. Some orders may be executed using DB AG (group parent entity) as the broker / counterparty, pursuant to application of Best Execution principles. For certain products DB Suisse will offer the opportunity to DB affiliates to match the best price received through the request for quote process for the relevant product, and if so enable DB Suisse to offer the DB affiliate product. Whilst aware of potential conflicts of interest in using affiliates to execute your transactions, DB Suisse will seek to mitigate such conflicts through our monitoring and review program when deploying this process.
	<i>Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)</i>	
	<i>Debt Instruments</i>	
	<i>Structured Finance instruments</i>	
	<i>Other Instruments</i>	
	<i>Currency Derivatives - Futures and options admitted to trading on a trading venue</i>	Execution is carried out solely against DB AG which is the group parent entity. Controls are in place to ensure that best results are obtained for the client on a consistent basis.
	<i>Currency Derivatives - Swaps, forwards, and other currency derivatives</i>	
	<i>Interest Rates Derivatives - Swaps, forwards, and other interest rates derivatives</i>	All orders are routed to the exchange via either the DB AG (group parent entity) platform or via Bloomberg EMSX. Best
	<i>Equity Derivatives - Swaps, forwards, and other equity derivatives</i>	
	<i>Interest Rates Derivatives - Futures and options admitted to trading on a trading venue</i>	

As required under Article 3(3) of MiFID RTS 28	Instrument applicability	Commentary (as applicable to DB Suisse)
	<i>Commodity Derivatives - Futures and options admitted to trading on a trading venue</i>	Execution monitoring controls are in place to ensure that orders are routed to exchange accurately and promptly.
	<i>Equity Derivatives - Futures and options admitted to trading on a trading venue</i>	
	<i>Securitized Derivatives - Warrants and Certificate Derivatives</i>	Any potential conflict of interest arising from fee payments is mentioned clearly to the client in the term sheet
(c) a description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;	<i>All (other than Securitized Derivatives)</i>	There are no specific arrangements with any external execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received.
	<i>Securitized Derivatives</i>	Structuring fees are paid by the issuer via invoice.
(d) an explanation of the factors that led to a change in the list of execution venues listed in the firm's execution policy, if such a change occurred;	<i>All</i>	No change in the list of execution venues occurred during the year.
(e) an explanation of how order execution differs according to client categorization, where the firm treats such category of client differently and where it may affect the order execution arrangements;	<i>All</i>	For Best Execution principles, refer to Section 2.1.1 & 2.1.2 of the Order Execution Policy. This can be found here: https://deutschewealth.com/content/deutschewealth/en/articles/regulatory_information.html
(f) an explanation of when other criteria were given precedence over immediate price and cost when executing retail client orders and how these other criteria were instrumental in delivering the best possible result in terms of the total consideration to the client;	<i>All</i>	For Best Execution principles, refer to Section 2.1.1 & 2.1.2 of the Order Execution Policy. This can be found here: https://deutschewealth.com/content/deutschewealth/en/articles/regulatory_information.html
g) an explanation of how the investment firm has used any data or tools relating to the quality of execution including any data published under 27(10) (a) of Directive 2014/65/EU.	<i>All (other than Securitized Derivatives)</i>	We have used other independent benchmarking tools to assess our execution prices against the average prevailing prices in the market. Such a benchmarking exercise helped us to assess the quality of execution by our brokers / counterparties and enabled us to optimize selection of the same to improve execution results.

As required under Article 3(3) of MiFID RTS 28	Instrument applicability	Commentary (as applicable to DB Suisse)
	<i>Securitised Derivatives</i>	Benchmarking was not used for structured products. However, quality of execution was ensured by obtaining, on average, pricing from three different counterparties for each trade.
<i>h) an explanation of how the investment firm has used, if applicable, output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU which will allow for the development of enhanced measures of execution quality, or any other algorithms used to optimize and assess execution performances.</i>	<i>All</i>	Output of consolidated tape providers as per Article 65 of Directive 2014/65/EU has not been utilized for the 2024 reporting year.

The following tables provide information on the top five execution venues / executing brokers (by proportion of volume traded as a % of total volume) used by DB Suisse in calendar year 2024 for executing orders from clients in various classes of Financial Instruments. A machine-readable version of these tables (CSV format) has also been made available separately.

https://deutschewealth.com/content/deutschewealth/en/articles/regulatory_information.html

The terms “**Execution Venue**” and “**Executing Broker**” as used in the tables below imply “**Execution**” and “**Transmission**” of orders respectively.



For Retail Clients:

LEGAL UNIT		529900BXXPMXQTRE1V05				
CLASS OF INSTRUMENT		(A) Equities - Shares and Depository Receipts - 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				
Client Type		Retail				
Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	9.96%	11.12%	0.00%

LEGAL UNIT		529900BXXPMXQTRE1V05				
CLASS OF INSTRUMENT		(A) Equities - Shares and Depository Receipts - 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				
Client Type		Retail				
Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	40.37%	17.31%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	15.24%	8.68%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47TOY26Q87Y0QP81	11.29%	8.19%	-	-	0.00%
INSTINET PACIFIC LIMITED	549300RI6VZUNIR81J81	10.98%	32.08%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	7.22%	7.36%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - 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					
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	30.03%	85.35%	9.96%	11.12%	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	28.25%	2.54%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	10.66%	1.27%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	7.90%	1.20%	-	-	0.00%
INSTINET PACIFIC LIMITED	549300RI6VZUNIR81J81	7.69%	4.70%	-	-	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05						
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)						
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N						
Client Type	Retail						
Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders	
SIX SIS AG	549300A3X13YWROC2J57	100.00%	100.00%	4.76%	5.31%	0.00%	



LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	29.46%	17.81%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	14.30%	13.43%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	10.89%	11.92%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	10.77%	9.37%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	9.73%	10.87%	-	-	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	27.59%	11.06%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	13.40%	8.34%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	10.20%	7.40%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	10.09%	5.82%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	9.11%	6.75%	-	-	0.00%



LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		N				
Client Type		Retail				
Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	0.93%	1.04%	0.00%
LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		N				
Client Type		Retail				
Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	26.39%	18.82%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	18.60%	11.37%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	14.77%	6.36%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	9.74%	11.97%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	9.32%	13.72%	-	-	0.00%



LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type		Retail				
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	26.10%	15.91%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	18.39%	9.61%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	14.60%	5.38%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	9.63%	10.12%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	9.22%	11.59%	-	-	0.00%
LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(B) Debt Instruments - Bonds				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type		Retail				
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	11.69%	6.86%	-	-	0.00%
BNP PARIBAS	ROMUWSFPU8MPRO8K5P83	7.94%	3.55%	-	-	0.00%
Morgan Stanley & Co. International PLC	4PQUHN3JPFGFNF3BB653	7.94%	8.82%	-	-	0.00%
Jane Street Financial Limited	549300ZHEHX8M31RP142	6.66%	12.27%	-	-	0.00%
Merrill Lynch International	GGDZP1UYGU9STUHRDP48	5.45%	4.19%	-	-	0.00%



LEGAL UNIT		529900BXXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(B) Debt Instruments - Money Market Instruments				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type		Retail				
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	26.20%	17.88%	-	-	0.00%
Morgan Stanley & Co. International PLC	4PQUHN3JPF GFNF3BB653	12.29%	13.98%	-	-	0.00%
BNP PARIBAS	R0MUWSFPU8MPRO8K5P83	11.52%	2.27%	-	-	0.00%
RBC Europe Limited	TXDSU46SXBWIGJ8G8E98	8.24%	11.34%	-	-	0.00%
WELLS FARGO BANK NATIONAL ASSOCIATION	KB1H1DSRPFMYMCUFXT09	7.51%	17.38%	-	-	0.00%
LEGAL UNIT		529900BXXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(C) Interest Rate Derivatives - Futures and options admitted to trading on a trading venue				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR Y						
Client Type		Retail				
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(C) Interest Rate Derivatives - Swaps, forwards and other interest rate derivatives					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR Y						
Client Type	Retail					
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%
LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(D) Currency Derivatives - Futures and options admitted to trading on a trading venue					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE	7LTWFZYICNSX8D621K86	40.76%	36.80%	-	-	0.00%
BARCLAYS	G5GSEF7VJP5I7OUK5573	19.03%	1.35%	-	-	0.00%
JPMC	7H6GLXDRUGQFU57RNE97	11.50%	20.70%	-	-	0.00%
BNP PARIS	213800WKRTJHSGWS5S26	10.24%	16.02%	-	-	0.00%
HSBC	MP6ISZYZBEU3UXPYFY54	6.18%	11.66%	-	-	0.00%



LEGAL UNIT	529900BXXPMXQTRE1V05					
CLASS OF INSTRUMENT	(D) Currency Derivatives - Swaps, forwards and other currency derivatives					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
HSBC	MP6I5YZBEU3UXPYFY54	23.92%	13.99%	-	-	0.00%
GOLDMAN	W22LROWP2IHZNBB6K528	18.02%	1.67%	-	-	0.00%
CITI	XKZZ2JZF41MRHTR1V493	13.14%	7.52%	-	-	0.00%
JPMC	7H6GLXDRUGQFU57RNE97	9.16%	10.49%	-	-	0.00%
BNP PARIS	213800WKRTJHSGWS5S26	7.45%	4.54%	-	-	0.00%
LEGAL UNIT	529900BXXPMXQTRE1V05					
CLASS OF INSTRUMENT	(E) Structured Finance Instruments					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	99.19%	98.19%	-	-	0.00%
MIZUHO INTERNATIONAL PLC	213800HZ54TG54H2KV03	0.34%	0.20%	-	-	0.00%
Merrill Lynch International	GGDZP1UYGU9STUHRDP48	0.25%	0.20%	-	-	0.00%
Morgan Stanley & Co. International PLC	4PQUHN3JPFQGNF3BB653	0.08%	0.40%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	0.07%	0.40%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(F) Equity Derivatives - Futures and options admitted to trading on a trading venue
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N	
Client Type	Retail

Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%

LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(F) Equity Derivatives - Swaps and other equity derivatives
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR Y	
Client Type	Retail

Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%



LEGAL UNIT		529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT		(G) Securitised Derivatives - Warrants and Certificate Derivatives					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		N					
Client Type		Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)		LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT		7LTWFZYICNSX8D621K86	22.49%	19.50%	-	-	0.00%
BNP PARIBAS		6EWKU0FGVX5QQJHFGT48	19.72%	18.59%	-	-	0.00%
		R0MUWSFPU8MPRO8K5P83	0.19%	0.14%	-	-	0.00%
BARCLAYS CAPITAL SECURITIES LIMITED		K9WDOH4D2PYBSLSOB484	14.34%	14.97%	-	-	0.00%
Citigroup Global Markets Limited		XKZZ2JZF41MRHTR1V493	7.25%	6.13%	-	-	0.00%
UBS Switzerland AG		549300WOIFUSNYH0FL22	6.20%	7.17%	-	-	0.00%
LEGAL UNIT		529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT		(H) Commodities Derivatives - Futures and options admitted to trading on a trading venue					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		Y					
Client Type		Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)		LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT		7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%



LEGAL UNIT		529900BXXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type		Retail				
Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	12.96%	14.46%	0.00%
LEGAL UNIT		529900BXXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR N						
Client Type		Retail				
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	31.75%	28.99%	-	-	0.00%
Jane Street Financial Limited	549300ZHEHX8M31RP142	28.25%	5.41%	-	-	0.00%
SIX SIS AG	549300A3XI3YWROC2J57	18.28%	56.94%	12.96%	14.46%	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	6.52%	1.03%	-	-	0.00%
Jefferies International Limited	S5THZMDUJCTQZBTRVI98	2.70%	0.57%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	38.86%	67.32%	-	-	0.00%
Jane Street Financial Limited	549300ZHEHX8M31RP142	34.57%	12.56%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	7.98%	2.39%	-	-	0.00%
Jefferies International Limited	S5THZMDUJCTQZBTRVI98	3.30%	1.32%	-	-	0.00%
Steubing AG	39120043LUI1WJS8IX30	3.27%	9.44%	-	-	0.00%
LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(J) Other instruments					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Retail					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTFWZYICNSX8D621K86	54.38%	93.28%	-	-	0.00%
UBS AG	BFM8T61CT2L1QCEMIK50	27.00%	3.31%	-	-	0.00%
BARCLAYS CAPITAL SECURITIES LIMITED	K9WDOH4D2PYBSLSOB484	9.73%	0.64%	-	-	0.00%
CREDIT LYONNAIS	9695009F5UPB9IIT1298	5.11%	0.09%	-	-	0.00%
BNP PARIBAS	6EWKU0FGVX5QQJHFGT48	1.28%	0.09%	-	-	0.00%



For Professional Clients:

LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - 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	Y
Client Type	Professional

Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3X13YWROC2J57	100.00%	100.00%	1.50%	1.67%	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - 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
Client Type	Professional

Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
INSTINET PACIFIC LIMITED	549300RI6VZUNIR81J81	27.36%	30.75%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	15.05%	6.36%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	14.64%	19.16%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	13.65%	8.41%	-	-	0.00%
CANACCORD GENUITY LIMITED	ZBU7VFV5NIMN4ILRFC23	10.16%	6.45%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - 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					
Client Type	Professional					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
INSTINET PACIFIC LIMITED	549300RI6VZUNIR81J81	21.79%	14.87%	-	-	0.00%
SIX SIS AG	549300A3XI3YWROC2J57	20.36%	51.63%	1.50%	1.67%	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	11.98%	3.07%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	11.66%	9.27%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	10.87%	4.07%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	0.51%	0.57%	0.00%

LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	32.48%	21.55%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	19.04%	10.10%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	17.97%	10.41%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	9.21%	13.62%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	5.74%	12.04%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	32.21%	19.60%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	18.88%	9.19%	-	-	0.00%
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	17.81%	9.47%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	9.13%	12.39%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	5.69%	10.96%	-	-	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y
Client Type	Professional

Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	0.42%	0.47%	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05						
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)						
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N						
Client Type	Professional						
Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	29.60%	3.90%	-	-	0.00%	
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	20.74%	23.42%	-	-	0.00%	
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	13.33%	9.67%	-	-	0.00%	
Goldman Sachs International	W22LROWP2IHZNBB6K528	11.07%	13.28%	-	-	0.00%	
UBS Switzerland AG	549300WOIFUSNYH0FL22	9.59%	16.15%	-	-	0.00%	

LEGAL UNIT	529900BXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(A) Equities - Shares and Depository Receipts - Tick size liquidity bands 5 and 6 (from 2000 trades per day)					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Professional					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
Merrill Lynch, Pierce, Fenner & Smith Incorporated	8NAV47T0Y26Q87Y0QP81	29.39%	3.77%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	20.60%	22.67%	-	-	0.00%
CANTOR FITZGERALD EUROPE	549300KM6VUHPKQLQX53	13.24%	9.36%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	10.99%	12.85%	-	-	0.00%
UBS Switzerland AG	549300WOIFUSNYH0FL22	9.52%	15.64%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(B) Debt Instruments - Bonds					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N					
Client Type	Professional					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	9.47%	8.33%	-	-	0.00%
Standard Chartered Bank	RILFO74KP1CM8P6PCT96	8.02%	0.28%	-	-	0.00%
BARCLAYS CAPITAL SECURITIES LIMITED	K9WDOH4D2PYBSLSOB484	7.51%	4.55%	-	-	0.00%
Merrill Lynch International	GGDZP1UYGU9STUHRDP48	7.26%	6.18%	-	-	0.00%
RBC Europe Limited	TXDSU46SXBWIGJ8G8E98	7.09%	4.41%	-	-	0.00%

LEGAL UNIT	529900BXXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(B) Debt Instruments - Money Market Instruments					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y					
Client Type	Professional					
Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
Royal Bank of Scotland Public Limited Company	549300WHU4EIHHP28H10	20.18%	14.08%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	12.23%	1.94%	-	-	0.00%
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	11.26%	9.71%	-	-	0.00%
Morgan Stanley & Co. International PLC	4PQUHN3JPFGFNF3BB653	8.65%	8.74%	-	-	0.00%
CREDIT LYONNAIS	9695009F5UPB9IITI298	6.32%	7.77%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(C) Interest Rate Derivatives - Swaps, forwards and other interest rate derivatives					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y					
Client Type	Professional					
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%

LEGAL UNIT	529900BXXKPMXQTRE1V05					
CLASS OF INSTRUMENT	(C) Interest Rate Derivatives - Futures and options admitted to trading on a trading venue					
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y					
Client Type	Professional					
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%



LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(F) Equity Derivatives - Futures and options admitted to trading on a trading venue				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		Y				
Client Type		Professional				
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTFWZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%
LEGAL UNIT		529900BXKPMXQTRE1V05				
CLASS OF INSTRUMENT		(E) Structured Finance Instruments				
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR		Y				
Client Type		Professional				
Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTFWZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(F) Equity Derivatives - Swaps and other equity derivatives
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y
Client Type	Professional

Execution Venue / Executing Broker	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	100.00%	100.00%	-	-	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(G) Securitised Derivatives - Warrants and Certificate Derivatives
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	Y
Client Type	Professional

Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	43.90%	17.93%	-	-	0.00%
BARCLAYS CAPITAL SECURITIES LIMITED	K9WDOH4D2PYBSLSOB484	10.03%	6.77%	-	-	0.00%
Citigroup Global Markets Limited	XKZZ2JZF41MRHTR1V493	8.75%	1.59%	-	-	0.00%
Bank Vontobel AG	549300L7V4MGECYRM576	6.83%	9.16%	-	-	8.33%
Morgan Stanley & Co. International PLC	4PQUHN3JPFGFNF3BB653	5.38%	3.19%	-	-	0.00%
BNP PARIBAS	6EWKU0FGVX5QQJHFGT48	5.01%	5.98%	-	-	0.00%



LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Execution Venue	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
SIX SIS AG	549300A3XI3YWROC2J57	100.00%	100.00%	10.93%	12.21%	0.00%

LEGAL UNIT	529900BXXKPMXQTRE1V05
CLASS OF INSTRUMENT	(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
Jane Street Financial Limited	549300ZHEHX8M31RP142	35.57%	8.91%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	31.90%	64.33%	-	-	0.00%
Jefferies International Limited	S5THZMDUJCTQZBTRVI98	9.32%	0.84%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	7.34%	0.84%	-	-	0.00%
Steubing AG	39120043LUI1WJS8IX30	6.78%	18.91%	-	-	0.00%



LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(I) Exchange traded products (Exchange traded funds, exchange traded notes and exchange traded commodities)
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
Jane Street Financial Limited	549300ZHEHX8M31RP142	28.00%	5.45%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	25.11%	39.36%	-	-	0.00%
SIX SIS AG	549300A3XI3YWROC2J57	21.28%	38.82%	10.93%	12.21%	0.00%
Jefferies International Limited	S5THZMDUJCTQZBTRVI98	7.34%	0.51%	-	-	0.00%
Goldman Sachs International	W22LROWP2IHZNBB6K528	5.78%	0.51%	-	-	0.00%

LEGAL UNIT	529900BXKPMXQTRE1V05
CLASS OF INSTRUMENT	(J) Other instruments
NOTIFICATION IF < 1 AVERAGE TRADE PER BUSINESS DAY IN THE PREVIOUS YEAR	N
Client Type	Professional

Execution Venue / Executing Broker (ranked by Volume in descending order)	LEI	Proportion of Volume traded as a % of total	Proportion of Trades executed as a % of total	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
UBS AG	BFM8T61CT2L1QCEMIK50	84.08%	20.63%	-	-	0.00%
DEUTSCHE BANK AKTIENGESELLSCHAFT	7LTWFZYICNSX8D621K86	11.61%	49.21%	-	-	0.00%
VIRTU FINANCIAL IRELAND LIMITED	549300XG5LFGN1IGYC71	1.48%	14.29%	-	-	0.00%
Steubing AG	39120043LUI1WJS8IX30	0.94%	7.94%	-	-	0.00%
ERSTE BANK	549300HUKIA1IZQHFZ83	0.94%	3.17%	-	-	0.00%