

TOP FIVE EXECUTION BROKERS REPORT 2019

CANDRIAM BELGIUM

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1. CONTEXT AND OBJECTIVE

The European Markets in Financial Instruments Directive 2014/65/EU (hereafter “MiFID II”) requires **CANDRIAM BELGIUM (hereinafter referred to as “CANDRIAM”)** to summarise and make public on an annual basis, for each class of financial instruments, the top five execution venues and/or brokers accompanied by an analysis of the quality of execution obtained during the relevant year.

1. SCOPE

This report covers the orders executed as part of the advisory and discretionary portfolio management activity for professional and non-professional clients in accordance with MiFID II regulation. . advisory mandates managed by CANDRIAM. The collective investment activity is not in the scope of this report.

All orders made as part of the mandates managed by CANDRIAM are transmitted to the internal Trading Desk which is responsible for the execution, unless the client has given specific instructions otherwise. With certain mandates, clients can give specific instructions as to the selection of the intermediary used to execute their orders.

The present report refers to the obligations set out in Article 27(6) of MiFID II, Article 65(6) of the Commission Delegated Regulation (EU) 2017/565 and Article 3(1) and 3(2) of Commission Delegated Regulation (EU) 2017/576 (“RTS 28”), detailing the top five execution brokers in terms of transaction volume by asset class, by client category. Transaction data are provided by client category (retail or professional), providing a split of the total volume across the top five intermediaries (such as brokers).

The information provided in the present document covers the period from 1.01.2019 to 31.12.2019.

2. GENERAL INFORMATION AND DISCLOSURES

According to the applicable regulation, CANDRIAM shall publish for each class of financial instruments, a summary of the analysis and conclusions they draw from their detailed monitoring of the quality of execution obtained where they executed all client orders in the previous year.

The following information is provided on a consolidated basis where such information is common to several or all classes of financial instruments :

(a) 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 assessing the quality of execution;

CANDRIAM seeks to manage portfolios in the best interest of clients and to obtain the best possible result considering the client’s investment objectives. CANDRIAM takes all sufficient steps to obtain the best possible result when placing orders with other entities for execution.

As detailed in its **Best Selection Policy**, CANDRIAM relies on qualitative factors to select an execution venue or an intermediary and has in place processes which are designed to obtain the best possible execution result on a consistent basis taking into consideration the relevant execution factors.

The detailed matrix presented in the **Best Selection Policy** sums up the continuous broker selection principles applied by the Dealing Desk by type of products and presents the relative importance of the execution factors/criteria per asset class taken into account in the assessment of the execution performance of the brokers.

Specific comments per asset classes :

- Equities

Candriam takes all sufficient steps to select the best brokers. For the most liquid stocks (tick size liquidity bands 5 and 6), one of the key factors was the ability of brokers to execute orders with the use of technology like program trading. In this area, the most representative brokers typically were the global players (UBS Europe SE, Barclays Bank, JP Morgan, Credit Suisse Securities, Sociedad de Valores, Société Générale) that were selected for their ability to efficiently handle large lists of orders globally across various regions. For less liquid stocks (tick size liquidity bands 1,2,3 and 4), one of the key factors was the ability of brokers to execute orders with an access to large pools of liquidity locally. In this area, we got strong support for liquidity seeking from the regional brokers (KBC Securities, Banque Degroof Petercam, Kepler Capital Markets, Exane across Europe and Nomura for Asia).

- Bonds

Candriam takes all sufficient steps to select the best fixed-income trading venues (for example platforms). For the most liquid bonds, the key venue for executing orders were multi-bank trading platforms where large liquidity providers (BNP Paribas, JP Morgan, Deutsche Bank, Morgan Stanley Europe SE, Société Générale, Nomura, HSBC) could be put into competition in an effort to get the best prices.

- Money Market

Trades done by Belfius Bank for some institutional mandates.

- Futures & options

Candriam takes all sufficient steps to select the best brokers and make sure those brokers provide the best possible execution & post-execution results. For futures, the vast majority of orders were small size tickets with no liquidity issues. In this area, an important factor was the quality of booking & settlement and the concentration of brokers (mainly JP Morgan in 2019) was due to our efforts in ensuring timely operations.

- FX

Candriam takes all sufficient steps to select the best FX trading venues. For FX, the vast majority of orders did not represent any liquidity issues. The key venue for executing orders was a multi-bank trading platform (FX-All) where large liquidity providers (UBS Europe SE, BNP Paribas, Natixis) could be put into competition in an effort to get the best prices. Some trades done by Belfius Bank and RBC Investor Services which are custodian banks.

- ETFs

Candriam takes all sufficient steps to select the best ETF trading venues (for example platforms). For ETFs, the key venue for executing orders were multi-bank trading platforms like Tradeweb where large liquidity providers (Flow traders, Société Générale, Citigroup Global Markets Europe, Morgan Stanley Europe SE) could be put into competition in an effort to get the best prices.

(b) Description of any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders;

CANDRIAM is required to identify and to prevent or manage any actual, potential or perceived conflicts of interest to ensure that it does not place its own interests above its clients' interests and must, at all times, observe the fair treatment of all of its clients.

To fulfil this requirement, CANDRIAM maintains and operates effective organisational and administrative arrangements, and implements policies and procedures designed to identify, monitor and to prevent or manage any actual, potential or perceived conflicts of interest and ensure that CANDRIAM employees conduct business activities in accordance with the principles stated above.

Our order placement and execution procedures are intended to ensure that the transactions carried out for portfolio management purposes, as well as their frequency, are exclusively in the best interest of CANDRIAM clients.

CANDRIAM:

- holds neither stake nor interest in any venue or broker it may rely on to execute transactions on behalf of clients
- is not a member of any market, therefore, any conflict of interest in the use of the execution platforms is annihilated.

CANDRIAM does not have any close links, conflicts of interests, nor common ownerships with respect to any execution venues used to execute orders.

(c) Description of any specific arrangements with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received;

CANDRIAM does not have any such arrangements for the routing of an order towards a specific execution venue or broker.

(d) 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;

Before the CANDRIAM trading desk transmits orders to brokers, it takes all sufficient steps to make sure that those brokers provide the best possible execution results.

CANDRIAM has identified key factors in determining which broker to use for executing orders:

- Ability of brokers to execute small-size market orders on liquid instruments in a timely manner (with the use of technology);
- Ability of brokers to execute efficiently large-size orders and thinly traded instruments (with access to large pools of liquidity);
- Ability of brokers to interact with the CANDRIAM trading desk (with optimal dialogue, permanent feedback on market conditions and on order fills).

The key factor in updating the CANDRIAM broker list in 2019 has been liquidity, in particular for fixed-income.

(e) Explanation of how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements;

Some investment strategies like quantitative and indexed equity are predominantly benchmarked against the official closing prices, the execution occurs at / near the closing auction time after orders are transmitted to brokers electronically. Emerging market equity strategies predominantly instruct VWAP which refers to targeting the volume weighted average price over a period of time or over the full-day trading session. VWAP orders are

also transmitted to brokers electronically. Investment strategies on less liquid instruments (small & mid-caps, emerging market bonds) often require block execution and voice trading.

(f) Explanation of whether 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;

In case of large lists of orders (program trading), broker selection is not only based on the broker ability to offer liquidity and competitive pricing, but also on the quality of post-trade confirmations and settlements (internal statistics given by CANDRIAM middle-office).

(g) Explanation of how the investment firm has used any data or tools relating to the quality of execution, including any data published under Delegated Regulation (EU) 2017/575;

The CANDRIAM trading desk performs first-level controls and must justify large deviations with price reference benchmarks depending on order types (equities and bonds). It shares the conclusion of its control to compliance, portfolio management and risk departments on a periodic basis, in particular for the broker review committee.

The CANDRIAM Compliance department performs an independent control of the efficiency of the best selection policy application in order to make sure that the trading desk gets the best possible execution result for managed portfolios.

CANDRIAM does not directly use data published under Delegated Regulation (EU) 2017/575 but may occasionally request specific TCA requests from executing brokers.

(h) Explanation, where applicable, of how the investment firm has used output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.

CANDRIAM does not use information from consolidated tape providers.

3. RANKING OF THE 5 MAIN EXECUTION BROKERS

In order to meet the requirements of MiFID, CANDRIAM must provide two sets of Top 5 Execution Brokers tables per class of financial instrument relating to orders transmitted to a broker, to execute in the market on CANDRIAM's behalf.

CANDRIAM is not facing the market or member of market. The report does not present data related security lending transactions as such type of transaction has not been carried out for the mandates.

a. Equities — Shares & Depositary Receipts

i. Tick size liquidity bands 5 and 6 (from 2 000 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depositary Receipts: Tick size liquidity bands 5 and 6				
Notification if <1 average trade per business day in the previous year	No				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of	Proportion of orders executed as a percentage of	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	23,45	33,46	7,56	92,44	0
JP Morgan AG(LEI:549300ZK53CNGEEI6A29)	15,16	8,1	24,38	75,62	0
Credit Suisse Securities, Sociedad de Valores, S.A.(LEI:959800TMGPWX7NYM4R72)	7,84	9,05	5,88	94,12	0
KBC Securities NV(LEI:2138005SP78ELT822P61)	5,41	3,86	59,42	40,58	0
Exane(LEI:969500UP76J52A9OXU27)	5,16	7,82	52,44	47,56	0

Type	Professional				
Class of Instrument	Equities - Shares and Depositary Receipts: Tick size liquidity bands 5 and 6				
Notification if <1 average trade per business day in the previous year	No				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of	Proportion of orders executed as a percentage of	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Barclays Bank Ireland PLC(LEI:2G5BKIC2CB69PRJH1W31)	12,94	9,15	83,97	16,03	0
Societe Generale(LEI:O2RNE8IBXP4R0TD8PU41)	8,96	7,96	75,89	24,11	0
Credit Suisse Securities, Sociedad de Valores, S.A.(LEI:959800TMGPWX7NYM4R72)	8,47	6,19	81,5	18,5	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	7,8	13,58	50	50	0
Barclays Capital - UK(LEI:K9WDOH4D2PYBSLSOB484)	7,07	2,47	86,59	13,41	0

ii. Tick size liquidity bands 3 and 4 (from 80 to 1 999 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 3 and 4				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
KBC Securities NV(LEI:2138005SP78ELT822P61)	28,92	18,45	45,63	54,37	0
BANK DEGROOF PETERCAM(LEI:549300NBLHT5Z7ZV1241)	15,46	15,77	14,49	85,51	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	11,75	28,28	3,32	96,68	0
Kepler Capital Markets - France(LEI:254900VCHS9DMDUVZ16)	10,9	5,11	31,3	68,7	0
Exane(LEI:969500UP76J52A9OXU27)	6,81	4,9	13,98	86,02	0

Type	Professional				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 3 and 4				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
KBC Securities NV(LEI:2138005SP78ELT822P61)	28,4	20,36	66,46	33,54	0
BANK DEGROOF PETERCAM(LEI:549300NBLHT5Z7ZV1241)	18,93	5,88	96,86	3,14	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	9,67	5,58	79,81	20,19	0
Citigroup Global Markets LTD - UK(LEI:XKZZ2JZF41MRHTR1V493)	5,6	9,2	82,85	17,15	0
Kepler Capital Markets - France(LEI:254900VCHS9DMDUVZ16)	5,19	3,02	58,98	41,02	0

iii. Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)

Type	Retail				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 1 and 2				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
The Goldman Sachs Group, Inc. (LEI:784F5XWPLTWKTBV3E584)	21,26	3,95	3,2	96,8	0
KBC Securities NV(LEI:2138005SP78ELT822P61)	17,73	22,04	59,72	40,28	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	12,91	25,88	17,91	82,09	0
JP Morgan AG(LEI:549300ZK53CNREEI6A29)	7,7	7,68	22,66	77,34	0
Credit Suisse Securities, Sociedad de Valores, S.A.(LEI:959800TMGPWX7NYM4R72)	6,14	6	11,57	88,43	0

Type	Professional				
Class of Instrument	Equities - Shares and Depository Receipts: Tick size liquidity bands 1 and 2				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Citigroup Global Markets LTD - UK(LEI:XKZZ2JZF41MRHTR1V493)	21,6	18,46	96,37	3,63	0
Nomura Holdings, Inc.(LEI:549300B3CEAHYG7K8164)	15,29	16,87	99,68	0,32	0
Societe Generale(LEI:O2RNE8IBXP4R0TD8PU41)	12,09	11,98	96,45	3,55	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	8,7	8,79	87,41	12,59	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	8,15	11,15	82,49	17,51	0

b. Debt instruments

i. Bonds

Type	Retail				
Class of Instrument	Debt Instruments: Bonds				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BNP PARIBAS (LEI:ROMUWSFPU8MPRO8K5P83)	9,54	5,35	3,98	96,02	0
JP Morgan AG (LEI:549300ZK53CNGEEI6A29)	8,14	9,87	15,27	84,73	0
Deutsche Bank AG, Germany (LEI:7LTWFZYICNSX8D621K86)	6,42	2,57	1,7	98,3	0
Morgan Stanley Europe SE (LEI:54930056FHWP7GIWYY08)	5,75	6,73	13,31	86,69	0
Societe Generale (LEI:O2RNE8IBXP4R0TD8PU41)	5,37	2,51	2,53	97,47	0

Type	Professional				
Class of Instrument	Debt Instruments: Bonds				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Morgan Stanley Europe SE (LEI:54930056FHWP7GIWYY08)	20,28	12,6	0	100	0
BNP PARIBAS (LEI:ROMUWSFPU8MPRO8K5P83)	11,08	7,78	0	100	0
Nomura Holdings, Inc. (LEI:549300B3CEAHYG7K8164)	7,1	3,6	0	100	0
Societe Generale (LEI:O2RNE8IBXP4R0TD8PU41)	6,73	6,98	0	100	0
JP Morgan AG (LEI:549300ZK53CNGEEI6A29)	4,34	5,02	0	100	0

ii. Money markets instruments

Type	Retail				
Class of Instrument	Debt Instruments: Money Markets				
Notification if <1 average trade per business day in the previous year	-				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Debt Instruments: Money Markets				
Notification if <1 average trade per business day in the previous year	Yes				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Belfius Bank(LEI:A5GWLPH3KM7YV2SFQL84)	100	100	100	0	100
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

c. Interest rates derivatives

i. Futures and options admitted to trading on a trading venue

Table 1 Broker					
Type	Retail				
Class of Instrument	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	-				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	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	Yes				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan AG(LEI:549300ZK53CNGEEI6A29)	100	100	0	100	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

ii. Swaps, forwards, and other interest rates derivatives

➤ Non applicable

d. Credit derivatives

➤ Non applicable

e. Currency derivatives

i. Futures and options admitted to trading on a trading venue

Type	Retail				
Class of Instrument	Currency Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	-				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Currency Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	Yes				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan AG(LEI:549300ZK53CNGEEI6A29)	100	100	0	100	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

ii. Swaps, forwards, and other currency derivatives

Type	Retail				
Class of Instrument	Currency Derivatives: Swaps, Forwards and Other Currency Derivatives				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Belfius Bank(LEI:A5GWLFH3KM7YV2SFQL84)	100	100	0	100	100
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Currency Derivatives: Swaps, Forwards and Other Currency Derivatives				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
RBC Investor Services Bank SA (LEI:549300IVXKQHV6O7PY61)	47,19	17,4	0	100	0
UBS Europe SE(LEI:5299007QVIQ7IO64NX37)	29,05	21,98	0	100	0
BNP PARIBAS(LEI:ROMUWSFPU8MPRO8K5P83)	8,97	13,37	0	100	0
UBS Limited(LEI:REYPIEJN7XZHSUI0N355)	6,2	6,41	0	100	0
NATIXIS (LEI:KX1WK48MPD4Y2NCUIZ63)	5,16	6,04	0	100	0

f. Structured finance instruments

➤ Non applicable

g. Equity Derivatives

i. Options and Futures admitted to trading on a trading venue

Type	Retail				
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan AG(LEI:549300ZK53CNGEEI6A29)	100	100	11,65	88,35	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Type	Professional				
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Notification if <1 average trade per business day in the previous year	Yes				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
JP Morgan AG(LEI:549300ZK53CNGEEI6A29)	100	100	15,04	84,96	0
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

ii. Swaps and other equity derivatives

➤ Non applicable

h. Securitized Derivatives

➤ Non applicable

i. Commodities derivatives and emission allowances Derivatives

➤ Non applicable

j. Contracts for difference

➤ Non applicable

k. Exchange traded products

Type	Retail				
Class of Instrument	Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange				
Notification if <1 average trade per business day in the previous year	No				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Flow Traders B.V. (LEI:549300CLJI9XDH12XV51)	38,86	23,92	28,07	71,93	0
Societe Generale(LEI:O2RNE8IBXP4ROTD8PU41)	29,96	40,76	33,04	66,96	0
Citigroup Global Markets LTD - UK(LEI:XKZZ2JZF41MRHTR1V493)	9,51	9,76	16,8	83,2	0
Exane(LEI:969500UP76J52A9OXU27)	5,51	6,83	65,58	34,42	0
Morgan Stanley Europe SE(LEI:54930056FHWP7GIWYY08)	5,32	7,41	12,81	87,19	0

Type	Professional				
Class of Instrument	Exchange Traded Products (Exchange Traded Funds, Exchange Traded Notes and Exchange				
Notification if <1 average trade per business day in the previous year	Yes				
Top five 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 executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Flow Traders B.V. (LEI:549300CLJI9XDH12XV51)	56,79	26,83	10,19	89,81	0
Citigroup Global Markets Europe AG(LEI:6TJCK1B7E7UTXP528Y04)	29,49	14,63	94,02	5,98	0
Morgan Stanley (LEI:IGJSJL3JD5P30I6NJZ34)	6,45	9,76	0	100	0
Societe Generale(LEI:O2RNE8IBXP4ROTD8PU41)	3,75	19,51	48,25	51,75	0
Citigroup Global Markets LTD - UK(LEI:XKZZ2JZF41MRHTR1V493)	2,28	21,95	0	100	0

I. Emission allowances

- Non applicable

m. Other instruments

- Non applicable