

*retail clients*

Class of Instrument	Equities — Shares & Depositary Receipts Tick size liquidity band 1 and 2 (from 0 to 79 trades per day)				
Notification if < 1 average trade per business day in the previous year	N				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
NEW YORK STOCK EXCHANGE, INC. (XNYS)	45,33%	35,04%	52,48%	47,52%	2,17%
TOKYO STOCK EXCHANGE (XTKS)	13,70%	13,60%	26,40%	73,60%	0,00%
SIX SWISS EXCHANGE (XSWX)	7,70%	10,55%	22,68%	77,32%	0,00%
LONDON STOCK EXCHANGE (XLON)	9,82%	5,11%	25,53%	74,47%	8,51%
NASDAQ/NMS (GLOBAL MARKET) (XNMS)	4,26%	5,98%	30,91%	69,09%	7,27%

Class of Instrument	Equities — Shares & Depositary Receipts 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 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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
LONDON STOCK EXCHANGE (XLON)	22,60%	10,05%	42,86%	0,00%	10,71%
WIENER BOERSE AG (XVIE)	16,11%	15,26%	32,94%	0,00%	0,00%
NEW YORK STOCK EXCHANGE, INC. (XNYS)	16,79%	22,80%	45,67%	0,00%	2,36%
XETRA (XETR)	15,01%	19,21%	25,23%	0,00%	9,35%
SPOT REGULATED MARKET - BVB (XBSE)	12,82%	13,11%	47,95%	0,00%	0,00%

Class of Instrument	Equities — Shares & Depositary Receipts 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 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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
NASDAQ/NMS (GLOBAL MARKET) (XNMS)	29,74%	17,56%	43,89%	55,61%	4,29%
NEW YORK STOCK EXCHANGE, INC. (XNYS)	24,70%	42,27%	45,65%	53,19%	0,82%
XETRA (XETR)	22,63%	18,51%	39,59%	59,94%	15,65%
EURONEXT - EURONEXT PARIS (XPAR)	8,09%	5,19%	30,17%	69,27%	3,35%
NASDAQ - ALL MARKETS (XNAS)	5,79%	1,39%	72,92%	27,08%	0,00%

Class of Instrument	Debt instruments Bonds				
Notification if < 1 average trade per business day in the previous year	j				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	91,21%	83,67%	12,20%	87,80%	0,00%
DEUTSCHE BOERSE AG (XFRA)	5,79%	8,67%	94,12%	5,88%	5,88%
BOERSE STUTTGART (XSTU)	1,82%	2,04%	100,00%	0,00%	0,00%
WIENER BOERSE AG (XVIE)	0,39%	3,06%	16,67%	83,33%	0,00%
BOERSE DUESSELDORF (XDUS)	0,35%	0,51%	100,00%	0,00%	0,00%

Class of Instrument	Debt instruments Money markets instruments				
Notification if < 1 average trade per business day in the previous year	J				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	100,00%	100,00%	0.00%	100.00%	0.00%
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Interest rates derivatives Futures and options admitted to trading on a trading venue				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Interest rates derivatives Swaps, forwards, and other interest rates derivatives				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	credit derivatives Futures and options admitted to trading on a trading venue				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.



Class of Instrument	credit derivatives Other credit derivatives				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

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	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	currency derivatives Swaps, forwards, and other currency derivatives				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Structured finance instruments				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Equity Derivatives Options and Futures admitted to trading on a trading venue				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Equity Derivatives Swaps and other equity derivatives				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Securitized Derivatives Warrants and Certificate Derivatives				
Notification if < 1 average trade per business day in the previous year	J				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS (XOFF)	73,72%	28,28%	34,02%	57,73%	0,00%
BOERSE STUTTGART (XSTU)	24,35%	68,80%	2,54%	97,46%	0,00%
WIENER BOERSE AG (XVIE)	1,13%	1,46%	0,00%	80,00%	0,00%
RAIFFEISEN CENTROBANK AG - SYSTEMATIC INTERNALISER	0,57%	0,29%	0,00%	100,00%	0,00%
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Securitized Derivatives Other securitized derivatives				
Notification if < 1 average trade per business day in the previous year	J				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
OFF-EXCHANGE TRANSACTIONS - LISTED INSTRUMENTS (XOFF)	95,36%	88,10%	31,08%	70,27%	0,00%
WIENER BOERSE AG (XVIE)	4,64%	11,90%	40,00%	60,00%	0,00%
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.



Class of Instrument	Commodities derivatives and emission allowances Derivatives Options and Futures admitted to trading on a trading venue				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Commodities derivatives and emission allowances Derivatives Other commodities derivatives and emission allowances derivatives				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Contracts for difference				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	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				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	98,93%	98,68%	0,84%	99,16%	0,00%
SIX SWISS EXCHANGE (XSWX)	0,38%	0,25%	50,00%	50,00%	0,00%
XETRA (XETR)	0,28%	0,52%	76,47%	23,53%	0,00%
LONDON STOCK EXCHANGE (XLON)	0,23%	0,34%	54,55%	45,45%	0,00%
NYSE ARCA (ARCX)	0,03%	0,03%	100,00%	0,00%	0,00%

Class of Instrument	Emission allowances				
Notification if < 1 average trade per business day in the previous year	N.A.				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name and venue identifier(MIC or LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Other instruments				
Notification if < 1 average trade per business day in the previous year	j				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
SIX SWISS EXCHANGE (XSWX)	33,88%	47,37%	22,22%	77,78%	0,00%
OTC PINK MARKETPLACE (PINX)	33,27%	5,26%	0,00%	100,00%	0,00%
NEW YORK STOCK EXCHANGE, INC. (XNYS)	13,82%	10,53%	0,00%	100,00%	0,00%
EURONEXT - EURONEXT PARIS (XPAR)	10,07%	10,53%	0,00%	50,00%	0,00%
DEUTSCHE BOERSE AG (XFRA)	5,93%	5,26%	0,00%	100,00%	0,00%