

retail clients

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
XETRA (XETR)	39,39%	43,87%	23,40%	76,60%	0,75%
LONDON STOCK EXCHANGE (XLON)	21,27%	14,57%	31,82%	68,18%	11,36%
BORSA ITALIANA S.P.A. (XMIL)	13,23%	3,64%	13,64%	86,36%	0,00%
EURONEXT - EURONEXT PARIS (XPAR)	7,04%	6,13%	13,51%	86,49%	0,00%
SIX SWISS EXCHANGE - BLUE CHIPS SEGMENT (XVTX)	5,82%	9,27%	12,50%	87,50%	0,00%

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
NASDAQ/NMS (GLOBAL MARKET) (XNMS)	37,77%	24,41%	5,38%	94,62%	3,23%
WIENER BOERSE AG (XVIE)	14,55%	30,45%	47,41%	52,59%	0,00%
EURONEXT - EURONEXT PARIS (XPAR)	11,87%	8,14%	80,65%	19,35%	0,00%
NEW YORK STOCK EXCHANGE, INC. (XNYS)	7,98%	8,14%	0,00%	100,00%	6,45%
BUDAPEST STOCK EXCHANGE (XBUD)	6,34%	5,25%	65,00%	35,00%	0,00%

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
TORONTO STOCK EXCHANGE (XTSE)	59,42%	20,48%	27,66%	72,34%	0,00%
NASDAQ/NMS (GLOBAL MARKET) (XNMS)	18,23%	28,98%	7,52%	92,48%	4,51%
NEW YORK STOCK EXCHANGE, INC. (XNYS)	11,92%	30,72%	6,38%	93,62%	12,06%
TSX VENTURE EXCHANGE (XTSX)	2,89%	1,09%	60,00%	40,00%	0,00%
ASX - ALL MARKETS (XASX)	1,91%	0,87%	0,00%	100,00%	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)	94,31%	83,10%	7,63%	92,37%	0,00%
BOERSE STUTTGART (XSTU)	3,44%	4,93%	28,57%	71,43%	0,00%
DEUTSCHE BOERSE AG (XFRA)	1,21%	4,23%	16,67%	83,33%	0,00%
BOERSE BERLIN (XBER)	0,65%	0,70%	0,00%	100,00%	0,00%
BORSA ITALIANA S.P.A. (XMIL)	0,19%	0,70%	0,00%	100,00%	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 und Kennung (MIC oder LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name und Kennung (MIC oder LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name und Kennung (MIC oder LEI)	N.A.	N.A.	N.A.	N.A.	N.A.
Name und Kennung (MIC oder 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
WIENER BOERSE AG (XVIE)	72,28%	35,90%	0,00%	100,00%	0,00%
BOERSE STUTTGART (XSTU)	19,62%	48,72%	31,58%	68,42%	0,00%
DEUTSCHE BOERSE AG (XFRA)	6,90%	12,82%	0,00%	100,00%	0,00%
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	1,20%	2,56%	100,00%	0,00%	0,00%
Name und Kennung (MIC oder LEI)	N.A.	N.A.	N.A.	N.A.	N.A.

Class of Instrument	Securitized Derivatives Other securitized derivatives				
	J				
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 percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
WIENER BOERSE AG (XVIE)	48,62%	45,45%	6,67%	93,33%	0,00%
SIX SWISS EXCHANGE – STRUCTURED PRODUCTS (XQMH)	34,67%	42,42%	21,43%	78,57%	0,00%
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	11,75%	3,03%	0,00%	100,00%	0,00%
BOERSE STUTTGART (XSTU)	1,80%	3,03%	0,00%	100,00%	0,00%
SIX SWISS EXCHANGE (XSWX)	1,71%	3,03%	0,00%	100,00%	0,00%

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)	83,50%	86,73%	0,00%	100,00%	0,00%
XETRA (XETR)	8,80%	2,16%	6,25%	93,75%	0,00%
SIX SWISS EXCHANGE (XSWX)	2,19%	1,03%	0,00%	100,00%	0,00%
LONDON STOCK EXCHANGE (XLON)	2,11%	0,72%	12,50%	87,50%	0,00%
EURONEXT - EURONEXT PARIS (XPAR)	1,80%	0,72%	12,50%	87,50%	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
NEW YORK STOCK EXCHANGE, INC. (XNYS)	54,19%	25,45%	14,29%	85,71%	21,43%
TORONTO STOCK EXCHANGE (XTSE)	12,39%	7,27%	0,00%	100,00%	0,00%
BUDAPEST STOCK EXCHANGE (XBUD)	11,41%	9,09%	0,00%	100,00%	0,00%
NASDAQ/NMS (GLOBAL MARKET) (XNMS)	9,85%	5,45%	0,00%	100,00%	0,00%
WIENER BOERSE AG (XVIE)	5,75%	18,18%	0,00%	100,00%	0,00%