## professional 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	^	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
NEW YORK STOCK EXCHANGE, INC. (XNYS)	50,55%	61,74%	77,99%	22,01%	0,00%	
SIX SWISS EXCHANGE (XSWX)	14,35%	5,76%	0,00%	100,00%	0,00%	
NASDAQ/NGS (GLOBAL SELECT MARKET) (XNGS)	13,92%	5,54%	0,00%	100,00%	0,00%	
LONDON STOCK EXCHANGE (XLON)	8,18%	4,35%	2,50%	97,50%	0,00%	
TOKYO STOCK EXCHANGE (XTKS)	5,68%	4,02%	18,92%	81,08%	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	J						
Top five execution venues ranked in	Proportion of volume	*	Percentage of	Percentage of	Percentage of		
terms of trading volumes (descending	traded as a		passive orders	00	directed		
order)	percentage of total in	•		orders	orders		
	that class	that class					
XETRA (XETR)	56,30%	39,48%	2,92%	5,84%	0,00%		
NEW YORK STOCK EXCHANGE, INC. (XNYS)	17,51%	30,55%	74,53%	24,53%	0,00%		
LONDON STOCK EXCHANGE (XLON)	11,14%	6,63%	4,35%	95,65%	0,00%		
WIENER BOERSE AG (XVIE)	5,64%	11,82%	78,05%	0,00%	0,00%		
EURONEXT - EURONEXT PARIS (XPAR	3,13%	1,73%	16,67%	83,33%	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	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
terms of trading volumes (descending	traded as a	executed as	passive orders	aggressive	directed	
order)	percentage of total in	percentage of total in		orders	orders	
	that class	that class				
NEW YORK STOCK EXCHANGE, INC. (XNYS)	42,10%	58,58%	70,77%	29,23%	0,00%	
NASDAQ/NGS (GLOBAL SELECT MARKET) (XNGS)	26,12%	10,87%	0,00%	100,00%	0,00%	
EURONEXT - EURONEXT PARIS (XPAR)	4,74%	4,06%	7,84%	92,16%	0,00%	
XETRA (XETR)	4,81%	3,90%	0,00%	100,00%	0,00%	
LONDON STOCK EXCHANGE (XLON)	3,59%	2,27%	0,00%	100,00%	0,00%	

Class of Instrument	Debt instruments Bonds				
Notification if < 1 average trade per business day in the previous year	N				
Top five execution venues ranked in	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
terms of trading volumes (descending order)	traded as a percentage of total in	executed as percentage of total in	passive orders	aggressive orders	directed orders
	that class	that class			
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	92,96%	93,33%	0,00%	100,00%	0,00%
BOERSE STUTTGART (XSTU)	6,02%	5,00%	0,00%	100,00%	66,67%
DEUTSCHE BOERSE AG	1,02%	1,67%	0,00%	100,00%	100,00%
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.

Class of Instrument	Debt instruments Money markets instru	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	executed as	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 Futures and options admitted to trading on a trading venue						
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	^	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
EUREX DEUTSCHLAND (XEUR)	71,79%	43,46%	0,00%	100,00%	0,00%		
CHICAGO BOARD OF TRADE (XCBT)	15,55%	32,24%	0,00%	100,00%	0,00%		
ICE FUTURES EUROPE - FINANCIAL PRODUCTS DIVISION (IFLL)	5,23%	9,81%	0,00%	100,00%	0,00%		
ASX - TRADE24 (XSFE)	3,21%	5,61%	0,00%	100,00%	0,00%		
THE MONTREAL EXCHANGE / BOURSE DE MONTREAL (XMOD)	2,69%	6,07%	0,00%	100,00%	0,00%		

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	executed as	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 a	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	executed as	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 derivative	es			
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	executed as	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 a	currency derivatives Futures and options admitted to trading on a trading venue					
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	executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
CHICAGO MERCANTILE EXCHANGE (XCME)	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	currency derivatives Swaps. forwards. and	currency derivatives Swaps. forwards. and other currency 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	executed as	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	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	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	•	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
CBOE FUTURES EXCHANGE (XCBF)	39,65%	61,59%	0,00%	100,00%	0,00%	
EUREX DEUTSCHLAND (XEUR)	30,39%	21,01%	0,00%	100,00%	0,00%	
HONG KONG FUTURES EXCHANGE LTD. (XHKF)	15,60%	7,97%	0,00%	100,00%	0,00%	
ICE FUTURES U.S. (IFUS)	14,36%	9,42%	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	Equity Derivatives Swaps and other equit	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	executed as	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	Proportion of volume	•	Percentage of	Percentage of	Percentage of	
terms of trading volumes (descending order)	traded as a percentage of total in that class	executed as percentage of total in that class	passive orders	aggressive orders	directed orders	
NEW YORK STOCK EXCHANGE, INC. (XNYS)	72,73%	100,00%	0,00%	0,00%	0,00%	
NYSE ARCA	18,18%	50,00%	50,00%	0,00%	0,00%	
WIENER BOERSE AG (XVIE)	9,09%	0,00%	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.	

Class of Instrument		ecuritized Derivatives Other securitized 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	executed as	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 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	executed as	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	^	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	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	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
terms of trading volumes (descending	traded as a	executed as	passive orders	aggressive	directed	
order)	percentage of total in	percentage of total in		orders	orders	
	that class	that class				
BLOOMBERG TRADING FACILITY LIMITED (BMTF)	69,93%	0,00%	100,00%	0,00%	0,00%	
NASDAQ/NMS (GLOBAL MARKET)	29,87%	100,00%	0,00%	0,00%	0,00%	
NEW YORK STOCK EXCHANGE, INC.	0,20%	100,00%	0,00%	0,00%	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.	

Class of Instrument	Emission allowances	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	executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
EURONEXT - EURONEXT PARIS (XPAR)	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.