

Class of Instrument	Equities - Shares & Depositary Receipts (T12)							
Notification if <1 average trade per business day in the previous year								
Top five execution venues ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	d as a percentage of tot uted as percentage of tot ive orders sive orders cted order						
Deutsche Börse XETA XETA	37.08 %	7.15 %	0.00 %	50.00 %	0.00 %			
Bolsa de Madrid XMAD	28.08 %	32.14 %	11.11 %	33.33 %	0.00 %			
CHI-X Europe CHIX	9.44 %	7.14 %	0.00 %	50.00 %	0.00 %			
GROW	7.75 %	10.72 %	33.33 %	33.33 %	0.00 %			
Turquoise MTF TRQX	5.30 %	3.57 %	0.00 %	0.00 %	0.00 %			
Interaction	Execution							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T34)							
Notification if <1 average trade per business day in the previous year			No					
Top five execution venues ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	d as a percentage of tot uted as percentage of tot ive orders sive orders cted o						
Bolsa de Madrid XMAD	25.31 %	12.09 %	42.55 %	43.83 %	0.00 %			
CHI-X Europe CHIX	8.67 %	12.50 %	67.08 %	29.22 %	0.00 %			
BATS Periodic Auction BATP	8.31 %	4.89 %	0.00 %	0.00 %	0.00 %			
Amsterdam Stock Exchange XAMS	5.65 %	1.13 %	36.36 %	27.27 %	0.00 %			
Off Exchange Transactions XOFF	5.20 %	1.34 %	7.69 %	7.69 %	0.00 %			
Interaction	Execution							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T56)							
Notification if <1 average trade per business day in the previous year		No						
Top five execution venues ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
Bolsa de Madrid XMAD	31.50 %	9.66 %	67.80 %	22.37 %	0.00 %			
CHI-X Europe CHIX	8.88 %	13.78 %	77.91 %	19.71 %	0.00 %			
Paris Stock Exchange XPAR	6.80 %	1.80 %	49.09 %	32.73 %	0.00 %			
Deutsche Börse XETA XETA	5.70 %	1.24 %	57.89 %	7.89 %	0.00 %			
CBOE EUROPE ? BXE OFF-BOOK BATF	4.04 %	1.90 %	0.00 %	0.00 %	0.00 %			
Interaction	Execution							
Report provided by LiquidMetrix								



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		Yes					
Top five execution venues ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	Proportion of orders exec uted as percentage of tot al in that class	Percentage of pass ive orders	Percentage of aggres sive orders	Percentage of dire cted orders		
Paris Stock Exchange XPAR	91.10 %	14.29 %	0.00 %	0.00 %	0.00 %		
BOERSE FRANKFURT - REGULIERTER MARKT FRAA	7.38 %	71.43 %	0.00 %	0.00 %	0.00 %		
Off Exchange Transactions XOFF	1.52 %	14.28 %	0.00 %	100.00 %	0.00 %		
Interaction	Execution						
Report provided by LiquidMetrix							



Class of Instrument	Equities - Shares & Depositary Receipts (T34)							
Notification if <1 average trade per business day in the previous year	No							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
MS	100.00 %	100.00 %	32.30 %	51.77 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T56)							
Notification if <1 average trade per business day in the previous year	No							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
MS	100.00 %	100.00 %	51.09 %	40.15 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



Class of Instrument	Equities - Shares & Depositary Receipts (T12)							
Notification if <1 average trade per business day in the previous year	Yes							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
MS	100.00 %	100.00 %	9.52 %	47.62 %	0.00 %			
Interaction	Placement/transmission							
Report provided by LiquidMetrix								



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	Yes						
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders					
MS	100.00 %	100.00 %	35.71 %	35.71 %	0.00 %		
Interaction	Placement/transmission						
Report provided by LiquidMetrix							



Class of Instrument	Other instruments							
Notification if <1 average trade per business day in the previous year	Yes							
Top five investment firms ranked in t erms of trading volumes (descending o rder)	Proportion of volume trad ed as a percentage of tot al in that class	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
MS	100.00 %	100.00 % 100.00 % 0.00 % 0.00 %						
Interaction	Placement/transmission							
Report provided by LiquidMetrix								