

Class of Instrument	Equities - Shares & Depositary Receipts (T34)						
Notification if <1 average trade per business day in the previous year		Νο					
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		
Bolsa de Madrid XMAD	28.34 %	16.04 %	49.26 %	37.16 %	0.00 %		
CBOE EUROPE ? BXE OFF-BOOK BATF	11.53 %	1.30 %	0.00 %	37.66 %	0.00 %		
Off Exchange Transactions XOFF	8.44 %	1.27 %	8.00 %	2.67 %	0.00 %		
Swiss Stock Exchange XSWX	6.30 %	0.22 %	7.69 %	30.77 %	0.00 %		
CHI-X Europe CHIX	5.58 %	12.49 %	64.19 %	29.46 %	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	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		
Bolsa de Madrid XMAD	29.29 %	9.51 %	64.45 %	27.16 %	0.00 %		
CHI-X Europe CHIX	9.14 %	13.60 %	68.99 %	28.02 %	0.00 %		
Paris Stock Exchange XPAR	6.04 %	1.66 %	59.00 %	20.50 %	0.00 %		
Swiss Stock Exchange XSWX	5.33 %	0.25 %	26.67 %	13.33 %	0.00 %		
Deutsche Börse XETA XETA	4.83 %	1.01 %	62.30 %	8.20 %	0.00 %		
Interaction	Execution						
	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 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 orde						
Bolsa de Madrid XMAD	54.77 %	28.64 %	27.87 %	27.87 %	0.00 %			
Lisbon Stock Exchange XLIS	13.36 %	10.33 %	4.55 %	50.00 %	0.00 %			
Deutsche Börse XETA XETA	11.31 %	7.04 %	40.00 %	26.67 %	0.00 %			
TOWER RESEARCH CAPITAL EUROPE LTD TRS I	3.52 %	6.57 %	0.00 %	100.00 %	0.00 %			
CHI-X Europe CHIX	3.36 %	9.86 %	4.76 %	71.43 %	0.00 %			
Interaction	Execution							
	Report provided by LiquidMetrix							



Class of Instrument	Exchange traded	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	as a percentage of tot uted as percentage of tot ive orders sive orders cted orders						
Paris Stock Exchange XPAR	85.30 %	41.33 %	6.45 %	70.97 %	0.00 %			
Off Exchange Transactions XOFF	3.15 %	16.00 %	0.00 %	8.33 %	0.00 %			
BOERSE FRANKFURT - REGULIERTER MARKT  FRAA	2.53 %	6.67 %	0.00 %	0.00 %	0.00 %			
London Stock Exchange XLON	2.16 %	4.00 %	0.00 %	100.00 %	0.00 %			
TOWER RESEARCH CAPITAL EUROPE LTD TRS I	1.89 %	2.67 %	0.00 %	100.00 %	0.00 %			
Interaction	Execution							
	Report provided by LiquidMetrix							



Class of Instrument	Other instruments						
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	ed as a percentage of tot uted as percentage of tot ive orders sive orders cted orders					
Bolsa de Madrid XMAD	100.00 %	100.00 %	50.00 %	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	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	d 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	ad 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	ad as a percentage of tot uted as percentage of tot ive orders sive orders cted 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	d 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	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	
MS	100.00 %	100.00 %	0.00 %	0.00 %	0.00 %	
Interaction	Placement/transmission					
Report provided by LiquidMetrix						