Class of Instrument	Equities - Shares & Depositary Receipts Tick size liquidity bands 5 and 6 (from 2000 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		
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	55,0%	62,1%	0,1%	0,3%	78,9%		
XETRA - REGULIERTER MARKT (XETA)	15,5%	10,4%	30,0%	55,0%	99,1%		
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	7,0%	5,9%	0,1%	0,4%	34,6%		
BOERSE DUESSELDORF - QUOTRIX - REGULIERTER MARKT	4,6%	3,3%	0,1%	0,3%	14,5%		
XETRA - FREIVERKEHR (XETB)	3,5%	4,2%	29,5%	53,0%	99,2%		

Class of Instrument	Equities - Shares & Depositary Receipts Tick size liquidity bands 3 and 4 (from 80 to 1999 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		
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	60,7%	65,8%	0,1%	0,3%	82,4%		
XETRA - REGULIERTER MARKT (XETA)	13,2%	10,6%	40,9%	48,0%	99,5%		
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	4,0%	3,9%	0,1%	0,4%	51,4%		
XETRA - FREIVERKEHR (XETB)	3,6%	2,5%	39,3%	44,5%	99,0%		
BOERSE STUTTGART - FREIVERKEHR (STUB)	3,4%	4,2%	0,1%	0,3%	91,2%		

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		
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	35,4%	50,8%	0,1%	0,3%	88,4%		
BOERSE FRANKFURT - FREIVERKEHR (FRAB)	6,8%	10,6%	0,1%	0,2%	90,6%		
BOERSE STUTTGART - FREIVERKEHR (STUB)	4,7%	5,2%	0,2%	0,4%	91,7%		
XETRA - REGULIERTER MARKT (XETA)	4,0%	3,6%	43,0%	39,4%	99,4%		
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	3,7%	3,5%	0,1%	0,3%	39,6%		

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 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		
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	88,8%	5,7%	0,9%	2,2%	87,7%		
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	3,1%	39,9%	0,1%	0,3%	15,4%		
BOERSE STUTTGART - FREIVERKEHR (STUB)	2,4%	19,5%	0,1%	0,4%	78,9%		
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	0,9%	16,0%	0,1%	0,2%	83,8%		
BOERSE FRANKFURT - FREIVERKEHR (FRAB)	0,6%	6,7%	0,1%	0,3%	92,8%		

Class of Instrument	Debt instruments Money markets instruments
Notification if < 1 average trade per business day in the previous year	N

Class of Instrument	Equities - Shares & Depositary Receipts Tick size liquidity bands 5 and 6 (from 2000 trades per day)						
Notification if < 1 average trade per business day in the previous year		N					
Top five investment firms 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		
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	2,2%	1,4%	0,1%	0,6%	66,5%		
VIRTU ITG EUROPE LIMITED (213800EEC95PRUCEUP63)	0,8%	0,8%	0,2%	0,7%	97,3%		
UBS Europe SE (5299007QVIQ7IO64NX37)	0,1%	0,0%	0,0%	0,0%	100,0%		

Class of Instrument	Equities - Shares & Depositary Receipts Tick size liquidity bands 3 and 4 (from 80 to 1999 trades per day)						
Notification if < 1 average trade per business day in the previous year		N					
Top five investment firms ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders Percentage of aggressive orders Percentage of aggressive orders Orders					
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	2,7%	1,8%	0,1%	0,2%	85,3%		
VIRTU ITG EUROPE LIMITED (213800EEC95PRUCEUP63)	0,3%	0,2%	0,6%	1,5%	94,6%		
UBS Europe SE (5299007QVIQ7IO64NX37)	0,2%	0,0%	0,0%	0,0%	100,0%		
COMMERZBANK Aktiengesellschaft (851WYGNLUQLFZBSYGB56)	0,0%	0,0%	0,0%	0,0%	100,0%		

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 investment firms 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	
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	33,5%	16,8%	0,1%	0,2%	53,7%	
VIRTU ITG EUROPE LIMITED (213800EEC95PRUCEUP63)	2,4%	1,0%	0,2%	0,3%	98,3%	
UBS Europe SE (5299007QVIQ7IO64NX37)	0,1%	0,0%	0,0%	0,0%	100,0%	
Raiffeisen Centrobank AG (529900M2F7D5795H1A49)	0,0%	0,0%	0,0%	0,0%	100,0%	
Raiffeisen Bank International AG (9ZHRYM6F437SQJ6OUG95)	0,0%	0,0%	0,0%	0,0%	100,0%	

Class of Instrument		Debt instruments Bonds					
Notification if < 1 average trade per business day in the previous year	N						
Top five investment firms ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders error e					
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	0,0%	0,2%	0,0%	0,0%	56,5%		

Class of Instrument	Debt instruments Money markets instruments
Notification if < 1 average trade per business day in the previous year	N 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
DZ BANK AG Deutsche Zentral-	22.50/	10.00/	2 -0/		
Genossenschaftsbank, Frankfurt am Main	99,5%	16,6%	0,5%	3,2%	86,4%
BOERSE STUTTGART - FREIVERKEHR	0.00/	50.00/	0.40/	2.20/	44.40/
(STUB)	0,3%	52,3%	0,1%	0,3%	44,1%
BOERSE FRANKFURT - FREIVERKEHR	0.1%	22.5%	0.09/	0.39/	02.79/
(FRAB)	0,1%	23,5%	0,0%	0,3%	92,7%
BOERSE DUESSELDORF - QUOTRIX MTF	0.09/	0.49/	0.09/	0.0%	0.09/
(DUSD)	0,0%	0,1%	0,0%	0,0%	0,0%
BOERSE MUENCHEN - FREIVERKEHR	0.0%	0.49/	0,0%	0,0%	100.0%
(MUNB)	0,0%	0,1%			100,0%

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	Y				
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

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	Y					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders				

Top five investment firms 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
Boerse Stuttgart cats GmbH (529900TW3YXY9C6T1G09)	0,0%	3,9%	0,0%	0,0%	100,0%

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	Υ Υ				
Top five investment firms 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 aggressive orders	Percentage of directed orders	

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	Y				
Top five investment firms 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

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	Y				
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 aggressive orders	Percentage of directed orders		

Class of Instrument	Credit derivatives Other credit derivatives					
Notification if < 1 average trade per business day in the previous year	Υ					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders executed as percentage of passive orders				

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	Y					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	a percentage of total in executed as percentage of Percentage of passive orders Percentage or aggressive orders representations of the percentage of passive orders representations or aggressive orders.				

Class of Instrument	Currency derivatives Swaps, forwards, and other currency derivatives						
Notification if < 1 average trade per business day in the previous year	Υ						
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of of passive orders					

Class of Instrument	Structured finance instruments
Notification if < 1 average trade per business day in the previous year	N

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	Y				
Top five investment firms 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

Class of Instrument	Credit derivatives Other credit derivatives					
Notification if < 1 average trade per business day in the previous year	Y					
Top five investment firms 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	

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		Y				
Top five investment firms ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders				

Class of Instrument	Currency derivatives Swaps, forwards, and other currency derivatives					
Notification if < 1 average trade per business day in the previous year	Y					
Top five investment firms 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 passive orders Percentage of orders Orders					

Class of Instrument	Structured finance instruments
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
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	93,5%	11,5%	1,0%	5,1%	76,5%
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	1,8%	35,0%	0,0%	0,5%	11,0%
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	0,8%	17,4%	4,0%	0,3%	98,0%
BOERSE STUTTGART - FREIVERKEHR (STUB)	0,7%	10,4%	0,0%	0,0%	62,9%
XETRA - REGULIERTER MARKT (XETA)	0,4%	12,1%	10,6%	44,0%	91,3%

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				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders executed as percentage of passive orders executed experience or descriptions or description				
EUREX DEUTSCHLAND (XEUR)	16,0%	82,7%	87,3%	11,3%	100,0%	

Top five investment firms 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
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	0,0%	2,1%	0,0%	0,0%	94,4%

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	Y					
Top five investment firms 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 passive orders Percentage of aggressive orders Orders					

Class of Instrument	Equity derivatives Swaps and other equity derivatives						
Notification if < 1 average trade per business day in the previous year		Υ					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders					

Class of Instrument	Securitized Derivatives Warrants and Certificate Derivatives					
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	
BOERSE STUTTGART - FREIVERKEHR (STUB)	44,6%	54,1%	0,2%	0,5%	86,4%	
BOERSE FRANKFURT - FREIVERKEHR (FRAB)	19,4%	23,8%	0,1%	0,3%	87,7%	
XETRA - REGULIERTER MARKT (XETA)	8,9%	2,4%	25,0%	58,5%	99,1%	
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	8,2%	6,7%	1,1%	4,0%	82,2%	
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	6,2%	5,6%	0,1%	0,3%	98,6%	

Class of Instrument	Securitized Derivatives Other securitized derivatives				
Notification if < 1 average trade per business day in the previous year	Y				
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

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		Y					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	as a percentage of total in executed as percentage of Percentage of passive orders executed as percentage of passive orders executed as percentage of passive orders executed executed as percentage of passive orders.					

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	Y

Class of Instrument	Equity derivatives Swaps and other equity derivatives					
Notification if < 1 average trade per business day in the previous year	Υ					
Top five investment firms 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 passive orders Percentage of aggressive orders					

Class of Instrument	Securitized Derivatives Warrants and Certificate Derivatives					
Notification if < 1 average trade per business day in the previous year	N					
Top five investment firms 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	
Boerse Stuttgart cats GmbH (529900TW3YXY9C6T1G09)	2,4%	3,2%	0,0%	0,1%	99,8%	
JANE STREET FINANCIAL LIMITED (549300ZHEHX8M31RP142)	0,2%	0,2%	0,0%	0,0%	100,0%	
Flow Traders B.V. (549300CLJI9XDH12XV51)	0,1%	0,1%	0,9%	3,5%	91,4%	
Bank Vontobel AG (549300L7V4MGECYRM576)	0,1%	0,0%	0,0%	0,0%	100,0%	
ICF BANK AG Wertpapierhandelsbank	0,0%	0,0%	0,0%	0,0%	79,7%	

Class of Instrument	Securitized Derivatives Other securitized derivatives					
Notification if < 1 average trade per business day in the previous year		Y				
Top five investment firms 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	

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	Y				
Top five investment firms 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

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	Y

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

Top five investment firms 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

Class of Instrument	Contracts for difference					
Notification if < 1 average trade per business day in the previous year		Υ				
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	

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 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	
BOERSE DUESSELDORF - QUOTRIX MTF (DUSD)	38,0%	37,2%	0,1%	0,3%	11,0%	
XETRA - REGULIERTER MARKT (XETA)	29,4%	19,1%	17,4%	54,8%	97,9%	
TRADEGATE EXCHANGE - FREIVERKEHR (XGAT)	14,4%	27,8%	0,1%	0,4%	98,0%	
BOERSE STUTTGART - FREIVERKEHR (STUB)	3,3%	4,6%	0,1%	0,4%	96,9%	
BOERSE FRANKFURT - REGULIERTER MARKT (FRAA)	1,2%	2,8%	0,2%	0,4%	98,2%	

Class of Instrument	Emission allowances					
Notification if < 1 average trade per business day in the previous year		Υ				
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	

Class of Instrument	Other instruments
---------------------	-------------------

Class of Instrument	Contracts for difference						
Notification if < 1 average trade per business day in the previous year		Y					
Top five investment firms 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		

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 investment firms 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	
Flow Traders B.V. (549300CLJI9XDH12XV51)	1,8%	2,0%	0,1%	0,3%	98,8%	
JANE STREET FINANCIAL LIMITED (549300ZHEHX8M31RP142)	1,5%	1,2%	0,0%	0,4%	98,4%	
ICF BANK AG Wertpapierhandelsbank (529900E89HA1I45HB613)	0,7%	0,4%	0,5%	1,4%	79,6%	
Optiver V.O.F. (7245009KRYSAYB2QCC29)	0,4%	0,5%	0,2%	0,5%	97,7%	
VIRTU ITG EUROPE LIMITED	0,0%	0,0%	1,1%	2,1%	87,4%	

Class of Instrument	Emission allowances				
Notification if < 1 average trade per business day in the previous year	Y				
Top five investment firms 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 orders				

Class of Instrument	Other instruments
---------------------	-------------------