Top 5 Reporting 2023

Retail Clients

Class of Instrument	Equities - Shares and Depos	Equities - Shares and 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	Ν							
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders				
GETTEX - Market Maker Munich (MUNC)	67,02	95,46	100,00	0,00	99,63				
Berlin - Tradegate Exchange (TGAT)	9,30	1,93	100,00	0,00	99,40				
Xetra (XETR)	4,78	0,66	56,26	43,74	91,18				
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	4,02	0,30	21,61	78,39	23,75				
Frankfurt (XFRA)	2,03	0,42	100,00	0,00	98,50				

Class of Instrument	Equities - Shares and Deposition	equities - Shares and 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	Ν	Ν						
Top five execution	Proportion of volume	Proportion of orders	Percentage of passive	Percentage of aggressive	Percentage of directed			

venues ranked in terms of trading volumes (descending order)	traded as a percentage of total in that class	executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	orders
GETTEX - Market Maker Munich (MUNC)	81,76	97,67	100,00	0,00	99,47
Xetra (XETR)	5,92	0,56	63,72	36,28	85,59
Berlin - Tradegate Exchange (TGAT)	5,45	1,16	100,00	0,00	99,37
New York Stock Exchange (XNYS)	0,79	0,01	53,39	46,61	80,46
NYSE ARCA (ARCX)	0,78	0,03	74,33	25,67	99,55

Class of Instrument	Equities - Shares and Deposit	Equities - Shares and 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	Ν					
Top five execution venues ranked in terms	Proportion of volume traded as a percentage of	Proportion of orders executed as a	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		

venues ranked in terms of trading volumes (descending order)	traded as a percentage of total in that class	executed as a percentage of total in that class	orders	orders	orders
GETTEX - Market Maker Munich (MUNC)	86,64	98,85	100,00	0,00	99,56
Xetra (XETR)	6,93	0,37	65,30	34,70	94,61
Berlin - Tradegate Exchange (TGAT)	3,86	0,54	100,00	0,00	99,18
NYSE ARCA (ARCX)	0,47	0,02	81,80	18,20	99,60
NASDAQ Stock Market (XNAS)	0,35	0,01	38,95	61,05	79,60

Class of Instrument	Equities - No specific assign	Equities - No specific assignment							
Notification, if < 1 average trade per business day in the previous year	N	Ν							
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders				
GETTEX - Market Maker Munich (MUNC)	73,62	93,83	100,00	0,00	99,90				
Berlin - Tradegate Exchange (TGAT)	5,20	1,77	100,00	0,00	99,84				
NASDAQ Stock Market (XNAS)	2,68	0,53	53,89	46,11	97,88				
MEMX LLC (MEMX)	2,57	0,36	90,26	9,74	99,25				
NYSE ARCA (ARCX)	2,05	0,33	48,31	51,69	99,94				

Class of Instrument	Debt instruments - Bonds	Debt instruments - Bonds							
Notification, if < 1 average trade per business day in the previous year	N	Ν							
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders				
GETTEX - Market Maker Munich (MUNC)	89,11	93,89	100,00	0,00	50,06				
Berlin - Tradegate Exchange (TGAT)	5,68	2,11	100,00	0,00	94,15				
Frankfurt (XFRA)	3,38	2,58	100,00	0,00	87,22				
Stuttgart (XSTU)	1,27	0,94	100,00	0,00	78,78				
München (XMUN)	0,26	0,12	100,00	0,00	70,59				

Class of Instrument	Debt instruments - Money r	Debt instruments - Money markets instruments						
Notification, if < 1 average trade per business day in the previous year	Y	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Interest rates derivatives - F	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	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Interest rates derivatives - S	Interest rates derivatives - Swaps, forwards, and other interest rates derivatives						
Notification, if < 1 average trade per business day in the previous year	Y	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Credit derivatives - Futures	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	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Credit derivatives - Other cr	Credit derivatives - Other credit derivatives					
Notification, if < 1 average trade per business day in the previous year	Y	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
null	0,00	0,00	0,00	0,00	0,00		

Class of Instrument	Currency derivatives - Futu	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	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
null	0,00	0,00	0,00	0,00	0,00		

Class of Instrument	Currency derivatives - Swa	Currency derivatives - Swaps, forwards, and other currency 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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
null	0,00	0,00	0,00	0,00	0,00		

Class of Instrument	Structured finance instrumen	Structured finance instruments					
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
GETTEX - Market Maker Munich (MUNC)	100,00	100,00	100,00	0,00	0,00		

Class of Instrument	Equity Derivatives - Options	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	Ν				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
EUREX AG (XEUR)	99,92	99,14	100,00	0,00	99,52	
Chicago Board Opt. Exch. (XCBO)	0,08	0,86	100,00	0,00	0,00	

Class of Instrument	Equity Derivatives - Swaps a	Equity Derivatives - Swaps and other equity 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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
null	0,00	0,00	0,00	0,00	0,00		

Class of Instrument	Securitized Derivatives - W	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
GETTEX - Market Maker Munich (MUNC)	97,15	99,19	100,00	0,00	99,81		
Stuttgart (XSTU)	1,88	0,47	100,00	0,00	86,13		
Frankfurt (XFRA)	0,79	0,26	100,00	0,00	80,78		
Xetra (XETR)	0,09	0,01	35,18	64,82	33,41		
Berlin - Tradegate Exchange (TGAT)	0,07	0,07	100,00	0,00	13,86		

Class of Instrument	Securitized Derivatives - Ot	Securitized Derivatives - Other securitized derivatives					
Notification, if < 1 average trade per business day in the previous year	Y	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
GETTEX - Market Maker Munich (MUNC)	63,66	57,87	100,00	0,00	100,00		
Frankfurt (XFRA)	26,78	26,38	100,00	0,00	95,16		
Stuttgart (XSTU)	9,56	15,74	100,00	0,00	97,30		

Class of Instrument	Commodities derivatives and	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	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
null	0,00	0,00	0,00	0,00	0,00	

Class of Instrument	Commodities derivatives and	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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
null	0,00	0,00	0,00	0,00	0,00	

Class of Instrument	Contracts for difference				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
null	0,00	0,00	0,00	0,00	0,00

Class of Instrument	Exchange traded products (E	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	Ν					
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
GETTEX - Market Maker	84,94	97,80	100,00	0,00	94,61	

(descending order)	total in that class	percentage of total in that class			
GETTEX - Market Maker Munich (MUNC)	84,94	97,80	100,00	0,00	94,61
Xetra (XETR)	12,75	0,63	34,19	65,81	13,57
Berlin - Tradegate Exchange (TGAT)	1,57	1,35	100,00	0,00	15,31
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	0,20	0,02	19,37	80,63	2,91
WPB Hamburg - Lang & Schw. (HAML)	0,16	0,04	100,00	0,00	100,00

Class of Instrument	Emission allowances	Emission allowances						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Other instruments				
Notification, if < 1 average trade per business day in the previous year	Ν				
Top five execution	Proportion of volume	Proportion of orders	Percentage of passive	Percentage of aggressive	Percentage of directed

venues ranked in terms of trading volumes (descending order)	traded as a percentage of total in that class	executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
GETTEX - Market Maker Munich (MUNC)	61,39	96,16	100,00	0,00	95,72
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	25,62	0,49	21,67	78,33	53,70
Frankfurt (XFRA)	3,67	0,57	100,00	0,00	96,74
Xetra (XETR)	3,36	0,77	50,17	49,83	100,00
Stuttgart (XSTU)	1,97	0,64	100,00	0,00	88,50

Class of Instrument	Equities - Shares and Depos	Equities - Shares and 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	Ν							
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	30,39	5,95	32,75	67,25	22,34			
CBOE EUROPE - CXE ORDER BOOKS (CHIX)	8,80	0,41	88,88	11,12	4,35			
Xetra (XETR)	5,06	8,06	57,01	42,99	77,74			
Berlin - Tradegate Exchange (TGAT)	4,61	30,43	100,00	0,00	99,23			
London Stock Exchange (XLON)	3,90	0,64	66,24	33,76	13,79			

Wien (XWBO)

New York Stock Exchange (XNYS)

GETTEX - Market Maker Munich (MUNC)

Table 2

Class of Instrument	Equities - Shares and Depos	Equities - Shares and 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	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
Xetra (XETR)	19,69	12,58	69,53	30,47	83,80			
Berlin - Tradegate Exchange (TGAT)	18,89	51,64	100,00	0,00	99,68			

1,76

0,63

16,58

22,98

74,91

100,00

77,02

25,09

0,00

81,80

76,25

96,29

9,92

4,97

3,63

Class of Instrument	Equities - Shares and Depos	Equities - Shares and 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	Ν	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
Xetra (XETR)	29,55	19,51	56,22	43,78	80,40			
Berlin - Tradegate Exchange (TGAT)	22,68	45,76	100,00	0,00	99,65			
CBOE EUROPE - DXE	7,24	1,09	43,32	56,68	18,91			

Berlin - Tradegate Exchange (TGAT)	22,68	45,76	100,00	0,00	99,65
CBOE EUROPE - DXE ORDER BOOKS (NL) (CEUX)	7,24	1,09	43,32	56,68	18,91
GETTEX - Market Maker Munich (MUNC)	5,95	18,52	100,00	0,00	95,85
NASDAQ Stock Market (XNAS)	2,93	0,41	57,08	42,92	63,36

Class of Instrument	Equities - No specific assign	Equities - No specific assignment					
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	22,20	7,60	57,00	43,00	34,98		
NASDAQ Stock Market (XNAS)	12,14	4,15	63,25	36,75	45,23		
Jersey City/N.J DirectEdge - EDGX Exchange Trading (EDGX)	9,12	4,34	80,74	19,26	13,38		
New York Stock Exchange (XNYS)	5,05	2,28	66,03	33,97	58,11		
New York/N.Y IEX Trading (IEXG)	3,79	0,76	52,30	47,70	8,78		

Class of Instrument	Debt instruments - Bonds						
Notification, if < 1 average trade per business day in the previous year	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
Frankfurt (XFRA)	58,29	70,47	100,00	0,00	97,54		
GETTEX - Market Maker Munich (MUNC)	17,91	13,12	100,00	0,00	19,22		
Stuttgart (XSTU)	9,63	7,75	100,00	0,00	93,93		
Berlin - Tradegate Exchange (TGAT)	5,85	3,14	100,00	0,00	89,38		
München (XMUN)	3,12	1,30	100,00	0,00	75,29		

Class of Instrument	Debt instruments - Money r	Debt instruments - Money markets instruments						
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)	rms Proportion of volume Proportion of orders executed as a percentage of total in that class percentage of total in that class class							
null	0,00	0,00	0,00	0,00	0,00			

London - ICE Futures Europe (IFEU)

Montreal Exch.-Fut./Opt. (XMOD)

Table 7

Class of Instrument	Interest rates derivatives - F	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	Ν	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
EUREX AG (XEUR)	97,16	93,89	100,00	0,00	76,52			
Chicago Board of Trade (XCBT)	2,65	4,94	37,79	62,21	8,83			
Osaka Sec.ExOpt.+Fut. (XOSE)	0,10	0,16	100,00	0,00	0,00			

0,61

0,41

97,44

80,77

0,00

0,00

2,56

19,23

0,07

0,02

Class of Instrument	Interest rates derivatives - S	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	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders			
null	0,00	0,00	0,00	0,00	0,00			

Class of Instrument	Credit derivatives - Futures	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	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
null	0,00	0,00	0,00	0,00	0,00	

Class of Instrument	Credit derivatives - Other cr	Credit derivatives - Other credit 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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
null	0,00	0,00	0,00	0,00	0,00	

Class of Instrument	Currency derivatives - Futu	Currency derivatives - Futures and options admitted to trading on a trading venue					
Notification, if < 1 average trade per business day in the previous year	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
Chicago Merc. Ex. (XCME)	100,00	100,00	97,28	2,72	1,81		

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 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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
null	0,00	0,00	0,00	0,00	0,00

Class of Instrument	Structured finance instrumer	Structured finance instruments					
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
Frankfurt (XFRA)	90,17	77,78	100,00	0,00	71,43		
Düsseldorf (XDUS)	9,84	22,22	100,00	0,00	50,00		

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	Ν				

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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
EUREX AG (XEUR)	79,62	76,25	100,00	0,00	88,21
Chicago Merc. Ex. (XCME)	15,08	7,31	63,76	36,24	85,48
Paris - NYSE Liffe (XMON)	0,85	0,26	100,00	0,00	6,99
Madrid - MEFF R. Var. (XMRV)	0,82	0,19	99,73	0,27	0,00
New York Board of Trade (IFUS)	0,79	0,15	32,29	67,71	0,00

Class of Instrument	Equity Derivatives - Swaps a	Equity Derivatives - Swaps and other equity 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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
null	0,00	0,00	0,00	0,00	0,00	

Class of Instrument	Securitized Derivatives - W	Securitized Derivatives - Warrants and Certificate Derivatives					
Notification, if < 1 average trade per business day in the previous year	Ν						
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
Stuttgart (XSTU)	54,77	59,29	100,00	0,00	97,23		
Frankfurt (XFRA)	40,08	37,98	100,00	0,00	98,49		
GETTEX - Market Maker Munich (MUNC)	3,30	1,54	100,00	0,00	99,12		
Xetra (XETR)	0,59	0,51	47,93	52,07	89,04		
Düsseldorf (XDUS)	0,53	0,13	100,00	0,00	70,59		

Class of Instrument	Securitized Derivatives - Other securitized derivatives					
Notification, if < 1 average trade per business day in the previous year	Ν					
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
Frankfurt (XFRA)	51,37	47,07	100,00	0,00	84,50	
Stuttgart (XSTU)	37,40	37,30	100,00	0,00	79,04	
Wien (XWBO)	9,96	13,90	98,89	1,11	77,50	
Berlin (XBER)	0,60	1,04	100,00	0,00	83,33	
Hannover (XHAN)	0,44	0,52	100,00	0,00	100,00	

Class of Instrument	Commodities derivatives and	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	Proportion of orders executed as a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
New York Board of Trade (IFUS)	96,83	77,42	84,72	15,28	80,56		
New York - NYMEX Div. (XNYM)	1,05	5,38	40,00	60,00	0,00		
Chicago Board of Trade	0,88	5,38	0,00	100,00	0,00		

Chicago Board of Trade (XCBT)	0,88	5,38	0,00	100,00	0,00
New York - COMEX Div. (XCEC)	0,55	5,38	20,00	80,00	20,00
Chicago Merc. Ex. (XCME)	0,40	2,15	100,00	0,00	0,00

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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
null	0,00	0,00	0,00	0,00	0,00

Class of Instrument	Contracts for difference				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
null	0,00	0,00	0,00	0,00	0,00

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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Xetra (XETR)	37,72	30,19	29,48	70,52	80,28
GETTEX - Market Maker Munich (MUNC)	34,73	42,78	100,00	0,00	90,68
London Stock Exchange (XLON)	4,85	1,06	12,51	87,49	32,73
Amsterdam - Bloomberg Trading Facility (BTFE)	3,25	0,11	100,00	0,00	24,98
Stuttgart (XSTU)	3,12	4,85	100,00	0,00	66,47

Class of Instrument	Emission allowances				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
null	0,00	0,00	0,00	0,00	0,00

Class of Instrument	Other instruments				
Notification, if < 1 average trade per business day in the previous year	Ν				
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 a percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Schweizer Boerse -SIX Swiss Exchange AG (XSWX)	31,48	12,23	17,80	82,20	73,91
EUREX AG (XEUR)	28,57	3,92	100,00	0,00	27,89
CBOE EUROPE - CXE ORDER BOOKS (CHIX)	5,51	0,32	88,27	11,73	9,34
Frankfurt (XFRA)	4,66	16,40	100,00	0,00	97,05
Stuttgart (XSTU)	4,25	13,87	100,00	0,00	97,92