Ton five execution venues

Class of Instrument	Equities - Shares & Depositary Receipts		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Xetra (MIC: XETR)	41,6%	43,6%	75,0%
Tradegate (MIC: TGAT)	39,7%	37,5%	30,5%
Börse Frankfurt (MIC: XFRA)	13,2%	13,2%	34,7%
Börse Stuttgart (MIC: XSTU)	4,3%	4,4%	77,5%
Börse München (MIC: XMUN)	0,4%	0,4%	66,1%

Class of Instrument	Debt instrument Bonds		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Börse Stuttgart (MIC: XSTU)	63,3%	63,3%	61,4%
Börse Frankfurt (MIC: XFRA)	23,6%	23,6%	93,1%
Börse Düsseldorf (MIC: XDUS)	6,1%	6,1%	99,8%
Börse Berlin (MIC: XBER)	2,7%	2,7%	98,7%
Börse München (MIC: XMUN)	1,8%	1,8%	99,6%

Class of Instrument	Debt instrument Money market instruments		
Notification if < 1 average trade per business day in the previous year		-	
Top five execution venues ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Interest rate derivatives Futures and options admitted to trading on a trading venue		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Eurex (MIC: XEUR)	100,0%	100,0%	100,0%

Class of Instrument	Interest rate derivatives Swaps, forwards, and other interest rates derivatives		
Notification if < 1 average trade per business day in the previous year	•		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class		
-	-	-	-

Top five investment firm

Class of Instrument	Equities - Shares & Depositary Receipts		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class Proportion of orders executed as percentage of total in that class		
ICF BANK AG (LEI: 529900E89HA1I45HB613)	93,6%	94,9%	68,2%
Knight Capital Group, Inc. (LEI: OYLND20HCVC12JS4WU59)	4,3%	0,1%	37,8%
Raiffeisen Centrobank Wien (LEI: 529900M2F7D5795H1A49)	1,9%	5,0%	97,2%
UBS Limited (LEI: REYPIEJN7XZHSUI0N355)	0,1%	0,0%	100,0%
UBS Europe SE (LEI: 5299007QVIQ7IO64NX37)	0,0%	0,0%	85,0%

Class of Instrument	Debt instrument Bonds		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
Intesa Sanpaolo Bank Luxembourg S.A. (LEI: 549300H62SNDRT0PS319)	82,8%	36,9%	65,0%
ICF BANK AG (LEI: 529900E89HA1I45HB613)	17,2%	55,4%	67,3%
Knight Capital Group, Inc. (LEI: OYLND20HCVC12JS4WU59)	0,0%	7,7%	100,0%

Class of Instrument	Debt instrument Money market instruments		
Notification if < 1 average trade per business day in the previous year			
Top five investment firms ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Interest rate derivatives Futures and options admitted to trading on a trading venue		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
UBS Switzerland AG (LEI: 549300WOIFUSNYH0FL22)	100,0%	100,0%	100,0%

Class of Instrument	Interest rate derivativese Swaps, forwards, and other interest rates derivatives		
Notification if < 1 average trade per business day in the previous year	-		
Top five investment firms ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class Proportion of orders executed as percentage of total in that class		
-	-		

Top five execution venues

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	•		
Top five execution venues ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Credit derivatives Other credit derivatives		
Notification if < 1 average trade per business day in the previous year		-	
Top five execution venues ranked in terms of trading volumes	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 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	-		
Top five execution venues ranked in terms of trading volumes	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 directed orders
-	-	-	-

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

Class of Instrument	Structured finance instruments		
Notification if < 1 average trade per business day in the previous year	Yes		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Börse Frankfurt (MIC: XFRA)	54,5%	74,2%	100,0%
Börse Stuttgart (MIC: XSTU)	45,5%	25,8%	83,1%

Class of Instrument	Equity derivatives Options and futures admitted to trading on a trading venues		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Anteil der ausgeführten Aufträge als Prozentsatz aller Aufträge in dieser Kategorie	Percentage of directed orders
Eurex (MIC: XEUR)	100,0%	100,0%	100,0%

Top five investment firms

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	•		
Top five investment firms ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Credit derivatives Other credit derivatives		
Notification if < 1 average trade per business day in the previous year	-		
Top five investment firms ranked in terms of trading volumes	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 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	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
UBS Switzerland AG (LEI: 549300WOIFUSNYH0FL22)	100,0%	100,0%	100,0%

Class of Instrument	Currency derivatives Swaps, forwards, and other currency derivatives		
Notification if < 1 average trade per business day in the previous year	-		
Top five investment firms ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Structured finance instruments		
Notification if < 1 average trade per business day in the previous year	-		
Top five investment firms ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Equity derivatives Options and futures admitted to trading on a trading venues		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Anteil der ausgeführten Aufträge als Prozentsatz aller Aufträge in dieser Kategorie	Percentage of directed orders
UBS Switzerland AG (LEI: 549300WOIFUSNYH0FL22)	100,0%	100,0%	100,0%

Top five execution venues

Class of Instrument	Equity derivatives Swaps and other equity derivatives		
Notification if < 1 average trade per business day in the previous year		-	
Top five execution venues ranked in terms of trading volumes	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 directed orders
-			

Class of Instrument	Securitized Derivatives Warrants and Certificate Derivatives		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Börse Frankfurt (MIC: XFRA)	51,9%	46,7%	85,2%
Börse Stuttgart (MIC: XSTU)	47,7%	52,4%	96,1%
Xetra (MIC: XETR)	0,3%	0,3%	100,0%
Tradegate (MIC: TGAT)	0,0%	0,4%	95,1%
Börse Düsseldorf (MIC: XDUS)	0,0%	0,0%	93,1%

Class of Instrument	Securitized Derivatives Other securitized derivatives			
Notification if < 1 average trade per business day in the previous year	No			
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class Proportion of orders executed as percentage of total in that class			
Börse Frankfurt (MIC: XFRA)	59,8%	40,0%	18,1%	
Börse Stuttgart (MIC: XSTU)	32,8%	51,3%	42,0%	
Börse Hamburg (MIC: XHAM)	6,6%	7,6%	96,0%	
Börse Berlin (MIC: XBER)	0,9%	1,1%	100,0%	

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	-		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class dieser Kategorie Anteil der ausgeführten Aufträge als Prozentsatz aller Aufträge in dieser Kategorie 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			
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class Proportion of orders executed as percentage of total in that class		
-	-	-	-

Top five investment firms

Class of Instrument	Equity derivatives Swaps and other equity derivatives		
Notification if < 1 average trade per business day in the previous year		-	
Top fünf Wertpapierfirmen die ausgehend vom Handelsvolumen am wichtigsten sind	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 directed orders
-	-	-	-

Class of Instrument		Securitized Derivatives Warrants and Certificate Derivatives	
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
ICF BANK AG (LEI: 529900E89HA1I45HB613)	77,8%	86,1%	97,3%
Société Générale SA (LEI: O2RNE8IBXP4R0TD8PU41)	10,3%	1,4%	100,0%
Morgan Stanley & Co. LLC (LEI: 9R7GPTSO7KV3UQJZQ078)	9,7%	0,7%	100,0%
Goldman Sachs Group, Inc. (LEI: 784F5XWPLTWKTBV3E584)	2,1%	1,0%	100,0%
Intesa Sanpaolo Bank Luxembourg S.A. (LEI: 549300H62SNDRT0PS319)	0,0%	6,3%	65,4%

Class of Instrument	Securitized Derivatives Other securitized derivatives		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
Intesa Sanpaolo Bank Luxembourg S.A. (LEI: 549300H62SNDRT0PS319)	53,9%	80,0%	0,0%
Goldman Sachs Group, Inc. (LEI: 784F5XWPLTWKTBV3E584)	46,1%	20,0%	100,0%

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	-		
Top five investment firms ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class dieser Kategorie Anteil der ausgeführten Aufträge als Prozentsatz aller Aufträge in dieser Kategorie		
-	-	-	-

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	-		
Top five investment firms ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class Proportion of orders executed as percentage of total in that class		
-	-	-	-

Top five execution venues

Class of Instrument	Contracts for difference		
Notification if < 1 average trade per business day in the previous year		-	
Top five execution venues ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Exchange traded products (exchange	e traded funds, exchange traded note	s and exchange traded commodities)
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Xetra (MIC: XETR)	73,0%	22,2%	52,0%
Börse Stuttgart (MIC: XSTU)	17,6%	72,3%	75,4%
Tradegate (MIC: TGAT)	5,8%	3,3%	76,1%
Börse Frankfurt (MIC: XFRA)	2,4%	1,2%	70,1%
Börse München (MIC: XMUN)	0,4%	0,2%	40,0%

Class of Instrument	Emission certificates		
Notification if < 1 average trade per business day in the previous year	-		
Top five execution venues ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Other instruments		
Notification if < 1 average trade per business day in the previous year	No		
Top five execution venues ranked in terms of trading volumes	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 directed orders
Börse Frankfurt (MIC: XFRA)	31,7%	23,0%	63,2%
Börse Stuttgart (MIC: XSTU)	30,3%	42,1%	94,1%
Börse Hamburg (MIC: XHAM)	15,7%	9,5%	97,5%
Tradegate (MIC: TGAT)	12,1%	13,0%	97,9%
Börse München (MIC: XMUN)	3,6%	3,1%	74,6%

Top five investment firms

Class of Instrument	Contracts for difference		
Notification if < 1 average trade per business day in the previous year		-	
Top five investment firms ranked in terms of trading volumes	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 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	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
ICF BANK AG (LEI: 529900E89HA1I45HB613)	94,6%	95,0%	74,7%
Knight Capital Group, Inc. (LEI: OYLND20HCVC12JS4WU59)	4,8%	4,5%	86,7%
Intesa Sanpaolo Bank Luxembourg S.A. (LEI: 549300H62SNDRT0PS319)	0,7%	0,6%	100,0%

Class of Instrument	Emission certificates		
Notification if < 1 average trade per business day in the previous year	·		
Top five investment firms ranked in terms of trading volumes	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 directed orders
-	-	-	-

Class of Instrument	Other instruments		
Notification if < 1 average trade per business day in the previous year	No		
Top five investment firms ranked in terms of trading volumes	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 directed orders
ICF BANK AG (LEI: 529900E89HA1I45HB613)	100,0%	100,0%	0,0%