	DWS Intern	nationa	al GmbH(549300TPJCLC	OOHGM008)			
			Execution				
(b) Debt instruments (i) Bonds							
Transmission/Execution Notification if <1 average trade per business day in the previous year			Execution N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orde	ers
Tradeweb FLLR V (TWFM)	percentage of total in that class	23.7%	percentage of total in that class	52.5% NA	NA	r creemage or an ected or at	0%
Bloomberg Trading Facility B.V.(BTFE)		22.5%		11.5% NA	NA.		0%
DEUTSCHE BANK AG(7LTWFZYICNSX8D621K86)		4.7%		2.1% NA	NA		1% 0%
BNP PARIBAS SA(ROMUWSFPU8MPRO8K5P83) CITIGROUP GLOBAL MARKETS EUROPE AG(6TJCK1B7E7UTXP528Y04)		3.7%		1.9% NA 1.4% NA	NA NA		0%
(b) Debt instruments (ii) Money markets instruments							
Transmission/Execution			Execution				
Notification if <1 average trade per business day in the previous year	Proportion of volume traded as a		N Proportion of orders executed as				
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class		percentage of total in that class				
ING BANK NV(3TK20IVIUJ8J3ZU0QE75)		18.5%		8.4% NA	NA.		0%
JP MORGAN SE(549300ZK53CNGEEI6A29) COOPERATIEVE RABOBANK UA(DG3RU1DBUFHT4ZF9WN62)		14.5% 13.9%		9.2% NA 5.7% NA	NA NA		0%
Bloomberg Trading Facility B.V.(BTFE)		11.4%		11.7% NA	NA.		0%
BRED BANQUE POPULAIRE(NICH5Q04ADUV9SN3Q390)		10.0%		3.7% NA	NA		0%
(c) Interest rates derivatives (ii) Swaps, forwards, and other interest rates derivatives							
Transmission/Execution Notification if <1 average trade per business day in the previous year			Execution N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orde	ers
Tradeweb EU B.V.(TWEM)	percentage of total in that class	46.3%	percentage of total in that class	36.5% NA	NA	rescentage of disected of de	0.0%
MORGAN STANLEY EUROPE SE(54930056FHWP7GIWYY08)		46.3% 21.5%		36.5% NA 11.4% NA	NA NA		0.0%
JP MORGAN SE(549300ZK53CNGEEI6A29)		12.1%		9.5% NA	NA		0.0%
CITIGROUP GLOBAL MARKETS EUROPE AG(6TJCK1B7E7UTXP528Y04) BNP PARIBAS SA(ROMUWSFPU8MPRO8K5P83)		8.1% 4.0%		11.6% NA 5.0% NA	NA NA		0.0%
(d) credit derivatives (ii) Other credit derivatives Transmission/Execution			Execution				
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				
Tradeweb EU B.V.(TWEM)	percentage or total in that class	55.5%	percentage of total in that class	31.4% NA	NA		0.4%
DEUTSCHE BANK AG(7LTWFZYICNSX8D621K86)		11.7%		16.5% NA	NA		0.0%
GOLDMAN SACHS BANK EUROPE SE(8IBZUGJ7JPLH368JE346) CITIGROUP GLOBAL MARKETS EUROPE AG(6TJCK1B7E7UTXP528Y04)		8.3% 7.9%		4.8% NA 13.3% NA	NA NA		0.0%
JP MORGAN SE(549300ZK53CNGEEI6A29)		4.3%		6.2% NA	NA		0.0%
(e) currency derivatives (ii) Swaps, forwards, and other currency derivatives							
Transmission/Execution Notification if <1 average trade per business day in the previous year			Execution N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orde	ore
Financial & Risk Transaction Services Ireland Limited - FXall RFQ(FXRQ)	percentage of total in that class	56.3%	percentage of total in that class	44.4%	NA	NA	0.8%
FX Connect(MFXR)		27.5%		2.4%	NA NA	NA NA	8.5%
Bloomberg Trading Facility B.V.(BTFE)		2.9%		3.0%	NA	NA	37.8%
JP MORGAN SE(549300ZK53CNGEEI6A29) BOFA SECURITIES EUROPE SA(549300FH0WJAPEHTIQ77)		2.5% 1.6%		1.8%	NA NA	NA NA	0.0%
		1.076		7.376	1925	NA .	0.176
(m) Other instruments Transmission/Execution			Execution				
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				
DEUTSCHE BANK AG(7LTWFZYICNSX8D621K86)	percentage of total in that class	100.0%		100.0%	NA	NA	97.8%
			Transmission				
(a) Equities - Shares & Depositary Receipts (i) Tick size liquidity bands 5 and 6 (from 2	000 trades per day)		Hansinission				
Transmission/Execution			Transmission				
Notification if <1 average trade per business day in the previous year	Proportion of volume traded as a		N Proportion of orders executed as				
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class		percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orde	
GOLDMAN SACHS BANK EUROPE SE(8IBZUGJ7JPLH368JE346) JP MORGAN SE(5493007K53CNGFFI6A29)		19.7% 18.1%		28.7% NA 23.8% NA	NA NA		0.0%
JP MORGAN SE(549300ZK53CNGEEI6A29) MORGAN STANLEY EUROPE SE(54930056FHWP7GIWYY08)		18.1% 15.4%		23.8% NA 7.9% NA	NA NA		0.0%
UBS EUROPE SE(5299007QVIQ7IO64NX37)		10.5%		8.9% NA	NA		0.0%
BOFA SECURITIES EUROPE SA(549300FH0WJAPEHTIQ77)		9.9%		9.5% NA	NA		0.0%
(a) Equities - Shares & Depositary Receipts (ii) Tick size liquidity bands 3 and 4 (from 8	30 to 1999 trades per day)						
Transmission/Execution Notification if <1 average trade per business day in the previous year			Transmission N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orde	ers
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)	percentage of total in that class	27.4%	percentage of total in that class	16.9% NA	NA	- Arechtage or directed orde	0.0%
GOLDMAN SACHS BANK EUROPE SE(8IBZUGJ7JPLH368JE346)		21.5%		32.2% NA	NA NA		0.0%

JP MORGAN SE(549300ZK53CNGEEIGA29) LIBS FUROPE SE(5299007OVIO7IO64NX37)		16.8%	19.5% NA 4.1% NA	NA NA	0.0%
MORGAN STANLEY EUROPE SE(54930056FHWP7GIWYY08)		6.0%	4.1% NA 5.4% NA	NA NA	0.0%
(a) Equities - Shares & Depositary Receipts (iii) Tick size liquidity band 1 and 2 (from 0	to 79 trades per day)				
Transmission/Execution Notification if <1 average trade per business day in the previous year		Transi N	nission		
	Proportion of volume traded as a		rtion of orders executed as		
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class		rtion of orders executed as Percentage of passive orders ntage of total in that class		Percentage of directed orders
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)	<u> </u>	29.1%	11.3% NA	NA	0.0%
GOLDMAN SACHS BANK EUROPE SE(8IBZUGJ7JPLH368JE346)		17.9%	35.1% NA	NA	0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		17.8%	7.6% NA	NA .	0.0%
JP MORGAN SE(549300ZK53CNGEEI6A29) BARCLAYS BANK IRELAND PLC(2G5BKIC2CB69PRJH1W31)		15.5% 5.4%	23.0% NA 11.4% NA	NA NA	0.0%
BARCLATS BANK INCLAIND PLC(203BNIC2CB09PRJH1W31)		3.4%	11.4% NA	NA .	0.0%
(b) Debt instruments (i) Bonds					
Transmission/Execution		Transı	nission		
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		rtion of orders executed as Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)	percentage of total in that class	67.3%	ntage of total in that class 83.3% NA	NA .	0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		20.3%	13.6% NA	NA .	0.0%
(b) Debt instruments (ii) Money markets instruments					
Transmission/Execution Notification if <1 average trade per business day in the previous year		ı ransı v	nission		
	Proportion of volume traded as a	Propo	rtion of orders executed as		
Top five execution venues ranked in terms of trading volumes (descending order)			ntage of total in that class		Percentage of directed orders
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		100.00%	100.00% NA	NA	0%
					_
(c) Interest rates derivatives (i) Futures and options admitted to trading on a trading or Transmission/Execution	/enue	Trans	nission		
Notification if <1 average trade per business day in the previous year		N N	111331011		
	Proportion of volume traded as a		rtion of orders executed as		
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class		ntage of total in that class Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
DEUTSCHE BANK AG(7LTWFZYICNSX8D621K86)		37.1%	28.7% NA	NA	0.0%
MORGAN STANLEY EUROPE SE(54930056FHWP7GIWYY08) CITIGROUP GLOBAL MARKETS EUROPE AG(6TJCK1B7E7UTXP528Y04)		19.6%	37.0% NA 11.8% NA	NA NA	0.0%
JP MORGAN SE(549300ZK53CNGEEI6A29)		8.1%	2.8% NA	NA NA	0.0%
BOFA SECURITIES EUROPE SA(549300FH0WJAPEHTIQ77)		7.9%	12.8% NA	NA .	0.0%
(e) currency derivatives (ii) Swaps, forwards, and other currency derivatives					
Transmission/Execution		Transi	nission		
Notification if <1 average trade per business day in the previous year	Proportion of volume traded as a	Υ			
	Proportion of volume traded as a percentage of total in that class	Y Propo	mission rtion of orders executed as Percentage of passive orders ntage of total in that class	Percentage of aggressive orders	Percentage of directed orders
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limited(529900RXBDKTJ81MHL26)		Y Propo percei	rtion of orders executed as ratage of total in that class Percentage of passive orders 89% NA	NA	Percentage of directed orders 0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order)		Y Propo percei	rtion of orders executed as Percentage of passive orders ntage of total in that class		
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limited(529900RXBDKTJ81MHL26)		Y Propo percei	rtion of orders executed as ratage of total in that class Percentage of passive orders 89% NA	NA	0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limited(\$29900RX8DKTISIMHL26) DWS Investment Management Americas Inc. (CZ83K4EEX8QVCT38128)		Y Propo percei	rtion of orders executed as ratage of total in that class Percentage of passive orders 89% NA	NA	0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limited(529900RXBDKTJ81MHL26)		Y Propo percei 87% 13%	rtion of orders executed as ratage of total in that class Percentage of passive orders 89% NA	NA	0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RXSDKTIS1MHL26) DWS Investment Management Americas Inc (CZ83K4EEX8QVCT38128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue	percentage of total in that class	Y Propo percer 87% 13%	rition of orders executed as Percentage of passive orders tage of total in that class 89% NA 11% NA	NA	0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limited(\$29900RX8DKTISIMH126) DWS Investment Management Americas Inc. (CZ83X4EEX8QVCT38128) ([s] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year	percentage of total in that class Proportion of volume traded as a	Y Propopercei	rtion of orders executed as Percentage of passive orders 89% NA 11% NA mission rtion of orders executed as	NA NA	0% 0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKTISIJMH126) DWS investment Management Americas Inc. (CZ83K4EEEX8QVCT38128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification If 4 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class	Propopercei	rition of orders executed as Percentage of passive orders 89% NA 11% NA nission rition of orders executed as take of total in that class	NA NA Percentage of aggressive orders	0% 0% Percentage of directed orders
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(S29900RX8DKT)81MHL26) DWS investment Management Americas inc.(e28384EEX8QVCT38128) (g) Equity Derivatives (i) Option and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(882VGT)PIH1868EEX46)	percentage of total in that class Proportion of volume traded as a	Y Propopercei 87% 13% Transi N Propopercei 45.5%	rtion of orders executed as tage of total in that class 89% NA 11% NA 11	NA NA Percentage of aggressive orders NA	0% 0% Percentage of directed orders 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKTISIJMH126) DWS investment Management Americas Inc. (CZ83K4EEEX8QVCT38128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification If 4 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class Proportion of volume traded as a	Propopercei	rition of orders executed as Percentage of passive orders 89% NA 11% NA nission rition of orders executed as take of total in that class	NA NA Percentage of aggressive orders	0% 0% Percentage of directed orders
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKTISIMH126) DWS investment Hamagement Americas Inc. (CZ83X4EEX8QVCT38128) ([6] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE S((8)8EUGIF)PLH586E1460) BANCLAYS BANK IEUROPE S((8)8EUGIF)PLH586E1461) JP MORGAN SÉ(549300CSSCNGEEI6A29) DROAS SCEURIES EUROPE SK49800HOWJAPEHTIQ77)	percentage of total in that class Proportion of volume traded as a	Y Propo percet 87% 13% Transi N Propo percet 45.5% 14.0% 12.6% 10.8%	rition of orders executed as stage of total in that class 89% NA 11% NA 11% NA 11% NA 11% NA 15.3% NA 22.0% NA 16.3% NA 16.3% NA	NA NA Percentage of aggressive orders NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(5/29900KXBDKT/SISHH126) DWS investment Management Americas inc.(CZ83K4EEX8QVCT38128) (a) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8I82UGT)PIH1368E346) BARCLAYS BANK IRELAND PC(ZG58KCZ6B0PPH1W31) JP MORGAN SE(549300X5SCNEGEBOPH1W31)	percentage of total in that class Proportion of volume traded as a	Y Propo percel 87% 13% Transt N Propo percel 45.5% 14.0%	rtion of orders executed as tage of total in that class 89%. NA 11% NA 1	NA NA Percentage of aggressive orders NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKTJSI.MH126) DWS investment Management Americas Inc.(CZ3X4EEEX8QVCT38128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS SANK EUROPS (S(RE)JAG1/PH1368E346) BARCLAYS BANK IERDER S(RE)GENZG/STPH1368E346) BARCLAYS BANK IERDER S(RE)GENZG/STPH1368E346) BORS ASCENIETES EUROPS (SA(SASODH)) BORS ASCENIETES EUROPS (SA(SASODH)) REDIT SUISSE BANK EUROPS (SA)959800TMGPWX7NYM4R72)	percentage of total in that class Proportion of volume traded as a	Y Propo percet 87% 13% Transi N Propo percet 45.5% 14.0% 12.6% 10.8%	rition of orders executed as stage of total in that class 89% NA 11% NA 11% NA 11% NA 11% NA 15.3% NA 22.0% NA 16.3% NA 16.3% NA	NA NA Percentage of aggressive orders NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top fine execution venus ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(259000KRDE/TISHM1-26) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) (e) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission(Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8I8ZUGI7)PLH368IE346) BANCLUYS BANK IRLAND PC(CZ6SIKCZ69PDH1W31) JP MORGAN SE(549300CX5CNEGE6A29) BOFA SECURITIES EUROPE SA(549300THSOWLAPEHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300THSOWLAPEHTIQ77) (cREDIT SUISSE BANK EUROPE SA(549300THSOWLAPEHTIQ77) (g) Equity Derivatives (ii) Swapps and other equity derivatives	percentage of total in that class Proportion of volume traded as a	Y Propo percet 87% 13% Transi N Propo percet 45.5% 14.0% 12.6% 10.8% 8.5%	rition of orders executed as tage of total in that class 88%. NA 11% NA 11% NA 11% NA 16.3% NA 1.5% NA	NA NA Percentage of aggressive orders NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKT/BI.MH126) DWS investment Management Americas Inc.(£238X4EEX8QVCT38128) (c) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACIS BANK ELROPE S(BIRZUGT/PHLABSE-145) BARCLAYS BANK IRELAND PC(£26SKK.C2E66PR)H1W31) JP MORGAN SE(1493002KS3CNGEEI6A29) BOFA SECURITÉS EUROPE SA(459300FHOWIAPEHTIQ77) CREDT SUSSE BANK EUROPE SA(959300TMGPWX/TNYMAR72) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution	percentage of total in that class Proportion of volume traded as a	Y Propo percet 87% 13% Transs N Propo percet 45.5% 14.0% 12.6% 10.8% 8.5%	rition of orders executed as stage of total in that class 89% NA 11% NA 11% NA 11% NA 11% NA 15.3% NA 22.0% NA 16.3% NA 16.3% NA	NA NA Percentage of aggressive orders NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year [70] five execution venus ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Liminot(\$29900KRSDKT)(\$18H14E) DWS Investment Management Americas Inc.(C283K4EEX8QVCT38128) [6] Equity Derivatives (I) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year [70] five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACIS BANK EUROPE SE(8182NGT)7FIH580E346) BARCLAYS BANK IRELAND PL(2058KC/2ER8PPH1Y931) JP MORGAN SE(549300XSSCNCEER6A29) BOFA SCURITIES EUROPE SA(549300FNDWIAPEHTIQ77) CREDIT SUGSE BANK EUROPE SA(593800TMGPWX/YNTMAR72) [8] Equity Derivatives (II) Swapp and other equity derivatives Transmission/Execution	percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Propo percel 87% 13% Transr N Propo 45.5% 14.0% 12.6% 10.8% 8.5%	rtion of orders executed as stage of total in that class 89% NA 11% NA mission rtion of orders executed as stage of total in that class Percentage of passive orders of the control of orders executed as stage of total in that class 6.0% NA 5.8% NA 22.0% NA 16.3% NA 1.5% NA mission	NA NA Percentage of aggressive orders NA NA NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKT/BI.MH126) DWS investment Management Americas Inc.(£238X4EEX8QVCT38128) (c) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACIS BANK ELROPE S(BIRZUGT/PHLABSE-145) BARCLAYS BANK IRELAND PC(£26SKK.C2E66PR)H1W31) JP MORGAN SE(1493002KS3CNGEEI6A29) BOFA SECURITÉS EUROPE SA(459300FHOWIAPEHTIQ77) CREDT SUSSE BANK EUROPE SA(959300TMGPWX/TNYMAR72) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution	percentage of total in that class Proportion of volume traded as a	Propo 87% 13% 13% Transs N Propo 90crcs 45.5% 14.0% 12.6% 10.8% 8.5%	rition of orders executed as tage of total in that class 88%. NA 11% NA 11% NA 11% NA 16.3% NA 1.5% NA	NA NA Percentage of aggressive orders NA NA NA NA NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKT/ISI/MHL26) DWS investment Management Americas inc.(£283X4EEX8QVCT3B128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8IR2UGT/JPH1868E346) BARCLAYS BANK IRELAND PL(2CSGRIC/2CSRPPH1H231) JP MORGAN SE(5493000CSSCNESE6A29) BOFA SECURITIES EUROPE SA(549300FH0WJAPEHTIQZ7) CREDIT SIUSSE BANK EUROPE SA(593800THMOPWX/TWYMAR72) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(593900FH0WJAPEHTIQZ77)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a	Y Propole percel 87% 13% Transn N Propole Propole 10.8% 8.5% Transn N Transn N Transn N Propole Propole 8.5%	rition of orders executed as htage of total in that class 89% NA 11% NA 89% NA 11% NA Percentage of passive orders 89% NA 11% NA 11% NA Percentage of passive orders 89% NA 11% NA Percentage of passive orders 80% NA 22.0% NA 16.3% NA 1.9% NA Percentage of passive orders 80% NA 5.8% NA 5.8% NA 5.8% NA 5.8% NA 5.8% NA 5.9% NA 5.9% NA Percentage of passive orders 80% NA 5.9% NA 80% NA 80	NA NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top fine execution venus ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limind(259000/KBDKT)(SIMHL26) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) (c) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8I8ZUGI7)PLH368JE346) BARCLAYS BANK RELAND PLC(26SBKCZC869PHH W31) JP MORGAN SE(4893002SSCNCBE6IA29) BOFA SECURITIES EUROPE SE(8I8ZUGI7)PLH368JE346) BACK LAYS BANK EUROPE SA(5493001HOWNPEHTIOZ7) CREDIT SUSSE BANK EUROPE SA(5493001HOWNPEHTIOZ7) (c) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(5493007HOWNPEHTIOZ7) ARCACLAYS BANK RELAND PLC(26SBKCZ6869PHH W31)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a	Y Propose perceived with the per	rition of orders executed as stage of total in that class 89% NA 11% NA mission rition of orders executed as take of total in that class 6.0% NA 5.8% NA 12.20% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA 1.5% NA	NA NA Percentage of aggressive orders NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(\$29900RX8DKT/BISIMH26) DWS investment Management Americas inc.(£283X4EEX8QVCT3B128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE 5E(882UGF)/PIH368E344) BARCLAYS BANK IRELAND PL(£265RKC2689PBH1W31) JP MORGAN SE(\$93000CSSACMSE61A29) BOFA SCUBITIES EUROPE SA(\$9300CHOWLAPEHTIQZ7) CREDIT SUISSE BANK EUROPE SA(\$9300CHOWLAPEHTIQZ7) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(\$93900CHOWLAPEHTIQZ7) BARCLAYS BANK IRELAND PL(£265RKC2689PBH1W31) BOFA SECURITIES EUROPE SA(\$93900CHOWLAPEHTIQZ7) BARCLAYS BANK IRELAND PL(£265RKC2689PBH1W31) BUS EUROPE SE(\$25990COVA(2076AW37)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a	Y Propose Propose 13% Transs N Propose 12.6% 10.8% 8.5% Transs N Propose 12.6.6% 19.7%	rition of orders executed as hatage of total in that class 89% NA 11% NA 11% NA Percentage of passive orders 89% NA 11% NA Percentage of passive orders 89% NA 11% NA Percentage of passive orders 6.0% NA 5.8% NA 12.0% NA 16.3% NA 1.9% NA Percentage of passive orders 5.4% NA 1.5% NA 1.2% NA 1.2% NA 15.5% NA	NA NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
Notification if <1 average trade per business day in the previous year Top five execution venus ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Liminot(299000/KBDKT)(SIMHL26) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8I8ZUGJ7)PLH368IE346) BARC LAYS BANK IRLAND PC(ZG58KCZC689PBH W31) JP MORGAN SE(4839300XSSCN06E6A29) BOFA SECURITIES EUROPE SE(8I8ZUGJ7)PLH368IE346) BACK LAYS BANK EUROPE SA(549300HMDPWATMAPEHTO/7) CREDIT SUSSE BANK EUROPE SA(549300HMDPWATMAPEHTO/7) CREDIT SUSSE BANK EUROPE SA(549300HMDPWATMAPEHTO/7) CREDIT SUSSE BANK EUROPE SA(549300HMDPWATMAPEHTO/7) To five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(549300HMDPWATMAPEHTO/7) ARCHAY SHANK IRLAND PC(ZG58KCZ686PPAH W31) UBS EUROPE SE(52990070VQ7)OG4NA37) UBS EUROPE SE(52990070VQ7)OG4NA37) MORGAN STANLE EUROPE SE(5299000FHWPWF)GIWYYOS)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a	Y Proposed 5 13% 13% 13% 13% 13% 13% 13% 13% 13% 14.0% 12.6% 10.8% 8.5% 1970-26.6% 19.7% 19.4% 12.8% 12.8%	rition of orders executed as talge of total in that class 88% NA 11% NA	NA NA Percentage of aggressive orders NA	0% 0% 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Liminot (299000/KBDKT)(SIMHL/E) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8IRZUGJ7)PLH368IE346) BARC LAYS BANK IELD PC (ECGSBKCZC689PBH W31) JP MORGAN SE(549300XSSCNCBE6EA29) BOFA SCURITIES EUROPE SE(8IRZUGJ7)PLH368IE346) BACK LAYS BANK EUROPE SA(983900HOWPMXPHMA72) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SCURITIES EUROPE SA(549300FHOW)APEHTIO/7) NORGAN STAMI (ELAND PC(C2GSBKCZ6B0PPHI W31) UBS EUROPE SE(5299007OVIQ/7)GANN37) MORGAN STAMI EUROPE SE(8IRZUGJ7)PLH368IE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUGJ7)PLH368IE346)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Propose Propose 13% Transs N Propose 12.6% 10.8% 8.5% Transs N Propose 12.6.6% 19.7%	rition of orders executed as hatage of total in that class 89% NA 11% NA 11% NA Percentage of passive orders 89% NA 11% NA Percentage of passive orders 89% NA 11% NA Percentage of passive orders 6.0% NA 5.8% NA 12.0% NA 16.3% NA 1.9% NA Percentage of passive orders 5.4% NA 1.5% NA 1.2% NA 1.2% NA 15.5% NA	NA NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited (\$29900RX8DKT)81MH126) DWS investment Management Americas inc.(#28384EEX8QVCT38128) (g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(888Z/GT)PIH1868E346) BARCLAYS BANK IRELAND PC(2C68KC/2C80PRH1W31) JP MORGAN SE(9483000XSSCNEBEIGA29) BOFA SCCURTIES EUROPE SA(959300TMS/DWX7NYM4R72) (g) Equity Derivatives (ii) Svapsa and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SCCURTIES EUROPE SA(549300FHOWJAPEHTIOZ7) BACK LAYS BANK IRELAND PC(2C58KC/2C88PPH1 W31) USE SURDOR SE(529007CWQ/QT)GORNAY) MORGAN STANLEY EUROPE SA(549300FHOWJAPEHTIOZ77) BACK LAYS BANK IRELAND PC(2C58KC/2C88PPH1 W31) USE SURDOR SE(529007CWQ/QT)GORNAY) MORGAN STANLEY EUROPE SE(549300SFHOWJAPEHTIOZ77) BACK LAYS BANK IRELAND PC(2C56KC/2C88PPH1 W31) USE SURDOR SE(529007CWQ/QT)GORNAY) MORGAN STANLEY EUROPE SE(549300SFHOWJAPEHTIOZ77) BACK LAYS BANK IRELAND PC(2C56KC/2C88PPH1 W31) USE SURDOR SE(529007CWQ/QT)GORNAY) MORGAN STANLEY EUROPE SE(549300SFHOWJAPEHTIOZ77) BACK LAYS BANK IRELAND PC(2C56KC/2C68PPH1 W31) USE SURDOR SE(529007CWQ/QT)GORNAY) MORGAN STANLEY EUROPE SE(549300SFHOW)PG/IWYOB) GOLDMAN SACKIES BANK EUROPE SE(548300GSFHOW)PG/IWYOB) GOLDMAN SACKIES BANK EUROPE SE(548300GSFHOW)PG/IWYOB) GOLDMAN SACKIES BANK EUROPE SE(548300GSFHOW)PG/IWYOB) GOLDMAN SACKIES BANK EUROPE SE(54830CGSFHOW)PG/IWYOB) GOLDMAN SACKIES BANK	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Propose percei	rition of orders executed as 11% NA 1	NA NA Percentage of aggressive orders NA	0% 0% 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0%
Notification if <1 average trade per business day in the previous year Top five execution venus ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limined(299000/KBDKT)(SIMHL/E) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) BARC LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) GARC LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) [d] Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Top five execution venues ranked in terms of trading volumes (descending order) BOCA SECURITIES EUROPE SA(549300FHW)MPEHTIQ77) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) [d) Exchange traded products (Exchange traded funds, exchange traded notes and ex- Transmission/Execution	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Proposed 13% 13% 13% 13% 15% 15% 15% 15% 15% 15% 15% 15% 15% 15	rition of orders executed as talge of total in that class 88% NA 11% NA	NA NA Percentage of aggressive orders NA	0% 0% 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(299000/KBDF/1818H1/26) DWS investment Management Americas Inc (CZ83K4EEX8QVCT38128) (e) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission(Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(818ZUGF/7)PLH368IE346) BANC LAYS BANK IRELAND PC(2GSBKCZC6869PHHW31) JP MORGAN SE(9859300CSSCNEBEGA29) BOFA SECURITIES EUROPE SE(818ZUGF/7)PLH368IE346) BASE SECURITIES EUROPE SE(818ZUGF/7)PLH368IE346) BOFA SECURITIES EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) TOP five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(549300FHOWARPHTIQ77) NORGAN STAMLEVE PURDOR SE(549300SFHOWARPHTIQ73) UBS EUROPE SE(52900O7VQ/7)ORANX37) MORGAN STAMLEVE PURDOR SE(54930OSFHOWARPHTIQ73) UBS EUROPE SE(52900O7VQ/7)ORANX37) MORGAN STAMLEVE PURDOR SE(54930OSFHOWARPHTIQ7) MORGAN STAMLEVE	Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Propose percei	rition of orders executed as tage of total in that class 89%. NA 11% NA 11% NA 89%. NA 11% NA 11% NA Percentage of passive orders executed as tage of total in that class 6.0% NA 5.8% NA 1.9% NA 16.3% NA 1.9% NA 1.9% NA	Percentage of aggressive orders NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0% 0.0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top five execution venus ranked in terms of trading volumes (descending order) DWS Investments Hong Kong Limined(299000/KBDKT)(SIMHL/E) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) BARC LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) BACK LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) GARC LAYS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) [d] Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Top five execution venues ranked in terms of trading volumes (descending order) BOCA SECURITIES EUROPE SA(549300FHW)MPEHTIQ77) GOLDMAN SACHS BANK EUROPE SE(8IRZUG17PLH56BE346) [d) Exchange traded products (Exchange traded funds, exchange traded notes and ex- Transmission/Execution	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class change traded commodities)	Y Proposition 13% 13% 13% 13% 13% 13% 13% 13% 14.0% 12.6% 12.6% 10.8% 8.5% 17anss N Proposition 15.7% 15.4% 17.8% 7.8% 15.4% 17.8% 7.8% 15.4% 17.8% 15.4% 17.8% 17.8% 15.4% 17.8% 17.8% 18.5% 15.4% 17.8% 15.4% 17.8% 17.8% 18.5% 15	rition of orders executed as 11% NA 1	NA NA Percentage of aggressive orders NA	0% 0% 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0%
Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) DWS investments Hong Kong Limited(299000/KBDF/1818H1/26) DWS investment Management Americas Inc (CZ83K4EEX8QVCT38128) (e) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission(Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(818ZUGF/7)PLH368IE346) BANC LAYS BANK IRELAND PC(2GSBKCZC6869PHHW31) JP MORGAN SE(9859300CSSCNEBEGA29) BOFA SECURITIES EUROPE SE(818ZUGF/7)PLH368IE346) BASE SECURITIES EUROPE SE(818ZUGF/7)PLH368IE346) BOFA SECURITIES EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) CREDIT SUISSE BANK EUROPE SA(549300FHOWARPHTIQ77) TOP five execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SA(549300FHOWARPHTIQ77) NORGAN STAMLEVE PURDOR SE(549300SFHOWARPHTIQ73) UBS EUROPE SE(52900O7VQ/7)ORANX37) MORGAN STAMLEVE PURDOR SE(54930OSFHOWARPHTIQ73) UBS EUROPE SE(52900O7VQ/7)ORANX37) MORGAN STAMLEVE PURDOR SE(54930OSFHOWARPHTIQ7) MORGAN STAMLEVE	Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class	Y Proposition 13% 13% 13% 13% 13% 13% 13% 13% 14.0% 12.6% 12.6% 10.8% 8.5% 17anss N Proposition 15.7% 15.4% 17.8% 7.8% 15.4% 17.8% 7.8% 15.4% 17.8% 15.4% 17.8% 17.8% 15.4% 17.8% 17.8% 18.5% 15.4% 17.8% 15.4% 17.8% 17.8% 18.5% 15	rition of orders executed as tage of total in that class 89%. NA 11% NA 11% NA 89%. NA 11% NA 11% NA Percentage of passive orders executed as tage of total in that class 6.0% NA 5.8% NA 1.9% NA 16.3% NA 1.9% NA 1.9% NA	Percentage of aggressive orders NA	0% 0% Percentage of directed orders 0.0% 0.0% 0.0% 0.0% Percentage of directed orders 0.0% 0.0% 0.0%
Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) DWS investments thong Kong Limited(\$299000K80E/TSISHH126) DWS investment Management Americas inc.(C283K4EEX8QVCT38128) [e] Equity Desirvatives (1) Options and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACHS BANK EUROPE SE(8I82UGT)PIHTASBE3E346) BARCLAYS BANK IRELAND PC(2GSBKC2C860PPHHW31) JP MORGAN SE(5493000XSCNCBE6EA29) BOFA SECURITIES EUROPE SE(8I82UGT)PIHTASBE3E346) BARCLAYS BANK IRELAND PC(2GSBKC2C860PPHHW31) JP MORGAN SE(5493000XSCNCBE6EA29) BOFA SECURITIES EUROPE SA(549300FHOWIAPEHTIQ77) BOFA SECURITIES EUROPE SA(549300FHOWIAPEHTIQ77) BOFT SUSSE BANK EUROPE SA(549300THOWIAPEHTIQ77) BANK SECURITIES EUROPE SA(549300HWAPEHTIQ77) BARCLAYS BANK IRELAND PC(2GSBKC2C860PPHHW31) USS EUROPE SE(529007QVQCDYOCHNOCHNOCT) MORGAN STANLE PURDOR'S E(SIREQUIST)PIHTASBE3E346) [8] Exchanges traded products (Exchange traded funds, exchange traded notes and ex- Transmission/Execution Notification 14 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SE(529007QVQCDYOCHNOCHNOCT) MORGAN STANLE PURDOR'S E(SIREQUIST)PIHTASBE3E346) [8] Exchanges traded products (Exchange traded funds, exchange traded notes and ex- Transmission/Execution Notification 14 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) JANE STREET FINANCIAL ITD(5493002HENWAMSIRPH202) FLOW TRADERS SKY694900CHISWHIZHYDES(1)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class change traded commodities)	Y Propose 2 Prop	rition of orders executed as 11% NA 1	Percentage of aggressive orders NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
Notification if <1 average trade per business day in the previous year Top five execution venus ranked in terms of trading volumes (descending order) DWS Investments flow flow [Limited \$29000/RMSD(TSIAHH_26)] DWS Investment Management Americas Inc.(C283K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACIS BANK EUROPE SS(180ZUG17PH1580E246) BARCLAYS BANK RELAND PLC[DGSRKC2CB69PRH1W31] JP MORGAN SE(SAS000ZS3CNOEB6A29) BOFA SCCURITIES EUROPE SA(SAS00FH0WARPEHTQY7) CREDIT SUSSE BANK EUROPE SA(SAS00FH0WARPEHTQY7) [d] Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SCCURITIES EUROPE SA(SAS00OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME TRADERS GYG49300CH9KDH1PGHWY08) GOLDMAN SACIS BANK EUROPE SE(SBSOLGH7WH7GWY08) JANE STREET FRANCIAL LTD(SA930OCH9KWH1DXF92) JANE STREET FRANCIAL LTD(SA930OCH9KWH1DXF92)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class change traded commodities)	Y Proposed 13% 13% 13% 13% 13% 13% 13% 13% 14.0% 14.0% 12.6% 10.8% 8.5% 14.0% 15.6% 17.8% 7.8% 19.4% 17.8% 7.8% 17.8% 7.8% 10.0% 16.4% 10.0% 16.4% 18.0% 16.4% 18.0% 16.4% 16.	rition of orders executed as stage of total in that class 88% NA 115%	Percentage of aggressive orders NA NA NA NA NA NA NA NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) DWS investment Hong Kong Limited (529900KRSDKT)SIMHL26) DWS investment Management Americas Inc.(CZ83K4EEX8QVCT38128) (a) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue. Transmission/Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes. (descending order) GOLDMAN SACHS BANK EUROPE SE(8I8ZUGI7)PLH368IE346) BARCLYS BANK IRELAND PC(2GSBKC)CE69P0HHW31) JP MORGAN SE(953900CSSCNCBE616A29) BOFA SECURITIES EUROPE SE(8I8ZUGI7)PLH368IE346) BASE SECURITIES EUROPE SE(8I8ZUGI7)PLH368IE346) CREDIT SIJUSE BANK EUROPE SE(8I8ZUGI7)PLH368IE346) CREDIT SIJUSE BANK EUROPE SE(8I8ZUGI7)PLH368IE346) CREDIT SIJUSE BANK EUROPE SE(8I8ZUGI7)PLH368IE346) BOFA SECURITIES EUROPE SE(95900TMGPWXYNYMAR72) (g) Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) BOFA SECURITIES EUROPE SE(8I8ZUGI7)PLH368IE346) (ii) Exchange traded products (Exchange traded funds, exchange traded notes and ex Transmission/Execution Notification if <1 average trade per business day in the previous year Top fine execution venues ranked in terms of trading volumes (descending order) JANE STREET FIRANCIAL ITD(549300ZEHXBMS1RFP142) (iii) Exchange traded products (Exchange traded funds, exchange traded notes and ex Transmission/Execution Top fine execution venues ranked in terms of trading volumes (descending order) JANE STREET FIRANCIAL ITD(549300ZEHXBMS1RFP142)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class change traded commodities)	Y Proposed 13% 13% 13% 13% 13% 13% 13% 13% 13% 13%	rition of orders executed as take of total in that class 89%. NA 11% NA 89%. NA 11% NA Recentage of passive orders 89%. NA 10%. NA 1.5.8%. NA 1.2.0%. NA 1.6.3%. NA 1.9%. NA	Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.
Notification if <1 average trade per business day in the previous year Top five execution venus ranked in terms of trading volumes (descending order) DWS Investments flow flow [Limited \$29000/RMSD(TSIAHH_26)] DWS Investment Management Americas Inc.(C283K4EEX8QVCT38128) [d] Equity Derivatives (i) Options and Futures admitted to trading on a trading venue Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) GOLDMAN SACIS BANK EUROPE SS(180ZUG17PH1580E246) BARCLAYS BANK RELAND PLC[DGSRKC2CB69PRH1W31] JP MORGAN SE(SAS000ZS3CNOEB6A29) BOFA SCCURITIES EUROPE SA(SAS00FH0WARPEHTQY7) CREDIT SUSSE BANK EUROPE SA(SAS00FH0WARPEHTQY7) [d] Equity Derivatives (ii) Swaps and other equity derivatives Transmission/Execution Notification if <1 average trade per business day in the previous year Top five execution venues ranked in terms of trading volumes (descending order) BOFA SCCURITIES EUROPE SA(SAS00OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBS0OFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME VELOPE SE(SBSOOFH0WARPEHTQY7) NORGAN STAME TRADERS GYG49300CH9KDH1PGHWY08) GOLDMAN SACIS BANK EUROPE SE(SBSOLGH7WH7GWY08) JANE STREET FRANCIAL LTD(SA930OCH9KWH1DXF92) JANE STREET FRANCIAL LTD(SA930OCH9KWH1DXF92)	percentage of total in that class Proportion of volume traded as a percentage of total in that class Proportion of volume traded as a percentage of total in that class change traded commodities)	Y Proposed 13% 13% 13% 13% 13% 13% 13% 13% 14.0% 14.0% 12.6% 10.8% 8.5% 14.0% 15.6% 17.8% 7.8% 19.4% 17.8% 7.8% 17.8% 7.8% 10.0% 16.4% 10.0% 16.4% 18.0% 16.4% 18.0% 16.4% 16.	rition of orders executed as stage of total in that class 88% NA 115%	Percentage of aggressive orders NA NA NA NA NA NA NA NA Percentage of aggressive orders NA	Percentage of directed orders 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.

(m) Other instruments Transmission/Execution		Transmission				
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				
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)	percentage or total in that class	33%	22%	NA	NA	0%
UBS EUROPE SE(5299007QVIQ7IO64NX37)		19%	24%			0%
JP MORGAN SE(549300ZK53CNGEEI6A29) GOLDMAN SACHS BANK EUROPE SE(8IBZUGJ7JPLH368JE346)		11% 9%	19%	NA NA		0% 0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		8%	4%	NA NA		0%
	DMC I	-tt-Ct-U/540200V0DUU	NDV010107\			_
	DWS Inve	stment GmbH(549300K0BHJ9 Execution	3BX9J8J87)			
(b) Debt instruments (ii) Money markets instruments Transmission/Execution		Execution				
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				
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK SA(1VUV7VQFKUOQSJ21A208)		46% 25%	20% NA 20% NA	NA		0%
NATWEST MARKETS NV(X3CZP3CK64YBHON1LE12) ING RANK NV(3TK20IVILII8137LI0OF75)		14%	20% NA 27% NA	NA NA		0% 0%
COOPERATIEVE RABOBANK UA(DG3RU1DBUFHT4ZF9WN62)		13%	27% NA	NA .		0%
CREDIT SUISSE BANK EUROPE SA(959800TMGPWX7NYM4R72)		3%	7% NA	NA		0%
		Transmission				
(a) Equities - Shares & Depositary Receipts (i) Tick size liquidity bands 5 and 6 (from 200 Transmission/Execution	00 trades per day)	Transmission				
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				
DWS International GmbH(549300TPJCLC0OHGM008)		90.4%	97.1% NA	NA		0.0%
DWS Investment Management Americas, Inc. (CZ83K4EEEX8QVCT3B128)		9.4%	2.9% NA 0.1% NA	NA NA		0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		0.2%	U.1% NA	NA	U	.0%
(a) Equities - Shares & Depositary Receipts (ii) Tick size liquidity bands 3 and 4 (from 80 Transmission/Execution	to 1999 trades per day)	Transmission				
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				
DWS International GmbH(549300TPJCLC00HGM008)	L	59.1%	76.9% NA	NA	C	0.0%
DWS Investment Management Americas, Inc. (CZ83K4EEEX8QVCT3B128) DWS Investments Hong Kong Limited (529900RX8DKTJ81MHL26)		37.3% 3.6%	21.2% NA 1.9% NA	NA NA		0.0%
		3.0%	2370 101	104		.070
(a) Equities - Shares & Depositary Receipts (iii) Tick size liquidity band 1 and 2 (from 0 to Transmission/Execution	o 79 trades per day)	Transmission				_
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	Proportion of orders executed as				
DWS International GmbH(549300TPJCLC00HGM008)	percentage or total in that class	55.0%	78.6% NA	NA		0.0%
DWS Investment Management Americas, Inc. (CZ83K4EEEX8QVCT3B128)		32.3% 12.7%	14.6% NA	NA		0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		12.7%	6.8% NA	NA	d	0.0%
(b) Debt instruments (i) Bonds Transmission/Execution		Transmission				
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		
DWS International GmbH(549300TPJCLC0OHGM008)	percentage of total in that class	79.4%	60.5% NA	NA	0	0.0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		16.6%	32.0% NA	NA		0.0%
DWS Investments Hong Kong Limited (529900RX8DKTJ81MHL26)		4.0%	7.6% NA	NA	0	0.0%
(b) Debt instruments (ii) Money markets instruments						
Transmission/Execution		Transmission				
Notification if <1 average trade per business day in the previous year	Proportion of volume traded as a	Y Proportion of orders executed as				
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class	percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
DWS International GmbH(549300TPJCLC0OHGM008) DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		94% 6%	88% NA 12% NA	NA NA		0% 0%
(c) Interest rates derivatives (i) Futures and options admitted to trading on a trading ve	enue	Tennenisia				
Transmission/Execution Notification if <1 average trade per business day in the previous year		Transmission N				
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a	Proportion of orders executed as	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
DWS International GmbH(549300TPJCLC00HGM008)	percentage of total in that class	percentage of total in that class 96.8%	97.2% NA	NA .		0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		3.1%	0.7% NA	NA NA		0.0%
DWS Investment Management Americas, Inc. (CZ83K4EEEX8QVCT3B128)		0.1%	2.1% NA	NA	0	0.0%
(c) Interest rates derivatives (ii) Swaps, forwards, and other interest rates derivatives						
Transmission/Execution		Transmission				
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	
DWS International GmbH(549300TPJCLC0OHGM008)		100.00%		100.00%	NA	NA		0%
(d) credit derivatives (ii) Other credit derivatives								
Transmission/Execution Notification if <1 average trade per business day in the previous year			Transmission 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					
DWS International GmbH(549300TPJCLC0OHGM008)		100.00%	1	100.00%	NA	NA		0%
(e) currency derivatives (ii) Swaps, forwards, and other currency derivatives								
Transmission/Execution Notification if <1 average trade per business day in the previous year			Transmission N					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as		Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
DWS International GmbH(549300TPICLCOOHGM008)	percentage of total in that class	99.7%	percentage of total in that class	99.7%		NA NA		4.9%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		0.3%		0.2%		NA NA		4.9% 0.0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		0.0%		0.2%		NA		0.0%
(g) Equity Derivatives (i) Options and Futures admitted to trading on a trading venue								
Transmission/Execution			Transmission					
Notification if <1 average trade per business day in the previous year	Proportion of volume traded as a		N Proportion of orders executed as					
Top five execution venues ranked in terms of trading volumes (descending order)	percentage of total in that class		percentage of total in that class		Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
DWS International GmbH(549300TPJCLC0OHGM008)		82.0%		83.2%		NA		0.0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128) DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		15.5% 2.6%		11.6% 5.2%		NA NA		0.0%
DWS IIIVESTINEITS FIGHING CHINICEU(325500KABDK 1301WITL20)		2.076		3.270	NA .	NA.	,	7.070
(g) Equity Derivatives (ii) Swaps and other equity derivatives								
Transmission/Execution Notification if <1 average trade per business day in the previous year			Transmission N					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as		Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
	percentage of total in that class		percentage of total in that class			* **	Percentage of directed orders	
DWS International GmbH(549300TPJCLC00HGM008) DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		99.3%		89.3% 6.4%		NA NA		0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		0.3%		4.3%		NA NA		0%
(k) Exchange traded products (Exchange traded funds, exchange traded notes and exch	ango traded commoditios)							
Transmission/Execution	lange traded commodities		Transmission					_
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					
DWS International GmbH(549300TPJCLC0OHGM008)		99.98%		99.7%		NA		2.8%
DWS Investments Hong Kong Limited (529900RX8DKTJ81MHL26)		0.02%		0.3%	NA	NA	(0.0%
(m) Other instruments								
Transmission/Execution Notification if <1 average trade per business day in the previous year			Transmission N					
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a		Proportion of orders executed as		Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
DWS International GmbH(549300TPJCLC0OHGM008)	percentage of total in that class	53.2%	percentage of total in that class	75.7%	NA .	NA .		0.0%
DWS Investments Hong Kong Limited(529900RX8DKTJ81MHL26)		34.6%		18.1%		NA NA		0.0%
DWS Investment Management Americas, Inc.(CZ83K4EEEX8QVCT3B128)		12.2%		6.2%	NA	NA	(0.0%







