

# Top Brokers and Venues

Full Year 2018

### Redburn Top Brokers and Venues

This document details the top brokers and venues by volume for flow executed through Redburn (Europe) Limited, ("Redburn"), as detailed under EU Commission Delegated Regulation (E) 2017/576 (MiFID II). The data contained within is based on all executions taking place between 1 January 2018 and 31 December 2018.

#### Summary of execution quality monitoring

All orders are executed in-line with Redburn's Order Execution Policy which is available from our public website redburn.com.

A range of factors are considered when selecting a venue to trade on, the venues used will be subject to the agreement with the client and objectives of the order being worked. The primary factors considered are available price, volume and probability of execution. Cost of execution is only considered when all other factors are equal.

Redburn has no close links, conflicts of interest, or common ownerships with any execution venues.

Payments received from or paid to venues are subject to standard venue pricing policies as published by the individual venues.

The list of venues accessed changes over time depending on relative market share and availability of liquidity. During the period covered, the only changes to the firm's existing list of venues was to add those venues that accessed additional liquidity sources and therefore improved overall best execution. During the same period, no venues were removed from our current list of approved trading venues.

The same execution arrangements are available to all clients. Any difference in execution style or venue access is purely driven by client preference.

Redburn does not trade on-behalf of retail clients. Execution of all orders is based on available price and liquidity as outlined in our order execution policy.

Reburn does not make use of a consolidated tape provider.

Redburn gathers data on execution quality through our own trading activity and through feeds provided by the individual trading venues, including data published under RTS-27. This data is monitored to determine the effectiveness of trading strategies and guide decisions on how orders will be executed.

Information on Redburn's exchange memberships, our Principal Execution Venues and Order Execution Policy are available on request from ukcompliance@redburn.com or from our website: https://www.redburn.com/regulatory-information

## **Top Venues**

#### Shares & Depositary Receipts

Tick size liquidity bands 5 and 6 (from 2,000 trades per day)

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
LONDON STOCK EXCHANGE	15.1%	42.40/	50.50/	20.70/	0.00/
XLON		13.4%	58.5%	36.7%	0.0%
CBOE Europe - CXE Order Books	44.00/	00.00/	00.00/	00.70/	0.00/
CHIX	14.3%	20.8%	63.3%	36.7%	0.0%
TURQUOISE DARK	• •••		05.70/	0.004	0.00/
TRQM	8.4%	5.4%	95.7%	2.0%	0.0%
CBOE Europe - BXE Periodic Auctions	7.00/	7.00/			0.00/
BATP	7.6%	7.9%	4.3%	1.8%	0.0%
CBOE Europe - LIS Service	7.00/	0.00/	0.004	0.004	0.00/
LISX	7.6%	0.0%	0.0%	0.0%	0.0%

#### Shares & Depositary Receipts

Tick size liquidity bands 3 and 4 (from 80 to 1,999 trades per day)

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
CBOE Europe - BXE Periodic Auctions	12.1%	10.50/	4.00/	4.00/	0.00/
BATP		10.5%	4.9%	1.9%	0.0%
TURQUOISE DARK	44.00/	0.20/	00.20/	4.00/	0.00/
TRQM	11.0%	6.3%	92.3%	4.6%	0.0%
LONDON STOCK EXCHANGE	40.50/	10.50/	40.40/	44.70/	0.00/
XLON	10.5%	14.1%	48.4%	44.7%	0.0%
CBOE Europe - LIS Service	40.00/	0.40/	0.00/	00.70/	0.00/
LISX	10.3%	0.1%	0.0%	66.7%	0.0%
CBOE Europe - CXE Order Books	0.00/	40.00/	00.40/	00.00/	0.007
CHIX	8.3%	13.9%	60.4%	39.6%	0.0%

#### Shares & Depositary Receipts

Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
SIX SWISS EXCHANGE - BLUE CHIPS	40.00/	7.50/	07.40/	00.007	0.00/
XVTX	19.3%	7.5%	27.1%	68.8%	0.0%
CBOE Europe - CXE Order Books	44.00/	40.00/	00.00/	04.00/	0.00/
CHIX	11.2%	13.2%	69.0%	31.0%	0.0%
CBOE Europe - CXE Dark Order Books		7.00/	02.00/	C 40/	0.00
CHID	7.5%	7.6%	93.6%	6.4%	0.0%
CBOE Europe - BXE Periodic Auctions	C 40/	F 40/	E 50/	F 20/	0.00/
BATP	6.1%	5.4%	5.5%	5.3%	0.0%
CBOE Europe - LIS Service	0.00/	0.00/	0.00/	0.007	0.00/
LISX	6.0%	0.2%	0.0%	0.0%	0.0%

# Top Venues

## **Exchange Traded Products**

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
LONDON STOCK EXCHANGE	55.00/	05.40/	45.40/	50.00/	0.00/
XLON	55.2%	65.1%	45.1%	53.0%	0.0%
XETRA	07.00/	0.00/	50.00/	40.007	0.00/
XETR	27.2%	8.2%	52.6%	42.3%	0.0%
BORSA ITALIANA - ELECTRONIC SHARE		5.00/	00.004	70.70/	0.00/
MTAA	4.5%	5.3%	26.3%	73.7%	0.0%
CBOE Europe - CXE Order Books	4.40/			00.50/	0.004
CHIX	4.4%	8.4%	71.5%	28.5%	0.0%
XETRA - REGULIERTER MARKT	2.00/	F 40/	0.00/	07.40/	0.007
XETA	3.8%	5.4%	0.9%	97.4%	0.0%

#### Other Instruments

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
LONDON STOCK EXCHANGE	16.4%	15.2%	EE 40/	27.00/	0.00/
XLON		15.2%	55.4%	37.8%	0.0%
TURQUOISE DARK	0.20/	7.00/	02.00/	0.00/	0.00/
TRQM	9.3%	7.6%	93.6%	2.8%	0.0%
CBOE Europe - CXE Order Books	0.007	40.70/	C2 00/	27.00/	0.00/
CHIX	9.0%	13.7%	63.0%	37.0%	0.0%
NASDAQ STOCKHOLM AB	0.40/	C F0/	50.40/	44.00/	0.0%
XSTO	8.1%	6.5%	52.1%	41.9%	0.0%
CBOE Europe - LIS Service	0.40/	0.20/	0.00/	0.00/	0.00/
LISX	8.1%	0.2%	0.0%	0.0%	0.0%

# Top Brokers

#### **Shares & Depositary Receipts**

Tick size liquidity bands 5 and 6 (from 2,000 trades per day)

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
Instinet Europe Ltd	04.40/	04.00/	44.70/	45.007	0.00/
213800MXAKR2LA1VBM44	34.4%	21.2%	44.7%	45.6%	0.0%
JP Morgan Securities Plc	25.70/	20.00/	20.00/	70.40/	0.00/
K6Q0W1PS1L1O4IQL9C32	25.7%	32.6%	26.8%	72.4%	0.0%
UBS AG	45.50/		00.00/	00.00/	0.00/
BFM8T61CT2L1QCEMIK50	15.5%	20.4%	60.0%	26.3%	0.0%
Credit Suisse Securities Eur Ltd	40.40/			F7.00/	0.00/
DL6FFRRLF74S01HE2M14	10.1%	14.7%	26.9%	57.3%	0.0%
Goldman Sachs International	4.00/	2.00/	40.00/	F 50/	0.00/
W22LROWP2IHZNBB6K528	4.0%	3.6%	42.3%	5.5%	0.0%

#### **Shares & Depositary Receipts**

Tick size liquidity bands 3 and 4 (from 80 to 1,999 trades per day)

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
JP Morgan Securities Plc	26.1%	22.00/	22.00/	66.40/	0.00/
K6Q0W1PS1L1O4IQL9C32		32.9%	32.8%	66.1%	0.0%
Instinet Europe Ltd	20.40/	20.20/	42.00/	42.00/	0.00/
213800MXAKR2LA1VBM44	26.1%	20.3%	43.0%	43.8%	0.0%
UBS AG			40.00/	00.00/	0.007
BFM8T61CT2L1QCEMIK50	18.8%	23.5%	46.8%	39.8%	0.0%
Credit Suisse Securities Eur Ltd	40.00/	12.0%	30.5%	44.8%	0.00/
DL6FFRRLF74S01HE2M14	10.2%				0.0%
Goldman Sachs International	4.00/		40.00/	7.8%	0.00/
W22LROWP2IHZNBB6K528	4.8%	4.0%	42.8%		0.0%

#### **Shares & Depositary Receipts**

Tick size liquidity bands 1 and 2 (from 0 to 79 trades per day)

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
Instinet Europe Ltd	39.1%	24.00/	20.20/	50.50/	0.00/
213800MXAKR2LA1VBM44		34.0%	36.3%	52.5%	0.0%
JP Morgan Securities Plc	25.00/	20.00/	22.20/	00.40/	0.00/
K6Q0W1PS1L1O4IQL9C32	25.8%	29.8%	33.3%	66.1%	0.0%
UBS AG			50.00/	07.40/	0.00/
BFM8T61CT2L1QCEMIK50	12.8%	19.9%	56.0%	37.1%	0.0%
Credit Suisse Securities Eur Ltd	0.40/	0.00/	24.00/	77 70/	0.00/
DL6FFRRLF74S01HE2M14	9.4%	8.6%	21.3%	77.7%	0.0%
Investment Technology Group Ltd		2.50/	75.00/	40.00/	0.00/
213800EEC95PRUCEUP63	6.3%	3.5%	75.6%	12.3%	0.0%

# Top Brokers

## **Exchange Traded Products**

Average below one trade per business day: N

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
Instinet Europe Ltd	54.50/	00.00/	00.00/	00.007	0.00/
213800MXAKR2LA1VBM44	51.5%	28.6%	33.2%	60.0%	0.0%
JP Morgan Securities Plc	21.5%	40.00/	20 50/	62.5%	0.00/
K6Q0W1PS1L1O4IQL9C32		10.6%	36.5%	63.5%	0.0%
Credit Suisse Securities Eur Ltd	24.20/	29.9%	58.7%	41.3%	0.00/
DL6FFRRLF74S01HE2M14	21.2%				0.0%
UBS AG	4.00/			04.40/	0.00/
BFM8T61CT2L1QCEMIK50	4.9%	15.1%	65.9%	34.1%	0.0%
Societe Generale	0.70/	44.70/	44.40/	00.00/	0.00/
O2RNE8IBXP4R0TD8PU41	0.7%	14.7%	11.1%	88.9%	0.0%

#### Other Instruments

Identifier	Proportion of volume traded	Proportion of orders executed	Percent of passive orders	Percent of aggressive orders	Percent of directed orders
Instinet Europe Ltd	28.5%	40.40/	37.7%	46.20/	0.0%
213800MXAKR2LA1VBM44		18.1%	31.1%	46.2%	0.0%
JP Morgan Securities Plc	20.40/	27.00/	40.40/	50 40/	0.00/
K6Q0W1PS1L1O4IQL9C32	26.1%	37.0%	40.4%	58.4%	0.0%
UBS AG	40.50/	50/	40.70/	40.40/	0.00/
BFM8T61CT2L1QCEMIK50	16.5%	24.1%	46.7%	40.1%	0.0%
Credit Suisse Securities Eur Ltd	40.40/	44.00/	00.00/	50.50/	0.00/
DL6FFRRLF74S01HE2M14	10.4%	11.8%	33.0%	58.5%	0.0%
Investment Technology Group Ltd	F 00/	2.20/	75.00/	7.70/	0.00/
213800EEC95PRUCEUP63	5.0%	2.2%	75.3%	7.7%	0.0%