



Jan 01, 2017 to Dec 31, 2017

Vanguard Asset Management

Investment Service – Portfolio Management/Reception and Transmission Professional Clients

Class of Instrument	Equities – Shares & Depositary Receipts – Tick size liquidity bands 5 and 6 (from 2000 trades per day)
Notification if < 1 average trade per business day in the previous year	N

Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of Passive orders	Percentage of Aggressive orders	Percentage of Directed orders
Instinet Group, LLC	28.61	16.74	16.91	26.43	0.00
Goldman Sachs International	16.56	12.90	9.47	15.50	0.00
Merrill Lynch, Pierce, Fenner & Smith Incorporated	13.49	11.46	19.57	32.53	0.00
Exane Limited	9.68	10.22	21.72	21.53	0.00
Citigroup Global Markets Inc	6.58	4.38	28.90	18.01	0.00

This document is an operational communication and should not be regarded as a financial promotion.

Issued by Vanguard Asset Management, Limited which is authorised and regulated in the UK by the Financial Conduct Authority.

© 2018 Vanguard Asset Management, Limited. All rights reserved.