Royal Bank of Canada Material Aspects of Relationships with Market Centers

Royal Bank of Canada (RBC) has prepared this report pursuant to a U.S. Securities and Exchange Commission rule (§240.11Ac1-6 / §242.606) requiring all brokerage firms to make available to the public quarterly reports about their order routing practices.

This report provides information on the routing of "non-directed orders" – any order that the customer has not specifically instructed to be routed to a particular venue for execution. RBC Wealth Management routes orders to Citigroup Global Markets, Inc. (CMGI), Citadel Execution Services (CDRG), G1 Execution Services, LLC (ETMM), Knight Capital Group Americas, LLC (NITE), and UBS Capital Markets (UBSS), Chicago Board Options Exchange (CBOE) and Wolverine Execution Services (WEX). RBC WM is assessed fees and receives credits from these consolidators. The amount of credits that RBC Wealth Management receives from one or more such market centers may exceed the amount RBC Wealth Management is charged. RBC Wealth Management may receive the benefit of these credits and such payments constitute payment for order flow.

RBC Wealth Management contracts with a third party vendor, S3 Execution Services, to receive execution metrics to meet its best execution requirements under FINRA rules. The firm has arranged for its market centers to pay for this service based on previous year's routing percentages at each destination. Payments for FY 2016 averaged \$.000043 per share.

Option Order Credits minus exchange fees received during 1st quarter 2017

Citigroup (CMGI) – Averaged \$0.32 per contract Citadel Execution Services (CES) – Averaged \$0.19 per contract Wolverine Execution Services (WEX) – Averaged \$0.45 per contract