STATEMENT OF WORK NUMBER #39: WEALTH MANAGEMENT GLOBAL RESEARCH WEBSITE

This Statement of Work ("SOW" or "Statement of Work") #39 is entered into by and between Markit North America Inc. (successor in title and rights to Markit On Demand, Inc.) ("Markit") and RBC Dominion Securities Inc. ("RBC" or "Client") pursuant to, and incorporates by reference all terms and conditions of the Master Service Agreement ("Agreement") between Royal Bank of Canada and Markit On Demand, Inc., effective November 1, 2011, which Agreement shall apply to Client as a "Client Affiliate" of Royal Bank of Canada, as defined in the Agreement.

The parties expressly agree that in the event of a conflict, inconsistency or ambiguity between the terms and conditions of this SOW and the Agreement, the terms and conditions of this SOW shall govern and control as to the scope of services described herein.

This Statement of Work #39 commences on April 1, 2017 ("Effective Date").

As of the Effective Date, this SOW #39, together with SOW #40, Capital Markets Global Research Website, replaces and supersedes Statement of Work #10: Royal Bank of Canada – Global Research Website, RBC Capital Markets Division, effective May 29, 2009, in its entirety.

1 Project Description

Markit will continue to host the equity research portal for RBC Wealth Management (the "Portal") built pursuant to SOW #10 above. The Portal includes, but is not limited to the following functionality:

- Integration of live feeds, including but not limited to:
 - o RBC Capital Markets
 - RBC Sector Industry Classification
 - o RBC Restricted List
 - RBC Blue Sky Restrictions
 - o Research analyst additions/removals
 - Provider specific coverage lists, ratings, and research feeds
 - o RBCWM PAG U.S. Equities
 - o RBCWM U.S. Fixed Income
 - o Argus
 - o Credit Suisse
 - o KDP Investment Advisors Inc.
 - Morningstar
 - o Dorsey Wright
 - o The Street
 - o S&P Capital IQ
 - Veritas Investment Research Co
 - o JP Morgan
 - Value Line
 - Content will continue to be maintained in the structure existing as of the Effective Date of this SOW; any changes to content structure will be provided by RBC in advance; and any required changes will be charged against RBC's maintenance budget
- · End user facing pages, including but not limited to:
 - Customizable Home Page, including but not limited to the following modules:
 - Recently Viewed Companies
 - Recent Initiations
 - Recent Upgrades / Downgrades
 - Recently Viewed Analysts.
 - Saved Searches
 - Subscriptions
 - Most Read Research (prev. 7 days)
 - Recently Viewed Reports
 - Recently Added to Briefcase
 - Research Pages
 - Provider and Product
 - Fundamental Ratings
 - Research Team
 - Sectors specific pages/content
 - o Briefcase
 - Analyst Pages
 - By Research Provider

- Bios
- Company Pages 0
- Search Functionality
 - Advanced Search
 - Ticker Search
 - Company Search
 - Analyst Search
- Advanced Search Q
- Saved Searches 0
- Subscriptions 0
- Search Results 0
- Preferences Page 0
- **Email Notification Template** 0
- Administrative/Content Management Tools, including but not limited to the following pages:

 - Homepage Ticker Tape (icon and content) 0
 - Product Group results pages 0
 - RBCWM PAG U.S. Equities 0
 - RBCWM U.S. Fixed Income 0
 - File Upload Functionality
- Secure pages (tier based), including but not limited to:
 - Autologin and Encryption point of entry 0
 - SAML Authentication (DS Tiers) 0
 - Additional security fixes that are required per security scan, as prioritized by RBC
- User Profile and Subscription information, including but not limited to:
 - Email alerts
- Tiered user structure with a defined entitlements matrix, including but not limited to:
 - Report type access ٥
 - Page availability 0
 - CMS privileges 0
- Permission matrix rules from RBC to create the full tiering and displayed in front-end interface
- Support for the following document types:
 - MS Office 0
 - PDF 0
 - HTML Ö
 - Rich Media file management (video and audio)
- Various Tier and Line of Business functionality
 - Branding Q
 - Authentication Ó
 - Access and entitlement

Content

Client will be responsible for licensing all data and content needed for the Portal.

3 **Proprietary Content**

Upon notification from either party that they intend to terminate this SOW, within 90 days of notification Markit will provide RBC with a copy of the most recent version of RBC Wealth Management Portfolio Advisory Group content (including metadata) that was contributed via the Markit Research Manager administrative tool. Method of providing such content and metadata shall be mutually agreed by the parties.

Redundancy

The Portal will be fully operational in Markit's redundant data centers.

5 Reporting

Markit will provide a monthly readership file and a monthly coverage file to RBC.

Service Fee

The fee for this project is \$25,000 USD per month, commencing upon the Effective Date.

Intellectual Property

Markit acknowledges and agrees that the Client shall retain full and exclusive ownership of the "look and feel" of the web pages (the HTML Design) or PDF reports designed, embodied in and/or derived or developed by and between Markit and Client ("Works for Hire"). Markit hereby assigns to Client and agrees to assign to and execute any documentation necessary to assign to Client any and all intellectual property rights that it may have or acquire in the Works for Hire. In the event a court of competent jurisdiction ever determines that Markit owns any intellectual property rights to the Works for Hire, Markit shall be deemed to have assigned all such rights to Client. If such rights cannot be assigned, Markit shall be deemed to have granted to Client an irrevocable, royalty free, perpetual, sub-licensable, transferable, exclusive license to use and exploit the Works for Hire in any manner or medium now known or hereafter devised.

8 Term

om. Jul 29, 2024, A.A. 36 PM ARREIT This SOW shall commence on the Effective Date and remain in effect for one (1) year thereafter ("Initial Term"). The initial Term shall renew for successive renewal terms of one (1) year each, unless either party notifies the other in writing of its decision not to extend the term no later than ninety (90) days prior to the expiration of the term then in effect.

Invoices

All invoices shall be sent to the following representatives of Client:

Kim Steffel 60 South 6th Street - P18 **RBC** Wealth Management Minneapolis, MN 55402

Phone: (612) 371-2387

Email: kim.steffel@rbc.com

Linda Caggianiello 180 Wellington St W - 11th Floor Toronto, ON M5J 0C2

Phone: (416) 842-9941

Email: linda.caggianiello@rbc.com

Material Changes and New Functionality 10

RBC will be entitled to an Enhancement Budget equal to 10% of the monthly hosting fee to fund enhancements to the design, user interface, or look & feel of any page, capability or platform included in the original project definition. Alternatively, the Enhancement Budget may be applied towards additional projects outside of original project scope. The Enhancement Budget shall accrue on a rolling 12 month basis, meaning that an unused hours roll over from month to month or from one fiscal year to the next so long as they are used no more than 12 months after accrued (example: hours accrued in January 2017 must be used no later than January 2018), and that client may borrow against future hours.

Whenever Client wants a firm bid for additional work outside of the enhancement budget, an additional Statement of Work will be created for that work.

Change Management 11

Markit will give Client at least five (5) business days prior notice (email to suffice) of any Scheduled Maintenance. Scheduled Maintenance whereby the availability of the Customized Solution is impacted shall occur no more often than once per month, on a designated Sunday between midnight and 4 a.m. Eastern Time, and will not exceed four (4) hours in duration for any individual instance.

Markit may perform additional unscheduled maintenance as necessary to support the delivery of the Customized Solution. Client will be notified of such maintenance as far in advance as practical. Markit will endeavor to perform additional maintenance activities in such a way as to minimize impact to Uptime.

ACCEPTED	ACCEPTED	
MARKIT NORTH AMERICA, INC.	RBC DOMINION SECURITIES INC.	
SIGNATURE DocuSigned by:	SIGNATURE	
PRINT NAME 725CC4A74EFF40B Adam Kansler	Mike Scott	
TITLE	TITLE	
EVP	Senior Vice President and Managing Director	
DATE OF SIGNATURE June 1, 2017	MAY 18/17 . Call	
	SIGNATURE	
	Maarten Jansen	
	Head, Investments & Trading	
	DATE OF SIGNATURE	
W. 11/5		
i jejojildit.co		
michael@justolildit.com. Jul 29		

Service Level Agreement

1 Definitions

- 1.1 Credit(s): Percentage of monthly fee to be reimbursed by Markit based on failure to meet established metrics.
- 1.2 Designated Technical Contact: Individual(s) (employed by Client) whom Markit will contact in the event that Markit becomes aware of any issue with the Customized Solution.
- 1.3 End User: The ultimate user of the Customized Solution in a production environment.
- 1.4 Incident: Any issue that prevents the Customized Solution from functioning as intended in a production environment
- 1.5 Incident Response: Markit's standard process for handling Incidents, including internal and external communication, documentation and resolution.
- 1.6 Incident Manager: Markit staff trained in Incident Response; capable of coordinating Incident investigation and responsible for communicating technical details to Client and Markit staff.
- 1.7 Project Manager: The individual at Markit acting as liaison between Markit and Client.
- 1.8 Third Party: Any service, data or content provider that is neither the Client nor Markit.
- 1.9 Uptime: The percentage of time during a calendar month that the Customized Solution is available.

2 Response and Escalation Services

- 2.1 Markit will respond to any and all Incidents, requests for maintenance, support services escalations, or queries via its Network Operations Center ("NOC") 24 hours a day, 7 days per week, 365 days per year. The NOC can be reached at MARKIT-NOC@markit.com or +1:303.583,4308. Response to any escalation will be from a technical incident responder in the NOC and not an automated reply.
- 2.2 Upon notice of any Incident related to any part of the services provided by Markit to Client, NOC personnel will initiate the Incident Response procedure and provide the Markit tracking ticket number within 15 minutes. The NOC will respond within 15 minutes of receiving notice of the Incident, regardless of severity level.
- 2.3 For all issues classified "Sev 1 -Total Outage" or "Sev 2 Major Outage" as per Section 2.5 below, the NOC will contact an Incident Manager in conjunction with creating the initial tracking ticket. The Incident Manager will join the investigation within 15 minutes during Markit's core business hours (7 AM 5 PM MT, Monday through Friday, excluding holidays) and within 30 minutes otherwise. The Incident Manager will provide Client with proactive status updates via email or phone.
- 2.4 Markit will respond to Incidents, requests for maintenance, support service escalations, or queries from Client or approved representatives of Client only. Should an End User contact Markit directly, Markit will (i) instruct the End User to contact Client directly and (ii) request the Project Manager to follow up with Client.
- 2.5 Incident Severity Determination
 - Markit will classify escalation severity level for any Incident (whether reported by Client or via Markit internal monitoring alert)
 according to the following criteria:
 - Sev 1 Total Outage: An issue that has major widespread effect on all Markit Clients and/or End Users. Example: complete inaccessibility or unavailability of the Customized Solution due to a major failure across multiple clients.
 - Sev 2 Major Outage: An issue that has significant impact on Client and/or End Users. Examples: complete inaccessibility or unavailability of the Customized Solution or a key page or module therein.
 - Sev 3 Partial Outage: An issue has some impact on Client and/or End Users. Examples: a multiple news stories are unavailable; a data points on multiple securities have discrepancies; or sporadic behavior of the site or service.
 - Sev 6 Minor issue and Inquiries: An issue has some impact on Client and/or End Users. Examples: a single news story is unavailable; a single data point has discrepancies; a question about the source or calculation of a data point.
 - Note: Sev 4 and Sev 5 issues are reserved for internal issues.
 - b) If, as a result of the ongoing investigation, severity is determined to be lower or higher than initially observed, MARKIT will reset severity level and response expectations.
 - Incidents caused by third party vendors will be classified and handled the same as MARKIT-related issues.
- 2.6 Status Updates and Regular Communication

- Markit will provide status updates with the following frequency:
 - Sev 1 Total Outage: Every 30 minutes until MARKIT identifies the problem and determines a prospective plan for correction in production. Once the problem is identified, MARKIT will provide Client with the estimated time of completion.
 - Sev 2 Major Outage: Every 30 minutes until MARKIT identifies the problem and determines a prospective plan for correction in production. Once the problem is identified, MARKIT will provide Client with the estimated time of completion.
 - Sev 3 Partial Outage: Daily updates until MARKIT identifies the problem and determines a prospective plan for correction in production. Once the problem is identified, MARKIT will provide Client with the estimated time of completion.
 - Sev 6 Minor Outage and Inquiries: Once the problem is identified, MARKIT will provide Client with an estimated time of completion.
- b) The Markit Incident Manager will be available to join a bridge line or other such cooperative coordination effort to resolve a Sev 1 – Total Outage or Sev 2 – Major Outage Incident.
- c) Markit may proactively initiate conference calls or bridge lines where Markit deems it necessary or helpful to resolving any
- 2.7 Markit shall provide Client's Designated Technical Contact with notice of any issue affecting the performance of the Customized Solution of which Markit becomes aware. In the event Markit believes such issue to be the result of an act or omission of a Third Party, Markit shall cooperate with Client and Third Party to restore normal functionality of the Customized Solution in a timely manner.
- 3 <u>Uptime Requirement</u>: Markit will ensure that the Customized Solution will be available at least 99.9% of the time as measured over each calendar month during the Term ("Uptime Requirement").
 - 3.1 Monitoring Approach: Markit will choose one or more pages of the Customized Solution to monitor in order to determine Uptime. Page selections will be reviewed with the Client to ensure appropriateness. Each page will be monitored continuously from more than one location outside of Markit's network on a round-robin basis at least once per minute. A page fails a monitoring test if two monitoring locations fail to access a page in two successive tries from each monitoring location.
 - 3.2 Uptime Calculation: Uptime will be calculated at the end of each month based on data provided by Markit's external monitoring provider. A page will be considered to be unavailable from the time of the first failure until the first subsequent success. All such intervals will be reviewed and validated by Markit. Uptime will then be calculated as the sum of all periods during which the page was available during the calendar month, divided by the total time in the month. One percentage will be calculated per month. Scheduled Maintenance as described in Section 6.1 below shall not be included for purposes of calculating Uptime.
 - 3.3 Exclusions: Any failure due to an outage of a Third Party will be excluded from the Uptime calculation.
 - 3.4 Credits: If, in any calendar month during the Term Uptime falls below the Uptime Requirement, Markit will grant Client a credit for that month based on the table set forth below calculated as follows: the percentage set forth in the table below multiplied by the Service Fees due for the same period.

Service Level Metric	Uptime	Credit
Uptime	99.80-99.89%	5%
	99.70-99.79%	10%
. G	99.69% or less	15%
Zij.	99,60% or less	See Section 6.1

4 Reporting

- 4.1 Markit will provide regular reporting detailing Uptime for the Customized Solution.
- 4.2 Markit will provide detailed reporting for all Sev 1 Total Outage or Sev 2 Major Outage Incidents, including a summary of the Incident and its impact, chronology of actions taken, time to resolution, lessons learned, and opportunities for improvement. Such report will be delivered to Client within seven (7) business days of the resolution of the Incident.

5 <u>Maintenance</u>

- 5.1 Markit will give Client at least five (5) business days prior notice (email to suffice) of any Scheduled Maintenance. Scheduled Maintenance whereby the availability of the Customized Solution is impacted shall occur no more often than once per month, on a designated Sunday between midnight and 4 a.m. Eastern Time, and will not exceed four (4) hours in duration for any individual instance. Scheduled Maintenance shall not be included for purposes of calculating Uptime.
- 5.2 Markit may perform additional unscheduled maintenance as necessary to support the delivery of the Customized Solution. Client will be notified of such maintenance as far in advance as practical. Markit will endeavor to perform additional maintenance activities in

> such a way as to minimize impact to Uptime. The impact on Uptime as a result of such unscheduled maintenance shall be included for purposes of calculating Uptime.

6 Termination of Service

- 6.1 Client shall have the right to terminate the Customized Solution upon 30 days written notice if Uptime drops below the lowest percentage identified in the table in Section 3.4 for a period of 3 consecutive months.
- nall save a real land of the state of the same of the 6.2 In the event Client exercises such right of termination, no payments will be due to MARKIT with respect to any periods occurring after the date of termination. If Client has prepaid any monies for periods after the date of termination, MARKIT shall issue a refund to

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