

Short-Term Obligation Rate Transparency (SHORT) System

SHORT FUNCTIONALITY

This Information Facility (“IF-2”) serves to outline the basic functionality and the high-level parameters by which the Municipal Securities Rulemaking Board (MSRB) operates the Short-Term Obligation Rate Transparency (SHORT) system, which collects and disseminates information and documents related to municipal securities bearing interest at short-term rates for market transparency, surveillance and other regulatory purposes (the “Short system”). The SHORT system receives, processes, and disseminates the rate transparency documents and information related to securities bearing interest at short-term rates, as further described herein. Such information and documents are made publicly available through MSRB’s Electronic Municipal Market Access (EMMA®) web portal (the “EMMA Portal”) and certain other dissemination services.

The MSRB maintains 7:00 a.m. to 7:00 p.m. Eastern Time as core operational hours on business days, which excludes weekends and business holidays identified on the MSRB System Holiday Schedule published on the MSRB website (MSRB.org). Core operational hours represent those hours when the MSRB’s resources will be more readily available to respond to inquiries and incidents experienced by users of MSRB’s systems, including the SHORT system.

Documents and Information Types. Pursuant to Rule G-34, brokers, dealers and municipal securities dealers (“dealers”) must report or ensure the reporting of, information about securities bearing interest at short-term rates, including auction rate securities (“ARS”) and variable rate demand obligations (“VRDO”). Information about the results of auctions or interest rate resets (generally, “Reset Data”) is submitted only as data, while disclosures in connection with liquidity facilities and auction procedures are submitted as documents (generally, “Disclosure Documents”), accompanied by related indexing information. Dealers must provide all Reset Data and Disclosure Documents required by MSRB rules and consistent with the related MSRB specification documents, including the Short-term Obligation Rate Transparency (SHORT) System Submission Manual, Specifications for the SHORT System Data Submission System, and the Specifications for SHORT System Document Submission Services (collectively, the “SHORT System User’s Manual”) within the timeframes set forth in MSRB rules and related MSRB procedures. As indicated in Rule G-34, dealers may rely on agents for the purpose of submitting documents and information; however, all actions taken by such agents on behalf of a dealer remain the responsibility of the dealer.

Documents submitted to the SHORT system must include related indexing information, including an indication of the document type, the date such document became available to the dealer, and CUSIP number(s) of the municipal securities to which such document relates. In lieu of submitting duplicate documents, a submitter may identify a document already submitted by cross reference and provide such items of related information as are required by MSRB rules and

the SHORT System User's Manual. In lieu of documents that cannot be obtained through best efforts, a submitter must submit notice that such document is not able to be obtained as required by MSRB rules or the SHORT System User's Manual.

The complete list of data elements that are required for a submission to the SHORT system is available in the SHORT System User's Manual made available on MSRB.org.

Submitters. Submissions may be made by such persons in the following circumstances:

- ARS Program Dealers;
- VRDO Remarketing Agents;
- ARS Auction Agents; and
- Designated Agents submitting documents and related information on behalf of dealers who have designated such agent for this purpose.

All ARS Auction Agents are allowed to submit information about an auction to the SHORT system without prior designation by an ARS Program Dealer. Dealers may designate agents to submit information on their behalf, and may revoke the designation of any such agents, through MSRB Gateway.¹ All actions taken by a Designated Agent on behalf of a dealer that has designated such agent are the responsibility of the dealer.

Designated Electronic Format for Disclosure Documents. All Disclosure Documents submitted to the SHORT system must be in portable document format (PDF), configured to permit documents to be saved, viewed, printed and retransmitted by electronic means without a password. If the submitted file is a reproduction of the original document, the reproduction must maintain the graphical and textual integrity of the content of the original document. Any Disclosure Document submitted to the SHORT system must be word-searchable, without regard to diagrams, images and other non-textual elements. Dealers submitting Disclosure Documents to the SHORT system are responsible for ensuring that the files uploaded meet these requirements.

Method and Timing of Submissions. The submission of documents and information to the SHORT system may be made either through a web-based electronic submitter interface or through a computer-to-computer data connection. When submissions are made using the web-based electronic submitter interface, documents are uploaded, and information is input through an on-line form. When submissions are made using the computer-to-computer data connection, documents are uploaded to a web service and information is uploaded utilizing extensible markup language (XML) files. Documentation for on-line and computer-to-computer submissions are published on MSRB.org.

The processes to submit Disclosure Documents are generally available at all times. Submissions of Reset Data may be made throughout any RTRS Business Day, as defined in Rule G-14, from

¹ MSRB Gateway is a single, secure access point for password-protected systems operated by the MSRB, including submission services, applications and the associated forms.

at least the hours of 7:30 a.m. to 6:30 p.m. Eastern Time. The MSRB may make the SHORT system, or portions of its functionality, unavailable outside of core operational hours for various purposes, including, maintenance, upgrades, or otherwise as needed to ensure the overall integrity of the SHORT system and the MSRB's other information systems.

Format and Data Checks. The SHORT system performs various data checks to ensure that information and documents are submitted in the correct format. In addition, data checks may be performed to monitor dealer compliance with MSRB Rule G-34 as well as to identify information submitted in correct formats that may contain errors due to information not falling within reasonable ranges of expected values for a given item of information. Information or documents that fail format checks may not be processed further, in which case an error message is returned to the submitter. Dealers that have information or documents submitted on their behalf by either an ARS Auction Agent or a Designated Agent are able to monitor such submissions.

EMMA SHORT-TERM OBLIGATION RATE TRANSPARENCY SERVICE

Information and documents submitted to the SHORT system also are posted to the MSRB's EMMA Portal pursuant to the EMMA Short-Term Obligation Rate Transparency Service. Such information and documents will be made available on the EMMA Portal promptly following processing by the SHORT system, transmission to the EMMA system, and processing by the EMMA system.² Submissions outside of core operational hours may be posted on the EMMA Portal promptly following the processing of such information, though some submissions outside of core operational hours may not be processed until the next business day. SHORT system documents and information along with related information are generally made available to the public through the EMMA Portal for the life of the related securities.

SHORT-TERM OBLIGATION RATE TRANSPARENCY SUBSCRIPTION SERVICE

The MSRB makes available to subscribers and data purchasers the Reset Data as well as Disclosure Documents, and related indexing information provided by submitters through a subscription or one-time purchase, as described in more detail below. Subscribers are permitted to re-disseminate data and documents from the SHORT Subscription Service pursuant to the terms of their respective subscription agreements. The MSRB may, at its discretion, waive or reduce fees for a service or product for certain non-profit organizations and for organizations providing, at no out-of-pocket charge, services or products to the MSRB for internal or public use or dissemination on MSRB's Electronic Municipal Market Access System (EMMA®) on terms agreeable to the MSRB.

Short-term Obligation Subscription Service

² For purposes of IF-2, promptly shall mean within 15 minutes following the successful intake of the data by the SHORT system, transformation of such data for operational usability, and storage for effective retrieval for display or dissemination to users of the EMMA Portal and, as applicable, to licensed subscribers of SHORT subscription services ("processing").

The MSRB's Short-term Obligation Subscription Service ("SHORT Subscription Service") is made available pursuant to the terms of a subscription agreement for a commercially reasonable fee as set forth in the "MSRB Subscription Services Price List" available on MSRB.org. Subscriptions will be provided through computer-to-computer data streams utilizing XML files for data and files in a designated electronic format (consisting of PDF files) for documents. Documents and information submitted to the SHORT system may be modified subsequent to their initial submission, and any such documents or data provided or modified will be made available to subscribers in accordance with their respective subscription agreements.

Access to Reset Data and Disclosure Documents. The MSRB permits subscribers to separately access and retrieve Reset Data, Disclosure Documents, or both. Detailed information for accessing Reset Data is found in the Specifications for the SHORT System Subscription Service located on MSRB.org. Detailed information for accessing Disclosure Documents is found in the Specifications for the EMMA Subscription Service (SHORT Documents) also located on MSRB.org.

List of Reset Data Information to be Disseminated. The list of potential fields related to Reset Data disseminated by the SHORT Subscription Service is as follows:

Transaction Transaction Type, Publication Date and Time, Dealers Name, Control Number

Instrument CUSIP, Instrument Type

Rate Information Interest Rate Reset Date Time, Interest Rate Period, Interest Rate, Posting Date Time, Effective Date of Interest Rate, Interest Rate, Minimum Denomination, Rate Type, Par Amount Auctioned, Min Rate, Max Rate, Par Amount Remarketed, Notification Period, Liquidity Facility Type, Liquidity Facility Expire Date, Identity of Liquidity Provider, Aggregate Par Amount – Bank Bond, Aggregate Par Amount – Investors and Remarketing Agent, Identity of Tender Agent, Order Type, Order Interest Rate, Order Entity, Order Par Amount, Filled Par Amount, Bid to Cover Ratio

Some data elements are made available only for ARS, while other data elements are only available for VRDO. The Specifications for the SHORT System Subscription Service posted on MSRB.org provides definitions of each data element, data format information, and schemas and other technical specifications for accessing and using the subscription systems.

Documents and Related Indexing Information to be Disseminated. The data elements related to Disclosure Documents disseminated, as appropriate for each submission, may include:

Submission Data Submission ID, transaction ID, submission transaction date/time

Security Data CUSIP number, ARS/VRDO instrument type identifier

Document Data Document ID, document type, document posting date, document status indicator

Short-Term Obligation Rate Transparency Historical Data Product

In addition to offering the SHORT Subscription Service, the MSRB offers a Short-Term Obligation Rate Transparency Historical Data Product (“SHORT Historical Data Product”). The SHORT Historical Data Product consists of the same data set (including documents and related information) as provided by the SHORT Subscription Service with the notable variances that the historical data product is at least one month old up to the end of the most recent complete month and does not provide an ongoing data feed to disseminate updated information previously delivered. The SHORT Historical Data Product may be purchased in any twelve consecutive complete month data set (or other time period as may be mutually agreed upon in writing) pursuant to the terms of a purchase agreement for a commercially reasonable fee as set forth in the MSRB Subscription Services Price List available on MSRB.org or as otherwise agreed to pursuant to the terms of a purchase agreement. Purchasers are permitted to re-disseminate transaction data from the SHORT Historical Data Product pursuant to the terms of the purchase agreement. A one-time set-up fee will be charged to first-time purchasers of the SHORT Historical Data Product, unless the purchaser is a current subscriber to an MSRB subscription service.