



**MSRB Notice 2008-40
(September 24, 2008)**

**Preliminary Specifications for Primary Market Subscription
and Document Submission Feeds of the MSRB's Electronic
Municipal Market Access System ("EMMA")**

The Municipal Securities Rulemaking Board (the "MSRB") is publishing preliminary specifications in connection with its planned implementation of an electronic system for free public access to primary market disclosure documents for the municipal securities market through the MSRB's Electronic Municipal Market Access system ("EMMA").¹ The specifications are for the following two computer-to-computer processes:

- **Automated Submission Interface** – a computer-to-computer connection for submission of official statements, certain preliminary official statements and advance refunding documents ("primary market documents"), together with related information, to EMMA by brokers, dealers and municipal securities dealers ("dealers"), acting as underwriters, placement agents or remarketing agents ("underwriters"), and by their designated agents²
- **Primary Market Subscription** – a computer-to-computer connection for real-time dissemination to subscribers of primary market documents and related information posted on EMMA's public website (the "EMMA portal")

The MSRB will accept comments on the preliminary specifications through October 24, 2008 and expects to publish final specifications shortly thereafter.

INFORMATIONAL CONFERENCE CALLS

The MSRB will host informational calls on these preliminary specifications as follows:

<u>Topic</u>	<u>Tuesday, October 14</u>	<u>Wednesday, October 15</u>
<i>Automated submission interface</i>	4:00 pm EDT	11:00 am EDT
<i>Primary market subscription</i>	12 noon EDT	3:00 pm EDT

¹ The MSRB expects to file with the Securities and Exchange Commission in the near future a proposed rule change to implement EMMA, currently operating as a pilot, as a permanent system of the MSRB, as described below.

² Primary market documents and related information could also be submitted to EMMA through an Internet-based data entry and document upload interface, as described below.

Persons wishing to participate in one or more of these informational calls should contact the MSRB at (703) 797-6600 by no later than October 10, 2008.

EMMA OVERVIEW

EMMA began operation on March 31, 2008 as a pilot facility of the MSRB's existing Official Statement and Advance Refunding Document (OS/ARD) system of the Municipal Securities Information Library ("MSIL") system.³ In its pilot phase, EMMA provides public access to the complete historical collection of official statements and advance refunding documents submitted to the MSIL system by underwriters for municipal securities offerings since 1990, as well as official statements and advance refunding documents submitted on a current-basis for new issues. The EMMA pilot also provides free public access to real-time transaction price information reported by dealers to the MSRB's Real-Time Transaction Reporting System for current transactions and historical data for transactions since January 31, 2005. The MSRB recently filed a proposal with the Securities and Exchange Commission (the "SEC") to expand EMMA to include continuing disclosure documents submitted by issuers, obligated persons and their agents pursuant to an amended Exchange Act Rule 15c2-12 on the EMMA portal.⁴ The EMMA portal is accessible at <http://emma.msrb.org>.

The MSRB expects to file with the SEC in the near future a proposed rule change to transition the EMMA pilot to permanent status and to establish an "access equals delivery" standard for electronic official statement dissemination in the municipal securities market, based on the "access equals delivery" rules for prospectus delivery for registered securities offerings adopted by the SEC in 2005.⁵ Specifically, the proposed rule change is expected to consist of

³ See Securities Exchange Act Release No. 57577 (March 28, 2008), 73 FR 18022 (April 2, 2008) (File No. SR-MSRB-2007-06) (approving operation of the EMMA pilot to provide free public access to the MSIL system collection of official statements and advance refunding documents and to the MSRB's historical and real-time transaction price data).

⁴ See Securities Exchange Act Release No. 58256 (July 30, 2008), 73 FR 46161 (August 7, 2008) (File No. SR-MSRB-2008-05) (MSRB proposal to establish continuing disclosure service of EMMA). See also Securities Exchange Act Release No. 58255 (July 30, 2008), 73 FR 46138 (August 7, 2008) (SEC proposal to amend Rule 15c2-12 to provide for the MSRB to serve as the sole central venue for electronic submission of continuing disclosures). The MSRB will publish specifications for automated submissions and real-time subscriptions relating to continuing disclosures at a future date.

⁵ See Securities Act Release No. 8591 (July 19, 2005), 70 FR 44722 (August 3, 2005) (SEC adoption of Securities Act Reform proposal, including "access equals delivery" provisions for registered securities). The MSRB's expected rule change proposal would

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proposals to: (i) establish EMMA’s permanent primary market disclosure service; (ii) establish EMMA’s permanent trade price transparency service; (iii) establish a real-time subscription to the primary market disclosure service’s collection of documents and related indexing information; and (iv) amend and consolidate current Rules G-32 and G-36 into new Rule G-32, on new issue disclosure, and replace current Forms G-36(OS) and G-36(ARD) with new Form G-32 for the purpose of establishing the “access equals delivery” standard.⁶

OVERVIEW OF EXPECTED SUBMISSION REQUIREMENTS

Set forth below is a brief description of the submission requirements that the MSRB anticipates will be set forth in revised Rule G-32, as it is expected to be filed with the SEC in the near future. A more complete description, together with the text of revised Rule G-32, will be published at the time of such filing.

Document Submissions

Under the expected revisions to Rule G-32, all submissions by underwriters of official statements would be required to be made within one business day after receipt from the issuer but by no later than the closing date for the offering. If no official statement is prepared for an offering or if an official statement is being prepared but is not yet available from the issuer by the closing date, the underwriter would be required to submit the preliminary official statement, if any, by the closing date. Once an official statement becomes available, the underwriter would be required to submit the official statement within one business day after receipt from the issuer. If no official statement is prepared for an offering, the underwriter would be required to provide notice of that fact to EMMA.

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incorporate (with modifications adapted to the specific characteristics of the municipal securities market) many of the key “access equals delivery” provisions established by the SEC for the registered security market in Securities Act Rules 172, 173 and 174.

⁶ The MSRB previously published a series of notices seeking comment on various aspects of the expected proposal. *See* MSRB Notice 2007-33 (November 15, 2007); MSRB Notice 2007-05 (January 25, 2007); MSRB Notice 2006-19 (July 27, 2006).

In the case of certain limited offerings,⁷ the underwriter would be permitted to elect to withhold submission of the official statement if it submits the following to EMMA: (i) a certification affirming that the offering meets all of the requirements of Rule 15c2-12(d)(1)(i) as a limited offering; (ii) notice that the official statement is not available on-line but that the underwriter would provide a copy of the official statement to any customer purchasing such limited offering throughout the life of the securities, free of charge; and (iii) specific contact information for underwriter personnel to whom requests for copies of the official statement should be made. In addition, submissions to EMMA in connection with roll-overs of commercial paper would not be required if a submission has previously been made to EMMA for such commercial paper program and no amendments or supplements to the official statement have been made since such submission.

Underwriters would be required to submit advance refunding documents by no later than five business days after the closing date for primary offerings that advance refund an outstanding issue and for which an advance refunding document has been prepared. This proposed requirement would apply whenever an advance refunding document has been prepared in connection with a primary offering, not just for those offerings in which an official statement also has been prepared as under current Rule G-36.

Underwriters would be required to submit amendments to official statements and advance refunding documents during the new issue disclosure period within one business day of receipt. In addition, underwriters would be required to submit prompt notice of any cancellation of an offering for which a submission of a document or information relating to the offering has previously been made to EMMA.

Data Submissions

Existing Forms G-36(OS) and G-36(ARD) would be replaced by new Form G-32, consisting of the collection of data elements provided to EMMA in connection with a primary offering of municipal securities. New Form G-32 is expected to be filed with the SEC in the near future. The data elements on the form are described below.

Data could be provided in a single or multiple submission events. The submission process would be initiated in conjunction with the beginning of trading after the bond sale, at which time the underwriter would provide, at a minimum, issue-specific information consisting of the full issuer name and issue description, as such items are expected to appear in the official

⁷ Limited offerings consist of primary offerings under Rule 15c2-12(d)(1)(i) in which the securities have authorized denominations of \$100,000 or more and are sold to no more than 35 persons who the underwriter reasonably believes: (a) have such knowledge and experience in financial and business matters that they are capable of evaluating the merits and risks of the prospective investment, and (b) are not purchasing for more than one account or with a view to distributing the securities.

statement⁸ and security-specific information consisting of the nine-digit CUSIP number, the principal amount at maturity of each security, and the initial offering price for each security in the issue.⁹ Additional items of information would be submitted either in conjunction with the submission of the official statement, preliminary official statement or advance refunding document or by closing, as applicable, although any or all such additional information may be submitted as part of the initial submission if available.

SUBMISSION PROCESS OVERVIEW

Method of Submission

All primary market documents would be submitted to the MSRB, free of charge, through either EMMA's automated computer-to-computer submission interface or EMMA's web form submission interface for manual submissions.

Automated submission interface. The MSRB will expose web service interfaces allowing for the submission of SOAP (Simple Object Access Protocol) standard XML (extensible markup language) messages and PDF (portable document format) documents using secure, computer-to-computer communications. These interfaces would be remotely consumed by applications written in a wide variety of programming languages and running on a wide variety of platforms.

The automated submission interface likely will be most suitable for submitters that consistently expect to make multiple submissions each day or that wish to integrate their submission process in an automated manner with existing internal data systems. This might include underwriters that handle a large number of underwritings or designated agents that may handle submissions on behalf of a number of underwriters.

Certain submission functionalities available through the web form submission interface described below will not be available through the automated submission interface. Most notably, the automated submission interface will not initially be available for submissions relating to municipal fund securities. In addition, although the automated submission interface

⁸ For an issue that is ineligible for CUSIP number assignment, the state of the issuer and dated date also would be provided. For an issue of municipal fund securities, the state of the issuer also would be provided. For an issue of commercial paper, the six-digit CUSIP number assigned to the issue also would be provided in connection with the initiation of the commercial paper program.

⁹ For an issue that is ineligible for CUSIP number assignment, the nine-digit CUSIP number would be omitted but the maturity date and interest rate would be provided. For issues of municipal fund securities and commercial paper, no security-specific information would be required.

will be capable of handling documents submitted as multiple PDF files as well as amendments to previously submitted documents, it will be most efficient for submissions involving a single PDF file. Furthermore, a submitter using the automated submission interface to amend or supplement data previously submitted for an offering would be required to include the entire data set for the offering in the subsequent submission event, rather than merely changes or additions.

Web form submission interface. This interface will allow for Internet-based data entry and PDF document upload on the EMMA portal. The web form submission interface will permit all types of submissions (including submissions relating to municipal fund securities) and will provide maximum flexibility in ensuring that documents consisting of multiple files are properly presented to users through the EMMA portal.

The data entry form will require some manual processing by users, although the level of processing will nearly always be significantly less than currently required for submissions through the MSIL system's existing electronic OS/ARD submission system (e-OS system), which will be retired upon implementation of the permanent EMMA system. The web form submission interface also will allow submitters to access data and documents initially submitted through the automated submission interface for further processing and to adjust the presentation of documents on the EMMA portal. The web form submission interface will be accessible through the EMMA portal.¹⁰ Further information regarding the web form submission interface will be published by the MSRB in the future.

Offering Types

For submission purposes, EMMA's primary market disclosure service will recognize two offering types:

- ***Bond*** – bonds, notes, commercial paper, certificates of participation and other debt obligations, including remarketings, fixed rate, variable rate and zero coupon debt
- ***Municipal fund security*** – interests in 529 college savings plans, local government investment pools and any other forms of municipal fund securities

Submissions for bond offerings will be accepted either through the web form submission interface or the automated submission interface. As noted above, submissions for municipal fund security offerings will be accepted only through the web form submission interface.¹¹

¹⁰ The web form submission interface will be accessible through the EMMA portal at <http://emma.msrb.org/Submission/SubmissionPortal.aspx>.

¹¹ Submissions for municipal fund securities will be limited to the web form submission interface due to the need for a more tailored document handling process that can be best accommodated through the web form submission process, as well as the significantly

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Document Format

Primary market documents would be submitted as PDF files configured to permit documents to be saved, viewed, printed and retransmitted by electronic means. If the submitted file is a reproduction of the original document, the submitted file must maintain the graphical and textual integrity of the original document. In addition, as will be more fully described in the upcoming filing of the permanent EMMA primary market disclosure service, the MSRB expects to transition to a requirement that such PDF files be word-searchable (that is, allowing the user to search for specific terms used within the document through a search or find function available in most standard software packages), provided that diagrams, images and other non-textual elements would not be required to be word-searchable.¹²

Submission Accounts and MSRB Gateway

Submissions of primary market documents would be made by underwriters, which may submit documents for municipal securities which they have underwritten, and by designated agents, which may be designated by underwriters to make submissions on their behalf.

All submissions would be made through password protected accounts established through the MSRB's upcoming MSRB Gateway.¹³ Each underwriter will have a master MSRB Gateway account initially assigned to and administered by the underwriter's primary contact under MSRB Rule G-40, on electronic mail contacts. Each underwriter will control the administration of its master account and will be able to create and control individual user accounts within MSRB

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lower volume of submissions compared to bond offerings. The MSRB invites comment on whether to consider extending the automated submission interface for use in connection with municipal fund securities in the future.

¹² Although, the MSRB would strongly encourage submitters to immediately begin making submissions as word-searchable PDF files (preferably as native PDF or PDF normal files, which generally produce smaller and more easily downloadable files as compared to scanned PDF files), implementation of this requirement would be deferred to provide the relevant market participants with sufficient time to adapt their processes and systems to provide for the routine creation or conversion of primary market disclosure documents as word-searchable PDF files.

¹³ MSRB Gateway will serve as the point-of-entry for EMMA submissions and, over time, for other MSRB electronic systems. The MSRB expects to launch MSRB Gateway in advance of the effective date of the "access equals delivery" rules and related submission requirements. More information about MSRB Gateway is available at <http://www.msrb.org/msrb1/pdfs/GatewayAnnouncement.pdf>.

Gateway, including user accounts for EMMA submissions. The MSRB will be migrating active accounts of users of the existing e-OS system to MSRB Gateway as user accounts with rights to make primary market submissions, subject to the administrative control of the underwriter's master account.¹⁴ Each underwriter's master account administrator will be able to create additional user accounts to make submissions to EMMA for the underwriter.

An underwriter would be permitted to designate a third-party agent to make submissions to EMMA on its behalf. An underwriter would extend an invitation through MSRB Gateway to a third-party to act as its designated agents for EMMA submissions. MSRB Gateway would transmit such invitation by e-mail to the selected third party, which would then create an account in MSRB Gateway if not already a registered user and accept such invitation through MSRB Gateway. The underwriter would then confirm the designated agent through MSRB Gateway before the agent could begin making submissions on behalf of the underwriter. The underwriter would be able to revoke a designation of a designated agent at any time through MSRB Gateway. Once confirmed by an underwriter, a designated agent would be able to login through MSRB Gateway to make submissions on behalf of the designating underwriter. Underwriters will be responsible in all respects for the actions taken by their designated agents on their behalf.

MSRB Gateway will be accessible through the MSRB's website at www.msrb.org or through the EMMA portal. Further information about MSRB Gateway, including a user manual providing detailed instructions, will be published in the near future.

AUTOMATED SUBMISSION INTERFACE

Web Service

Submitters using the automated submission interface would connect to web service interfaces exposed by the MSRB at specified URLs (uniform resource locators) to submit SOAP standard XML messages and PDF documents. Further details regarding connection to the web service interfaces, including the URLs through which data and documents are to be submitted, will be provided when the MSRB publishes final specifications.

Submission Process and Submission Types

The automated submission interface will accept two submission types for bond offerings, with each type having both a data message and a document message, as described below:

¹⁴ Active e-OS accounts will be migrated automatically to MSRB Gateway. Other potential submitters to EMMA, including any users of the e-OS system whose accounts are not automatically migrated, may request his or her master account administrator to create a new user account within MSRB Gateway.

Primary market disclosure submission. This submission type is used to submit data and official statements (including any amendments or supplements or any preliminary official statements) for a primary offering of municipal securities (including remarketings). All primary market disclosure submissions will have at least one data message and most primary market disclosure submissions will have at least one document message. The typical primary market disclosure submission will involve the submission of one official statement, together with indexing and related data, describing one or more new issues. All issues described in a single official statement are treated as a single offering for EMMA submission purposes.

Advance refunding disclosure submission. This submission type is used to submit data and advance refunding documents (including any amendments) in connection with an advance refunding of outstanding municipal securities. All advance refunding disclosure submissions will have at least one data message and at least one document message. The typical advance refunding disclosure submission will involve one or more refunding new issues from a single offering, one or more advance refunding documents, and one or more outstanding (refunded) issues, together with indexing and related data.

Overview of Message Processing, Schemas, Data Tags and Required Elements

This notice links to a series of figures and tables providing more detailed information about the automated submission interface process. A message processing overview is included in Figure 1. XML schemas for data messages and document messages, together with a type definition schema, are included in Figure 2. A data tag glossary is provided in Figure 3. A table of required/optional data elements, based on submission type, is provided in Figure 4. Messages will be validated and EMMA will return response messages to the submitter's system, as illustrated in Figure 5. Validation response messages will be published with the final specifications.

Primary Market Disclosure Submission – Data Message

Standard Data Submission. Data will be submitted through the automated submission interface as SOAP messages. Data elements to be submitted in a data message for a primary market disclosure submission will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) offering data; (iii) issue data; (iv) security data; (v) underwriter data; and (vi) limited offering contact data. These categories, and the available data tags applicable to each category, are included in Figure 6. Each message also must include a header containing an authentication token and web services protocol support, as illustrated in Figure 7.

The most common submission is expected to be for offerings for which (i) an official statement is submitted, (ii) a single underwriter or underwriting syndicate underwrites all issues in the offering, (iii) CUSIP numbers are assigned to the securities, and (iv) the underwriting

spread is disclosed in the official statement. In this case, the minimum data elements to be provided in a data message, together with the value to be selected or entered, would be:¹⁵

- **submission data** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘publish’)
- **offering data** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread disclosure indicator (select ‘disclosed in official statement’)
- **issue data** (each element provided for each issue in the offering) –
 - (i) issue type (select ‘new issue’)
 - (ii) security type (select ‘CUSIP-9’)
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date)
- **security data** (each element provided for each security of each issue in the offering) –
 - (i) CUSIP-9 (enter nine-digit number)
 - (ii) maturity principal amount (enter value)
 - (iii) initial offering price or yield (enter value)
- **underwriter data** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)
- **limited offering contact data** – no limited offering contact data submitted

Special Data Submission Cases and Sample XML Messages. Additional or different data elements to be included in special submission cases are described in Figure 8. Sample XML messages representing a standard data submission and certain special submission cases are included in Figure 9.

Primary Market Disclosure Submission – Document Submission and Document Message

Documents will be submitted through the automated submission interface as SOAP messages. Elements to be submitted in a document message will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) document data; (iii) file data; and (iv) underwriter data. These categories, and the available data tags applicable to each

¹⁵ Data elements and enumerated values from which specific selections are to be made are more fully described in the data tag glossary in Figure 3.

category, are included in Figure 6. The document message will be organized so that these data elements are including in the message header, along with an authentication token and web services protocol support.¹⁶ The PDF file of the document, as a binary file encoded in MTOM (SOAP Message Transmission Optimization Mechanism), will constitute the body of the document message.

Documents, Files and Order of Files. Three types of documents may be submitted in a primary market disclosure submission: official statements, preliminary official statements and remarketing supplements. Normally, a document will consist of a single PDF file. If a document consists of multiple files, each file must be submitted in a separate document message. The document types are described below:

- ***official statement (including amendments)*** – In most cases, an official statement will consist of a single PDF file. Where an official statement is submitted as more than one PDF file, the order in which such files are displayed on the EMMA portal may be controlled through the submission process, although the MSRB believes that submitters will be best served by themselves merging such separate files into a single PDF file for submission. An amendment to an official statement will be submitted as an additional file to the original official statement file, rather than as a separate document.
- ***preliminary official statement (including amendments)*** – Initially, a preliminary official statement will be accepted by EMMA only if the underwriter indicates that the official statement will not be available for submission by closing.¹⁷ Preliminary official statement files will be handled in the same manner as official statement files. However, if an issuer supplements its preliminary official statement with the effect that the preliminary official statement, as supplemented, constitutes the final official statement (for example, where a preliminary official statement was prepared for a competitive offering and the preliminary official statement is supplemented by a revised cover reflecting the terms of winning bid), then the preliminary official statement, as supplement, should be submitted as an official statement (rather than as a preliminary official statement and an amendment), preferably as a single merged PDF file rather than as separate files.
- ***remarketing supplement*** – A remarketing supplement generally will consist of a relatively short addendum or wrap in the form of a single PDF, produced for a remarketing of an outstanding issue, that is designed to supplement the original official statement produced for the initial issuance of the outstanding issue. EMMA would

¹⁶ The authentication token and web services protocol support to be included in the header are illustrated in Figure 7.

¹⁷ The MSRB intends to permit voluntary submissions of preliminary official statements more broadly at a future stage of development.

permit a submitter to submit solely the addendum or wrap and to identify the original official statement posted on EMMA to which such addendum or wrap applies.¹⁸ In that case, the EMMA portal would display the remarketing supplement, together with the original official statement, as two separate documents associated with the remarketed issue. In those cases where an entirely new disclosure document is produced in connection with a remarketing of an outstanding issue, such new disclosure document should be submitted as an official statement rather than as a remarketing supplement.¹⁹

Standard Document Submission. The most common document submission is expected to be the official statement submitted as a single PDF file. The minimum elements to be provided in a document message, together with the value to be selected or entered, would be:

- ***submission data*** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘publish’)
 - (iii) submission identifier (enter identification number assigned by EMMA to related data message – do not use if submission underwritten CUSIP-9 identifier is used)

or

 - (iv) submission underwritten CUSIP-9 identifier (enter nine-digit number of latest maturity in the offering – do not use if submission identifier is used)

- ***document data*** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document description (optional – if no submitter supplied document name provided, EMMA will provide default description)

- ***file data*** –
 - (i) date received from issuer (enter date)

- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

¹⁸ A remarketing supplement will not be accepted if the original official statement is not posted on EMMA.

¹⁹ Similarly, a submitter may elect to submit the original official statement and an addendum or wrap to EMMA as an official statement, preferably as a single merged PDF file rather than as separate files, rather than submitting the addendum or wrap as a remarketing supplement. The submitter would be required to do so in those cases where the original official statement is not already available on EMMA.

Special Document Submission Cases and Sample XML Messages. Additional or different data elements to be included in special submission cases are described in Figure 8. Sample XML messages representing a standard document submission and certain special submission cases are included in Figure 9.

Advance Refunding Disclosure Submission – Data Message

Data for advance refunding disclosure submissions will be submitted through the automated submission interface as SOAP messages. Data elements to be submitted for an advance refunding disclosure submission will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) offering data; (iii) issue data; (iv) security data; and (v) underwriter data. These categories, and the available data tags applicable to each category, are included in Figure 10. Each message also must include a header containing an authentication token and web services protocol support.

Standard Data Submission. The most common submission of an advance refunding disclosure submission is expected to have the following characteristics: (i) each security that is refunded is refunded in whole, and (ii) CUSIP numbers had been assigned to the refunded securities. In this scenario, the minimum data elements relating to the refunded outstanding issues (*i.e.*, not the refunding new issue) to be provided in a data message, together with the value to be selected or entered, would be:

- ***submission data*** –
 - (i) submission type (select ‘advance refunding disclosure’)
 - (ii) submission status (select ‘publish’)
- ***offering data*** –
 - (i) offering type (select ‘bond’)
- ***issue data*** (each element provided for each issue refunded in whole or in part in an advance refunding) –
 - (i) issue type (select ‘refunded’)
 - (ii) security type (select ‘CUSIP-9’)
- ***security data*** (provided for each refunded security of each refunded issue – data not to be submitted for any security that is not refunded) –
 - (i) original CUSIP-9 of refunded security (enter nine-digit number)
- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

Special Data Submission Cases and Sample XML Messages. Additional or different data elements to be included in special submission cases are described in Figure 11. Sample XML messages representing a standard data submission and certain special submission cases are included in Figure 12.

Advance Refunding Disclosure Submission – Document Submission and Document Message

Documents will be submitted through the automated submission interface as SOAP messages. Elements to be submitted in a document message will be organized in a hierarchical relationship into the following categories: (i) submission data; (ii) document data; (iii) file data; and (iv) underwriter data. These categories, and the available data tags applicable to each category, are included in Figure 10. The document message will be organized so that these data elements are including in the message header, along with an authentication token and web services protocol support. The PDF file of the document, as a binary file encoded in MTOM, will constitute the body of the document message.

Advance Refunding Documents, Files and Order of Files. An advance refunding document (including amendments) is the only type of document that may be submitted in an advance refunding disclosure submission. Normally, an advance refunding document will consist of a single PDF file. If an advance refunding document consists of multiple files, each file must be submitted in a separate document message. Where an advance refunding document is submitted as more than one PDF file, the order in which such files are displayed on the EMMA portal may be controlled through the submission process, although the MSRB believes that submitters will be best served by themselves merging such separate files into a single PDF file for submission. An amendment to an advance refunding document will be submitted as an additional file to the original advance refunding document file, rather than as a separate document. However, if more than one advance refunding document is used in an advance refunding, each advance refunding document must be submitted as a separate document in a separate document message.

Standard Document Submission. The most common document submission is expected to be a single advance refunding document submitted as a single PDF file. The minimum elements to be provided in a document message, together with the value to be selected or entered, would be:

- ***submission data*** –
 - (i) submission type (select ‘advance refunding disclosure’)
 - (ii) submission status (select ‘publish’)
 - (iii) submission identifier (enter identification number assigned by EMMA to related data message)

- ***document data*** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document description (optional – if no submitter supplied document name provided, EMMA will provide default description)

- (iv) original CUSIP-9 of refunded security (enter nine-digit number for each refunded security applicable to such document)²⁰
 - (v) CUSIP-9 identifier of refunding issue (enter nine-digit number of the latest maturity of each advance refunding issue applicable to such document)
- **file data** –
 - (i) date received from issuer (enter date)
 - **underwriter data** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

Special Document Submission Cases and Sample XML Messages. Additional or different data elements to be included in special submission cases are described in Figure 11. Sample XML messages representing a standard document submission and certain special submission cases are included in Figure 12.

PRIMARY MARKET SUBSCRIPTION SERVICE

Web Service

Subscribers to the primary market subscription service would connect to web service interfaces exposed by the MSRB at one or more specified URLs to receive SOAP standard XML messages and PDF documents. Further details regarding connection to the web service interfaces, including the URLs through which data and documents are to be made available, will be provided when the MSRB publishes final specifications.

Data and Document Feed Process

The primary market subscription service will provide XML files of data in connection with primary market disclosures and advance refunding disclosures and PDF files of official statements, preliminary official statements and advance refunding documents.

Data file dissemination. Publicly disseminated information submitted to EMMA will normally be staged for subscriber access simultaneously with the posting of such publicly disseminated information to the EMMA portal. Subscribers would poll the subscription web service, at a frequency to be determined by each subscriber, by issuing a data request to receive the next available data from primary market disclosure submissions and advance refunding disclosure submissions (whether submitted through the automated submission interface or the web form submission interface), based on subscriber-determined parameters. EMMA will

²⁰ If an advance refunding involves multiple advance refunding documents, the refunded securities referenced in each individual document message would be a subset of the refunded securities listed in the related data submission for the full advance refunding.

bundle into a single XML file data from up to 200 data submissions for primary market disclosures and advance refunding disclosures for transmission to subscribers. The XML file will include file reference identifiers for each PDF file for use by subscribers in polling the subscription web service and in associating them to the related data. Depending on the subscriber's polling parameters, subscribers will be able to access information through the primary market subscription service on an effectively real-time basis.

Document dissemination. Documents submitted to EMMA normally will be available for subscriber access simultaneously with the posting of such documents to the EMMA portal. Subscribers would issue document requests, at a frequency to be determined by each subscriber, to receive any available documents based on the file reference identifiers provided in the XML files disseminated to subscribers. Each document will be transmitted to subscribers as individual PDF files. Depending on the subscriber's parameters for issuing document requests, subscribers will be able to access documents through the primary market subscription service on an effectively real-time basis, subject to transmission limitations resulting from the potentially large size of some document files and the speed of the subscriber's connection.

Overview of Message Processing, Schemas and Data Tags

This notice links to a series of figures and tables providing more detailed information about the primary market subscription service. A message processing overview is included in Figure 13. An XML data schema and a type definition schema are included in Figure 14. A data tag glossary is provided in Figure 15. The descriptions of the submission data elements to be provided by submitters to EMMA through the automated submission interface as set forth above in this notice, as well as in the special submission cases described in Figure 8 and Figure 11, provide more detailed information about the data elements to be disseminated to subscribers through the primary market subscription.

Data Message

Data elements to be disseminated through the primary market subscription service will be organized in a hierarchical relationship into the following categories: (i) subscriber data; (ii) submission data; (iii) offering data; (iv) issue data; (v) security data; (vi) document data; (vii) file data; and (viii) limited offering contact data. These categories, and the available data tags applicable to each category, are included in Figure 16 and are also summarized below:

- ***subscriber data*** –
 - (i) submission transaction count (indicates number of submissions in data message)
 - (ii) replay date (if data replay requested by subscriber, indicates period of data replay)
- ***submission data*** –
 - (i) submission identifier (uniquely identifies submission being disseminated)
 - (ii) submission type (primary market disclosure, advance refunding disclosure)
 - (iii) submission status (publish, notice of cancellation of offering)
 - (iii) submission transaction date and time (indicates EMMA posting date and time)

- **offering data** –
 - (i) offering type (bond, municipal fund security)
 - (ii) underwriting spread (if no underwriting spread disclosure indicator used)
 - (iv) underwriting spread disclosure indicator (if underwriting spread not provided – disclosed in official statement, not disclosed for competitive sale)
 - (v) OS availability status (as applicable – indicates if official statement not available at closing, if no official statement is available and applicable exemption under Rule 15c2-12, if official statement available only from underwriter for limited offering under Rule 15c2-12)
 - (vi) POS availability status (if OS availability status used – indicates if preliminary official statement is available or is not available)

- **issue data** (each element provided for each issue in the offering, as applicable) –
 - (i) issue type (new issue, remarketed, refunded)
 - (ii) security type (CUSIP-9, Non-CUSIP, CUSIP-6)
 - (iii) issuer name (full name as entered by submitter)
 - (iv) issue description (full description as entered by submitter)
 - (v) issuer state
 - (vi) issue closing date
 - (vii) issue dated date
 - (viii) original dated date (for remarketings if CUSIP-9 is unchanged but new dated date is assigned)
 - (ix) original CUSIP-9 of remarketed security (provided only if new CUSIP-9 number assigned to a remarketed issue)
 - (x) CUSIP-6 (provided only for commercial paper issue where CUSIP-9s not submitted to EMMA or for Non-CUSIP issues if CUSIP-6 of issuer is known)
 - (xi) CUSIP-9 of latest maturity on issue not underwritten (provided only for offerings where different underwriters underwrite separate issues in the offering)

- **security data** (each element provided for each security of each issue in the offering, as applicable) –
 - (i) CUSIP-9 (as applicable for new issue or remarketed issue type – not provided for municipal fund security issue type or Non-CUSIP or CUSIP-6 security type)
 - (ii) maturity date
 - (iii) security dated date (if different from issue dated date)
 - (iv) maturity principal amount
 - (v) interest rate
 - (vi) initial offering price or yield
 - (vii) initial offering price or yield range (if provided, initial offering price or yield and initial offering price or yield range represent minimum and maximum of range of prices or yields)
 - (viii) underwritten indicator (as applicable if underwrite is only underwriting a portion of an issue – not underwritten indicates that this security is underwritten by a different underwriter, partially underwritten indicates that underwriter is

- underwriting a portion of this security and the remaining portion is underwritten by another underwriter)
- (ix) par value underwritten (if security is partially underwritten, represents portion of security underwritten by the underwriter)
 - (x) original CUSIP-9 of refunded security (used only for refunded issue type – not provided for Non-CUSIP or CUSIP-6 security type)
 - (xi) new CUSIP-9 of refunded security (used only for refunded issue type if new CUSIP-9 assigned for refunded portion of partially refunded security)
 - (xii) new CUSIP-9 for unrefunded balance (used only for refunded issue type if new CUSIP-9 assigned for unrefunded balance of partially refunded security)
- **document data** (each element provided for each document associated with the submission, as applicable) –
 - (i) document identifier (uniquely identifies submission being disseminated)
 - (ii) document type (official statement, preliminary official statement, advance refunding document, remarketing supplement, municipal fund security disclosure document, municipal fund security disclosure document supplement)
 - (iii) document description
 - (iv) document status (current, archived)²¹
 - (v) document posting date (date first file of document posted to public on EMMA)
 - (vi) document archive date (date document moved to EMMA archive)
 - (vii) document posting operation indicator (append to posted document, replace posted document)
 - (viii) document disclosure completion indicator (partial, complete)
 - (ix) CUSIP-9 identifier of refunding issue (only for advance refunding document – provided for each advance refunding issue applicable to such document)
 - (x) original CUSIP-9 of refunded security (only for advance refunding document – provided for each refunded security applicable to such advance refunding document)
 - **file data** (each element provided for each file of a document, as applicable) –
 - (i) file identifier (unique identifier for each PDF file of the document)
 - (ii) file order (as applicable if multiple files for the document are submitted)

²¹ The document archive for each issue or security generally will contain all documents submitted to EMMA for public dissemination with respect to such issue or security. In addition to “current” documents posted on their respective Issue Detail or Security Detail page on the EMMA portal, the archive will sometimes include duplicate submissions of documents that may occur from time to time, as well as documents that may be superseded through subsequent amendatory submissions to EMMA. Although such superseded documents would be removed from the “current” document list on the Issue Detail or Security Detail page, they would still be available to the public through the archive link appearing on such Issue Detail or Security Detail page.

- (iii) file status (current, archived)
 - (iv) file posting date (date file posted to public on EMMA)
 - (v) file archive date (date file moved to EMMA archive)
- **limited offering contact** (provided only if an official statement for an offering exempt from Rule 15c2-12(d)(1)(i) is produced but will not be submitted to EMMA)
 - (i) OS contact organization name
 - (ii) OS contact first name
 - (iii) OS contact last name
 - (iv) OS contact title
 - (v) OS contact phone number
 - (vi) OS contact phone number extension
 - (vii) OS contact address
 - (viii) OS contact city
 - (ix) OS contact state
 - (x) OS contact zip code
 - (xi) OS contact email address

Several examples of XML files disseminating data submissions for various types of primary market disclosures and advance refunding disclosures are included in Figure 17.

* * * * *

Questions or comments on this notice may be directed to Ernesto A. Lanza, Senior Associate General Counsel, Leslie Carey, Associate General Counsel, or Steve Cook, Senior Programmer, at (703) 797-6600. Questions or comments also may be discussed during the informational conference calls on October 14 and 15, 2008. Written comments should be submitted by no later than October 24, 2008. Written comments will be available for public inspection at the MSRB's public access facility and also will be posted on the MSRB web site.²²

September 24, 2008

* * * * *

INDEX OF FIGURES

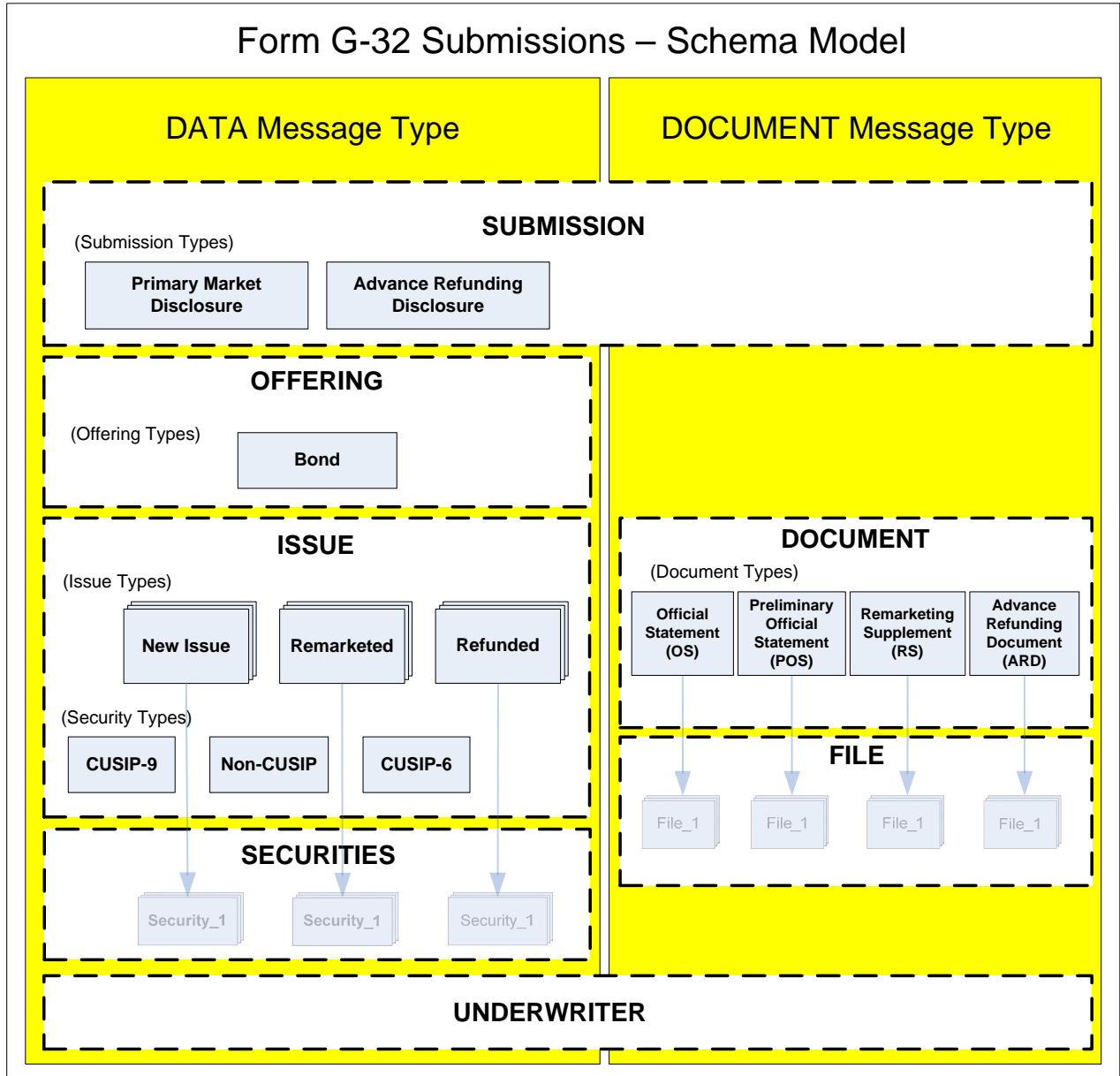
- 1 – Submission – Message Processing Overview**
- 2 – Submission – Data Message, Document Message & Type Definition Schemas**
- 3 – Submission – Data Tag Glossary**

²² All comments received will be made publicly available without change. Personal identifying information, such as names or e-mail addresses, will not be edited from submissions. Therefore, commentators should submit only information that they wish to make available publicly.

- 4 – Submission – Required/Optional Data Elements**
- 5 – Submission – Validation Response Message Model**
- 6 – Submission – Primary Market – Data Tag Mapping**
- 7 – Submission – Primary Market – Sample XML Headers**
- 8 – Submission – Primary Market – Special Data and Document Submission Cases**
- 9 – Submission – Primary Market – Sample Data and Document XML Messages**
- 10 – Submission – Advance Refunding – Data Tag Mapping**
- 11 – Submission – Advance Refunding – Special Data and Document Submission Cases**
- 12 – Submission – Advance Refunding – Sample Data and Document XML Messages**
- 13 – Subscription – Message Processing Overview**
- 14 – Subscription – Data Message & Type Definition Schema**
- 15 – Subscription – Data Tag Glossary**
- 16 – Subscription – Data Tag Mapping**
- 17 – Subscription – Sample XML Files**

SUBMISSION
DATA MESSAGE, DOCUMENT MESSAGE & TYPE DEFINITION SCHEMAS

Set forth below is a schema model showing the two message types (Data and Document) required to make a submission. Within each message type are information containers (Submission, Offering, Issue, Securities, Document, Files, and Underwriter) and the information types and values associated with each.



XML MESSAGE SCHEMAS

Detailed below are three (3) schemas; Data, Document, and a common Type Definition schema that is included in each of the Data and Document schemas by reference. The Data and Document schemas describe the base structural containers which in turn reference child-level containers and specifications described in the Type Definition schema. The schemas are universally applicable to Data and Document Messages for Primary Market and Advance Refunding submissions.

Data Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include schemaLocation="..." />
  <xs:element name="DisclosureMessage" type="DataMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="DataMessageType">
    <xs:sequence>
      <xs:element name="Submission" type="SubmissionDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Offering" type="OfferingDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Underwriter" type="UnderwriterDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="OSAvailabilityContactInformation" type="OSAvailabilityContactInformationType" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <!-- Type definition ends -->
</xs:schema>
```

Document Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include schemaLocation="..." />
  <xs:element name="DisclosureMessage" type="DocumentMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="DocumentMessageType">
```

```

    <xs:sequence>
      <xs:element name="Submission" type="SubmissionDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Document" type="DocumentDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Underwriter" type="UnderwriterDetailsType" minOccurs="1" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <!-- Type definition ends -->
</xs:schema>

```

Type Definition Schema

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <!-- Type Definition starts -->
  <xs:complexType name="SubmissionDetailsType">
    <xs:choice minOccurs="0" maxOccurs="1">
      <xs:element name="SubmissionIdentifier" type="Max25Text"/>
      <xs:element name="SubmissionUnderwrittenCUSIP9Identifier" type="Cusip9Type"/>
    </xs:choice>
    <xs:attribute name="SubmissionType" type="SubmissionType" use="required"/>
    <xs:attribute name="SubmissionStatus" type="SubmissionStatusType"/>
  </xs:complexType>
  <xs:complexType name="OfferingDetailsType">
    <xs:sequence>
      <xs:element name="Issue" type="IssuesType" maxOccurs="unbounded"/>
      <xs:element name="UnderwriterAssessmentExemptionIndicator" type="UnderwriterAssessmentExemptionIndicatorType"
minOccurs="0" maxOccurs="5"/>
      <xs:element name="UnderwriterAssessmentDiscountIndicator" type="UnderwriterAssessmentDiscountIndicatorType"
minOccurs="0" maxOccurs="2"/>
    </xs:sequence>
    <xs:attribute name="OfferingType" type="OfferingType"/>
    <xs:attribute name="OSAvailabilityStatus" type="OSAvailabilityStatusType"/>
    <xs:attribute name="POSAavailabilityStatus" type="POSAavailabilityStatusType"/>
    <xs:attribute name="UnderwritingSpreadDisclosureIndicator" type="UnderwritingSpreadDisclosureIndicatorType"/>
    <xs:attribute name="UnderwritingSpread" type="xs:float"/>
  </xs:complexType>
  <xs:complexType name="IssuesType">
    <xs:sequence>

```

```

    <xs:element name="OriginalCUSIP9OfRemarketedSecurity" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="UnderlyingSecurities" type="UnderlyingSecuritiesType" minOccurs="0" maxOccurs="1"/>
  </xs:sequence>
  <xs:attribute name="IssueType" type="IssueType"/>
  <xs:attribute name="SecurityType" type="SecurityType"/>
  <xs:attribute name="IssueDescription" type="Max250Text"/>
  <xs:attribute name="IssuerName" type="Max250Text"/>
  <xs:attribute name="IssuerState" type="StateCode"/>
  <xs:attribute name="IssueClosingDate" type="ISODate"/>
  <xs:attribute name="IssueDatedDate" type="ISODate"/>
  <xs:attribute name="OriginalDatedDate" type="ISODate"/>
  <xs:attribute name="CUSIP6" type="Cusip6Type"/>
  <xs:attribute name="CUSIP9OfLatestMaturityOnIssueNotUnderwritten" type="Cusip9Type"/>
</xs:complexType>
<xs:complexType name="UnderlyingSecuritiesType">
  <xs:sequence>
    <xs:element name="Security" type="SecurityDetailsType" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="SecurityDetailsType">
  <xs:attribute name="CUSIP9" type="Cusip9Type"/>
  <xs:attribute name="MaturityDate" type="ISODate"/>
  <xs:attribute name="SecurityDatedDate" type="ISODate"/>
  <xs:attribute name="InitialOfferingPriceYield" type="xs:float"/>
  <xs:attribute name="MaturityPrincipalAmount" type="xs:decimal"/>
  <xs:attribute name="InterestRate" type="xs:decimal"/>
  <xs:attribute name="UnderwrittenIndicator" type="UnderwrittenIndicatorType"/>
  <xs:attribute name="ParValueUnderwritten" type="xs:decimal"/>
  <xs:attribute name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
  <xs:attribute name="NewCUSIP9OfUnrefundedBalance" type="Cusip9Type"/>
  <xs:attribute name="NewCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
</xs:complexType>
<xs:complexType name="UnderwriterDetailsType">
  <xs:attribute name="ManagingUnderwriterMSRBID" type="Max10Text" use="required"/>
</xs:complexType>
<xs:complexType name="DocumentDetailsType">
  <xs:sequence>
    <xs:element name="CUSIP9IdentifierOfRefundingIssue" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>

```

```

        <xs:element name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
        <xs:element name="UnderlyingFiles" type="UnderlyingFilesType" maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="DocumentType" type="DocumentType" use="required"/>
    <xs:attribute name="DocumentDescription" type="Max250Text"/>
    <xs:attribute name="DocumentPostingOperationIndicator" type="DocumentPostingOperationIndicatorType"/>
    <xs:attribute name="DocumentDisclosureCompletionIndicator" type="DocumentDisclosureCompletionIndicatorType" use="required"/>
</xs:complexType>
<xs:complexType name="UnderlyingFilesType">
    <xs:sequence>
        <xs:element name="File" type="FileDetailsType" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
<xs:complexType name="FileDetailsType">
    <xs:attribute name="FileOrder" type="xs:integer"/>
    <xs:attribute name="DateReceivedFromIssuer" type="ISODate" use="required"/>
</xs:complexType>
<xs:complexType name="OSAvailabilityContactInformationType">
    <xs:attribute name="OSContactOrganizationName" type="Max140Text"/>
    <xs:attribute name="OSContactFirstName" type="Max25Text"/>
    <xs:attribute name="OSContactLastName" type="Max25Text"/>
    <xs:attribute name="OSContactTitle" type="Max140Text"/>
    <xs:attribute name="OSContactPhoneNumber" type="Max14Text"/>
    <xs:attribute name="OSContactPhoneNumberExtension" type="Max6Text"/>
    <xs:attribute name="OSContactAddress" type="Max140Text"/>
    <xs:attribute name="OSContactCity" type="Max25Text"/>
    <xs:attribute name="OSContactState" type="StateCode"/>
    <xs:attribute name="OSContactZipCode" type="Max14Text"/>
    <xs:attribute name="OSContactEmailAddress" type="Max140Text"/>
</xs:complexType>
<xs:simpleType name="SubmissionType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="PrimaryMarketDisclosure"/>
        <xs:enumeration value="AdvanceRefundingDisclosure"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SubmissionStatusType">
    <xs:restriction base="xs:string">

```

```

        <xs:enumeration value="Publish"/>
        <xs:enumeration value="NoticeOfCancellationOfOffering"/>
        <xs:enumeration value="Test"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OfferingType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Bond"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="IssueType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="NewIssue"/>
        <xs:enumeration value="Remarketed"/>
        <xs:enumeration value="Refunded"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SecurityType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="CUSIP-9"/>
        <xs:enumeration value="CUSIP-6"/>
        <xs:enumeration value="non-CUSIP"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="OfficialStatement"/>
        <xs:enumeration value="PreliminaryOfficialStatement"/>
        <xs:enumeration value="AdvanceRefundingDocument"/>
        <xs:enumeration value="RemarketingSupplement"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentPostingOperationIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="AppendToPostedDocument"/>
        <xs:enumeration value="ReplacePostedDocument"/>
    </xs:restriction>
</xs:simpleType>

```

```

<xs:simpleType name="POSAvailabilityStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="POSSubmitted"/>
    <xs:enumeration value="NoPOSPrepared"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OSAvailabilityStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="OSNotAvailableAtClosing"/>
    <xs:enumeration value="OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptLimitedOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptShortTermOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptPuttableOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptSmallOffering"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentDisclosureCompletionIndicatorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Partial"/>
    <xs:enumeration value="Complete"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwriterAssessmentDiscountIndicatorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="EntireOfferingMatures2YearsOrLess"/>
    <xs:enumeration value="EntireOfferingPuttable2YearsOrLess"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwriterAssessmentExemptionIndicatorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="OfferingLessThan1Million"/>
    <xs:enumeration value="EntireOfferingMatures9MonthsOrLess"/>
    <xs:enumeration value="EntireOfferingPuttable9MonthsOrLess"/>
    <xs:enumeration value="Rule15c212d1iExemptLimitedOffering"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwritingSpreadDisclosureIndicatorType">
  <xs:restriction base="xs:string">

```

```

        <xs:enumeration value="DisclosedInOfficialStatement"/>
        <xs:enumeration value="NotDisclosed_CompetitiveSale"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwrittenIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="NotUnderwritten"/>
        <xs:enumeration value="PartiallyUnderwritten"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip6Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="6"/>
        <xs:maxLength value="6"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip9Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="9"/>
        <xs:maxLength value="9"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="StateCode">
    <xs:restriction base="xs:string">
        <xs:pattern value="[A-Z]{2,2}"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ISODate">
    <xs:restriction base="xs:date"/>
</xs:simpleType>
<xs:simpleType name="ISODateTime">
    <xs:restriction base="xs:dateTime"/>
</xs:simpleType>
<xs:simpleType name="Max250Text">
    <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="250"/>
    </xs:restriction>

```

```
</xs:simpleType>
<xs:simpleType name="Max140Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="140"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max25Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="25"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max14Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="14"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max10Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="10"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max6Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="6"/>
  </xs:restriction>
</xs:simpleType>
<!-- Type definition ends -->
</xs:schema>
```

SUBMISSION
DATA TAG GLOSSARY

Set forth below is a glossary of all data tags to be used in EMMA’s automated submission interface for submissions of data messages and document messages. These data elements are organized in a hierarchical data relationship. This glossary sets out each data element’s XML container, data tag, definition and data specifications, including a listing of enumerated values for those data elements where the submitter is to choose a value and an example of the data format where the submitter is to enter a value.

Submission Data Tags Description and Specification EMMA Primary Market Disclosure Service			
XML Container	Data Tag	Definition	Data Specification
Submission	Submission Type	Indicates base category of disclosure, consisting of primary market or advance refunding disclosure	Enumerated Value: <ul style="list-style-type: none"> • PrimaryMarketDisclosure • AdvanceRefundingDisclosure
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or as official notice of cancellation of the offering	Enumerated Value: <ul style="list-style-type: none"> • Publish • NoticeOfCancellationOfOffering • Test
	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of submission (the initial submission event) and used by the submitter in connection with subsequent submission events	Max25Text ex: S212345678910
	Submission Underwritten CUSIP9 Identifier	CUSIP9 of a security in the offering used to link each submission event during the submission sequence for a particular submission – available only for primary market disclosure submission, cannot be used for advance refunding submission	String{Min9,Max9} ex: 123456AB7
Offering	Offering Type	Identifies the offering as debt securities, including bonds, notes, certificates of participation and other debt obligations	Enumerated Value: <ul style="list-style-type: none"> • Bond

XML Container	Data Tag	Definition	Data Specification
Offering	OS Availability Status	Indicates special availability conditions with respect to the official statement, including whether (i) the official statement will be made available late (after closing); (ii) an official statement has not been produced; or (iii) the official statement produced for a limited offering under Rule 15c2-12(d)(1)(i) is available only from the underwriter	Enumerated Value: <ul style="list-style-type: none"> • OSNotAvailableAtClosing • OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptShortTermOffering • OSNotProduced_15c212ExemptPuttableOffering • OSNotProduced_15c212ExemptSmallOffering
	POS Availability Status	Indicates special availability conditions with respect to the preliminary official statement where an official statement is not available by closing, including whether (i) the preliminary official statement is being made available or (ii) preliminary official statement has not been produced	Enumerated Value: <ul style="list-style-type: none"> • POSSubmitted • NoPOSPrepared
	Underwriting Spread Disclosure Indicator	If underwriting spread not submitted to EMMA, indicates whether underwriting spread or agency fee paid is disclosed in official statement or if not disclosed for a competitive sale.	Enumerated Value: <ul style="list-style-type: none"> • DisclosedInOfficialStatement • NotDisclosed_CompetitiveSale
	Underwriting Spread	Underwriting spread or agency fee paid to underwriter in a negotiated offering, if not disclosed in official statement (if Underwriting Spread is in dollars – e.g., express \$1,000,000.00 as 1000000; otherwise if in basis points – e.g., express 25 basis points as 0.25) Interpretation of value: If Underwriting Spread value is greater than 100.00 the value will be interpreted as dollars, otherwise as percent.	Float ex: 450245.55 [dollars] or 0.85 [basis points]

XML Container	Data Tag	Definition	Data Specification
Offering	Underwriter Assessment Exemption Indicator	<p>Indicates an applicable exception from the underwriting assessment under MSRB Rule A-13(a) for an offering in which all securities in the offering:</p> <ul style="list-style-type: none"> • Have an aggregate par value less than \$1,000,000; • Have a final stated maturity of nine months or less; • At the option of the holder thereof, may be tendered to an issuer of such securities or its designated agent for redemption or purchase at par value or more at least as frequently as every nine months until maturity, earlier redemption, or purchase by an issuer or its designated agent; • Have authorized denominations of \$1000,000 or more and are sold to no more than thirty-five persons each of whom the broker, dealer or municipal securities dealer reasonably believes: (A) has the knowledge and experience necessary to evaluate the merits and risks of the investment; and (B) is not purchasing for more than one account, with a view toward distributing the securities 	<p>Enumerated Value:</p> <ul style="list-style-type: none"> • OfferingLessThan1Million • EntireOfferingMatures9MonthsOrLess • EntireOfferingPuttable9MonthsOrLess • Rule15c212d1iExemptLimitedOffering
	Underwriter Assessment Discount Indicator	<p>Indicates an applicable discount from the standard underwriting assessment under MSRB Rule A-13(b) for the following offerings:</p> <ul style="list-style-type: none"> • For primary offerings in which all securities offered have a final stated maturity less than two years; or • For primary offerings in which all securities offered, at the option of the holder thereof, may be tendered to an issuer of such securities or its designated agent for redemption or purchase at par value or more at least as frequently as every two years until maturity earlier redemption, or purchase by an issuer or its designated agent. 	<p>Enumerated Value:</p> <ul style="list-style-type: none"> • EntireOfferingMatures2YearsOrLess • EntireOfferingPuttable2YearsOrLess
Issue	Issue Type	<p>Indicates whether issue is (i) a new issue (including new money issues and current and advance refunding issues), (ii) an outstanding issue that is being remarketed, or (iii) an outstanding issue that is being refunded</p>	<p>Enumerated Value:</p> <ul style="list-style-type: none"> • NewIssue • Remarketed • Refunded
	Security Type	<p>Indicates whether (i) nine-digit CUSIP numbers are assigned to the securities in the issue, (ii) no CUSIP numbers are assigned to the securities in the issue, or (iii) only a six-digit CUSIP number has been submitted to EMMA for a commercial paper issue</p>	<p>Enumerated Value:</p> <ul style="list-style-type: none"> • CUSIP-9 • CUSIP-6 • Non-CUSIP
	Issuer Name	<p>Full issuer name as it appears on the official statement</p>	<p>Max250Text ex: Emma County Infrastructure Finance Authority</p>
	Issue Description	<p>Full issue description as it appears on the official statement</p>	<p>Max250Text ex: Road Improvement Refunding Bonds, Series 2008A</p>

XML Container	Data Tag	Definition	Data Specification
Issue	Issuer State	Standard state abbreviation	String;StateCode;2 ex: VA
	Issue Closing Date	Date on which the issue is expected to settle	CCYY-MM-DD ex: 2008-12-15
	Issue Dated Date	Dated date of the issue	CCYY-MM-DD ex: 2008-12-01
	Original Dated Date	Original dated date of an issue if a new dated date is assigned for the remarketed issue in which the CUSIP number has not changed	CCYY-MM-DD ex: 2008-12-01
	CUSIP6	Six-digit base CUSIP number for commercial paper issues, as assigned by the CUSIP Service Bureau	String{Min6,Max6} ex: 123456
	Original CUSIP9 Of Remarketed Security	Original nine-digit CUSIP number of the latest maturity of an issue being remarketed if one or more new CUSIP numbers are assigned to the remarketed securities	String{Min9,Max9} ex: 123456AB7
	CUSIP9 Of Latest Maturity On Issue Not Underwritten	Nine-digit CUSIP number of the latest maturity of each issue in the offering that is not underwritten by the underwriter, if any	String{Min9,Max9} ex: 123456AB7
Securities	CUSIP9	Nine-digit CUSIP number for each security, as assigned by the CUSIP Service Bureau – not provided for securities ineligible for CUSIP numbers and for commercial paper issues	String{Min9,Max9} ex: 123456AB7
	Maturity Date	Maturity date of the security – not provided for commercial paper issues	CCYY-MM-DD ex: 2025-12-01
	Security Dated Date	Dated date of security not eligible for CUSIP number assignment	CCYY-MM-DD ex: 2025-12-01
	Maturity Principal Amount	Total principal amount at maturity of the security – not provided for commercial paper issues	Decimal ex: 5000000
	Initial Offering Price or Yield	Initial offering price or yield of the security – not provided for commercial paper issues	Float ex: 100.5 [price] or 3.95 [yield]
	Interest Rate	Interest rate of the security – not provided for commercial paper issues	Decimal ex: 3.9 [fixed rate] or 0 [zero coupon/capital appreciation] or blank [variable rate]

XML Container	Data Tag	Definition	Data Specification
Securities	Underwritten Indicator	If the underwriter partially underwrites an issue, indicates if a security was not underwritten by the underwriter or if the underwriter underwrote only a portion of a security	Enumerated Value: <ul style="list-style-type: none"> • NotUnderwritten • PartiallyUnderwritten
	Par Value Underwritten	If the underwriter partially underwrites a security (i.e., Underwritten Indicator = Partially Underwritten), par value of the security underwritten by underwriter	Decimal ex: 2500000
	Original CUSIP9 of Refunded Security	For a refunded issue, provides original CUSIP number(s) for security(ies) being advance refunded	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Refunded Security	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) being advance refunded, if new CUSIP number is assigned to all or a portion of the refunded security	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Unrefunded Balance	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) not being advance refunded, if new CUSIP number is assigned to all or a portion of the unrefunded balance of the refunded security	String{Min9,Max9} ex: 123456AB7
Document	Document Type	Indicates type(s) of documents available for the offering, including (i) official statement, (ii) preliminary official statement, (iii) advance refunding document, or (iv) remarketing supplement	Enumerated Value: <ul style="list-style-type: none"> • OfficialStatement • PreliminaryOfficialStatement • AdvanceRefundingDocument • RemarketingSupplement
	Document Description	Document name, if any	Max250Text ex: Official Statement or Preliminary Official Statement or Escrow Deposit Agreement or Reoffering Circular
	Document Posting Operation Indicator	Indicates whether file will be appended to any existing files posted for such document or if file will replace all existing files posted for such document	Enumerated Value: <ul style="list-style-type: none"> • AppendToPostedDocument • ReplacePostedDocument
	Document Disclosure Completion Indicator	Indicates whether the file being submitted completes the document disclosure – for a document consisting of a single file, this indicator should reflect “complete” – for a document consisting of multiple files, all files other than the last file should have an indicator reflecting “partial” and the last file should have an indicator reflecting “complete”	Enumerated Value: <ul style="list-style-type: none"> • Partial • Complete
	CUSIP9 Identifier Of Refunding Issue	Nine-digit CUSIP number(s) of the refunding issue	String{Min9,Max9} ex: 123456AB7

XML Container	Data Tag	Definition	Data Specification
Document	Original CUSIP9 of Refunded Security	Original CUSIP number for security being refunded, reflecting the CUSIP number of the security immediately preceding the refunding	String{Min9,Max9} ex: 123456AB7
File	File Order	If a document consists of more than one electronic file, provides file sequence information	Integer
	Date Received from Issuer	Date that the document was received from the issuer	CCYY-MM-DD ex: 2008-12-08
Underwriter	Managing Underwriter MSRB ID	MSRB-issued registration number of the managing underwriter	Max10Text ex: A12345
Limited Offering Contact	OS Contact Organization Name	Long name of the contact organization responsible for making the official statement available upon request	Max140Text ex: MuniBond Dealer
	OS Contact First Name	The first name of the contact person available to making the official statement available upon request	Max25Text ex: Emma
	OS Contact Last Name	The last name of the contact person available to making the official statement available upon request	Max25Text ex: Jones
	OS Contact Title	The title of the contact person available to making the official statement available upon request	Max140Text ex: Senior Vice President
	OS Contact Phone Number	The phone number of the contact person available to making the official statement available upon request	Max14Text ex: 703-555-2222
	OS Contact Phone Number Extension	The extension of the phone number (if any) of the contact person available to making the official statement available upon request	Max6Text ex: 1235
	OS Contact Address	The street address or post office box of the contact person available to making the official statement available upon request	Max140Text ex: 123 Security Road

XML Container	Data Tag	Definition	Data Specification
Limited Offering Contact	OS Contact City	The address city of the contact person available to making the official statement available upon request	Max25Text ex: Alexandria
	OS Contact State	The address state of the contact person available to making the official statement available upon request	String;StateCode;2 ex: VA
	OS Contact Zip Code	The address zip code of the contact person available to making the official statement available upon request	Max14Text ex: 22301-5555
	OS Contact Email Address	The email address of the contact person available to making the official statement available upon request	Max140Text ex: ejones@munibonddealer.com

SUBMISSION
REQUIRED/OPTIONAL DATA ELEMENTS

Set forth below is a table showing the relationship between the various submission types and required and optional data tags. As submission messages are processed by EMMA, the message data content will be verified with exception response messages returned to the submitter system. Response messages will be classified as error, warning or informational.

Submission Data Tags						
Form G-32 Submissions						
EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Submission	Submission Type	R	R	R	R	R
	Submission Status	R	R	R	R	R
	Submission Identifier	O (for subsequent submissions)	R (for subsequent submissions)	O (for subsequent submissions)	R (for subsequent submissions)	R (for subsequent submissions)
	Submission Underwritten CUSIP9 Identifier	O (for subsequent submissions)	N/A	O (for subsequent submissions)	N/A	N/A
Offering	Offering Type	R	R	R	R	R
	OS Availability Status	AA	AA	AA	AA	AA
	POS Availability Status	AA	AA	AA	AA	AA
	Underwriting Spread Disclosure Indicator	R	R	R	R	N/A

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Offering	Underwriting Spread	R (not required if disclosed in official statement or for competitive sale)	R (not required if disclosed in official statement or for competitive sale)	R (not required if disclosed in official statement or for competitive sale)	R (not required if disclosed in official statement or for competitive sale)	N/A
	Underwriter Assessment Exemption Indicator	AA	AA	AA	AA	AA
	Underwriter Assessment Discount Indicator	AA	AA	AA	AA	AA
Issue	Issue Type	R	R	R	R	R
	Security Type	R	R	R	R	R
	Issuer Name	R	R	R	R	R (if Security Type = non-CUSIP)
	Issue Description	R	R	R	R	R (if Security Type = non-CUSIP)
	Issuer State	O	R	O	O	R (if Security Type = non-CUSIP)
	Issue Closing Date	R	R	R	R	N/A
	Issue Dated Date	O	R	O	O	O
Original Dated Date	N/A	N/A	R (only if same CUSIP and dated date has changed)	N/A	N/A	

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Issue	CUSIP6	N/A	N/A	N/A	R	N/A
	Original CUSIP9 Of Remarketed Security	N/A	N/A	R (only if new CUSIP assigned)	N/A	N/A
	CUSIP9 Of Latest Maturity On Issue Not Underwritten	R (only if Non-Underwritten Issue in Offering)	N/A	R (only if Non-Underwritten Issue in Offering)	N/A	N/A
Securities	CUSIP9	R	N/A	R	N/A	AA
	Maturity Date	O	R	O	O	AA
	Security Dated Date	N/A	R	N/A	N/A	N/A
	Maturity Principal Amount	R	R	R	N/A	N/A
	Initial Offering Price or Yield	R	R	R	N/A	N/A
	Interest Rate (1)	O	R	O	O	O
	Underwritten Indicator	R (only if underwrite less than whole Issue)	R (only if underwrite less than whole Issue)	R (only if underwrite less than whole Issue)	N/A	N/A
	Par Value Underwritten	R (only if Underwritten Indicator = PartiallyUnderwritten)	R (only if Underwritten Indicator = PartiallyUnderwritten)	R (only if Underwritten Indicator = PartiallyUnderwritten)	N/A	N/A

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Securities	Original CUSIP9 of Refunded Security	N/A	N/A	N/A	N/A	R
	New CUSIP9 of Refunded Security	N/A	N/A	N/A	N/A	AA
	New CUSIP9 of Unrefunded Balance	N/A	N/A	N/A	N/A	AA
Document	Document Type	R	R	R	R	R
	Document Description	O	O	O	O	O
	Document Posting Operation Indicator	O	O	O	O	O
	Document Disclosure Completion Indicator	R	R	R	R	R
	Original CUSIP9 of Refunded Security	N/A	N/A	N/A	N/A	R
	CUSIP9 Identifier Of Refunding Issue	N/A	N/A	N/A	N/A	R

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
File	File Order	O	O	O	O	O
	Date Received from Issuer	R	R	R	R	R
Underwriter	Managing Underwriter MSRB ID	R	R	R	R	R
Limited Offering Contact	OS Contact Organization Name	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering
	OS Contact First Name	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering
	OS Contact Last Name	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Limited Offering Contact	OS Contact Title	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering
	OS Contact Phone Number	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering
	OS Contact Phone Number Extension	AA	AA	AA	AA	AA
	OS Contact Address	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering

Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Limited Offering Contact	OS Contact City	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)
	OS Contact State	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)
	OS Contact Zip Code	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)
	OS Contact Email Address	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)	R (only if OS Availability Status = OS Available Only From Underwriter_15c212 Exempt LimitedOffering)

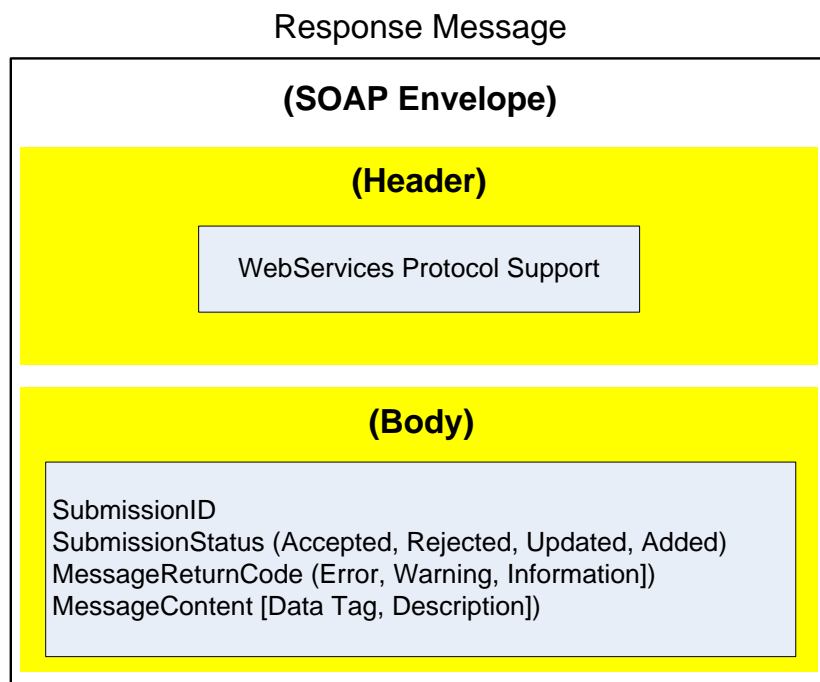
Submission Data Tags						
Form G-32 Submissions EMMA Primary Market Disclosure Service						
XML Container	Data Tag	Primary Market Disclosures				Advance Refunding Disclosures [Refunded Issue]
		[New Issue] CUSIP based (CUSIP-9)	[New Issue] Ineligible for CUSIP Number Assignment (non-CUSIP)	[Remarketed]	[New Issue] Commercial Paper (CUSIP-6)	
Footnotes:						
R	Required for a complete data submission					
O	Optional					
AA	As Applicable					
N/A	Not Applicable – signifies that no data is to be provided for a particular data element either because such data is not needed for such submission or such data will be derived from other sources available to the MSRB – any data supplied for a data element marked as N/A will not be used for purposes of EMMA portal or subscription dissemination					
(1)	Interest Rate should be - Blank for Variable Rate, 0 (zero) for Zero Coupon					

SUBMISSION
VALIDATION RESPONSE MESSAGE MODEL

As submission messages are processed by EMMA, the message content will be verified relative to business rules of expected data relationships by submission type. Exception response messages will be returned to the submitter system when certain types of conditions exist with respect to the data submitted. Response messages are classified as Error, Warning and Info depending on the nature and severity of the exception as follows:

1. Error - message indicates termination of message processing with failure of the intended action. The submitter should take appropriate corrective action and re-submit as appropriate.
2. Warning - message indicates a potential problem that deserves attention and correction as appropriate; however, the requested action is fulfilled.
3. Information – message indicates certain action taken by EMMA that does not materially affect completeness of the submission but of which the submitter should be aware.

An abstract representation of a Response Message, shown below, will be returned to the Submitter System with the Response Message Content, defined in the table below, contained in the body of the message.



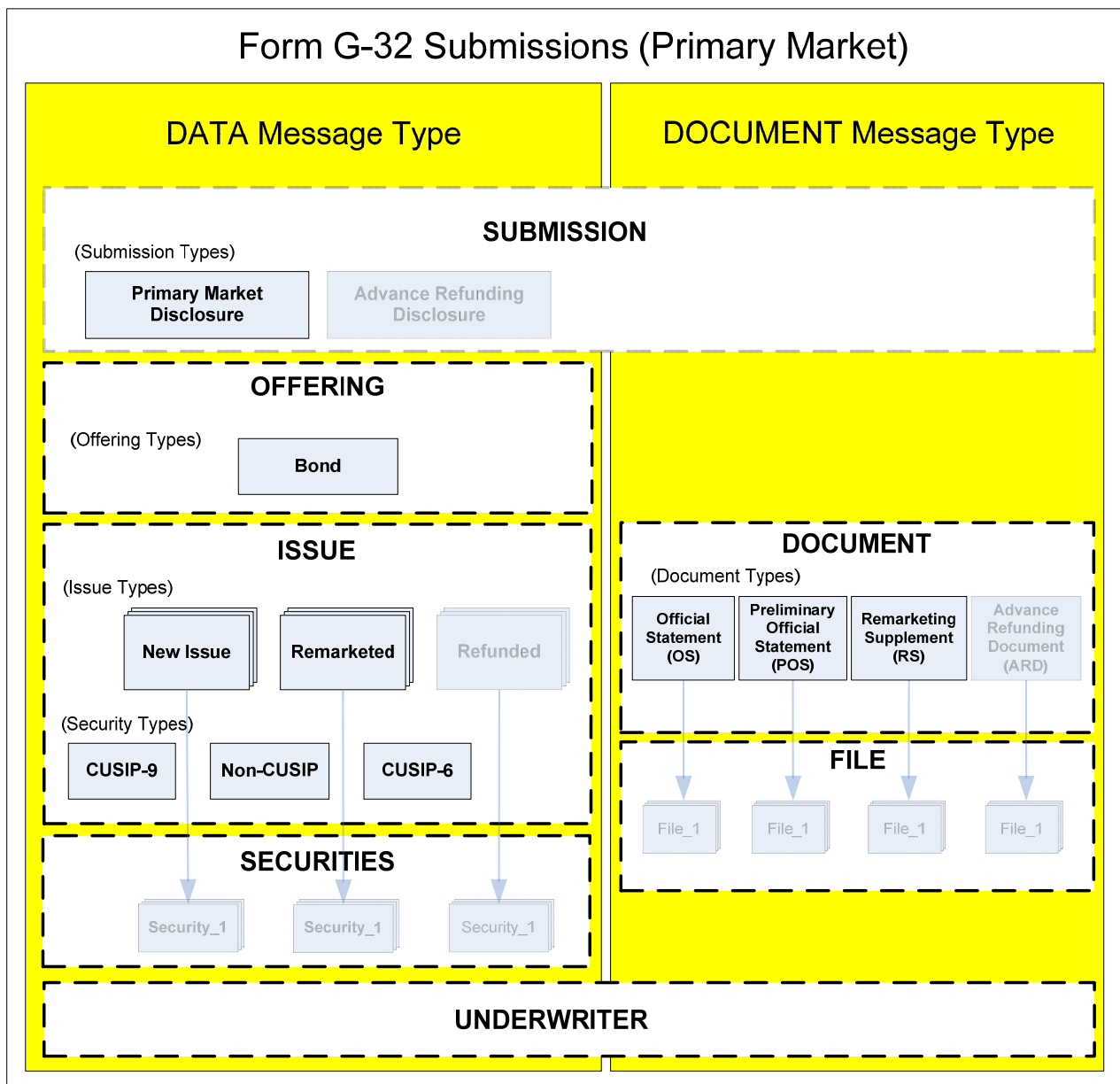
Below is a sample Response Message trace where a submission event has been confirmed as added successfully. This sample is intended to show the general structure of response messages.

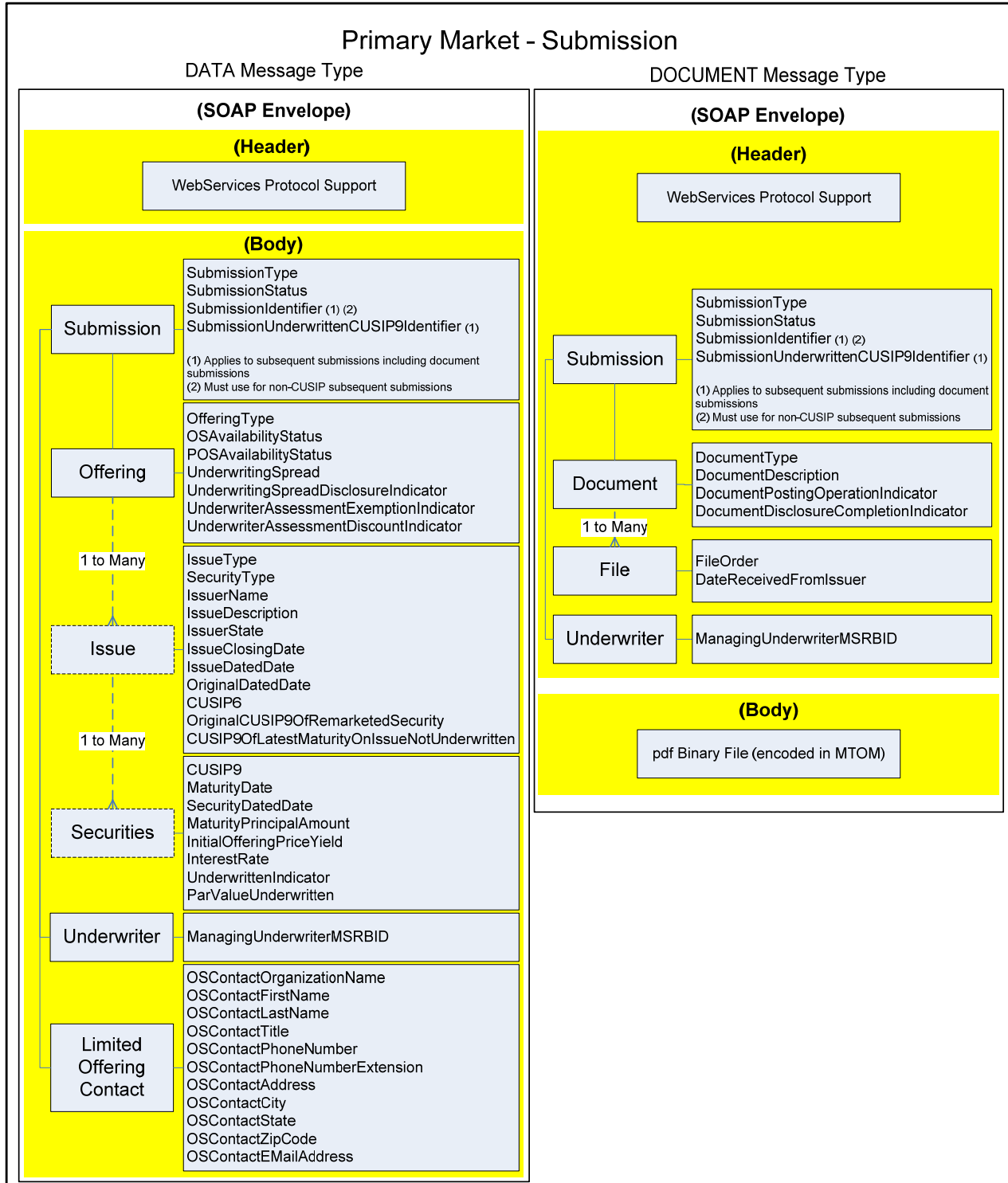
Response Message – Sample Trace File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Header>
    <Action s:mustUnderstand="1"
xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/OpenSubmissi
onResponse
    </Action>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <DisclosureMessageResponse xmlns="http://emma.msrb.org/schemas/disclosuremessages">
      <DisclosureResponseDetails xmlns="http://emma.msrb.org/schemas/disclosureservice">
        <Submission SubmissionID="EA1734" SubmissionStatus="Added"
xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
          </Submission>
        <Message MessageReturnCode="Information" MessageContent="Advance refunding submission added."
xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
          </Message>
        </DisclosureResponseDetails>
      </DisclosureMessageResponse>
    </s:Body>
  </s:Envelope>
```

**SUBMISSION – PRIMARY MARKET
DATA TAG MAPPING**

Set forth below are the information types and allowed values associated with primary market disclosure data and document messages. All primary market data messages will include a submission type of “primary market disclosure” with an offering type of “bond.” Issue and security types are included as appropriate to describe the nature of the offering. Three types of documents may be submitted in a primary market disclosure submission: official statements, preliminary official statements and remarketing supplements. Normally, a document will consist of a single PDF file. If a document consists of multiple files, each file must be submitted in a separate document message.





SOAP (Simple Object Access Protocol) - foundation layer of the web services protocol stack

MTOM (SOAP Message Transmission Optimization Mechanism) - a method of efficiently sending binary data to and from web services

SUBMISSION – PRIMARY MARKET
SAMPLE XML HEADERS

Data Message – Sample Header + Message Trace File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
  <s:Header>
    <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"><u:Timestamp u:Id="_0"><u:Created>2008-08-21T19:58:44.296Z</u:Created><u:Expires>2008-08-21T20:03:44.296Z</u:Expires></u:Timestamp><o:UsernameToken u:Id="uuid-99a8d3c0-8044-4572-a189-2af1f3a246e8-1"><o:Username><!--Removed--></o:Username><o:Password><!--Removed--></o:Password><o:UsernameToken></o:Security>
    <To s:mustUnderstand="1" xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">https://temp-wrk/EmmaDisclosureService/DisclosureService.svc</To>
    <Action s:mustUnderstand="1" xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/OpenSubmission</Action>
  </s:Header>
  <s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <DisclosureMessageType xmlns="http://emma.msrb.org/schemas/disclosuremessages">
      <DisclosureMessage xmlns="http://emma.msrb.org/schemas/disclosureservice">
        <Submission SubmissionStatus="Publish" SubmissionType="PrimaryMarketDisclosure" xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
        </Submission>
        <Offering UnderwritingSpread="235000" OfferingType="Bond" xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
          <Issue IssueClosingDate="2009-10-10" SecurityType="CUSIP9" IssueType="NewIssue" IssuerName="Emma County, Virginia" IssueDescription="Revenue Refundiing Bonds, Series 2009">
            <UnderlyingSecurities>
              <CUSIP9="99106ABJ6" MaturityPrincipalAmount="90000.00" nitialOfferingPriceYield="3.89">
              <CUSIP9="99106ABK4" MaturityPrincipalAmount="100000.00" nitialOfferingPriceYield="3.94">
              <CUSIP9="99106ABL2" MaturityPrincipalAmount="125000.00" nitialOfferingPriceYield="3.99"></Security>
            </UnderlyingSecurities>
          </Issue>
        </Offering>
      </DisclosureMessage>
    </DisclosureMessageType>
  </s:Body>
</s:Envelope>
```

```
                <Underwriter ManagingUnderwriterMSRBID="A12345" xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
                </Underwriter>
            </DisclosureMessage>
        </DisclosureMessageType>
    </s:Body>
</s:Envelope>
```

Document Message – Sample Header File

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/" xmlns:u="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd">
    <s:Header>
        <h:DisclosureDocumentMessageDetails xmlns:h="http://emma.msrb.org/schemas/disclosureservice"
        xmlns="http://emma.msrb.org/schemas/disclosureservice" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns:xsd="http://www.w3.org/2001/XMLSchema">
            <Submission SubmissionType="PrimaryMarketDisclosure"
            xmlns="http://emma.msrb.org/schemas/disclosuremessages/types"><SubmissionIdentifier>EA1292</SubmissionIdentifier>
            </Submission>
            <Document DocumentType="AdvancedRefundingDocument" DocumentPostingOperationIndicator="AppendToPostedDocument"
            DocumentDisclosureCompletionIndicator="Complete" xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
                <UnderlyingFiles>
                    < DateReceivedFromIssuer="2008-08-02"></File>
                </UnderlyingFiles>
            </Document>
            <Underwriter ManagingUnderwriterMSRBID="MSRB2" xmlns="http://emma.msrb.org/schemas/disclosuremessages/types">
            </Underwriter>
        </h:DisclosureDocumentMessageDetails>
        <o:Security s:mustUnderstand="1" xmlns:o="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd"><u:Timestamp u:Id="_0"><u:Created>2008-08-21T19:26:53.468Z</u:Created><u:Expires>2008-08-21T19:31:53.468Z</u:Expires></u:Timestamp>
        <o:UsernameToken u:Id="uid-c3e563e4-bd51-40f7-8c02-3ed0b5a4a1bb-35"><o:Username><!--Removed--></o:Username><o:Password><!--Removed--></o:Password></o:UsernameToken></o:Security>
        <To s:mustUnderstand="1" xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">https://temp-wrk/EmmaDisclosureService/DisclosureService.svc</To>
        <Action s:mustUnderstand="1"
        xmlns="http://schemas.microsoft.com/ws/2005/05/addressing/none">http://emma.msrb.org/schemas/disclosureservice/IDisclosureService/PostDocumentFile</Action>
    </s:Header>
```

<s:Body xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">

[BINARY STREAM OF PDF FILE]

</s:Body>

</s:Envelope>

**SUBMISSION – PRIMARY MARKET
SPECIAL DATA & DOCUMENT SUBMISSION CASES**

DATA SUBMISSIONS

Standard Data Submission

For an offering for which (i) an official statement is submitted, (ii) a single underwriter or underwriting syndicate underwrites all issues in the offering, (iii) CUSIP numbers are assigned to the securities, and (iv) the underwriting spread is disclosed in the official statement, the minimum data elements to be provided in a data message, together with the value to be selected or entered, would be:

- ***submission data*** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘publish’)

- ***offering data*** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread disclosure indicator (select ‘disclosed in official statement’)

- ***issue data*** (each element provided for each issue in the offering) –
 - (i) issue type (select ‘new issue’)
 - (ii) security type (select ‘CUSIP-9’)
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date)

- ***security data*** (each element provided for each security of each issue in the offering) –
 - (i) CUSIP-9 (enter nine-digit number)
 - (ii) maturity principal amount (enter value)
 - (iii) initial offering price or yield (enter value)

- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

- ***limited offering contact data*** – no limited offering contact data submitted

Special Data Submission Cases

Additional or different data elements to be included in special data submission cases are described below.

Underwriting Spread Disclosure Special Cases

Underwriting spread not disclosed in official statement. If the underwriting spread for a negotiated offering is not disclosed in the official statement (including any case in which no official statement is produced), offering data would be:¹

- ***offering data*** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread (enter value)

Underwriting spread not disclosed for competitively sold offering. If the underwriting spread for an offering sold on a competitive bid basis is not disclosed in the official statement or as a data element, offering data would be:

- ***offering data*** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread disclosure indicator (select ‘not disclosed – competitive sale’)

Official Statement Special Cases

No official statement produced (preliminary official statement status). If no official statement was produced for an offering exempt from Rule 15c2-12, offering data would be:

- ***offering data*** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread (enter value)
 - (iii) OS availability status (select applicable exemption under Rule 15c2-12)²
 - (iv) POS availability status (select ‘POS submitted’ if a preliminary official statement is submitted or ‘no POS prepared’ if no preliminary official statement was produced)

¹ In this and the following special cases, data to be submitted would remain the same as for the standard data submission described above except to the extent shown.

² An exemption would be selected only if no official statement was produced in connection with an offering exempt under Rule 15c2-12. No exemption would be selected if an official statement was in fact produced for such an exempted offering, but instead the official statement would be submitted except in the case of certain limited offerings as described below.

Late submission of official statement (preliminary official statement status). If the official statement is not available by closing, offering data would be:

- **offering data** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread (enter value)³
 - (iii) OS availability status (select ‘OS not available at closing’)
 - (iv) POS availability status (select ‘POS submitted’ if a preliminary official statement is submitted or ‘no POS prepared’ if no preliminary official statement was produced)

Official statement for limited offering available only from the underwriter. If the official statement for an offering exempt from Rule 15c2-12(d)(1)(i) (limited offering) is produced but will not be submitted to EMMA, offering data and limited offering contact data would be:

- **offering data** –
 - (i) offering type (select ‘bond’)
 - (ii) underwriting spread disclosure indicator (select ‘disclosed in official statement’)⁴
 - (iii) OS availability status (select ‘OS available only from underwriter for limited offering’)⁵
- **limited offering contact data** – no limited offering contact data submitted
 - (i) OS contact organization name (enter name of organization from which official statement may be requested)
 - (ii) OS contact first name (enter first name of individual from whom official statement may be requested)
 - (iii) OS contact last name (enter first name of individual from whom official statement may be requested)
 - (iv) OS contact title (enter job title)
 - (v) OS contact phone number (enter phone number)
 - (vi) OS contact phone number extension (optional)

³ Underwriting spread would be required to be disclosed as a submitted data element in any case in which the official statement is not submitted by closing, even if the official statement is subsequently submitted and includes the underwriting spread.

⁴ In this and following special cases, if underwriting spread is not disclosed in the official statement for an offering sold on other than a competitive bid basis, then the underwriting spread would be required to be disclosed as a submitted data element.

⁵ This would serve as an affirmative certification by the underwriter that the offering qualifies in all respects as a limited offering pursuant to Rule 15c2-12(d)(1)(i).

- (vii) OS contact address (enter mailing address)
- (viii) OS contact city (enter city)
- (ix) OS contact state (enter state)
- (x) OS contact zip code (enter zip code)
- (xi) OS contact email address (enter email address to which requests for the official statement may be sent)

Underwriting Assessment Special Cases

Offering exempt from MSRB underwriting assessment. If the entire offering (*i.e.*, all issues in the offering) qualifies for an exemption from the MSRB's underwriting assessment under Rule A-13(a), offering data would be:

- ***offering data*** –
 - (i) offering type (select 'bond')
 - (ii) underwriting spread disclosure indicator (select 'disclosed in official statement')
 - (iii) underwriting assessment exemption indicator (select applicable exemption under MSRB Rule A-13(a))

Offering qualifies for discounted MSRB underwriting assessment. If the entire offering (*i.e.*, all issues in the offering) qualifies for a discounted underwriting assessment under Rule A-13(b), offering data would be:

- ***offering data*** –
 - (i) offering type (select 'bond')
 - (ii) underwriting spread disclosure indicator (select 'disclosed in official statement')
 - (iii) underwriting assessment discount indicator (select applicable basis for discount under MSRB Rule A-13(b))

Partial Underwriting

Underwrite less than entire principal amount of an issue. If the underwriter underwrites only a portion of an issue (*i.e.*, a different underwriter underwrites the remaining portion of that issue) and therefore should be billed an underwriting assessment under Rule A-13 for only the underwritten portion of the issue, issue data and security data would be:

- ***issue data*** –
 - (i) issue type (select 'new issue')
 - (ii) security type (select 'CUSIP-9')
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date)
- ***security data*** (provided as indicated) –

- (i) CUSIP-9 (enter nine-digit number for every security in issue, regardless of whether underwritten by underwriter)
- (ii) maturity principal amount (enter value for every security in issue, regardless of whether underwritten by underwriter)
- (iii) underwritten indicator (use only for a security not underwritten by underwriter by selecting 'not underwritten' or a security only partially underwritten by underwriter by selecting 'partially underwritten')
- (iv) initial offering price or yield (enter value for only those securities in issue underwritten in whole or in part by underwriter)
- (v) par value underwritten (used solely for a security underwritten only in part by underwriter – enter principal amount underwritten by underwriter)

An issue in offering underwritten by different underwriter. If any issues in the offering are underwritten by a different underwriter, issue data would be as follows:

- ***issue data*** (for each issue underwritten in whole or in part by underwriter) –
 - (i) issue type (select 'new issue')
 - (ii) security type (select 'CUSIP-9')
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date)
- ***issue data*** (for each issue underwritten in its entirety by a different underwriter) –
 - (i) CUSIP-9 of latest maturity of issue not underwritten (enter nine-digit number)

No CUSIP Numbers

If no CUSIP numbers have been assigned to the securities in an issue due to ineligibility for CUSIP number assignment, issue data and security data would be as follows:

- ***issue data*** (each element provided for each issue ineligible for CUSIP number assignment) –
 - (i) issue type (select 'new issue')
 - (ii) security type (select 'non-CUSIP')
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date; if securities are to be issued in multiple tranches on different dates, enter date of initial issuance)
 - (vi) issuer state (enter name)
 - (vii) issue dated date (enter date)
 - (viii) CUSIP-6 (optional – enter six-digit number typically assigned to issuer for other offerings, if any)

- **security data** (each element provided for each security in non-CUSIP issue) –
 - (i) maturity principal amount (enter value)
 - (ii) initial offering price or yield (enter value)
 - (iii) maturity date (enter date)
 - (iv) interest rate (enter value)
 - (v) security dated date (enter date – use only if security dated date is different from issue dated date, generally if securities are issued in multiple tranches on different dates)

Commercial Paper Issue

If only a six-digit CUSIP number is assigned for a commercial paper issue, issue data would be as follows and no security data would be provided:

- **issue data** (each element provided for each commercial paper issue) –
 - (i) issue type (select ‘new issue’)
 - (ii) security type (select ‘CUSIP-6’)
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter date)
 - (vi) CUSIP-6 (enter six-digit number)
- **security data** – no security data submitted

Remarketed Issue

If an outstanding issue is being remarketed, issue data would be as follows:

- **issue data** (each element provided for each remarketed issue) –
 - (i) issue type (select ‘remarketed’)
 - (ii) security type (select ‘CUSIP-9’)
 - (iii) issuer name (enter full plain English name as it appears in the official statement)
 - (iv) issue description (enter full plain English description as it appears in the official statement)
 - (v) issue closing date (enter closing date of the remarketing)
 - (vi) original CUSIP-9 of remarketed security (if new CUSIP-9s assigned for remarketed issue, enter original nine-digit number of latest maturity of remarketed issue)

Amendment or Supplement to Initial Data Submission

If data previously submitted in a data submission is to be amended or supplement by a subsequent data submission, the entire set of data must be resubmitted (*i.e.*, the subsequent submission will overwrite the initial submission) and the submission data would be as follows:

- ***submission data*** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘publish’)
 - (iii) submission identifier (enter identification number assigned by EMMA to initial data message submission – do not use if submission underwritten CUSIP-9 identifier is used) **or**
 - (iv) submission underwritten CUSIP-9 identifier (enter nine-digit number of latest maturity in the offering – do not use if submission identifier is used)

Cancellation of Offering

If data or documents have previously been submitted in connection with an offering and such offering is subsequently cancelled, submission data would be as follows and no other data categories would be provided:

- ***submission data*** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘notice of cancellation of offering’)
 - (iii) submission identifier (enter identification number assigned by EMMA to initial data message submission – do not use if submission underwritten CUSIP-9 identifier is used) **or**
 - (iv) submission underwritten CUSIP-9 identifier (enter nine-digit number of latest maturity in the offering – do not use if submission identifier is used)

DOCUMENT SUBMISSIONS

Standard Document Submission

For an offering for which an official statement is submitted as a single PDF file, the minimum elements to be provided in a document message, together with the value to be selected or entered, would be, in addition to the PDF file of the document itself:

- ***submission data*** –
 - (i) submission type (select ‘primary market disclosure’)
 - (ii) submission status (select ‘publish’)
 - (iii) submission identifier (enter identification number assigned by EMMA to related data message – do not use if submission underwritten CUSIP-9 identifier is used)
or
 - (iv) submission underwritten CUSIP-9 identifier (enter nine-digit number of latest maturity in the offering included in related data message – do not use if submission identifier is used)

- ***document data*** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document description (optional – if no submitter supplied document name provided, EMMA will provide default description)

- ***file data*** –
 - (i) date received from issuer (enter date)

- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

Special Document Submission Cases

Additional or different data elements to be included in special document submission cases are described below.

Official Statement Consisting of Multiple Files

If the official statement is submitted as multiple PDF files, each file must be submitted in a separate document message. The separate files would be linked through a common submission identifier or submission underwritten CUSIP-9 identifier included in the submission data of each document message. The document data and file data for the PDF files submitted would be (assuming for illustration purposes that the official statement document consists of three separate PDF files):

First PDF file:

- **document data** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘partial’)

- **file data** –
 - (i) date received from issuer (enter date)
 - (ii) file order (enter ‘1’)

Second PDF file:

- **document data** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘partial disclosure’)
 - (iii) document posting operation indicator (select ‘append to posted document’)

- **file data** –
 - (i) date received from issuer (enter date)
 - (ii) file order (enter ‘2’)

Third (last) PDF file:

- **document data** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘append to posted document’)

- **file data** –
 - (i) date received from issuer (enter date)
 - (ii) file order (enter ‘3’)

Amendment to Official Statement

Amendment as appended file. If an official statement has previously been submitted and a submitter is now submitting an amendment to the official statement to be displayed as an additional file on EMMA, the document data and file data for the amendment would be:

- **document data** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘append to posted document’)

- **file data** –
 - (i) date received from issuer (enter date)

Amendment as replacement file. If an official statement has previously been submitted and a submitter is now submitting an amendment to the official statement that is to replace the

existing file or files on display on EMMA, the document data and file data for the amendment would be:

- ***document data*** –
 - (i) document type (select ‘official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘replace posted document’)

- ***file data*** –
 - (i) date received from issuer (enter date)

Preliminary Official Statement

If a preliminary official statement is being submitted where such submission has been noted in the POS submission status of the related data message, the document data and file data for the preliminary official statement would be:

- ***document data*** –
 - (i) document type (select ‘preliminary official statement’)
 - (ii) document disclosure completion indicator (select ‘complete’)

- ***file data*** –
 - (i) date received from issuer (enter date)

Remarketing Supplement

If a remarketing supplement is being submitted for a remarketing where such document is to be displayed on EMMA along with an original official statement for the issue available through EMMA,⁶ the document data and file data for the remarketing supplement would be:

- ***document data*** –
 - (i) document type (select ‘remarketing supplement’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) original CUSIP-9 of latest maturity of remarketed issue (enter original nine-digit number⁷ – use only if CUSIP-9 is changed due to the remarketing)

⁶ The disclosure document for a remarketing should be submitted as an official statement, not as a remarketing supplement, if the full document is being submitted.

⁷ If the CUSIP-9 is not changed due to the remarketing, the current CUSIP-9 would be submitted as the original CUSIP-9.

- *file data* –
 - (i) date received from issuer (enter date)

**SUBMISSION – PRIMARY MARKET
SAMPLE DATA & DOCUMENT XML MESSAGES**

NEW ISSUE SUBMISSION

Underwriter A (MSRB ID A99955) is making a submission in connection with an offering consisting of two series of bonds described in a single official statement. The bonds were purchased in a negotiated offering and the underwriting spread is disclosed in the official statement. CUSIP numbers have been assigned by the CUSIP Service Bureau to all securities in the offering. The underwriting closes on December 18, 2008. The official statement, titled “Offering Circular,” was received from the issuer on December 5, 2008 and is being submitted to EMMA by the underwriter in a timely manner as a single PDF file. The two series of bonds are being underwritten as follows:

Emma City Industrial Development Agency Public Facility Improvement Revenue Bonds (2008 EMMA University Project), Series A

<u>Maturity Date</u>	<u>CUSIP Number</u>	<u>Maturity Principal Amount</u>	<u>Initial Offering Price/Yield</u>
12/01/2009	699438AJ7	\$255,000	3.88%
12/01/2010	699438AK4	\$265,000	3.92%
12/01/2011	699438AL2	\$275,000	3.98%
12/01/2012	699438AM0	\$290,000	4.00%
12/01/2013	699438AN8	\$300,000	4.00%
12/01/2014	699438AP3	\$315,000	3.95%
12/01/2030	699438BD9	\$7,380,000	3.90%

Underwriter A is underwriting the full amount of the Series A serial bonds maturing in 2009 through 2011. A different underwriter (Underwriter B) is underwriting the full amount of the Series A serial bonds maturing in 2012 through 2014. Underwriter A and Underwriter B are splitting the Series A term bonds maturing in 2030, with Underwriter A underwriting \$4,000,000 of the term bonds.

Emma City Industrial Development Agency Public Facility Improvement Revenue Refunding Bonds (2008 EMMA University Project), Series B

<u>Maturity Date</u>	<u>CUSIP Number</u>	<u>Maturity Principal Amount</u>	<u>Initial Offering Price/Yield</u>
12/01/2009	699438A91	\$315,000	3.75%
12/01/2010	699438A93	\$335,000	3.75%
12/01/2011	699438AA5	\$355,000	3.80%
12/01/2012	699438AB7	\$370,000	3.80%
12/01/2013	699438AC9	\$390,000	3.85%
12/01/2014	699438AD2	\$410,000	3.90%
12/01/2015	699438AE4	\$430,000	3.95%
12/01/2016	699438AF6	\$470,000	3.98%
12/01/2017	699438AG8	\$530,000	4.00%
12/01/2023	699438AH1	\$2,500,000	4.20%

Underwriter A does not underwrite any portion of the Series B bonds. The Series B bonds are underwritten in whole by Underwriter B.

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish" />
  <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
    <Issue IssueType="NewIssue" SecurityType="CUSIP-9" IssuerName="Emma City Industrial Development Agency" IssueDescription="Public
    Improvement Revenue Bonds (2008 EMMA University Project), Series A" IssueClosingDate="2008-12-18">
      <UnderlyingSecurities>
        <Security CUSIP9="699438AJ7" MaturityPrincipalAmount="255000.00" InitialOfferingPriceYield="3.88"/>
        <Security CUSIP9="699438AK4" MaturityPrincipalAmount="265000.00" InitialOfferingPriceYield="3.92"/>
        <Security CUSIP9="699438AL2" MaturityPrincipalAmount="275000.00" InitialOfferingPriceYield="3.98"/>
        <Security CUSIP9="699438AM0" MaturityPrincipalAmount="290000.00" UnderwrittenIndicator="NotUnderwritten"/>
        <Security CUSIP9="699438AN8" MaturityPrincipalAmount="300000.00" UnderwrittenIndicator="NotUnderwritten"/>
        <Security CUSIP9="699438AP3" MaturityPrincipalAmount="315000.00" UnderwrittenIndicator="NotUnderwritten"/>
        <Security CUSIP9="699438BD9" MaturityPrincipalAmount="7380000.00" UnderwrittenIndicator="PartiallyUnderwritten"
        ParValueUnderwritten="4000000.00" InitialOfferingPriceYield="3.90"/>
      </UnderlyingSecurities>
    </Issue>
  <Issue IssueType="NewIssue" SecurityType="CUSIP-9" CUSIP9OfLatestMaturityOnIssueNotUnderwritten="699438AH1">
```

```
</Issue>
</Offering>
<Underwriter ManagingUnderwriterMSRBID="L099955"/>
</DisclosureMessage>
```

Document Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation=" ...">
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345678</SubmissionIdentifier>
  </Submission>
  <Document DocumentDisclosureCompletionIndicator="Complete" DocumentType="OfficialStatement" DocumentDescription="Offering Circular">
    <UnderlyingFiles>
      <File DateReceivedFromIssuer="2008-12-05" />
    </UnderlyingFiles>
  </Document>
  <Underwriter ManagingUnderwriterMSRBID="A99955"/>
</DisclosureMessage>
```

REMARKETING SUBMISSION

Remarketing agent A (MSRB ID BQ99999) is making a submission in connection with a remarketing of an outstanding issue of bonds originally dated April 10, 2003. The securities retain their original CUSIP number but will have a new dated date. The remarketing will close on May 27, 2009. The issuer has prepared a remarketing supplement, delivered to the remarketing agent on May 26, 2009, designed to be used in combination with the original official statement for the initial issue, already available on EMMA. The remarketing agent's compensation for the remarketing of the issue is disclosed in the official statement.

The issue, as remarketed, is as follows:

Health Facilities Authority of Emma County Variable Rate Demand Retirement Facility Revenue Bonds (Muni Retirement Corporation Project) Series 2008A

<u>Maturity Date</u>	<u>CUSIP Number</u>	<u>Maturity Principal Amount</u>	<u>Initial Offering Price/Yield</u>
4/01/2033	49833RAX3	\$30,000,000	100%

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish" />
  <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
    <Issue IssueType="Remarketed" SecurityType="CUSIP-9" IssuerName="Health Facilities Authority of Emma County"
      IssueDescription="Variable Rate Demand Retirement Facility Revenue Bonds (Muni Retirement Corporation Project) Series 2008A"
      OriginalDatedDate="2003-04-10" IssueClosingDate="2009-05-27">
      <UnderlyingSecurities>
        <Security CUSIP9="49833RAX3" MaturityPrincipalAmount="30000000.00" InitialOfferingPriceYield="100.0"/>
      </UnderlyingSecurities>
    </Issue>
  </Offering>
  <Underwriter ManagingUnderwriterMSRBID="BQ99999"/>
</DisclosureMessage>
```

Document Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345678</SubmissionIdentifier>
  </Submission>
  <Document DocumentDisclosureCompletionIndicator="Complete" DocumentType="RemarketingSupplement"
    DocumentDescription="Reoffering Memorandum">
    <UnderlyingFiles>
      <File DateReceivedFromIssuer="2009-05-26"/>
    </UnderlyingFiles>
  </Document>
  <Underwriter ManagingUnderwriterMSRBID="BQ99999"/>
</DisclosureMessage>
```

COMMERCIAL PAPER SUBMISSION

Underwriter A (MSRB ID A9999944) is making a submission in connection with the issuance of an initial tranche of commercial paper, closing on May 22, 2009. The commercial paper program has been assigned a six-digit CUSIP number of 694004 from the CUSIP Service Bureau. The issuer has prepared a commercial paper memorandum, delivered to the underwriter on May 20, 2009. The underwriter's compensation is disclosed in the official statement. The commercial paper offering is exempt from the MSRB's underwriting assessment under Rule A-13(a)(ii) as an offering having a final stated maturity of nine months or less.

The commercial paper issue, to be offered at a price of 100%, is known as **EMMA County, Virginia Commercial Paper Program A-2**.

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation=" ..." >
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"/>
  <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
    <Issue IssueType="NewIssue" SecurityType="CUSIP-6" CUSIP6="694004" IssuerName="Emma County, Virginia"
      IssueDescription="Commercial Paper Program A-2" IssueClosingDate="2009-05-22">
    </Issue>
    <UnderwriterAssessmentExemptionIndicator>EntireOfferingMatures9MonthsOrLess</UnderwriterAssessmentExemptionIndicator>
  </Offering>
  <Underwriter ManagingUnderwriterMSRBID="A9999944"/>
</DisclosureMessage>
```

Document Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation=" ..." >
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345679</SubmissionIdentifier>
  </Submission>
  <Document DocumentDisclosureCompletionIndicator="Complete" DocumentType="OfficialStatement" DocumentDescription="Commercial Paper
```

Memorandum">
<UnderlyingFiles>
 <File DateReceivedFromIssuer="2009-05-20"/>
</UnderlyingFiles>
</Document>
<Underwriter ManagingUnderwriterMSRBID="A9999944"/>
</DisclosureMessage>

SUBMISSION OF OFFERING HAVING NO CUSIP NUMBERS

Underwriter A (MSRB ID A99991) is making a submission in connection with the offering of warrants that are ineligible for CUSIP number assignment by the CUSIP Service Bureau. Because the principal amount of the entire offering is under \$1 million, the offering is exempt from Exchange Act Rule 15c2-12 and no official statement has been produced by the issuer. However, a preliminary official statement, consisting of two separate PDF files (the main text of the disclosure document and a separate Appendix A describing the issuer, including its financial statements). Closing on the warrants is on April 26, 2009, which is also the dated date of this initial offering of the warrants (additional warrants may be issued in the future, which would have different dated dates). The underwriter was paid an underwriting fee of \$1,250 for underwriting the warrants.

The warrants are as follows:

Sanitary Improvement District No. 4858-1 of Emma County, Nebraska Construction Warrants, First Series

<u>Maturity Date</u>	<u>Maturity Principal Amount</u>	<u>Interest Rate</u>	<u>Initial Offering Price/Yield</u>
4/26/2014	\$30,000,000	6.50%	100%

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"/>
  <Offering OfferingType="Bond" OSAvailabilityStatus="OSNotProduced_15c212ExemptSmallOffering" POSAvailabilityStatus="POSSubmitted"
    UnderwritingSpread="1250.00">
    <Issue IssueType="NewIssue" SecurityType="non-CUSIP" IssuerState="NE" IssuerName="Sanitary Improvement District No. 4858-1 of
      Emma County, Nebraska" IssueDescription="Construction Warrants, First Series" IssueClosingDate="2009-04-26"
      IssueDatedDate="2009-04-26">
      <UnderlyingSecurities>
        <Security SecurityDatedDate="2009-04-26" MaturityDate="2014-04-26" MaturityPrincipalAmount="149137.36"
          InterestRate="6.50" InitialOfferingPriceYield="100.0"/>
      </UnderlyingSecurities>
    </Issue>
  </Offering>
</DisclosureMessage>
```

```
</Issue>
</Offering>
<Underwriter ManagingUnderwriterMSRBID="A99991"/>
</DisclosureMessage>
```

Document Messages (2 files)

FILE#1

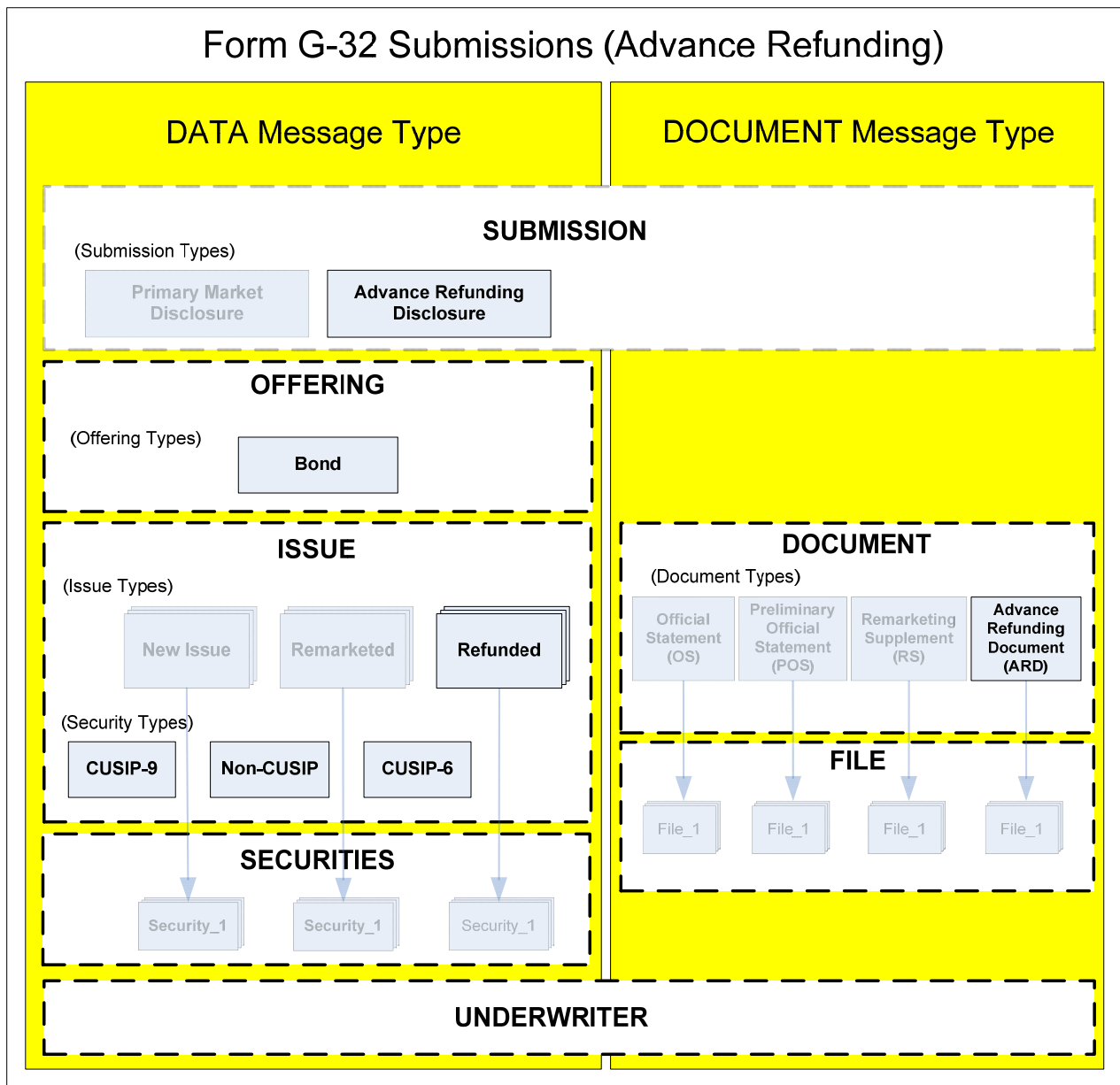
```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation=" ..." >
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345679</SubmissionIdentifier>
  </Submission>
  <Document DocumentPostingOperationIndicator="AppendToPostedDocment" DocumentDisclosureCompletionIndicator="Partial"
    DocumentType="PreliminaryOfficialStatement">
    <UnderlyingFiles>
      <File FileOrder="1" DateReceivedFromIssuer="2009-04-22"/>
    </UnderlyingFiles>
  </Document>
  <Underwriter ManagingUnderwriterMSRBID="A99991"/>
</DisclosureMessage>
```

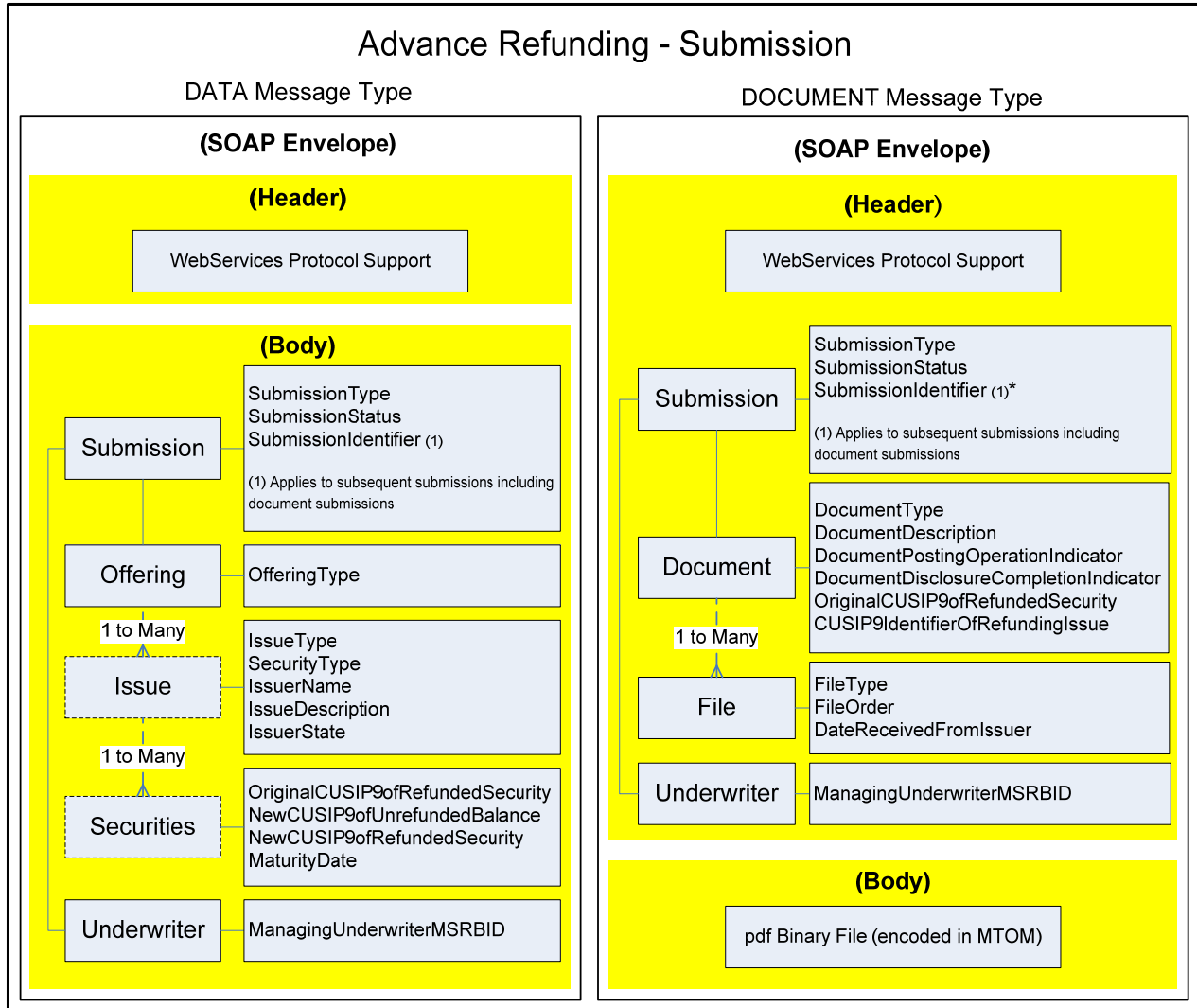
FILE#2

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation=" ..." >
  <Submission SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345679</SubmissionIdentifier>
  </Submission>
  <Document DocumentPostingOperationIndicator="AppendToPostedDocment" DocumentDisclosureCompletionIndicator="Complete"
    DocumentType="PreliminaryOfficialStatement">
    <UnderlyingFiles>
      <File FileOrder="2" DateReceivedFromIssuer="2009-04-22"/>
    </UnderlyingFiles>
  </Document>
  <Underwriter ManagingUnderwriterMSRBID="A99991"/>
</DisclosureMessage>
```

**SUBMISSION – ADVANCE REFUNDING
DATA TAG MAPPING**

Set forth below are the information types and allowed values associated with advance refunding disclosure data and document messages. All advance refunding data messages will include a submission type of “advance refunding disclosure” with an offering type of “bond.” Issue and security types are included as appropriate to describe the nature of the offering. Advance refunding document is the only type of document that may be submitted in an advance refunding disclosure submission. Normally, a document will consist of a single PDF file. If a document consists of multiple files, each file must be submitted in a separate document message.





SOAP (Simple Object Access Protocol) - foundation layer of the web services protocol stack

MTOM (SOAP Message Transmission Optimization Mechanism) - a method of efficiently sending binary data to and from web services

**SUBMISSION – ADVANCE REFUNDING
SPECIAL DATA & DOCUMENT SUBMISSION CASES**

DATA SUBMISSIONS

Standard Data Submission

For an advance refunding in which (i) each security that is refunded is refunded in whole and (ii) CUSIP numbers had been assigned to the refunded securities, the minimum data elements to be provided in a data message, together with the value to be selected or entered, would be:

- ***submission data*** –
 - (i) submission type (select ‘advance refunding disclosure’)
 - (ii) submission status (select ‘publish’)

- ***offering data*** –
 - (i) offering type (select ‘bond’)

- ***issue data*** (each element provided for each issue refunded in whole or in part in an advance refunding) –
 - (i) issue type (select ‘refunded’)
 - (ii) security type (select ‘CUSIP-9’)

- ***security data*** (provided for each refunded security of each refunded issue – data not to be submitted for any security that is not refunded) –
 - (i) original CUSIP-9 of refunded security¹ (enter nine-digit number)

- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

Special Data Submission Cases

Additional or different data elements to be included in special data submission cases are described below.

¹ The data message for an advance refunding disclosure submission would contain information about all refunded securities in an advance refunding. The document message in which an advance refunding document is submitted would contain information about only those refunded securities to which such advance refunding document applies, as described below.

Partial Refunding of a Security

If less than all of a specific security is being advance refunded and, as a result, new CUSIP numbers have been assigned to the refunded portion and/or to the unrefunded balance, the security data would be:

- ***security data*** (provided for each refunded security of each refunded issue, as indicated – data not to be submitted for any security that is not refunded) –
 - (i) original CUSIP-9 of refunded security (enter nine-digit number)
 - (ii) maturity date (enter date)
 - (iii) new CUSIP-9 of refunded security, if assigned (enter nine-digit number as applicable)
 - (iv) new CUSIP-9 of unrefunded balance, if assigned (enter nine-digit number as applicable)

Refunding of an Issue With No CUSIP Numbers

If no CUSIP numbers had been assigned to the securities being refunded due to ineligibility for CUSIP number assignment, the issue data and security data would be:

- ***issue data*** (each element provided for each issue refunded in whole or in part) –
 - (i) issue type (select ‘refunded’)
 - (ii) security type (select ‘Non-CUSIP’)
 - (iii) issuer name (enter full plain English name of issuer of refunded issue)
 - (iv) issue description (enter full plain English description of refunded issue)
 - (v) issuer state (enter name)
 - (vi) issue dated date (enter date)
- ***security data*** (provided for each refunded security of each refunded issue in an advance refunding – data not to be submitted for any security that is not refunded) –
 - (i) maturity date (enter date)

DOCUMENT SUBMISSIONS

Standard Document Submission

For an advance refunding for which a single advance refunding document is submitted as a single PDF file, the minimum elements to be provided in a document message, together with the value to be selected or entered, would be, in addition to the PDF file of the document itself:

- ***submission data*** –
 - (i) submission type (select ‘advance refunding disclosure’)
 - (ii) submission status (select ‘publish’)
 - (iii) submission identifier (enter identification number assigned by EMMA to related data message)

- ***document data*** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document description (optional – if no submitter supplied document name provided, EMMA will provide default description)
 - (iv) original CUSIP-9 of refunded security (enter nine-digit number for each refunded security applicable to such document)
 - (v) CUSIP-9 identifier of refunding issue (enter nine-digit number of the latest maturity of each advance refunding issue applicable to such document)

- ***file data*** –
 - (i) date received from issuer (enter date)

- ***underwriter data*** –
 - (i) managing underwriter MSRB ID (enter MSRB ID)

Special Document Submission Cases

Additional or different data elements to be included in special document submission cases are described below.

Advance Refunding Document Consisting of Multiple Files

If the advance refunding document is submitted as multiple PDF files, each file must be submitted in a separate document message. The separate files would be linked through a common submission identifier included in the submission data of each document message. The document data and file data for the PDF files submitted would be (assuming for illustration purposes that the advance refunding document consists of two separate PDF files):

First PDF file:

- **document data** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘partial’)
- **file data** –
 - (i) date received from issuer (enter date)
 - (iii) file order (enter ‘1’)

Second PDF file:

- **document data** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘append to posted document’)
- **file data** –
 - (i) date received from issuer (enter date)
 - (ii) file order (enter ‘2’)

Amendment to Advance Refunding Document

Amendment as appended file. If an advance refunding document has previously been submitted and a submitter is now submitting an amendment to the advance refunding document to be displayed as an additional file on EMMA, the document data and file data for the amendment would be:

- **document data** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘append to posted document’)
- **file data** –
 - (i) date received from issuer (enter date)

Amendment as replacement file. If an advance refunding document has previously been submitted and a submitter is now submitting an amendment to the advance refunding document that is to replace the existing file or files on display on EMMA, the file data for the amendment would be:

- **document data** –
 - (i) document type (select ‘advance refunding document’)
 - (ii) document disclosure completion indicator (select ‘complete’)
 - (iii) document posting operation indicator (select ‘replace posted document’)

- *file data* –
 - (i) date received from issuer (enter date)

**SUBMISSION – ADVANCE REFUNDING
SAMPLE DATA & DOCUMENT XML MESSAGES**

ADVANCE REFUNDING SUBMISSION

Underwriter A (MSRB ID A99992) is making a submission in connection with an offering of advance refunding bonds. The new issue (refunding) bonds are as follows:

Hospital and Higher Education Facilities Authority of Emma County Hospital Revenue Refunding Bonds (Emma Obligated Group Issue), Series 2009

<u>Maturity Date</u>	<u>CUSIP Number</u>	<u>Maturity Principal Amount</u>	<u>Initial Offering Price/Yield</u>
12/01/2010	197485AS7	\$655,000	3.80%
12/01/2011	197485AT5	\$760,000	3.90%
12/01/2012	197485AU3	\$875,000	3.95%
12/01/2013	197485AV1	\$990,000	4.00%
12/01/2014	197485AW8	\$1,100,000	4.05%
12/01/2015	197485AX6	\$1,315,000	4.10%
12/01/2030	197485AY4	\$10,300,000	4.25%

The new refunding bonds advance refund two outstanding issues of bonds. The issuer executes two separate advance refunding documents, titled “Escrow Deposit Agreement – 1998 Issue” and “Escrow Deposit Agreement – 2001 Issue,” in connection with the refunded bonds. The advance refunding documents were delivered to the underwriter on June 30, 2009. The advance refunded issues are as follows:

Hospital and Higher Education Facilities Authority of Emma County Hospital Revenue Bonds (Emma Memorial Hospital Issue), Series 1998

<u>Maturity Date</u>	<u>Refunded?</u>	<u>Original CUSIP</u>	<u>New CUSIP (Refunded Portion)</u>	<u>New CUSIP (Unrefunded Balance)</u>
12/01/2009	No	197484A91	N/A	N/A
12/01/2010	No	197484A93	N/A	N/A
12/01/2011	No	197484AA5	N/A	N/A
12/01/2012	No	197484AB7	N/A	N/A
12/01/2013	No	197484AC9	N/A	N/A
12/01/2014	No	197484AD2	N/A	N/A
12/01/2015	No	197484AE4	N/A	N/A
12/01/2016	Yes	197484GA9	No	No
12/01/2017	Yes	197484GB7	No	No
12/01/2023	Yes	197484GC5	No	No

Hospital and Higher Education Facilities Authority of Emma County Hospital Special Revenue Bonds (Emma Obligated Group Issue), Series 2001

<u>Maturity Date</u>	<u>Refunded?</u>	<u>Original CUSIP</u>	<u>New CUSIP (Refunded Portion)</u>	<u>New CUSIP (Unrefunded Balance)</u>
1/01/2010	No	197484A93	N/A	N/A
1/01/2011	No	197484AA5	N/A	N/A
1/01/2012	No	197484AB7	N/A	N/A
1/01/2013	No	197484AC9	N/A	N/A
1/01/2014	Partial	197484UV4	197486XG4	197486XL7
1/01/2020	Partial	197484UW2	197486XH2	197486XM5
1/01/2026	Partial	197484UX0	197486XJ0	197486XN3
1/01/2031	Partial	197484UY9	197486XK9	197486XP1

Data Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="AdvanceRefundingDisclosure" SubmissionStatus="Publish">
    <Offering OfferingType="Bond">
      <Issue IssueType="Refunded" SecurityType="CUSIP-9">
        <UnderlyingSecurities>
          <Security OriginalCUSIP9OfRefundedSecurity="197484GA9"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484GB7"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484GC5"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484UV4" NewCUSIP9OfRefundedSecurity="197486XG4"
            NewCUSIP9OfUnrefundedBalance="197486XL7"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484UW2" NewCUSIP9OfRefundedSecurity="197486XH2"
            NewCUSIP9OfUnrefundedBalance="197486XM5"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484UX0" NewCUSIP9OfRefundedSecurity="197486XJ0"
            NewCUSIP9OfUnrefundedBalance="197486XN3"/>
          <Security OriginalCUSIP9OfRefundedSecurity="197484UY9" NewCUSIP9OfRefundedSecurity="197486XK9"
            NewCUSIP9OfUnrefundedBalance="197486XP1"/>
        </UnderlyingSecurities>
      </Issue>
    </Offering>
    <Underwriter ManagingUnderwriterMSRBID="A99992"/>
  </DisclosureMessage>
```

Document Message

ADVANCE REFUNDING DOCUMENT # 1

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="AdvanceRefundingDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345678</SubmissionIdentifier>
  </Submission>
  <Document DocumentPostingOperationIndicator="AppendToPostedDocment" DocumentDisclosureCompletionIndicator="Complete">
```

```
DocumentType="AdvanceRefundingDocument" DocumentDescription="Escrow Deposit Agreement – 1998 Issue">
<CUSIP9IdentifierOfRefundingIssue>197485AY4</CUSIP9IdentifierOfRefundingIssue>
<OriginalCUSIP9OfRefundedSecurity>197484GB7</OriginalCUSIP9OfRefundedSecurity>
<OriginalCUSIP9OfRefundedSecurity>197484GC5</OriginalCUSIP9OfRefundedSecurity>
<UnderlyingFiles>
  <File DateReceivedFromIssuer="2009-06-30"/>
</UnderlyingFiles>
</Document>
<Underwriter ManagingUnderwriterMSRBID="A99992"/>
</DisclosureMessage>
```

ADVANCE REFUNDING DOCUMENT # 2

```
<?xml version="1.0" encoding="UTF-8"?>
<DisclosureMessage xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="...">
  <Submission SubmissionType="AdvanceRefundingDisclosure" SubmissionStatus="Publish">
    <SubmissionIdentifier>12345678</SubmissionIdentifier>
  </Submission>
  <Document DocumentPostingOperationIndicator="AppendToPostedDocment" DocumentDisclosureCompletionIndicator="Complete"
    DocumentType="AdvanceRefundingDocument" DocumentDescription="Escrow Deposit Agreement – 2001 Issue">
    <CUSIP9IdentifierOfRefundingIssue>197485AY4</CUSIP9IdentifierOfRefundingIssue>
    <OriginalCUSIP9OfRefundedSecurity>197484UV4</OriginalCUSIP9OfRefundedSecurity>
    <OriginalCUSIP9OfRefundedSecurity>197484UW2</OriginalCUSIP9OfRefundedSecurity>
    <OriginalCUSIP9OfRefundedSecurity>197484UX0</OriginalCUSIP9OfRefundedSecurity>
    <OriginalCUSIP9OfRefundedSecurity>197484UY9</OriginalCUSIP9OfRefundedSecurity>
    <UnderlyingFiles>
      <File DateReceivedFromIssuer="2009-06-30"/>
    </UnderlyingFiles>
  </Document>
  <Underwriter ManagingUnderwriterMSRBID="A99992"/>
</DisclosureMessage>
```


XML MESSAGE SCHEMAS

Detailed below are Data, Document and Type Definition schemas. The Data and Document schemas describe the base structural containers which in turn reference child-level containers and specifications described in the Type Definition schema.

Data Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include schemaLocation="..." />
  <xs:element name="SubscriptionDataMessage" type="SubscriptionDataMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="SubscriptionDataMessageType">
    <xs:sequence>
      <xs:element name="Submission" type="SubmissionDetailsType" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="SubmissionTransactionCount" type="xs:integer"/>
    <xs:attribute name="ReplayDate" type="ISODate"/>
  </xs:complexType>
  <xs:complexType name="SubmissionDetailsType">
    <xs:sequence>
      <xs:element name="Offering" type="OfferingDetailsType" minOccurs="1" maxOccurs="1"/>
      <xs:element name="Document" type="DocumentDetailsType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="OSAvailabilityContactInformation" type="OSAvailabilityContactInformationType" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="SubmissionIdentifier" type="Max25Text" use="required"/>
    <xs:attribute name="SubmissionType" type="SubmissionType" use="required"/>
    <xs:attribute name="SubmissionStatus" type="SubmissionStatusType"/>
    <xs:attribute name="SubmissionTransactionDateTime" type="ISODateTime"/>
  </xs:complexType>
</xs:schema>
```

Document Message Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns="EMMA-SUBMISSION-XML" targetNamespace="EMMA-SUBMISSION-XML"
elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <xs:include schemaLocation="..." />
  <xs:element name="SubscriptionDocumentMessage" type="SubscriptionDocumentMessageType"/>
  <!-- Type Definition starts -->
  <xs:complexType name="SubscriptionDocumentMessageType">
    <xs:sequence>
      <xs:element name="File" type="FileDetailsType" minOccurs="1" maxOccurs="1"/>
    </xs:sequence>
  </xs:complexType>
  <!-- Type definition ends -->
</xs:schema>
```

Type Definition Schema

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified" version="1.0">
  <!-- Type Definition starts -->
  <xs:complexType name="OfferingDetailsType">
    <xs:sequence>
      <xs:element name="Issue" type="IssuesType" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="OfferingType" type="OfferingType"/>
    <xs:attribute name="OSAvailabilityStatus" type="OSAvailabilityStatusType"/>
    <xs:attribute name="POSAvailabilityStatus" type="POSAvailabilityStatusType"/>
    <xs:attribute name="UnderwritingSpreadDisclosureIndicator" type="UnderwritingSpreadDisclosureIndicatorType"/>
    <xs:attribute name="UnderwritingSpread" type="xs:float"/>
  </xs:complexType>
  <xs:complexType name="IssuesType">
    <xs:sequence>
      <xs:element name="OriginalCUSIP9OfRemarketedSecurity" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="UnderlyingSecurities" type="UnderlyingSecuritiesType" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="IssueType" type="IssueType"/>
    <xs:attribute name="SecurityType" type="SecurityType"/>
  </xs:complexType>
</xs:schema>
```

```

    <xs:attribute name="IssueDescription" type="Max250Text"/>
    <xs:attribute name="IssuerName" type="Max250Text"/>
    <xs:attribute name="IssuerState" type="StateCode"/>
    <xs:attribute name="IssueClosingDate" type="ISODate"/>
    <xs:attribute name="IssueDatedDate" type="ISODate"/>
    <xs:attribute name="OriginalDatedDate" type="ISODate"/>
    <xs:attribute name="CUSIP6" type="Cusip6Type"/>
    <xs:attribute name="CUSIP9OfLatestMaturityOnIssueNotUnderwritten" type="Cusip9Type"/>
  </xs:complexType>
  <xs:complexType name="UnderlyingSecuritiesType">
    <xs:sequence>
      <xs:element name="Security" type="SecurityDetailsType" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="SecurityDetailsType">
    <xs:attribute name="CUSIP9" type="Cusip9Type"/>
    <xs:attribute name="MaturityDate" type="ISODate"/>
    <xs:attribute name="SecurityDatedDate" type="ISODate"/>
    <xs:attribute name="InitialOfferingPriceYield" type="xs:float"/>
    <xs:attribute name="InitialOfferingPriceYieldRange" type="xs:float"/>
    <xs:attribute name="MaturityPrincipalAmount" type="xs:decimal"/>
    <xs:attribute name="InterestRate" type="xs:decimal"/>
    <xs:attribute name="UnderwrittenIndicator" type="UnderwrittenIndicatorType"/>
    <xs:attribute name="ParValueUnderwritten" type="xs:decimal"/>
    <xs:attribute name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
    <xs:attribute name="NewCUSIP9OfUnrefundedBalance" type="Cusip9Type"/>
    <xs:attribute name="NewCUSIP9OfRefundedSecurity" type="Cusip9Type"/>
  </xs:complexType>
  <xs:complexType name="DocumentDetailsType">
    <xs:sequence>
      <xs:element name="CUSIP9IdentifierOfRefundingIssue" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="OriginalCUSIP9OfRefundedSecurity" type="Cusip9Type" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="UnderlyingFiles" type="UnderlyingFilesType" maxOccurs="1"/>
    </xs:sequence>
    <xs:attribute name="DocumentIdentifier" type="Max25Text"/>
    <xs:attribute name="DocumentType" type="DocumentType" use="required"/>
    <xs:attribute name="DocumentDescription" type="Max250Text"/>
    <xs:attribute name="DocumentStatus" type="DocumentStatusType"/>
  </xs:complexType>

```

```

    <xs:attribute name="DocumentPostingDate" type="ISODate"/>
    <xs:attribute name="DocumentArchiveDate" type="ISODate"/>
    <xs:attribute name="DocumentPostingOperationIndicator" type="DocumentPostingOperationIndicatorType"/>
    <xs:attribute name="DocumentDisclosureCompletionIndicator" type="DocumentDisclosureCompletionIndicatorType" use="required"/>
  </xs:complexType>
  <xs:complexType name="UnderlyingFilesType">
    <xs:sequence>
      <xs:element name="File" type="FileDetailsType" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="FileDetailsType">
    <xs:attribute name="FileIdentifier" type="Max25Text"/>
    <xs:attribute name="FileOrder" type="xs:integer"/>
    <xs:attribute name="FileStatus" type="DocumentStatusType"/>
    <xs:attribute name="FilePostingDate" type="ISODate"/>
    <xs:attribute name="FileArchiveDate" type="ISODate"/>
  </xs:complexType>
  <xs:complexType name="OSAvailabilityContactInformationType">
    <xs:attribute name="OSContactOrganizationName" type="Max140Text"/>
    <xs:attribute name="OSContactFirstName" type="Max25Text"/>
    <xs:attribute name="OSContactLastName" type="Max25Text"/>
    <xs:attribute name="OSContactTitle" type="Max140Text"/>
    <xs:attribute name="OSContactPhoneNumber" type="Max14Text"/>
    <xs:attribute name="OSContactPhoneNumberExtension" type="Max6Text"/>
    <xs:attribute name="OSContactAddress" type="Max140Text"/>
    <xs:attribute name="OSContactCity" type="Max25Text"/>
    <xs:attribute name="OSContactState" type="StateCode"/>
    <xs:attribute name="OSContactZipCode" type="Max14Text"/>
    <xs:attribute name="OSContactEMailAddress" type="Max140Text"/>
  </xs:complexType>
  <xs:simpleType name="SubmissionType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="PrimaryMarketDisclosure"/>
      <xs:enumeration value="AdvanceRefundingDisclosure"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="SubmissionStatusType">
    <xs:restriction base="xs:string">

```

```

        <xs:enumeration value="Publish"/>
        <xs:enumeration value="NoticeOfCancellationOfOffering"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OfferingType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Bond"/>
        <xs:enumeration value="MunicipalFundSecurity"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="IssueType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="NewIssue"/>
        <xs:enumeration value="Remarketed"/>
        <xs:enumeration value="Refunded"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="SecurityType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="CUSIP-9"/>
        <xs:enumeration value="CUSIP-6"/>
        <xs:enumeration value="non-CUSIP"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="OfficialStatement"/>
        <xs:enumeration value="PreliminaryOfficialStatement"/>
        <xs:enumeration value="AdvanceRefundingDocument"/>
        <xs:enumeration value="RemarketingSupplement"/>
        <xs:enumeration value="MFSDisclosureDocument"/>
        <xs:enumeration value="MFSDisclosureDocumentSupplement"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentPostingOperationIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="AppendToPostedDocment"/>
        <xs:enumeration value="ReplacePostedDocument"/>
    </xs:restriction>
</xs:simpleType>

```

```

    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Current"/>
    <xs:enumeration value="Archived"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="POSAvailabilityStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="POSSubmitted"/>
    <xs:enumeration value="NoPOSPrepared"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OSAavailabilityStatusType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="OSNotAvailableAtClosing"/>
    <xs:enumeration value="OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptLimitedOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptShortTermOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptPuttableOffering"/>
    <xs:enumeration value="OSNotProduced_15c212ExemptSmallOffering"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DocumentDisclosureCompletionIndicatorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Partial"/>
    <xs:enumeration value="Complete"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwriterAssessmentDiscountIndicatorType">
  <xs:restriction base="xs:string">
    <xs:enumeration value="EntireOfferingMatures2YearsOrLess"/>
    <xs:enumeration value="EntireOfferingPuttable2YearsOrLess"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwriterAssessmentExemptionIndicatorType">
  <xs:restriction base="xs:string">

```

```

        <xs:enumeration value="OfferingLessThan1Million"/>
        <xs:enumeration value="EntireOfferingMatures9MonthsOrLess"/>
        <xs:enumeration value="EntireOfferingPuttable9MonthsOrLess"/>
        <xs:enumeration value="Rule15c212d1iExemptLimitedOffering"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwritingSpreadDisclosureIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="DisclosedInOfficialStatement"/>
        <xs:enumeration value="NotDisclosed_CompetitiveSale"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UnderwrittenIndicatorType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="NotUnderwritten"/>
        <xs:enumeration value="PartiallyUnderwritten"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip6Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="6"/>
        <xs:maxLength value="6"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Cusip9Type">
    <xs:restriction base="xs:string">
        <xs:minLength value="9"/>
        <xs:maxLength value="9"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="StateCode">
    <xs:restriction base="xs:string">
        <xs:pattern value="[A-Z]{2,2}"/>
    </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ISODate">
    <xs:restriction base="xs:date"/>
</xs:simpleType>

```

```
<xs:simpleType name="ISODateTime">
  <xs:restriction base="xs:dateTime"/>
</xs:simpleType>
<xs:simpleType name="Max250Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="250"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max140Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="140"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max25Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="25"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max14Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="14"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max10Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="10"/>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Max6Text">
  <xs:restriction base="xs:string">
    <xs:minLength value="1"/>
    <xs:maxLength value="6"/>
  </xs:restriction>
</xs:simpleType>
```

```
</xs:simpleType>  
  <!-- Type definition ends -->  
</xs:schema>
```

SUBSCRIPTION
DATA TAG GLOSSARY

Set forth below is a glossary of all data tags to be used in EMMA’s primary market subscription. These data elements are organized in a hierarchical data relationship. This glossary sets out each data element’s XML container, data tag, definition and data specifications, including a listing of enumerated values for those data elements where the submitter chooses a value and an example of the data format where the submitter enters a value.

<p>Subscription Data Tags Description and Specification</p> <p>EMMA Primary Market Subscription Service</p>
--

XML Container	Data Tag	Definition	Data Specification
Subscriber Data Message	Submission Transaction Count	The number of submission transactions contained in the Subscriber Data Message	Integer ex: 37
	Replay Date	For subscriber data requests that contain date parameters, return data will be one day per Subscriber Data Message. The Replay Date will indicate the applicable date to which the content of the data message applies	CCYY-MM-DD ex: 2008-12-01
Submission	Submission Type	Indicates base category of disclosure, consisting of primary market or advance refunding disclosure	Enumerated Value: • PrimaryMarketDisclosure • AdvanceRefundingDisclosure
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or as official notice of cancellation of the offering	Enumerated Value: • Publish • NoticeOfCancellationOfOffering
	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of submission (the initial submission event) and used by the submitter in connection with subsequent submission events	Max25Text ex: S212345678910

XML Container	Data Tag	Definition	Data Specification
Submission	Submission Transaction Date Time	EMMA-assigned date and time the submission was registered in EMMA	CCYY-MM-DDT00:00:00 ex: 2008-12-01T09:30:00
Offering	Offering Type	Identifies the offering as debt securities, including bonds, notes, certificates of participation and other debt obligations	Enumerated Value: • Bond • Municipal Fund Security
	OS Availability Status	Indicates special availability conditions with respect to the official statement, including whether (i) the official statement will be made available late (after closing); (ii) an official statement has not been produced; or (iii) the official statement produced for a limited offering under Rule 15c2-12(d)(1)(i) is available only from the underwriter	Enumerated Value: • OSNotAvailableAtClosing • OSAvailableOnlyFromUnderwriter_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptLimitedOffering • OSNotProduced_15c212ExemptShortTermOffering • OSNotProduced_15c212ExemptPuttableOffering • OSNotProduced_15c212ExemptSmallOffering
	POS Availability Status	Indicates special availability conditions with respect to the preliminary official statement where an official statement is not available by closing, including whether (i) the preliminary official statement is being made available or (ii) preliminary official statement has not been produced	Enumerated Value: • POSSubmitted • NoPOSPrepared
	Underwriting Spread	Underwriting spread or agency fee paid to underwriter in a negotiated offering, if not disclosed in official statement (if Underwriting Spread is in dollars – e.g., express \$1,000,000.00 as 1000000; otherwise if in basis points – e.g., express 25 basis points as 0.25) Interpretation of value: If Underwriting Spread value is greater than 100.00 the value will be interpreted as dollars, otherwise as percent.	Float ex: 450245.55 [dollars] or 0.85 [basis points]
Issue	Issue Type	Indicates whether issue is (i) a new issue (including new money issues and current and advance refunding issues), (ii) an outstanding issue that is being remarketed, or (iii) an outstanding issue that is being refunded	Enumerated Value: • NewIssue • Remarketed • Refunded

XML Container	Data Tag	Definition	Data Specification
Issue	Security Type	Indicates whether (i) nine-digit CUSIP numbers are assigned to the securities in the issue, (ii) no CUSIP numbers are assigned to the securities in the issue, or (iii) only a six-digit CUSIP number has been submitted to EMMA for a commercial paper issue	Enumerated Value: <ul style="list-style-type: none"> • CUSIP-9 • CUSIP-6 • Non-CUSIP
	Issuer Name	Full issuer name as it appears on the official statement	Max250Text ex: Emma County Infrastructure Finance Authority
	Issue Description	Full issue description as it appears on the official statement	Max250Text ex: Road Improvement Refunding Bonds, Series 2008A
	Issuer State	Standard state abbreviation	String;StateCode;2 ex: VA
	Issue Closing Date	Date on which the issue is expected to settle	CCYY-MM-DD ex: 2008-12-15
	Issue Dated Date	Dated date of the issue	CCYY-MM-DD ex: 2008-12-01
	Original Dated Date	Original dated date of an issue if a new dated date is assigned for the remarketed issue in which the CUSIP number has not changed	CCYY-MM-DD ex: 2008-12-01
	CUSIP6	Six-digit base CUSIP number for commercial paper issues, as assigned by the CUSIP Service Bureau	String{Min6,Max6} ex: 123456
	Original CUSIP9 Of Remarketed Security	Original nine-digit CUSIP number of the latest maturity of an issue being remarketed if one or more new CUSIP numbers are assigned to the remarketed securities	String{Min9,Max9} ex: 123456AB7
CUSIP9 Of Latest Maturity On Issue Not Underwritten	Nine-digit CUSIP number of the latest maturity of each issue in the offering that is not underwritten by the underwriter, if any	String{Min9,Max9} ex: 123456AB7	
Securities	CUSIP9	Nine-digit CUSIP number for each security, as assigned by the CUSIP Service Bureau – not provided for securities ineligible for CUSIP numbers and for commercial paper issues	String{Min9,Max9} ex: 123456AB7
	Maturity Date	Maturity date of the security – not provided for commercial paper issues	CCYY-MM-DD ex: 2025-12-01
	Security Dated Date	Dated date of security not eligible for CUSIP number assignment	CCYY-MM-DD ex: 2025-12-01

XML Container	Data Tag	Definition	Data Specification
Securities	Maturity Principal Amount	Total principal amount at maturity of the security – not provided for commercial paper issues	Decimal ex: 5000000
	Initial Offering Price or Yield	Initial offering price or yield of the security – not provided for commercial paper issues.	Float ex: 100.5 [price] or 3.95 [yield]
	Initial Offering Price or Yield Range	Initial offering price or yield of the security – not provided for commercial paper issues. Completes the range of offering price or yield as applicable.	Float ex: 100.5 [price] or 3.95 [yield]
	Interest Rate	Interest rate of the security – not provided for commercial paper issues	Decimal ex: 3.9 [fixed rate] or 0 [zero coupon/capital appreciation] or blank [variable rate]
	Underwritten Indicator	If the underwriter partially underwrites an issue, indicates if a security was not underwritten by the underwriter or if the underwriter underwrote only a portion of a security	Enumerated Value: • NotUnderwritten • PartiallyUnderwritten
	Par Value Underwritten	If the underwriter partially underwrites a security (i.e., Underwritten Indicator = Partially Underwritten), par value of the security underwritten by underwriter	Decimal ex: 2500000
	Original CUSIP9 of Refunded Security	For a refunded issue, provides original CUSIP number(s) for security(ies) being advance refunded	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Refunded Security	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) being advance refunded, if new CUSIP number is assigned to all or a portion of the refunded security	String{Min9,Max9} ex: 123456AB7
	New CUSIP9 of Unrefunded Balance	For a refunded issue, provides newly assigned CUSIP number for security (or portion of security) not being advance refunded, if new CUSIP number is assigned to all or a portion of the unrefunded balance of the refunded security	String{Min9,Max9} ex: 123456AB7
Document	Document Identifier	EMMA-assigned unique identifier for a document of specific document type	Max25Text ex: 2535
	Document Type	Indicates type(s) of documents available for the offering, including (i) official statement, (ii) preliminary official statement, (iii) advance refunding document, (iv) remarketing supplement (v) Municipal Fund Security (MFS) Disclosure Document, or (vi) Municipal Fund Security (MFS) Disclosure Document Supplement	Enumerated Value: • OfficialStatement • PreliminaryOfficialStatement • AdvanceRefundingDocument • RemarketingSupplement • MFSDisclosureDocument • MFSDisclosureDocumentSupplement

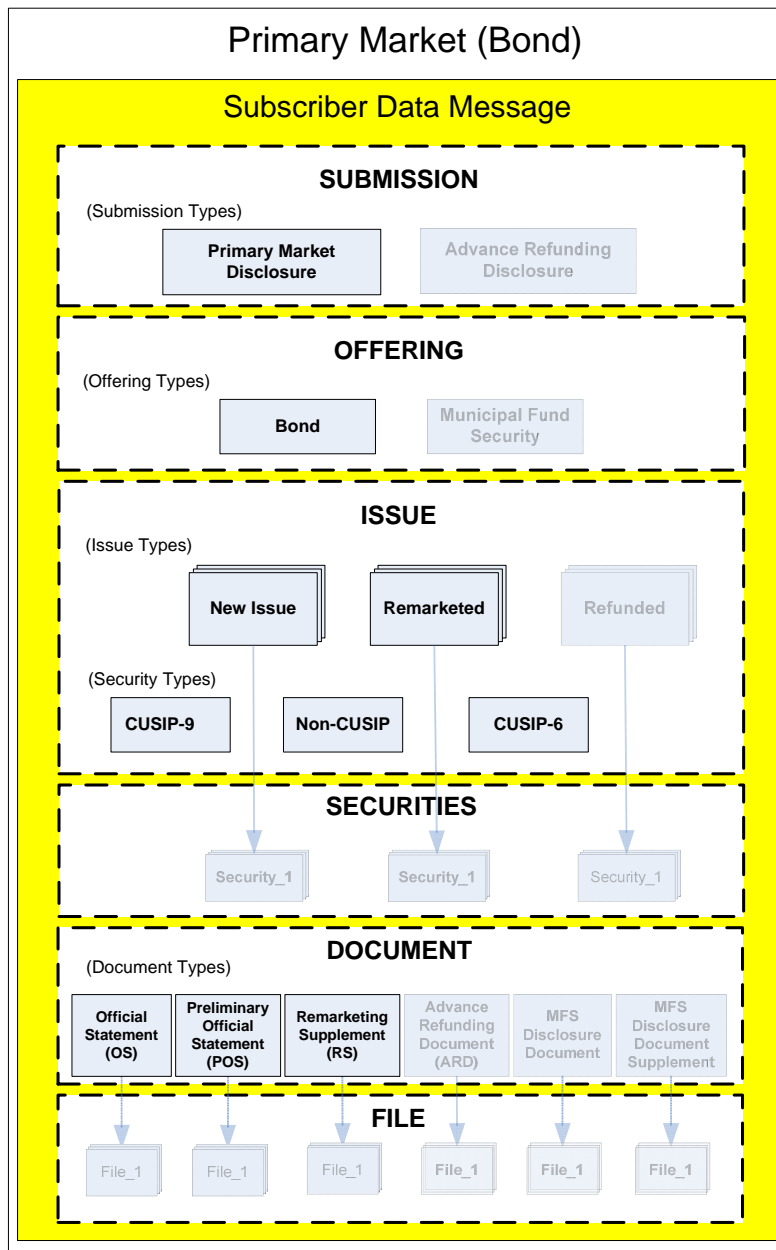
XML Container	Data Tag	Definition	Data Specification
Document	Document Description	Document name, if any	Max250Text ex: Official Statement or Preliminary Official Statement or Escrow Deposit Agreement or Reoffering Circular
	Document Status	Indication of the active state of a document consisting of current and archived	Enumerated Value: • Current • Archived
	Document Posting Date	The date the document was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08
	Document Archive Date	The date the document was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
	Document Posting Operation Indicator	Indicates whether file will be appended to any existing files posted for such document or if file will replace all existing files posted for such document	Enumerated Value: • AppendToPostedDocument • ReplacePostedDocument
	Document Disclosure Completion Indicator	Indicates whether the file being submitted completes the document disclosure – for a document consisting of a single file, this indicator should reflect “complete” – for a document consisting of multiple files, all files other than the last file should have an indicator reflecting “partial” and the last file should have an indicator reflecting “complete”	Enumerated Value: • Partial • Complete
	CUSIP9 Identifier Of Refunding Issue	Nine-digit CUSIP number (s) of the refunding issue	String(Min9,Max9) ex: 123456AB7
	Original CUSIP9 of Refunded Security	Original CUSIP number for security being refunded, reflecting the CUSIP number of the security immediately preceding the refunding	String(Min9,Max9) ex: 123456AB7
File	File Identifier	EMMA-assigned unique identifier for electronic file(s) constituting the submitted document	Max25Text ex: MS223986-1
	File Order	If a document consists of more than one electronic file, provides file sequence information	Integer ex: 24
	File Status	Indication of the active state of a file consisting of current and archived	Enumerated Value: • Current • Archived

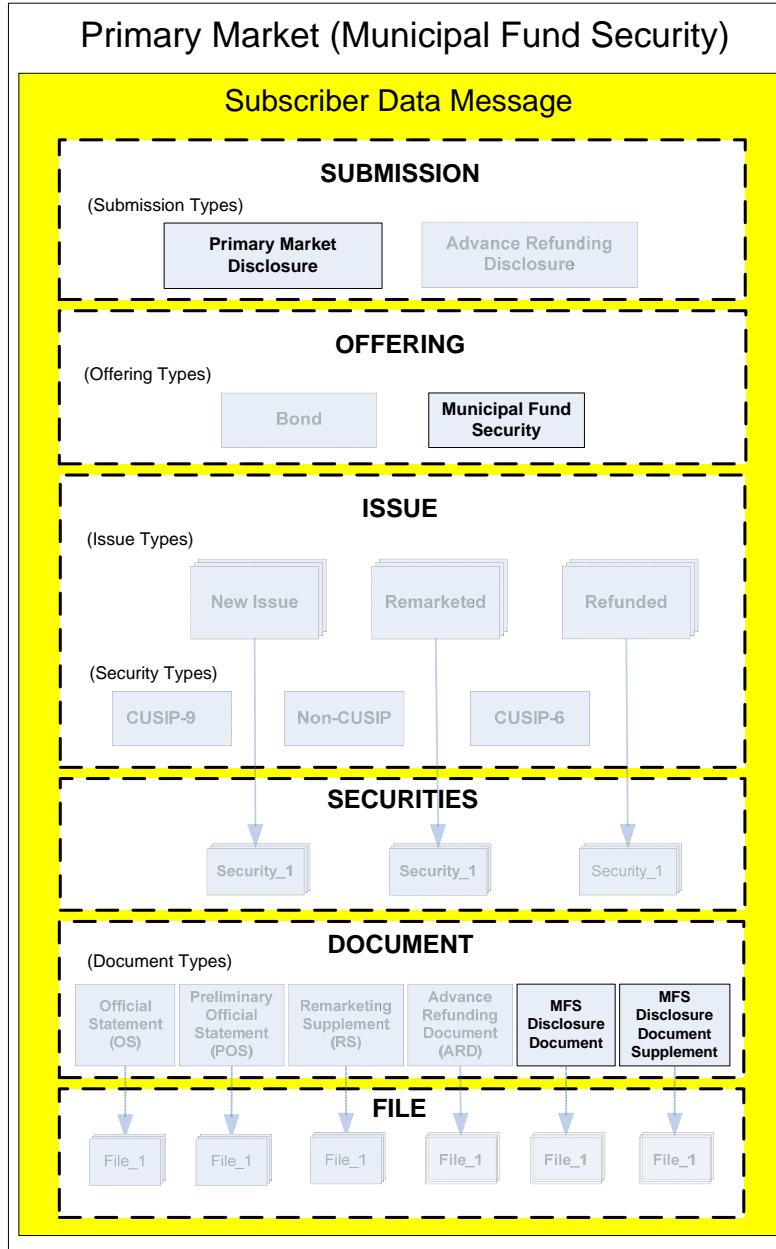
XML Container	Data Tag	Definition	Data Specification
File	File Posting Date	The date the file was posted to the public on EMMA	CCYY-MM-DD ex: 2008-12-08
	File Archive Date	The date the file was moved to the EMMA archive	CCYY-MM-DD ex: 2008-12-08
Limited Offering Contact	OS Contact Organization Name	Long name of the contact organization responsible for making the official statement available upon request	Max140Text ex: MuniBond Dealer
	OS Contact First Name	The first name of the contact person available to making the official statement available upon request	Max25Text ex: Emma
	OS Contact Last Name	The last name of the contact person available to making the official statement available upon request	Max25Text ex: Jones
	OS Contact Title	The title of the contact person available to making the official statement available upon request	Max140Text ex: Senior Vice President
	OS Contact Phone Number	The phone number of the contact person available to making the official statement available upon request	Max14Text ex: 703-555-2222
	OS Contact Phone Number Extension	The extension of the phone number (if any) of the contact person available to making the official statement available upon request	Max6Text ex: 1235
	OS Contact Address	The street address or post office box of the contact person available to making the official statement available upon request	Max140Text ex: 123 Security Road
	OS Contact City	The address city of the contact person available to making the official statement available upon request	Max25Text ex: Alexandria
	OS Contact State	The address state of the contact person available to making the official statement available upon request	String;StateCode;2 ex: VA

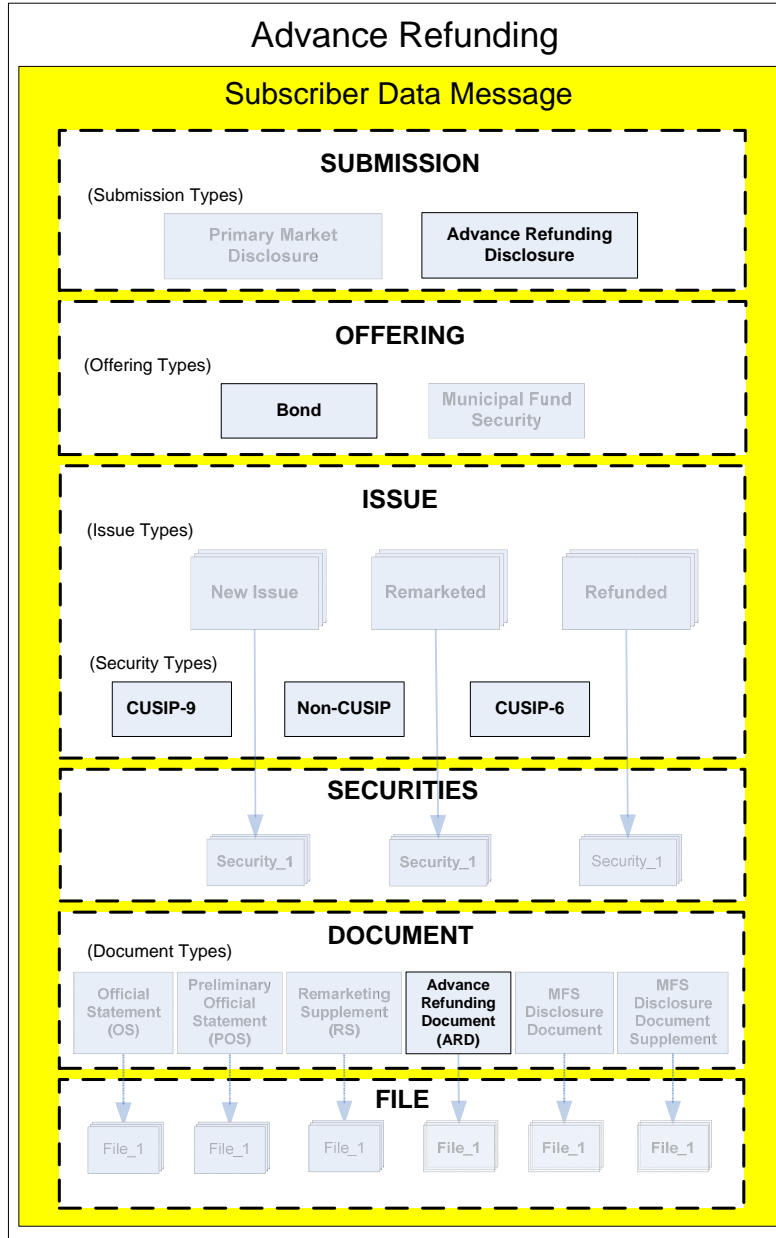
XML Container	Data Tag	Definition	Data Specification
Limited Offering Contact	OS Contact Zip Code	The address zip code of the contact person available to making the official statement available upon request	Max14Text ex: 22301-5555
	OS Contact Email Address	The email address of the contact person available to making the official statement available upon request	Max140Text ex: ejones@munibonddealer.com

SUBSCRIPTION
DATA TAG MAPPING

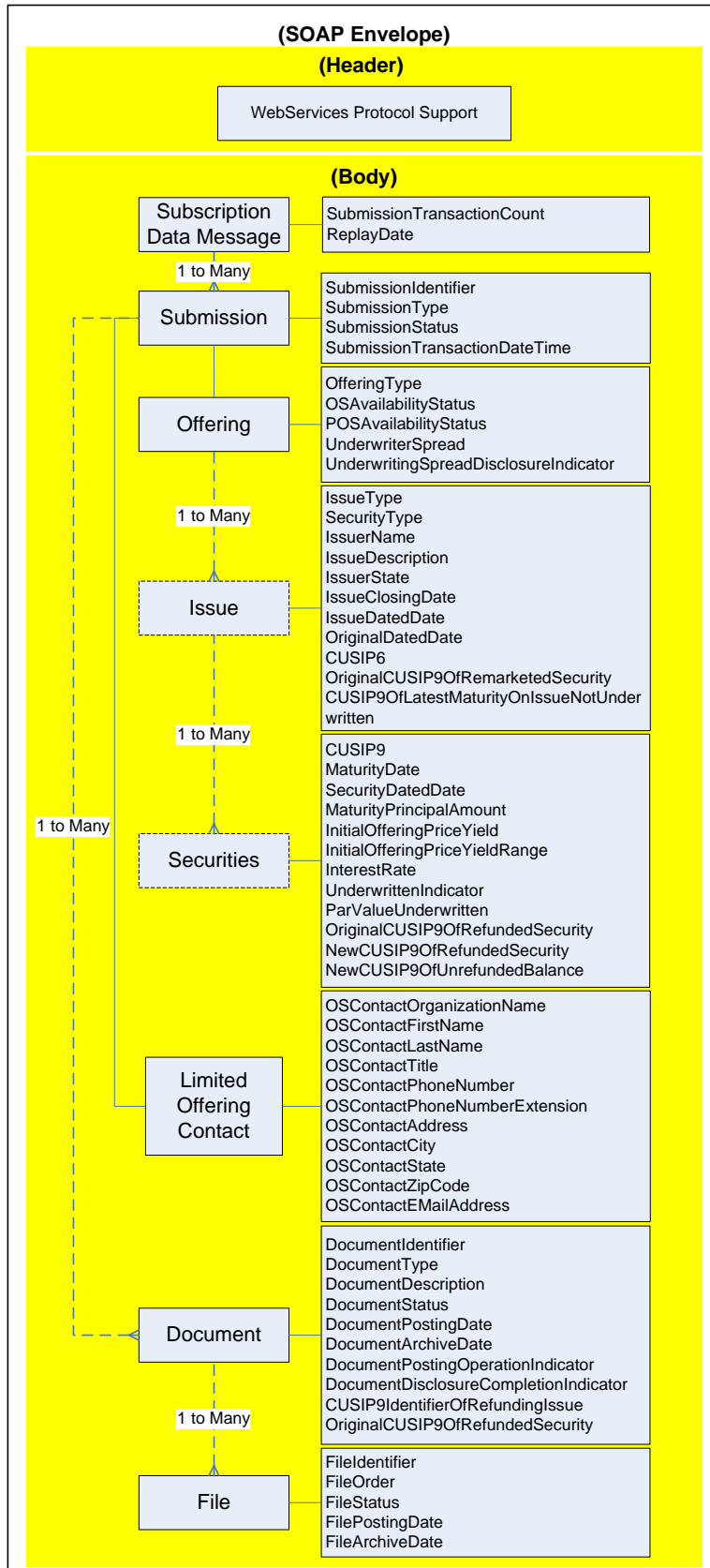
Set forth below are the information types and allowed values associated with subscription messages. Primary market disclosures will consist of offering types “bond” and “municipal fund securities.” Advance refunding disclosures will consist of offering type “bond.” Issue and security types are included as appropriate to describe the nature of the offering. Five types of documents will be disseminated to subscribers: official statements, preliminary official statements, municipal fund securities disclosure document and municipal fund securities disclosure document supplements. Normally, a document will consist of a single PDF file. If a document consists of multiple files, each file will be disseminated separately.







Subscription Data Message



SUBSCRIPTION
SAMPLE XML MESSAGES

NEW ISSUE

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
  xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="1300" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
    SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
      <Issue IssueType="NewIssue" SecurityType="CUSIP-9" IssuerName="Emma City Industrial Development Agency"
        IssueDescription="Public Improvement Revenue Bonds (2008 EMMA University Project), Series A" IssueClosingDate=
"2008-12-8">
        <UnderlyingSecurities>
          <Security CUSIP9="699438AJ7" MaturityPrincipalAmount="255000.00" InitialOfferingPriceYield="3.88"/>
          <Security CUSIP9="699438AK4" MaturityPrincipalAmount="265000.00" InitialOfferingPriceYield="3.92"/>
          <Security CUSIP9="699438AL2" MaturityPrincipalAmount="275000.00" InitialOfferingPriceYield="3.98"/>
          <Security CUSIP9="699438AM0" MaturityPrincipalAmount="290000.00"
            UnderwrittenIndicator="NotUnderwritten"/>
          <Security CUSIP9="699438AN8" MaturityPrincipalAmount="300000.00"
            UnderwrittenIndicator="NotUnderwritten"/>
          <Security CUSIP9="699438AP3" MaturityPrincipalAmount="315000.00"
            UnderwrittenIndicator="NotUnderwritten"/>
          <Security CUSIP9="699438BD9" MaturityPrincipalAmount="7380000.00"
            UnderwrittenIndicator="PartiallyUnderwritten" ParValueUnderwritten="4000000.00"
            InitialOfferingPriceYield="3.90"/>
        </UnderlyingSecurities>
      </Issue>
      <Issue IssueType="NewIssue" SecurityType="CUSIP-9" CUSIP9OfLatestMaturityOnIssueNotUnderwritten="699438AH1">
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1000" DocumentType="OfficialStatement" DocumentDescription="Offering Circular"
      DocumentDisclosureCompletionIndicator="Complete">
      <UnderlyingFiles>
        <File FileIdentifier="MS223986-1" FileStatus="Current" FilePostingDate="2008-12-06"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
</SubscriptionDataMessage>
```

```
</Document>
</Submission>
</ SubscriptionDataMessage >
```

REMARKETING

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
  xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="1400" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
    SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
      <Issue IssueType="Remarketed" SecurityType="CUSIP-9" IssuerName="Health Facilities Authority of Emma County"
        IssueDescription="Variable Rate Demand Retirement Facility Revenue Bonds (Muni Retirement Corporation Project) Series 2008A"
        OriginalDatedDate="2003-04-10" IssueClosingDate="2009-05-27">
        <UnderlyingSecurities>
          <Security CUSIP9="49833RAX3" MaturityPrincipalAmount="30000000.00" InitialOfferingPriceYield="100.0"/>
        </UnderlyingSecurities>
      </Issue>
    </Offering>
    <Document DocumentIdentifier="1001" DocumentPostingOperationIndicator="AppendToPostedDocument"
      DocumentDisclosureCompletionIndicator="Complete" DocumentType="RemarketingSupplement" DocumentDescription="Reoffering
      Memorandum">
      <UnderlyingFiles>
        <File FileIdentifier="MS265468-1" FileStatus="Current" FilePostingDate="2009-05-27"/>
      </UnderlyingFiles>
    </Document>
  </Submission>
</ SubscriptionDataMessage >
```

COMMERCIAL PAPER

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
  xsi:schemaLocation="...">
```

```
<Submission SubmissionIdentifier="SUB111115" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
  SubmissionTransactionDateTime="2008-03-20T00:00:00">
  <Offering OfferingType="Bond" UnderwritingSpreadDisclosureIndicator="DisclosedInOfficialStatement">
    <Issue IssueType="NewIssue" SecurityType="CUSIP-6" CUSIP6="694004" IssuerName="Emma County, Virginia"
      IssueDescription="Commercial Paper Program A-2" IssueClosingDate="2009-05-22">
    </Issue>
  </Offering>
  <Document DocumentDisclosureCompletionIndicator="Complete" DocumentType="OfficialStatement" DocumentDescription="Commercial
    Paper Memorandum">
    <UnderlyingFiles>
      <File FileIdentifier="MS26776-1" FileStatus="Current" FilePostingDate="2008-05-21"/>
    </UnderlyingFiles>
  </Document>
</Submission>
</ SubscriptionDataMessage >
```

OFFERING HAVING NO CUSIP NUMBERS

```
<?xml version="1.0" encoding="UTF-8"?>
<SubscriptionDataMessage SubmissionTransactionCount="8" xmlns="EMMA-SUBMISSION-XML" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
  xsi:schemaLocation="...">
  <Submission SubmissionIdentifier="SUB111116" SubmissionType="PrimaryMarketDisclosure" SubmissionStatus="Publish"
    SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <Offering OfferingType="Bond" OSAavailabilityStatus="OSNotProduced_15c212ExemptSmallOffering"
      POSAvailabilityStatus="POSSubmitted">
      <Issue IssueType="NewIssue" SecurityType="non-CUSIP" IssuerState="NE" IssuerName=" Sanitary Improvement District No.
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MUNICIPAL FUND SECURITY (529 COLLEGE SAVINGS PLAN)

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MUNICIPAL FUND SECURITY (LOCAL GOVERNMENT INVESTMENT POOL)

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