



The Official Source for Municipal Disclosures and Market Data

# **Specifications for MSRB Continuing Disclosure Subscription Service Historical Data Product (EMMA Continuing Disclosure Subscriber Manual)**

**Version 1.3**

## Revision History

Version	Date	Description of Changes
1.0	June 2012	Initial version.
1.1	January 2015	<p>Summary of Changes:</p> <p>Asset-Backed Securities Disclosure Filings (Various):</p> <ul style="list-style-type: none"><li>• Submission Process and Disclosure Types</li><li>• Data Message – Disclosure Indexing Data</li><li>• Figure 2 – Data Message &amp; Type Definition Schemas</li><li>• Type Definition Schema – Disclosure Indexing Data Details / Asset Backed Securities Disclosure Category</li><li>• Figure 3: Data Tag Glossary</li><li>• Figure 4: Sample XML Messages</li></ul>
1.2	August 2015	Updated the Resources and Support section to reflect the change in hours of operation for Email Support.
1.3	November 2018	Incorporated new required event notices related to financial obligations under amended SEC Rule 15c2-12 effective February 27, 2019

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## Resources and Support

MSRB Website: [www.msrb.org](http://www.msrb.org)

EMMA Website: [emma.msrb.org](http://emma.msrb.org)

For assistance, contact MSRB Support at 202-838-1330 or [MSRBsupport@msrb.org](mailto:MSRBsupport@msrb.org).

Live Support: 7:30 a.m. - 6:30 p.m. ET

Email Support: 7:00 a.m. – 7:00 p.m. ET

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## Introduction

The Municipal Securities Rulemaking Board (MSRB) protects investors, issuers of municipal securities, entities whose credit stands behind municipal securities and public pension plans by promoting a fair and efficient municipal market. The MSRB fulfills this mission by regulating securities firms, banks and municipal advisors that engage in municipal securities and advisory activities. To further protect market participants, the MSRB promotes disclosure and market transparency through its Electronic Municipal Market Access (EMMA®) website, provides education and conducts extensive outreach. The MSRB has operated under Congressional mandate with oversight by the Securities and Exchange Commission since 1975.

The EMMA website is a centralized online database operated by the MSRB that provides free public access to official disclosure documents and trade data associated with municipal bonds issued in the United States. In addition to current credit rating information, the EMMA website also makes available real-time trade prices and primary market and continuing disclosure documents for over one million outstanding municipal bonds, as well as current interest rate information, liquidity documents and other information for most variable rate municipal securities.

The *EMMA Continuing Disclosure Historical Product* is a data product consisting of historical documents and related indexing information as provided by the *Continuing Disclosure Subscription Service* of the MSRB's Electronic Municipal Market Access (EMMA®) system.

This specifications manual provides the hierarchical arrangement of the data and document structure as it appears on the storage device (such as CD, DVD, or external hard drive) and the data specifications for the *EMMA Continuing Disclosure Subscription Service*.

The *Continuing Disclosure Historical Product* may be purchased in any consecutive twelve-month data set. The *MSRB Historical Product Purchase Agreement* and the *CUSIP Service Bureau License Verification Form* must be completed prior to delivery of the historical data product.

Instructions to purchase the *Continuing Disclosure Subscription Service* or the *Continuing Disclosure Historical Product* are available on [www.msrb.org](http://www.msrb.org).

## Background

The *EMMA Continuing Disclosure Subscription Service* provides a subscriber real-time dissemination of documents, including financial-based, event-based and asset-backed securities disclosures as well as real-time information on designated accounting standards for submitting financial statements. In July 2009, the MSRB implemented a permanent continuing disclosure service to receive electronic submissions of, and to make publicly available access to continuing disclosure documents and related information through *EMMA Continuing Disclosure Submission Service*.

Disclosure documents and related indexing information submitted to the *EMMA Continuing Disclosure Service* are made available publicly on the EMMA® website.

The *Continuing Disclosure Historical Product*, which became available in June 2012, provides an avenue for obtaining the same data set of documents and related indexing information that were published previously on a real-time basis through the *Continuing Disclosure Subscription Service*.

# EMMA Subscription Service

## Data and Document Delivery

The Continuing Disclosure Historical Product provides PDF files of continuing disclosure documents, and XML files of related indexing data, submitted to the EMMA Continuing Disclosure Service through both the EMMA web interface and the automated submission interface.

**Figure 1** shows the hierarchical structure and relationship of data and documents stored on the historical subscription storage device.

Historical indexing data along with associated disclosure documents are available on a storage device with the indexing data organized in a hierarchically directory based on when the submission transaction date and time occurred.  
(e.g., SubmissionTransactionDateTime = "2008-03-20T00:00:00").

The disclosure documents may be identified and associated with the indexing data via the File ID reference (e.g., FileIdentifier="MS223987-2").

## Overview of Schemas and Data Tags

The *Continuing Disclosure Historical Product* uses similar schemas and data tags as the *EMMA Continuing Disclosure Subscription Service*. This document refers to a series of figures and tables providing more detailed information about the *EMMA Continuing Disclosure Subscription Service*. An XML data schema and a type definition schema are included in **Figure 2**. A data tag glossary is provided in **Figure 3**.

## Data Message

Data elements disseminated through the continuing disclosure subscription service have been organized in a hierarchical relationship into the following categories: (i) subscriber data; (ii) submission data; (iii) disclosure indexing data; (iv) contact information data; and (v) document data. These categories, and the available data tags applicable to each category, are included in **Figure 3** 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 transaction date and time (indicates EMMA posting date and time)

- ***Disclosure Indexing Data***

- (i) disclosure type (financial/operating filing, event filing, asset-backed securities filing, disclosure without indexing information for pre-July 1, 2009 undertaking)
- (ii) financial/operating disclosure category (multiple categories may be selected from: 'annual financial information/operating data under Rule 15c2-12', 'audited financial statements or CAFR under Rule 15c2-12', 'failure to provide annual financial information as required under Rule 15c2-12', 'quarterly/monthly financial information', 'change in fiscal year/timing of annual disclosure', 'change in accounting standard', 'interim/additional financial information/operating data', 'budget', 'investment/debt/financial policy', 'information provided to rating agency, credit/liquidity provider or other third-party', 'consultant reports', 'other financial/operating data')
- (iii) event disclosure category (multiple categories may be selected from: 'principal /interest payment delinquencies', 'non-payment related defaults', 'unscheduled draws on debt service reserves reflecting financial difficulties', 'unscheduled draws on credit enhancements reflecting financial difficulties', 'substitution of credit or liquidity providers, or their failure to perform', 'adverse tax opinion or event affecting the tax-exempt status of the security', 'modification to the rights of security holders', 'bond call', 'defeasance', 'release, substitution or sale of property securing repayment of the security', 'rating change', 'failure to provide event filing information as required', 'tender offer / secondary market purchases', 'merger / consolidation / acquisition and sale of all or substantially all assets', 'bankruptcy, insolvency, receivership or similar event', 'successor, additional or change in trustee', 'amendment to continuing disclosure undertaking', 'change in obligated person', 'notice to investor pursuant to bond documents', 'communication from the Internal Revenue Service', 'bid for auction rate or other securities', 'capital or other financing plan', 'litigation or enforcement action', 'change of tender agent, remarketing agent or other on-going party', 'derivative or other similar transaction', 'other event-based disclosures', 'merger consolidation reorganization insolvency bankruptcy', 'change of trustee tender agent remarketing agent or other ongoing party', 'financial obligation incurrence or agreement', 'financial obligation event reflecting financial difficulties')
- (iv) asset-backed securities disclosure category (only one will be selected from: 'initial asset backed securities disclosure SEC Rule 15Ga1c1', 'quarterly asset backed securities disclosure SEC Rule 15Ga1c2i', 'annual asset backed securities disclosure SEC Rule15Ga1c2ii', 'other asset backed securities disclosure')
- (v) Disclosure sub category types for filings including event disclosure categories 'financial obligation – incurrence or agreement', 'financial obligation - event reflecting financial difficulties'. One or more of following:  
 FinancialObligationIncurrence\_DebtObligation  
 FinancialObligationIncurrence\_Guarantee\_DebtObligation  
 FinancialObligationIncurrence\_Guarantee\_DerivativeInstrument  
 FinancialObligationIncurrence\_DerivativeInstrument  
 FinancialObligationEventReflectingFinancialDifficulties\_Default  
 FinancialObligationEventReflectingFinancialDifficulties\_EventOfAcceleration  
 FinancialObligationEventReflectingFinancialDifficulties\_TerminationEvent  
 FinancialObligationEventReflectingFinancialDifficulties\_ModificationOfTerms  
 FinancialObligationEventReflectingFinancialDifficulties\_Other
- (vi) other voluntary disclosure description (for financial/operating data disclosures, event-based disclosures and asset-backed securities disclosures)

- (vii) financial/operating period type (for financial/operating disclosure – year ended, quarter ended, month beginning, other period beginning, as of)
- (ix) financial/operating disclosure date (for financial/operating disclosure, date of financial/operating period type)
- (x) financial/operating disclosure second date (for financial/operating disclosure, end date of financial/operating period type if ‘other period beginning’ selected)
- (xi) event disclosure date (for event disclosure – date of document if different from date document submitted to EMMA)
- (xii) period type (for all asset-backed securities disclosure categories, only ‘other period beginning’)
- (xiii) disclosure period (for all asset-backed securities disclosure categories, period dates with ‘beginning date’ and ‘ending date’ for ‘other period beginning’)(xii) CUSIP-6 securities pointer (six-digit CUSIP number(s) – disclosure applicable to all nine-digit CUSIP numbers beginning with this six digits)
- (xiv) securities (nine-digit CUSIP number(s) to which disclosure is applicable)

- ***Contact Information Data***

- (i) contact organization type (issuer, obligated person, submitter)
- (ii) contact organization name
- (iii) contact first name
- (iv) contact last name
- (v) contact title
- (vi) contact phone number
- (vii) contact phone number extension
- (viii) contact address
- (ix) contact city
- (x) contact state
- (xi) contact zip code
- (xii) contact e-mail address

- ***Document Data***

- (i) document identifier (uniquely identifies submission being disseminated)
- (ii) document posting date (date first file of document posted to public on EMMA)
- (iii) document posting operation indicator (if document modifies a previously submitted document – append to posted document, replace posted document)

Examples of XML files disseminating data submissions for various types of continuing disclosures are included in **Figure 4**.

## Figure 1: Storage of Historical Information

### Data and Document Hierarchical Profile

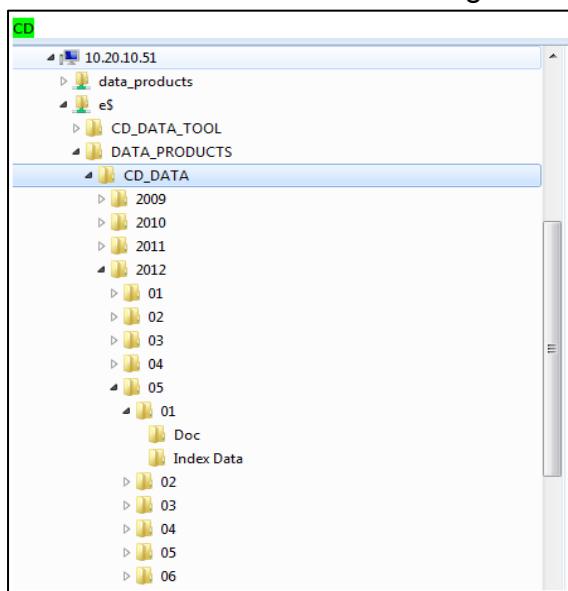
Indexing data and document files are hierarchically arranged on the storage device by the year (YYYY) then by the month (MM) and the day (DD).

- The “Doc” directory contains the disclosure documents in PDF format. The PDF files are uniquely named by their File ID (e.g., “EA123456.pdf”).
- The “Index Data” directory contains indexing information about the disclosure documents in XML format. The XML files are uniquely named by their transaction ID (e.g., “EP7891023.xml”).

Some submissions have multiple submission events (“transactions”) because the submitter returned and modified the original submission one or more times. Each transaction is recorded in a separate XML file in the “Index Data” directory. Multiple transactions for the same submission will share the same value in the ‘SubmissionIdentifier’ field.

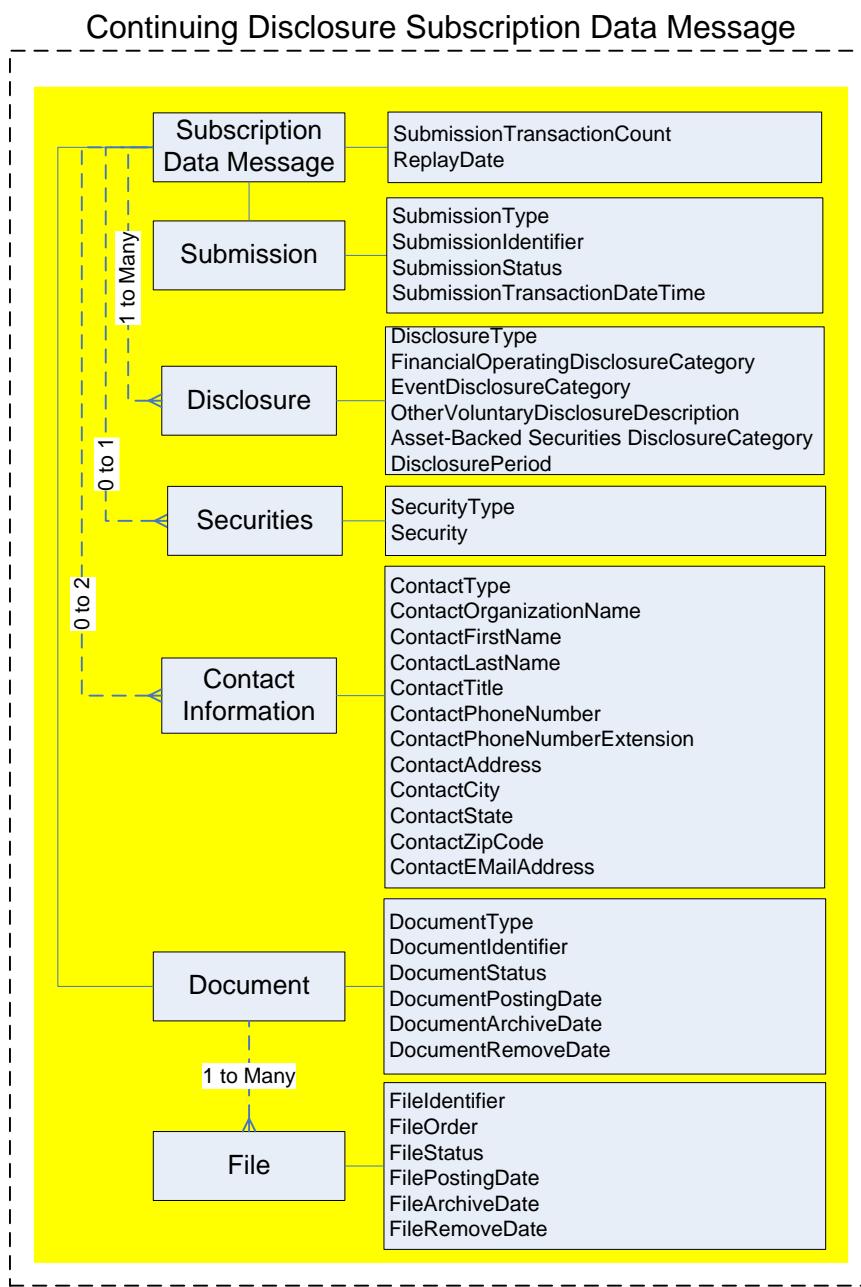
Where multiple transactions exist for a single submission, the most recent transaction will contain the complete, up-to-date information and the earlier transactions can be discarded or overwritten completely. The ‘SubmissionTransactionDateTime’ field can be used to determine which XML file contains the transaction with the most recent transaction for that submission.

Some dates in the “Doc” or “Index Data” directories will not be populated with XML files, documents, or both due to submissions not being received on that date.



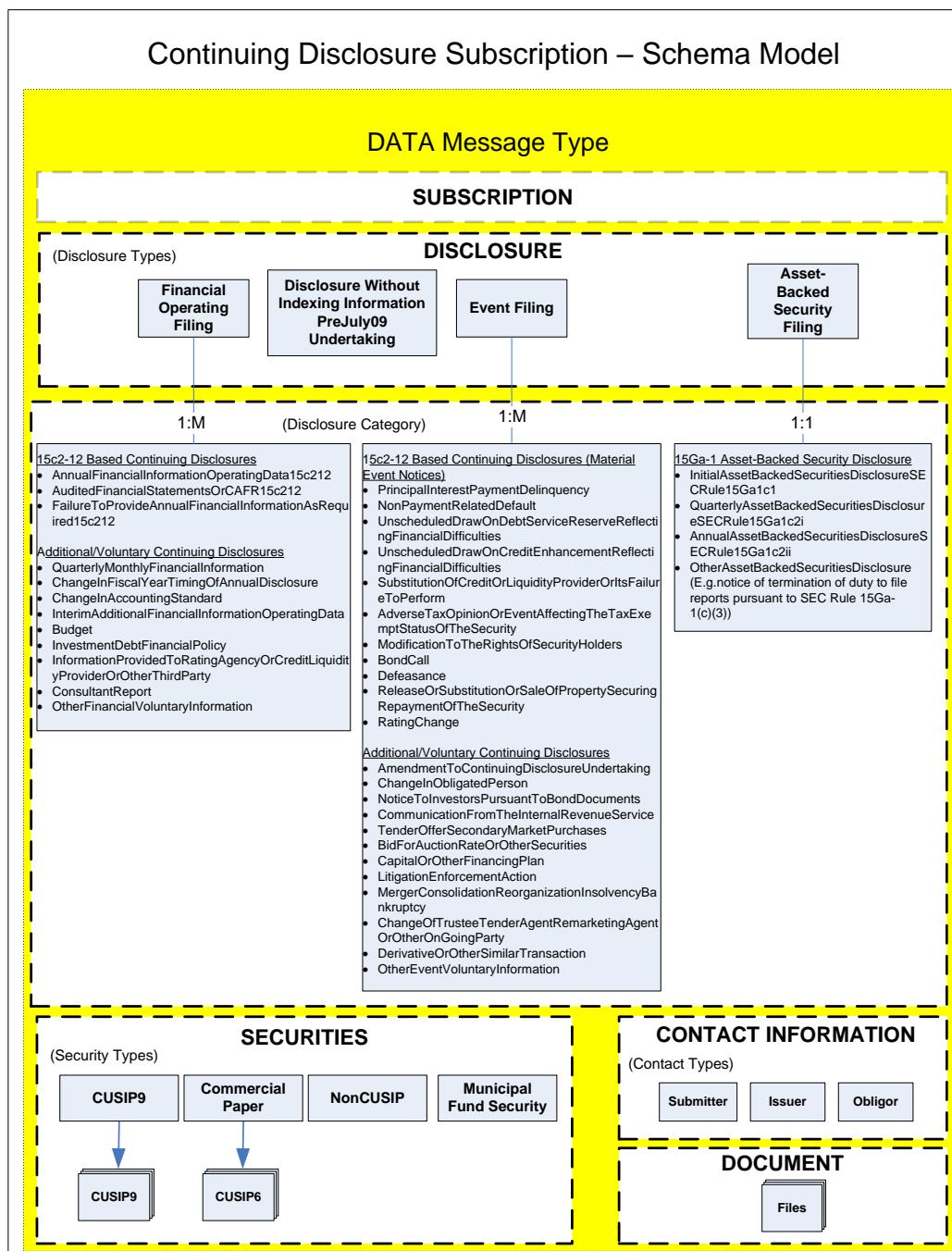
## Figure 2: XML Data Tag Structure

The following is a listing of possible data tags that may be included in XML data files depending on the specifics of the disclosure being reported.



## Figure 3: XML Data Message Category Type Overview

Below are the information categories and allowed values associated with subscription messages with specific emphasis on the details of the Disclosure Categories.



## Table 1: Data Tag Glossary

The historical product has many of the same data tags as the Continuing Disclosure Web Service Interface. 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.

Subscription Data Tags Description and Specification			
EMMA Subscription Service			
XML Container	Data Tag	Definition	Data Specification
Submission	Submission Identifier	Unique identifier assigned by EMMA at time of initiation of data submission (the initial submission event) and used by the submitter in connection with subsequent submission events, including document submission	Type= String{Min1,Max25} ex: S212345678910
	Submission Status	Indicates the intention to publish the information in the EMMA public portal or to submit as test submission – test submissions are not disseminated	Enumerated Value: • Publish
	Submission Transaction Date Time	EMMA-assigned date and time the submission was registered in EMMA	Type=ISODateTime (CCYY-MM-DDT00:00:00) ex: 2008-12-01T13:30:00

XML Container	Data Tag	Definition	Data Specification
Disclosure	Disclosure Type	<p>Indicates the type of continuing disclosure filing as follows:</p> <ul style="list-style-type: none"> <li>• Financial Operating Filing - Submit annual financial information under SEC Rule 15c2-12(b)(5)(i)(A) and (d)(2)(ii)(A), audited financial statements under Rule 15c2-12(b)(5)(i)(B), notice of failure to provide annual financial information under Rule 15c2-12(b)(5)(i)(D), and other voluntary financial or operating information.</li> <li>• Event Filing - Submit notice of a material event specified under SEC Rule 15c2-12(b)(5)(C) and (d)(2)(ii)(B), and any other event-based voluntary notice or disclosure with respect to municipal securities.</li> <li>• Asset-Backed Securities Filing – Submit disclosure filings specified under SEC Rule 15Ga-1.</li> <li>• DisclosureWithoutIndexingInformationPreJuly09Undertaking - This continuing disclosure document is being submitted without indexing information in connection with securities subject to a continuing disclosure undertaking entered into prior to July 1, 2009. <ul style="list-style-type: none"> <li>◦ Unindexed continuing disclosure documents will be posted on the EMMA Portal without indexing information, but accompanied by the submitter's contact information, and also will be disseminated to EMMA's continuing disclosure subscribers together with the submitter's contact information.</li> <li>◦ <u>Filing without indexing information is strongly discouraged</u> - Failure to provide indexing information will dramatically impact the effectiveness of your disclosure to the detriment of investors in your securities.</li> </ul> </li> </ul>	<p>Enumerated Value:</p> <ul style="list-style-type: none"> <li>• FinancialOperatingDataDisclosure</li> <li>• EventBasedDisclosure</li> <li>• DisclosureWithoutIndexingInformationPreJuly09Undertaking</li> <li>• AssetBackedSecuritiesDisclosure</li> </ul>
Disclosure			

XML Container	Data Tag	Definition	Data Specification
Disclosure	Financial Operating Disclosure Category	Indicates the financial operating disclosure category to which the filing applies. One or more categories may apply to a single filing	Enumerated Value: <ul style="list-style-type: none"> <li>• AnnualFinancialInformationOperatingData15c212</li> <li>• AuditedFinancialStatementsOrCAFR15c212</li> <li>• FailureToProvideAnnualFinancialInformationAsRequired15c212</li> <li>• QuarterlyMonthlyFinancialInformation</li> <li>• ChangeInFiscalYearTimingOfAnnualDisclosure</li> <li>• ChangeInAccountingStandard</li> <li>• InterimAdditionalFinancialInformationOperatingData</li> <li>• Budget</li> <li>• InvestmentDebtFinancialPolicy</li> <li>• InformationToBeProvidedToRatingAgencyOrCreditLiquidityProviderOrOtherThirdPartyConsultantReport</li> <li>• OtherFinancialVoluntaryInformation</li> </ul>

XML Container	Data Tag	Definition	Data Specification
	Event Disclosure Category	<p>Indicates the event-based disclosure categories to which the filing applies. One or more categories may apply to a single filing ex: a filing may include a notice of Bond Call and Defeasance</p>	<p>Enumerated Value:</p> <ul style="list-style-type: none"> <li>• PrincipalInterestPaymentDelinquency</li> <li>• NonPaymentRelatedDefault</li> <li>• UnscheduledDrawOnDebtServiceReserveReflectingFinancialDifficulties</li> <li>• UnscheduledDrawOnCreditEnhancementReflectingFinancialDifficulties</li> <li>• SubstitutionOfCreditOrLiquidityProviderOrItsFailureToPerform</li> <li>• AdverseTaxOpinionOrEventAffectingTheTaxExemptStatusOfTheSecurity</li> <li>• ModificationToTheRightsOfSecurityHolders</li> <li>• BondCall</li> <li>• Defeasance</li> <li>• ReleaseOrSubstitutionOrSaleOfPropertySecuringRepaymentOfTheSecurity</li> <li>• RatingChange</li> <li>• TenderOfferSecondaryMarketPurchases</li> <li>• MergerConsolidationAcquisitionAndSaleOfAllOrSubstantiallyAllAssets</li> <li>• BankruptcyInsolvencyReceivershipOrSimilarEvent</li> <li>• SuccessorAdditionalOrChangeInTrustee</li> <li>• FailureToProvideEventFilingInformation</li> <li>• AmendmentToContinuingDisclosureUndertaking</li> <li>• ChangeInObligatedPerson</li> <li>• NoticeToInvestorsPursuantToBondDocuments</li> <li>• CommunicationFromTheInternalRevenueService</li> <li>• BidForAuctionRateOrOtherSecurities</li> <li>• CapitalOrOtherFinancingPlan</li> <li>• LitigationEnforcementAction</li> <li>• ChangeOfTenderAgentRemarketingAgentOrOtherOnGoingParty</li> <li>• ChangeOfTrusteeTenderAgentRemarketingAgentOrOtherOnGoingParty</li> <li>• MergerConsolidationReorganizationInsolvencyBankruptcy</li> <li>• DerivativeOrOtherSimilarTransaction</li> <li>• OtherEventVoluntaryInformation</li> <li>• BankLoanAlternativeFinancingFormerlyVoluntary</li> <li>• FinancialObligationIncurrence</li> <li>• FinancialObligationEventReflectingFinancialDifficulties</li> </ul>

XML Container	Data Tag	Definition	Data Specification
	Asset-Backed Disclosure Category	<p>Indicates the asset-based securities disclosure categories to which the filing applies. Only one category may apply to a single filing</p> <p>ex: if the filing is a notice of Other Asset-Backed Securities Disclosure, it can not apply to initial, quarterly or annual disclosures</p>	<ul style="list-style-type: none"> <li>InitialAssetBackedSecuritiesDisclosureSECRule15Ga1c1</li> <li>QuarterlyAssetBackedSecuritiesDisclosureeSECRule15Ga1c2i</li> <li>AnnualAssetBackedSecuritiesDisclosureSECRule15Ga1c2ii</li> <li>OtherAssetBackedSecuritiesDisclosure</li> </ul>
	Other Voluntary Disclosure Description	Indicates the description of a disclosure filing for Financial Operating Disclosure, Event Disclosure or Asset-Backed Securities Disclosure	Type= String{Min1,Max140} ex: Description of a disclosure filing
	Disclosure Sub Category Types	For Disclosures with Event Disclosure Category of Event Disclosure Category with the values FinancialObligationIncurrence or FinancialObligationEventReflectingFinancialDifficulties will have one or more of these	<ul style="list-style-type: none"> <li>FinancialObligationIncurrence_DebtObligation</li> <li>FinancialObligationIncurrence_Guarantee_DebtObligation</li> <li>FinancialObligationIncurrence_Guarantee_DerivativeInstrument</li> <li>FinancialObligationIncurrence_DerivativeInstrument</li> <li>FinancialObligationEventReflectingFinancialDifficulties_Default</li> <li>FinancialObligationEventReflectingFinancialDifficulties_EventOfAcceleration</li> <li>FinancialObligationEventReflectingFinancialDifficulties_TerminationEvent</li> <li>FinancialObligationEventReflectingFinancialDifficulties_ModificationOfTerms</li> <li>FinancialObligationEventReflectingFinancialDifficulties_Other</li> </ul>
	Period Type	<p>For Financial Operating Filings and Asset-Backed Securities Filings, is used to indicate the type of period covered by the filing. The period type is used in combination with Disclosure Period</p> <p>ex. <i>PeriodType &lt;YearEnded&gt; &lt;EndingDate, 2008-12-31&gt;</i></p>	<p>Enumerated Value:</p> <ul style="list-style-type: none"> <li>YearEnded</li> <li>QuarterEnded</li> <li>MonthBeginning</li> <li>OtherPeriodBeginning</li> </ul>

XML Container	Data Tag	Definition	Data Specification
	Disclosure Period	<p>For Financial Operating Filings, used in conjunction with Period Type to indicate the applicable beginning and/or end date(s)</p> <p>For Event Filings, used without Period Type to indicate as of date of submitted document if other than the actual date of submission</p> <p>ex: Financial Operating Filing – Audited Financial Statements or CAFR (Rule 15c2-12) – <i>PeriodType &lt;OtherPeriodBeginning&gt; &lt;Beginning Date, 2009-06-31&gt; &lt;Ending Date, 2009-12-31&gt;</i></p> <p>ex: Event Filing – Bond Call -- <i>&lt;DisclosurePeriod AsOfDate="2009-12-31" /&gt;</i></p> <p>ex: Asset-Backed Securities Filing – <i>&lt;DisclosurePeriod PeriodType="OtherPeriodBeginning" BeginningDate="2013/12/31" EndingDate="2014-12-31" /&gt;</i></p>	<p>Attributes:</p> <ul style="list-style-type: none"> <li>• Period Type (see enumerated values above)</li> <li>• AsOfDate (ISODate) ex: 2009-06-31</li> <li>• BeginningDate (ISODate) ex: 2009-09-30</li> <li>• EndingDate (ISODate) ex: 2009-12-31</li> </ul>
Securities	Security Type	Indicates the disclosure as being CUSIP9 based, Commercial Paper, nonCUSIP (Ineligible for CUSIP Number Assignment) or Municipal Fund Security (529 Plan or Other Municipal Fund Security)	<p>Enumerated Value:</p> <ul style="list-style-type: none"> <li>• CUSIP9</li> <li>• CommercialPaper</li> <li>• nonCUSIP</li> <li>• MunicipalFundSecurity</li> </ul>
	Security	Indicates the nine-digit CUSIP number(s) to which the disclosure applies if the Security Type is CUSIP9, or the six-digit CUSIP6 number(s) if the Security Type is CommercialPaper. If the Security Type is nonCUSIP or Municipal Fund Security, the security descriptors of Issuer Name, Issue Description, Issuer State and Issue Dated Date will be included as appropriate	<p>CUSIP9 String{Min9,Max9} ex: 123456AB7 IF :Security Type is CUSIP9, or</p> <p>CUSIP6 String{Min6,Max6} ex: 123456 IF : Security Type is CommercialPaper</p>
Document	Document Identifier	EMMA-assigned unique identifier for a document of specific document type	Type= String{Min1,Max25} ex: 2535
	Document Status	Indication of the active state of a document consisting of current and archived	<p>Enumerated Value:</p> <ul style="list-style-type: none"> <li>• Current</li> <li>• Archived</li> <li>• Removed</li> </ul>
	Document Posting Date	The date the document was posted to the public on EMMA	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
	Document Archive Date	The date the document was moved to the EMMA archive	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
	Document Remove Date	The date the document was removed from a submission on the EMMA continuing disclosure service	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
File	File Identifier	EMMA-assigned unique identifier for electronic file(s) constituting the submitted document	Type= String{Min1,Max25} ex: MS223986-1

XML Container	Data Tag	Definition	Data Specification
	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 • Removed
	File Posting Date	The date the file was posted to the public on EMMA	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
	File Archive Date	The date the file was moved to the EMMA archive	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
	File Remove Date	The date the file was removed from a submission on the EMMA continuing disclosure service	Type= ISODate (CCYY-MM-DD) ex: 2008-12-08
Contact Information	Contact Type	Indicates organization type of contact that the public should contact with questions about the submitted disclosure	Enumerated Value: • Issuer • Obligor
	Contact Organization Name	Full name of the contact organization that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max140} ex: MuniBond Dealer
	Contact First Name	The first name of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max25} ex: Emma
	Contact Last Name	The last name of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max25} ex: Jones
	Contact Title	The title of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max15} ex: 703-555-2222
	Contact Phone Number	The phone number of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max6} ex: 1235
	Contact Phone Number Extension	The extension of the phone number (if any) of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max140} ex: 123 Security Road
	Contact Address	The street address or post office box of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max25} ex: Alexandria
	Contact City	The address city of the contact person that the public should contact with questions about the submitted disclosure	Type= String;StateCode;2 (pattern value="[A-Z]{2,2}") ex: VA
	Contact State	The address state of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max15} ex: 22301-5555
	Contact Zip Code	The address zip code of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max50} ex: issuer@issuer.com
	Contact Email Address	The email address of the contact person that the public should contact with questions about the submitted disclosure	Type= String{Min1,Max140} ex: MuniBond Dealer

## Figure 4: XML Data Message Schema

Below is the Data Message schema describing the base structural containers and types. This schema is universally applicable to Data Messages for Continuing Disclosure submissions.

### Data Message Schema

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema
  xmlns:tns="http://emma.msrb.org/schemas/subscriptionmessages/continuingdisclosure/types"
  elementFormDefault="qualified"
  targetNamespace="http://emma.msrb.org/schemas/subscriptionmessages/continuingdisclosure/types"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="ContinuingDisclosureSubscriptionDataMessage"
    type="tns:ContinuingDisclosureSubscriptionDataMessageType" />
  <xs:complexType name="ContinuingDisclosureSubscriptionDataMessageType">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="ContinuingDisclosureSubmission"
        type="tns:ContinuingDisclosureSubmissionDetailsType" />
      </xs:sequence>
      <xs:attribute name="SubmissionTransactionCount" type="xs:integer" />
      <xs:attribute name="ReplayDate" type="xs:date" />
    </xs:complexType>
    <xs:complexType name="ContinuingDisclosureSubmissionDetailsType">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="1" name="DisclosureIndexingData"
          type="tns:DisclosureIndexingDataDetailsType" />
        <xs:element minOccurs="0" maxOccurs="unbounded" name="ContactInformation" nillable="true"
          type="tns:ContactInformationType" />
        <xs:element minOccurs="0" maxOccurs="unbounded" name="Document" nillable="true"
          type="tns:DocumentDetailsType" />
        </xs:sequence>
        <xs:attribute name="SubmissionIdentifier" type="xs:string" />
        <xs:attribute name="SubmissionStatus" type="tns:SubmissionStatusType" />
        <xs:attribute name="SubmissionTransactionDateTime" type="xs:dateTime" />
      </xs:complexType>
      <xs:complexType name="DisclosureIndexingDataDetailsType">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="unbounded" name="Disclosure"
            type="tns:DisclosureDetailsType" />
          <xs:element minOccurs="0" maxOccurs="1" name="Securities" type="tns:SecuritiesDetailsType" />
        </xs:sequence>
      </xs:complexType>
      <xs:complexType name="DisclosureDetailsType">
        <xs:sequence>
          <xs:element minOccurs="0" maxOccurs="1" name="DisclosurePeriod"
            type="tns:DisclosurePeriodType" />
          <xs:element minOccurs="0" maxOccurs="unbounded" name="DisclosureSubCategory"
            type="tns:DisclosureSubCategoryType" />
          </xs:sequence>
          <xs:attribute name="DisclosureType" type="tns:DisclosureTypes" />
        </xs:complexType>
      </xs:complexType>
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

```

<xs:attribute name="FinancialOperatingDisclosureCategory"
type="tns:FinancialOperatingDisclosureCategoryType" />
<xs:attribute name="EventDisclosureCategory" type="tns:EventDisclosureCategoryType" />
<xs:attribute name="AssetBackedSecuritiesDisclosureCategory"
type="tns:AssetBackedSecuritiesDisclosureCategoryType" />
<xs:attribute name="OtherVoluntaryDisclosureDescription" type="xs:string" />
</xs:complexType>
<xs:complexType name="DisclosurePeriodType">
<xs:attribute name="PeriodType" type="tns:PeriodDetailsType" />
<xs:attribute name="AsOfDate" type="xs:date" />
<xs:attribute name="BeginningDate" type="xs:date" />
<xs:attribute name="EndingDate" type="xs:date" />
</xs:complexType>
<xs:simpleType name="PeriodDetailsType">
<xs:restriction base="xs:string">
<xs:enumeration value="YearEnded" />
<xs:enumeration value="QuarterEnded" />
<xs:enumeration value="MonthBeginning" />
<xs:enumeration value="OtherPeriodBeginning" />
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DisclosureSubCategoryType">
<xs:attribute name="Name" type="tns:DisclosureSubCategoryName" use="required" />
</xs:complexType>
<xs:simpleType name="DisclosureSubCategoryName">
<xs:restriction base="xs:string">
<xs:enumeration value="FinancialObligationIncurrence_DebtObligation" />
<xs:enumeration value="FinancialObligationIncurrence_Guarantee_DebtObligation" />
<xs:enumeration value="FinancialObligationIncurrence_Guarantee_DerivativeInstrument" />
<xs:enumeration value="FinancialObligationIncurrence_DerivativeInstrument" />
<xs:enumeration value="FinancialObligationEventReflectingFinancialDifficulties_Default" />
<xs:enumeration value="FinancialObligationEventReflectingFinancialDifficulties_EventOfAcceleration"
/>
<xs:enumeration value="FinancialObligationEventReflectingFinancialDifficulties_TerminationEvent" />
<xs:enumeration
value="FinancialObligationEventReflectingFinancialDifficulties_ModificationOfTerms" />
<xs:enumeration value="FinancialObligationEventReflectingFinancialDifficulties_Other" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="DisclosureTypes">
<xs:restriction base="xs:string">
<xs:enumeration value="FinancialOperatingDataDisclosure" />
<xs:enumeration value="EventBasedDisclosure" />
<xs:enumeration value="DisclosureWithoutIndexingInformationPreJuly09Undertaking" />
<xs:enumeration value="AssetBackedSecuritiesDisclosure" />
<xs:enumeration value="BankLoan" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="FinancialOperatingDisclosureCategoryType">
<xs:restriction base="xs:string">
<xs:enumeration value="AnnualFinancialInformationOperatingData15c212" />
<xs:enumeration value="AuditedFinancialStatementsOrCAFR15c212" />
<xs:enumeration value="FailureToProvideAnnualFinancialInformationAsRequired15c212" />
<xs:enumeration value="QuarterlyMonthlyFinancialInformation" />
<xs:enumeration value="ChangeInFiscalYearTimingOfAnnualDisclosure" />
<xs:enumeration value="ChangeInAccountingStandard" />

```

```

<xs:enumeration value="InterimAdditionalFinancialInformationOperatingData" />
<xs:enumeration value="Budget" />
<xs:enumeration value="InvestmentDebtFinancialPolicy" />
<xs:enumeration
value="InformationProvidedToRatingAgencyOrCreditLiquidityProviderOrOtherThirdParty" />
<xs:enumeration value="ConsultantReport" />
<xs:enumeration value="OtherFinancialVoluntaryInformation" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="EventDisclosureCategoryType">
<xs:restriction base="xs:string">
<xs:enumeration value="PrincipalInterestPaymentDelinquency" />
<xs:enumeration value="NonPaymentRelatedDefault" />
<xs:enumeration value="UnscheduledDrawOnDebtServiceReserveReflectingFinancialDifficulties" />
<xs:enumeration value="UnscheduledDrawOnCreditEnhancementReflectingFinancialDifficulties" />
<xs:enumeration value="SubstitutionOfCreditOrLiquidityProviderOrItsFailureToPerform" />
<xs:enumeration value="AdverseTaxOpinionOrEventAffectingTheTaxExemptStatusOfTheSecurity" />
<xs:enumeration value="ModificationToTheRightsOfSecurityHolders" />
<xs:enumeration value="BondCall" />
<xs:enumeration value="Defeasance" />
<xs:enumeration value="ReleaseOrSubstitutionOrSaleOfPropertySecuringRepaymentOfTheSecurity" />
<xs:enumeration value="RatingChange" />
<xs:enumeration value="TenderOfferSecondaryMarketPurchases" />
<xs:enumeration value="MergerConsolidationAcquisitionAndSaleOfAllOrSubstantiallyAllAssets" />
<xs:enumeration value="BankruptcyInsolvencyReceivershipOrSimilarEvent" />
<xs:enumeration value="SuccessorAdditionalOrChangeInTrustee" />
<xs:enumeration value="FailureToProvideEventFilingInformation" />
<xs:enumeration value="AmendmentToContinuingDisclosureUndertaking" />
<xs:enumeration value="ChangeInObligatedPerson" />
<xs:enumeration value="NoticeToInvestorsPursuantToBondDocuments" />
<xs:enumeration value="CommunicationFromTheInternalRevenueService" />
<xs:enumeration value="BidForAuctionRateOrOtherSecurities" />
<xs:enumeration value="CapitalOrOtherFinancingPlan" />
<xs:enumeration value="LitigationEnforcementAction" />
<xs:enumeration value="ChangeOfTenderAgentRemarketingAgentOrOtherOnGoingParty" />
<xs:enumeration value="ChangeOfTrusteeTenderAgentRemarketingAgentOrOtherOnGoingParty" />
<xs:enumeration value="MergerConsolidationReorganizationInsolvencyBankruptcy" />
<xs:enumeration value="DerivativeOrOtherSimilarTransaction" />
<xs:enumeration value="OtherEventVoluntaryInformation" />
<xs:enumeration value="BankLoanAlternativeFinancingFormerlyVoluntary" />
<xs:enumeration value="FinancialObligationIncurrence" />
<xs:enumeration value="FinancialObligationEventReflectingFinancialDifficulties" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AssetBackedSecuritiesDisclosureCategoryType">
<xs:restriction base="xs:string">
<xs:enumeration value="InitialAssetBackedSecuritiesDisclosureSECRule15Ga1c1" />
<xs:enumeration value="QuarterlyAssetBackedSecuritiesDisclosureSECRule15Ga1c2i" />
<xs:enumeration value="AnnualAssetBackedSecuritiesDisclosureSECRule15Ga1c2ii" />
<xs:enumeration value="OtherAssetBackedSecuritiesDisclosure" />
</xs:restriction>
</xs:simpleType>
<xs:complexType name="SecuritiesDetailsType">
<xs:sequence>

```

```

<xs:element minOccurs="0" maxOccurs="unbounded" name="Security"
type="tns:SecurityDetailsType" />
</xs:sequence>
<xs:attribute name="SecurityType" type="tns:SecurityTypes" />
</xs:complexType>
<xs:complexType name="SecurityDetailsType">
<xs:attribute name="CUSIP9" type="xs:string" />
<xs:attribute name="CUSIP6" type="xs:string" />
<xs:attribute name="IssuerName" type="xs:string" />
<xs:attribute name="IssueDescription" type="xs:string" />
<xs:attribute name="IssuerState" type="xs:string" />
<xs:attribute name="IssueDatedDate" type="xs:date" />
</xs:complexType>
<xs:simpleType name="SecurityTypes">
<xs:restriction base="xs:string">
<xs:enumeration value="CUSIP9" />
<xs:enumeration value="CommercialPaper" />
<xs:enumeration value="nonCUSIP" />
<xs:enumeration value="MunicipalFundSecurity" />
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ContactInformationType">
<xs:attribute name="ContactType" type="tns>ContactTypeDetails" />
<xs:attribute name="ContactOrganizationName" type="xs:string" />
<xs:attribute name="ContactFirstName" type="xs:string" />
<xs:attribute name="ContactLastName" type="xs:string" />
<xs:attribute name="ContactPhoneNumber" type="xs:string" />
<xs:attribute name="ContactPhoneNumberExtension" type="xs:string" />
<xs:attribute name="ContactAddress" type="xs:string" />
<xs:attribute name="ContactCity" type="xs:string" />
<xs:attribute name="ContactState" type="xs:string" />
<xs:attribute name="ContactZipCode" type="xs:string" />
<xs:attribute name="ContactEMailAddress" type="xs:string" />
</xs:complexType>
<xs:simpleType name="ContactTypeDetails">
<xs:restriction base="xs:string">
<xs:enumeration value="Issuer" />
<xs:enumeration value="Obligor" />
<xs:enumeration value="Submitter" />
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DocumentDetailsType">
<xs:sequence>
<xs:element minOccurs="0" maxOccurs="unbounded" name="UnderlyingFiles"
type="tns:UnderlyingFilesType" />
</xs:sequence>
<xs:attribute name="DocumentIdentifier" type="xs:string" />
<xs:attribute name="DocumentStatus" type="tns:DocumentStatusType" />
<xs:attribute name="DocumentPostingDate" type="xs:date" />
<xs:attribute name="DocumentArchiveDate" type="xs:date" />
<xs:attribute name="DocumentRemoveDate" type="xs:date" />
</xs:complexType>
<xs:complexType name="UnderlyingFilesType">
<xs:sequence>
<xs:element minOccurs="0" maxOccurs="1" name="File" type="tns:FileDetailsType" />
</xs:sequence>

```

```
</xs:complexType>
<xs:complexType name="FileDetailsType">
<xs:attribute name="FileIdentifier" type="xs:string" />
<xs:attribute name="FileStatus" type="tns:DocumentStatusType" />
<xs:attribute name="FileOrder" type="xs:integer" />
<xs:attribute name="FilePostingDate" type="xs:date" />
<xs:attribute name="FileArchiveDate" type="xs:date" />
<xs:attribute name="FileRemoveDate" type="xs:date" />
</xs:complexType>
<xs:simpleType name="DocumentStatusType">
<xs:restriction base="xs:string">
<xs:enumeration value="Current" />
<xs:enumeration value="Archived" />
<xs:enumeration value="Removed" />
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="SubmissionStatusType">
<xs:restriction base="xs:string">
<xs:enumeration value="Publish" />
</xs:restriction>
</xs:simpleType>
</xs:schema>
```

## Figure 5: Examples of XML files disseminating data submissions

### Financial/ Operating Data Disclosure (CUSIP-9)

```

<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="...">
  <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"
    SubmissionTransactionDateTime="2008-03-20T00:00:00">
    <DisclosureIndexingData>
      <Disclosure DisclosureType="FinancialOperatingDataDisclosure"
        FinancialOperatingDisclosureCategory="OtherFinancialVoluntaryInformation"
        OtherVoluntaryDisclosureDescription="Description of the nature
        of Other Financial Voluntary Information">
        <DisclosurePeriod AsOfDate="2008-07-01"/>
      </Disclosure>
      <Securities SecurityType="CUSIP9">
        <Security CUSIP9="617481LX1"/>
        <Security CUSIP9="617481LY2"/>
      </Securities>
    </DisclosureIndexingData>
    <ContactInformation ContactType="Submitter" ContactOrganizationName="Organization"
      ContactFirstName="ContactFirstName"
      ContactLastName="ContactLastname" ContactAddress="Address"
      ContactCity="City" ContactState="AL" ContactZipCode="55555"
      ContactPhoneNumber="555-55-5555"
      ContactEMailAddress="Issuer@mail.com"/>
      <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization"
        ContactFirstName="ContactFirstName"
        ContactLastName="ContactLastname" ContactAddress="Address"
        ContactCity="City" ContactState="AL" ContactZipCode="55555"
        ContactPhoneNumber="555-55-5555" ContactEMailAddress="123@mail.com"/>
      <ContactInformation ContactType="Obligor" ContactOrganizationName="Organization"
        ContactFirstName="ContactFirstName"
        ContactLastName="ContactLastname" ContactAddress="Address"
        ContactCity="City" ContactState="AL" ContactZipCode="55555"
        ContactPhoneNumber="555-55-5555" ContactEMailAddress="123@mail.com"/>
    <Document DocumentIdentifier="1000" DocumentPostingDate="2008-12-06">
      <UnderlyingFiles>
        <File FileIdentifier="MS223986-1" FileStatus="Current"
          FilePostingDate="2008-12-06" />
      </UnderlyingFiles>
      <UnderlyingFiles>
        <File FileIdentifier="MS223986-2" FileStatus="Current"
          FilePostingDate="2008-12-06" />
      </UnderlyingFiles>
    </Document>
  </ContinuingDisclosureSubmission>
</ContinuingDisclosureSubscriptionDataMessage>

```

**Financial /Operating Data Disclosure (Commercial Paper)**

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="EMMA-SUBSCRIPTION-XML ...">
    <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"
        SubmissionTransactionDateTime="2008-03-20T00:00:00">
        <DisclosureIndexingData>
            <Disclosure
                DisclosureType="FinancialOperatingDataDisclosure"
                    FinancialOperatingDisclosureCategory="ChangeInAccountingStandard">
                <DisclosurePeriod AsOfDate="2008-07-01"/>
            </Disclosure>
            <Securities SecurityType="CommercialPaper">
                <Security CUSIP6="694004"/>
            </Securities>
        </DisclosureIndexingData>
        <ContactInformation ContactType="Submitter"
            ContactOrganizationName="Organization"
            ContactFirstName="ContactFirstName"
            ContactLastName="ContactLastname"
            ContactAddress="Address" ContactCity="City"
            ContactState="AL" ContactZipCode="55555"
            ContactPhoneNumber="555-55-5555"
            ContactEMailAddress="Issuer@mail.com"/>
        <Document DocumentIdentifier="1000"
            DocumentPostingDate="2008-12-06">
            <UnderlyingFiles>
                <File FileIdentifier="MS223986-1"
                    FileStatus="Current" FilePostingDate="2008-12-06" />
            </UnderlyingFiles>
        </Document>
    </ContinuingDisclosureSubmission>
</ContinuingDisclosureSubscriptionDataMessage>
```

## Financial/ Operating Data Disclosure (non-CUSIP)

```

<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML"
                                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                             xsi:schemaLocation="EMMA-SUBSCRIPTION-XML ...">
    <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"
                                     SubmissionTransactionDateTime="2008-03-20T00:00:00">
        <DisclosureIndexingData>
            <Disclosure
                DisclosureType="FinancialOperatingDataDisclosure"

                    FinancialOperatingDisclosureCategory="AnnualFinancial
                    InformationOperatingData15c212">
                <DisclosurePeriod
                    PeriodType="OtherPeriodBeginning" BeginningDate="2007-
                    06-30" EndingDate="2008-06-30"/>
                </Disclosure>
                <Securities SecurityType="nonCUSIP">
                    <Security IssuerName="Sanitary Improvement
                    District No. 4858-1 of Emma County"
                    IssueDescription="Construction Warrants, First Series"
                    IssuerState="NE" IssueDatedDate="2009-04-26"/>
                </Securities>
            </DisclosureIndexingData>
            <ContactInformation ContactType="Submitter"
                ContactOrganizationName="Organization"
                ContactFirstName="ContactFirstName"
                ContactLastName="ContactLastname"
                ContactAddress="Address" ContactCity="City"
                ContactState="AL" ContactZipCode="55555"
                ContactPhoneNumber="555-55-5555"
                ContactEMailAddress="Issuer@mail.com"/>
            <Document DocumentIdentifier="1000"
                DocumentPostingDate="2008-12-06">
                <UnderlyingFiles>
                    <File FileIdentifier="MS223986-1"
                        FileStatus="Current" FilePostingDate="2008-12-06" />
                </UnderlyingFiles>
            </Document>
        </ContinuingDisclosureSubmission>
    </ContinuingDisclosureSubscriptionDataMessage>

```

## Financial/ Operating Data Disclosure (non-CUSIP)

```

<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML"
                                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                             xsi:schemaLocation="EMMA-SUBSCRIPTION-XML ...">
    <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"
                                     SubmissionTransactionDateTime="2008-03-20T00:00:00">
        <DisclosureIndexingData>
            <Disclosure
                DisclosureType="FinancialOperatingDataDisclosure"
                    FinancialOperatingDisclosureCategory="ChangeInAccountingStandard">
                <DisclosurePeriod AsOfDate="2008-07-01"/>
            </Disclosure>
            <Securities SecurityType="MunicipalFundSecurity">
                <Security IssuerName="State of Emma"
                        IssueDescription="529 College Savings Plan – Advisor Series"
                        IssuerState="IL"/>
                </Securities>
            </DisclosureIndexingData>
            <ContactInformation ContactType="Submitter"
                                ContactOrganizationName="Organization"
                                ContactFirstName="ContactFirstName"
                                ContactLastName="ContactLastname"
                                ContactAddress="Address" ContactCity="City"
                                ContactState="AL" ContactZipCode="55555"
                                ContactPhoneNumber="555-55-5555"
                                ContactEMailAddress="Issuer@mail.com"/>
            <Document DocumentIdentifier="1000"
                      DocumentPostingDate="2008-12-06">
                <UnderlyingFiles>
                    <File FileIdentifier="MS223986-1"
                          FileStatus="Current" FilePostingDate="2008-12-06" />
                </UnderlyingFiles>
            </Document>
        </ContinuingDisclosureSubmission>
    </ContinuingDisclosureSubscriptionDataMessage>

```

## Event-Based Disclosure (CUSIP9)

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns="EMMA-SUBSCRIPTION-XML"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="EMMA-SUBSCRIPTION-XML ...>
    <ContinuingDisclosureSubmission SubmissionIdentifier="1300" SubmissionStatus="Publish"
        SubmissionTransactionDateTime="2008-03-20T00:00:00">
        <DisclosureIndexingData>
            <Disclosure DisclosureType="EventBasedDisclosure"
                EventDisclosureCategory="BondCall">
                <DisclosurePeriod AsOfDate="2008-06-30"/>
            </Disclosure>
            <Disclosure DisclosureType="EventBasedDisclosure"
                EventDisclosureCategory="Defeasance">
                <DisclosurePeriod AsOfDate="2008-06-30"/>
            </Disclosure>
            <Securities SecurityType="CUSIP9">
                <Security CUSIP9="617481LX1"/>
                <Security CUSIP9="617481LY2"/>
            </Securities>
        </DisclosureIndexingData>
        <ContactInformation ContactType="Submitter"
            ContactOrganizationName="Organization"
            ContactFirstName="ContactFirstName"
            ContactLastName="ContactLastname"
            ContactAddress="Address" ContactCity="City"
            ContactState="AL" ContactZipCode="55555"
            ContactPhoneNumber="555-55-5555"
            ContactEMailAddress="Issuer@mail.com"/>
        <Document DocumentIdentifier="1000"
            DocumentPostingDate="2008-12-15">
            <UnderlyingFiles>
                <File FileIdentifier="MS223987-1"
                    FileStatus="Current" FilePostingDate="2008-12-15" />
            </UnderlyingFiles>
        </Document>
    </ContinuingDisclosureSubmission>
</ContinuingDisclosureSubscriptionDataMessage>
```

## Event-Based Disclosure (CUSIP9) for new SEC 15c2-12 Event Types Example 1

```

<?xml version="1.0"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                             SubmissionTransactionCount="1" ReplayDate="2018-10-19"
                                             xmlns="http://emma.msrb.org/schemas/subscriptionmessage
                                             s/continuingdisclosure/types">
  <ContinuingDisclosureSubmission SubmissionIdentifier="EA502130" SubmissionStatus="Publish"
                                    SubmissionTransactionDateTime="2018-10-
                                    19T10:30:39.638541-04:00">
    <DisclosureIndexingData>
      <Disclosure DisclosureType="EventBasedDisclosure"
                EventDisclosureCategory="FinancialObligationIncurrence"
                OtherVoluntaryDisclosureDescription="Sample Description">
        <DisclosurePeriod AsOfDate="2018-10-19" />
        <DisclosureSubCategory Name="FinancialObligationIncurrence_DerivativeInstrument" />
      </Disclosure>
      <Securities SecurityType="CUSIP9">
        <Security CUSIP9="999100ZZ6" />
      </Securities>
    </DisclosureIndexingData>
    <ContactInformation ContactType="Submitter" ContactOrganizationName="DEALER-ORG-01"
                        ContactFirstName="DEALER1" ContactLastName="TESTER"
                        ContactPhoneNumber="703-797-6600"
                        ContactPhoneNumberExtension="1234"
                        ContactAddress="1900 Duke Street"
                        ContactCity="Alexandria" ContactState="VA"
                        ContactZipCode="22314"
                        ContactEMailAddress="dealer1@msrb.org" />
    <Document DocumentIdentifier="EA462475" DocumentStatus="Current"
              DocumentPostingDate="2018-10-19">
      <UnderlyingFiles>
        <File FileIdentifier="EA858378" FileStatus="Current" FileOrder="1" FilePostingDate="2018-10-19" />
      </UnderlyingFiles>
    </Document>
  </ContinuingDisclosureSubmission>
</ContinuingDisclosureSubscriptionDataMessage>

```

## Event-Based Disclosure (CUSIP9) for new SEC 15c2-12 Event Types Example 2

```

<?xml version="1.0"?>
<ContinuingDisclosureSubscriptionDataMessage xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                                             xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                             SubmissionTransactionCount="1" ReplayDate="2018-10-19"
                                             xmlns="http://emma.msrb.org/schemas/subscriptionmessage
                                             s/continuingdisclosure/types">
  <ContinuingDisclosureSubmission SubmissionIdentifier="EA502131" SubmissionStatus="Publish"
                                    SubmissionTransactionDateTime="2018-10-
                                    19T10:32:33.098312-04:00">
    <DisclosureIndexingData>
      <Disclosure DisclosureType="EventBasedDisclosure"
                EventDisclosureCategory="FinancialObligationEventReflectin
                gFinancialDifficulties"
                OtherVoluntaryDisclosureDescription="Another Sample
                Description">
        <DisclosurePeriod AsOfDate="2018-10-19" />
        <DisclosureSubCategory Name="FinancialObligationEventReflectingFinancialDifficulties_Default" />
        <DisclosureSubCategory Name="FinancialObligationEventReflectingFinancialDifficulties_Other" />
      </Disclosure>
      <Securities SecurityType="CUSIP9">
        <Security CUSIP9="999101ZZ4" />
      </Securities>
    </DisclosureIndexingData>
    <ContactInformation ContactType="Submitter" ContactOrganizationName="DEALER-ORG-01"
                          ContactFirstName="DEALER1" ContactLastName="TESTER"
                          ContactPhoneNumber="703-797-6600"
                          ContactPhoneNumberExtension="1234"
                          ContactAddress="1900 Duke Street"
                          ContactCity="Alexandria" ContactState="VA"
                          ContactZipCode="22314"
                          ContactEMailAddress="dealer1@msrb.org" />
    <Document DocumentIdentifier="EA462476" DocumentStatus="Current"
              DocumentPostingDate="2018-10-19">
      <UnderlyingFiles>
        <File FileIdentifier="EA858379" FileStatus="Current" FileOrder="1" FilePostingDate="2018-10-19" />
      </UnderlyingFiles>
    </Document>
  </ContinuingDisclosureSubmission>
</ContinuingDisclosureSubscriptionDataMessage>

```

## Asset-Backed Securities Filing (CUSIP9)

```
<?xml version="1.0" encoding="UTF-8"?>
<ContinuingDisclosureMessage xmlns="EMMA-SUBMISSION-XML"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="EMMA-SUBMISSION-XML ... ">
    <Submission SubmissionStatus="Publish" />
    <DisclosureIndexingData>
        <Disclosure
            DisclosureType="AssetBackedSecuritiesDisclosure"
            AssetBackedSecuritiesDisclosureCategory="InitialAsset
BackedSecuritiesDisclosureSECRule15Ga1c1"
            OtherVoluntaryDisclosureDescription= "Detailed
description of Asset-Backed securities filing">
            <DisclosurePeriod PeriodType="OtherPeriodBeginning"
BeginningDate="2014-01-01" EndingDate="2014-02-01"/>
        </Disclosure>
        <Securities SecurityType="CUSIP9">
            <Security CUSIP9="622438AJ7"/>
            <CUSIP6SecurityPointers>
                <CUSIP6SecurityPointer CUSIP6="622481"/>
                <CUSIP6SecurityPointer
                    </Securities>
                </DisclosureIndexingData>
                <ContactInformation ContactType="Issuer" ContactOrganizationName="Organization"
                    ContactFirstName="ContactFirstName"
                    ContactLastName="ContactLastname"
                    ContactAddress="Address" ContactCity="City"
                    ContactState="AL" ContactZipCode="55555"
                    ContactPhoneNumber="555-555-5555"
                    ContactEMailAddress="Issuer@mail.com"/>
            </ContinuingDisclosureMessage>
```

## Appendix 1: Notes on implementing software to read the Historical Data Product for CD

### Example in C#

The file **HistDataProd-CD-Effective-2019-02-27.xsd** is included in the zip file **HistDataProd-CD-Effective-2019-02-27.zip** along with 2 sample data files.

Use xsd.exe to create classes from XSD file.

**xsd HistDataProd-CD-Effective-2019-02-27.xsd /c**  
creates file **HistDataProd-CD-Effective-2019-02-27.cs**  
(xsd.exe is a tool included with Visual Studio)

Include this created class file in project.

Use **XmlSerializer** class with root class **ContinuingDisclosureSubscriptionDataMessageType** as in following code snippet:

```
var xmlSerializer = new XmlSerializer(
    typeof(ContinuingDisclosureSubscriptionDataMessageType));
var filename = "EA594336.xml"; // one of the sample files
var subm = xmlSerializer.Deserialize(
    new FileStream( filename, FileMode.Open)) as
ContinuingDisclosureSubscriptionDataMessageType;

// at this point use subm to access the data
Console.WriteLine(
    subm.ContinuingDisclosureSubmission[0]
    .DisclosureIndexingData.Disclosure[0]
    .DisclosureSubCategory[0].Name);
// prints: FinancialObligationIncurrence_DerivativeInstrument
```

Similar approach will work for Java as well.