



aseXML Schema Change Request

Document ID	34
Title	MSATS Generic Report Parameters
Change Type	Enhancement
Date	11 October 2007
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Document Control

Version	Date	Author	Summary of Change
1.0	10 th October 07	Bob Jones	Change proposal.
1.1	24 th October 07	Nada Reinprecht	Approval proposal; schema design
1.2	14 th November 07	Nada Reinprecht	Updated schema design

Contents

Document Control.....	2
Contents.....	3
Tables.....	4
Figures.....	5
Glossary.....	6
1. Change Proposal.....	7
1.1. Description of the proposed change.....	7
1.1.1 First change description.....	7
1.2. Reason for Change.....	7
1.3. Supplied Documents.....	7
1.3.1 Business process document.....	7
1.4. Baseline Schema.....	7
2. Approval Proposal.....	8
2.1. Proposed Change.....	8
2.1.1 Draft schema.....	8
2.1.2 Change log.....	8
2.1.3 Schema change description.....	8
2.1.4 Impact Summary.....	11
2.1.5 Developer Test.....	12
3. Proposal Assessment.....	13
3.1. Test.....	13
3.1.1 Test Platforms.....	13
3.1.2 Test Cases.....	13
3.1.3 Test Results.....	13
3.2. Conformance Report.....	13
4. Issue Register.....	14
4.1. Status of Issues.....	14
5. Resolution.....	15
5.1. ASWG Endorsement.....	15

Tables

Table 1-1, Proposed Changes	7
Table 2-1 Change Log	8
Table 2-2, Impact Summary	11
Table 3-1, Change Proposal Conformance Details	13
Table 4-1, Issues list	14
Table 5-1, ASWG Vote Results	15

Figures

Figure 2-1 Test Figure..... 9

Glossary

Abbreviation	Description

1. Change Proposal

This Change Proposal is to provide participants with a timelier and more flexible response to reporting needs that once included in the aseXML schema will not need further schema changes to implement new reports.

1.1. Description of the proposed change

The proposed changes are listed in the following table.

Item#	Change Description	Change Type
1	Provide participants with a timelier and more flexible response to reporting needs via the use of generic report parameters which once included in the aseXML schema will not need further schema changes to implement new reports.	Enhancement

Table 1-1, Proposed Changes

1.1.1 First change description

Provide a report request and response format where a new report type can be implemented in a timelier and more flexible way by not requiring an aseXML change for each new report type. To do this it is proposed to have a generic report parameter type "GenericReportParameters" whose only mandatory element is "ReportName" with an optional list of "Parameters". Each "Parameter" in the list has a mandatory "name" attribute to identify the parameter for the relevant processing.

1.2. Reason for Change

Provide participants with a timelier and more flexible response to reporting needs.

1.3. Supplied Documents

1.3.1 Business process document

Enhancement defect 4601 has been raised in Test Director under the MMS Project for this purpose.

1.4. Baseline Schema

The aseXML_r21 schema used as a basis for this proposal.

2. Approval Proposal

2.1. Proposed Change

2.1.1 Draft schema

Draft schema created as aseXML_r22.xsd.

2.1.2 Change log

The following changes have been implemented in this draft:

Chg #	Item #	Description of change	Filename
1	All	Schema namespace changed to urn:aseXML:r22; File version changed from r21 to r22	aseXML_r22
2	All	Included Reports_r22 in the aseXML_r22	aseXML_r22
3	All	Added r22 release identifier in the Event schema; File version changed from r21 to r22	Events_r22
4	1	Abstract type ReportParameterType added to Reports_r22; File version changed from r15 to r22.	Reports_r22
5	1	Derived types: StringParameter, DateParameter, DateTimeParameter, TimeParameter, IntegerParameter, BooleanParameter, DecimalParameter	Reports_r22
6	1	ReportParametersType and GenericReportParameters types added to Reports_r22;	Reports_r22
7	1	Version number of complex type "GenericReportParameters" set to r22 The version number is optional..	Reports_r22.xsd

Table 2-1 Change Log

2.1.3 Schema change description

Add GenericReportParameters to aseXML schema.

2.1.3.1 aseXML_r22.xsd

- Update Reports_r15.xsd reference to Reports_r22.xsd.

2.1.3.2 Reports_r22.xsd

- Add Complex Type "GenericReportParameters" derived from BaseReportParameters with an optional element "Parameters" of type "ReportParametersType"
- Add optional version attribute r22 to the GenericReportParameters.
- Add Complex Types "ReportParameterType" as an abstract type with attributes: mandatory "name" and optional "description"
- Add Complex Type "ReportParametersType" as a sequence of 'Parameter' of type "ReportParameterType"
- Add derived types: "StringParameter", "DateParameter", "DateTimeParameter", "TimeParameter", "DecimalParameter", "IntegerParameter", "BooleanParameter" and "AnyParameter"

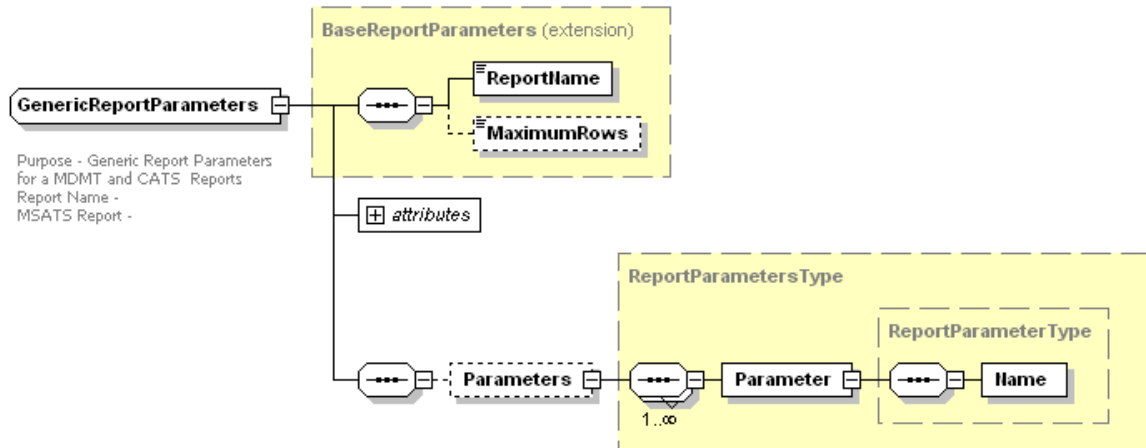
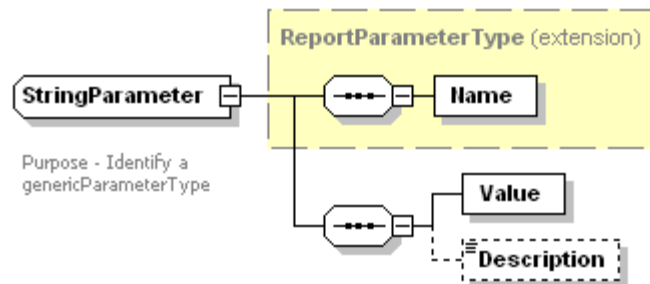


Figure 2-1 Generic Report Parameters type

ReportParameterType is an abstract type and can't be used as such. The only mandatory element in this abstract type is the Name of the NonZeroLengthString type.

Only parameter types derived from the abstract ReportParameterType can be used for the Parameter element.

Each derived parameter type has the following structure:



1. It is derived from the ReportParameterType
2. It has 2 additional elements: mandatory Value and optional Description.
3. Value element is nillable

The difference between the derived types is the data type of the Value element.

1. StringParameter (shown on the above diagram) has the NonZeroStringLength type for the Value element.
2. DateParameter has xsd:date type for the Value element
3. DateTimeParameter has xsd:dateTime type for the Value element
4. TimeParameter has xsd:time type for the Value element
5. DecimalParameter has xsd:decimal type for the Value element
6. IntegerParameter has xsd:integer type for the Value element
7. BooleanParameter has xsd:Boolean type for the Value element

Here are a few examples of how it works:

1. Example Report

```

<ReportResponse version="r10">
  <ReportParameters xsi:type="ase:GenericReportParameters" >
    <ReportName>Level2SettlementReconciliation</ReportName>
    <Parameters>
      <Parameter xsi:type="ase:StringParameter">
        <Name>SettlementCase</Name>
        <Value>S234</Value>
      </Parameter>
      <Parameter xsi:type="ase:DateParameter">
        <Name>FromDate</Name>
        <Value>2007-11-07</Value>
      </Parameter>
      <Parameter xsi:type="ase:DateParameter">
        <Name>ToDate</Name>
        <Value>2007-11-07</Value>
      </Parameter>
      <Parameter xsi:type="ase:IntegerParameter">
        <Name>LastSequenceNumber</Name>
        <Value>-300</Value>
      </Parameter>
      <Parameter xsi:type="ase:DateTimeParameter">
        <Name>RunTime</Name>
        <Value>2007-10-18T13:20:10.100+10:00</Value>
      </Parameter>
      <Parameter xsi:type="ase:DecimalParameter">
        <Name>AverageDailyLoad</Name>
        <Value>3.56789025438</Value>
        <Description>This is a description of Average Daily Load</Description>
      </Parameter>
      <Parameter xsi:type="ase:BooleanParameter">
        <Name>NMIEnergised</Name>
        <Value>true</Value>
      </Parameter>
      <Parameter xsi:type="ase:TimeParameter">
        <Name>TimeOfDay</Name>
        <Value>10:30:55</Value>
      </Parameter>
      <Parameter xsi:type="ase:StringParameter">
        <Name>ParameterWithNoValue</Name>
        <Value xsi:nil="true"></Value>
      </Parameter>
    </Parameters>
  </ReportParameters>
  <ReportResults xsi:type="ase:CSVReportFormat">
    <CSVData>
    </CSVData>
  </ReportResults>
  <Event>
    <Code>0</Code>
  </Event>
</ReportResponse>

```

2. Report with No parameters

```

<ReportResponse version="r10">
  <ReportParameters xsi:type="ase:GenericReportParameters">
    <ReportName>ReportWithNoParameters</ReportName>
  </ReportParameters>
  <ReportResults xsi:type="ase:CSVReportFormat">
    <CSVData>
    </CSVData>
  </ReportResults>

```

2.1.4 Impact Summary

This table identifies the files, transactions and versioned types that are potentially impacted as the result of these changes, where:

- o Modified types - None.
- o Derived types – None.
- o Versioned types affected – None.
- o Transactions potentially affected – ReportRequest and ReportResponse.
- o Schema files affected – aseXML_r22.xsd and Reports_r22.xsd.

Modified types	Derived types	Versioned types affected	Transactions potentially affected	Schema files affected
GenericReportParameters	GenericReportParameters	GenericReportParameters	ReportRequest	aseXML_r22.xsd
GenericReportParameters	GenericReportParameters	GenericReportParameters	ReportResponse	Reports_r22.xsd

Table 2-2, Impact Summary

2.1.5 Developer Test

2.1.5.1 *Test Platforms*

The new schema has been tested using the following platforms as advised by ASWG:

- XMLSpy 2004
- MSXML4 SP1
- Xerces 1.4.4 and 2.2.1

2.1.5.2 *Test Cases*

<List any sample files provided>

3. Proposal Assessment

3.1. Test

The ASWG ensures that all recommended parsers on relevant platforms can successfully validate the proposed schema.

3.1.1 Test Platforms

Supplied samples have been tested using the following parsers:

- MSXML 4.0 SP1
- Xerces 1.4.1
- Xerces 2.2.1
- XMLSpy 2004

3.1.2 Test Cases

<List samples tested... or 'as per section 2.1.5.2'>

3.1.3 Test Results

<All OK... or note issues>

3.2. Conformance Report

The ASWG completes the conformance report validating each proposed new schema file against the published aseXML guidelines.

Schema Filename	Impacted by Item #	Conformance Details
aseXML_r22.xsd	1	Conforms.
Reports_r22.xsd	1	Conforms.

Table 3-1, Change Proposal Conformance Details

4. Issue Register

This section describes any issues that have arisen and any modifications that are made to the original proposal during the Change Process

4.1. Status of Issues

Issue#	Item#	Description and Discussion	Status ¹	Resolution
1				

Table 4-1, Issues list

¹ Either 'Open' or 'Closed'

5. Resolution

The ASWG votes for endorsement of the options identified in section 2, and the voting results are forwarded to NEMMCO for approval. When 75% of those ASWG members who voted endorse a specific option, this represents an ASWG Recommendation for that option. NEMMCO will not reject an ASWG Recommendation without first consulting with the ASWG.

5.1. ASWG Endorsement

The results of the ASWG vote are as follows:

Date of Vote: 23/11/2007

Option	# Votes	% Vote
Option 1 (section 2.1)	6	86
Abstained	1	14
Total Members Present	7	100

Table 5-1, ASWG Vote Results