

**Schema Release**

**AseXML Schema Working Group**

**Release r22**

**Draft Release Date: 23/11/2007**

**Final Release Date: 21/12/2007**

## Document History

<b>Version</b>	<b>Date</b>	<b>Authors</b>	<b>Comments</b>
1.0	17 Dec 2007	Matthew Lohmann	

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## 1. Introduction

Version r22 of the aseXML schema has been developed from r21. This schema release is presented to aseXML Subscribers and Industry Participants for review, and to NEMMCO for approval, in accordance with the ASWG Terms of Reference.

## 2. Change Requests

The following ASWG Change Requests have been included in this schema release:

CR#	Description
34	MSATS Generic Report Parameters
35	aseXML Licence Update

These Change Requests are available from the ASWG or the aseXML website ([www.aseXML.com](http://www.aseXML.com) or <http://www.nemmco.com.au/asexml/index.htm>) for review by all impacted parties.

### 3. Impact Summary

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

- Modified types - None.
- Derived types - None.
- Versioned types affected - None.
- Transactions potentially affected - ReportRequest and ReportResponse.
- Schema files affected - aseXML\_r22.xsd, Events\_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

## 4. File Change Summary

The following file changes are implemented to create the r22 schema version

### 4.1. aseXML

- Changed aseXML namespace to urn:aseXML:r22
- Updated file references for Events, Reports to reflect file version r22
- Add the following text in the annotation of the main (root) aseXML file
  - **Use of the AseXML Standard**

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  - (a) You must not change the AseXML Standard without complying with the ASWG Terms of Reference.
  - (b) NEMMCO will not change the AseXML Standard without complying with the ASWG Terms of Reference.
  - (c) You must disclose all modifications you make to the AseXML Standard to ASWG and to NEMMCO (in such form as they request from time to time). You must also provide ASWG and NEMMCO with any information and assistance they may reasonably request regarding the modification.
  - (d) You assign (or will procure an assignment) to NEMMCO of all Intellectual Property Rights you have in any modifications you make to the AseXML Standard. The assignment will take effect from the creation of the modification. NEMMCO licenses you to use the AseXML Standard as part of the licence granted to you under paragraph 1.
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You are licensed to use the AseXML Standard free of charge.
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Use of the AseXML Standard is solely at your own risk. NEMMCO strongly advises that you independently confirm that the AseXML Standard is suitable for your purposes before you use it.
- **No Warranty**

The AseXML Standard is supplied “as is” and without any warranty or condition, express or implied. In particular, NEMMCO does not warrant or represent that:

- (a) the AseXML Standard will be suitable for your purposes;
- (b) the AseXML Standard will be accurate, reliable, complete, or up to date;
- (c) the AseXML Standard is free from computer viruses (including macro viruses) or other programs that may affect software or systems of users; or
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- **No Liability**

To the maximum extent permitted by law, NEMMCO has no liability (whether arising from negligence or otherwise) for any loss, damage, costs or expenses that you may suffer or incur in connection with the AseXML Standard or its use.

If NEMMCO is required by law to accept liability to you, NEMMCO’s liability is limited (at its election) to the re-supply of the particular goods or services or to the cost of this re-supply.

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1. Termination of these Terms of Use will not prejudice any right of action or remedy that might have accrued to either party, or affect any terms that by their nature survive termination.

- **Governing law**

These Terms of Use are governed by the laws of Victoria. The parties submit to the exclusive jurisdiction of the courts Victoria.

- **Variation**

These Terms of Use must not be varied except in writing signed by both parties.

- **Assignment**

You must not sub-licence assign or otherwise transfer your rights under these Terms of Use to any other person, or otherwise seek to commercialise or exploit the AseXML Standard, without NEMMCO's prior written consent.

1. NEMMCO may novate or assign its rights or obligations by notice to you and you must immediately execute any documents necessary to give effect to this.

- **Interpretation**

These meanings apply, unless a contrary intention appears

- (a) **AseXML Standard** means the Australian Energy Standard XML language (as developed by or for NEMMCO) and any modifications developed by or licensed to NEMMCO.
- (b) **ASWG** means the AseXML Standard Working Group. The ASWG is the single, technically focussed working group responsible for managing the aseXML Standard and advising NEMMCO.
- (c) **Intellectual Property Rights** include all patents, copyright, moral rights, registered designs, registered and unregistered trademarks, trade secrets, know-how and confidential information and all other intellectual property as defined in Article 2 of the *Convention Establishing the World Intellectual Property Organisation of July 1967*.
- (d) **Related Entity** has the meaning given to it by the *Corporations Act 2001* (Cth).
- (e) **Representative** of a party includes an employee, agent, officer, director, auditor, advisor, partner, consultant, joint venturer, contractor or sub-contractor of that party.

A reference to 'you' means **[Full Company Name, ABN & address]**

A reference to either party includes its Related

## 4.2. Events

- Changed Events\_r21.xsd to Events\_r22.xsd
- Schema differences:

```
<xsd:simpleType name="r22">
  <xsd:annotation>
    <xsd:documentation> Purpose - Release r22
  identifier</xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="ReleaseIdentifier">
    <xsd:enumeration value="r22"/>
  </xsd:restriction>
</xsd:simpleType>
```

## 4.3. Reports

- Changed Reports\_r15.xsd to 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”

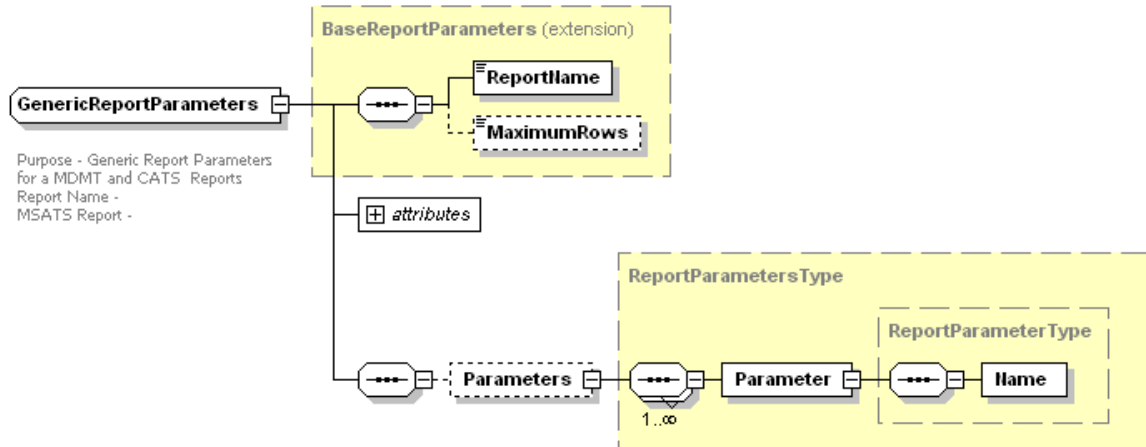
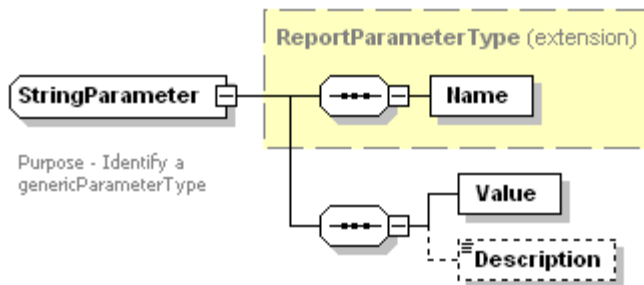


Figure 4-1 Generic Report Parameters type

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>NMI Energised</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>
</ReportResponse>
```

</CSVData>  
</ReportResults>

The table below shows the schema files included in this release. Files that have been added, removed or modified for this release are marked.

<b>File names</b>	<b>Added</b>	<b>Removed</b>	<b>Modified</b>
Acknowledgements_r15.xsd			
aseXML_r22.xsd			X
BAR_r15.xsd			
BulkDataTool_r15.xsd			
CATSReports_r20.xsd			
CATSTableReplication_r20.xsd			
ClientInformation_r15.xsd			
Common_r21.xsd			
CustomerDetails_r19.xsd			
CustomerTransfer_r20.xsd			
Electricity_r19.xsd			
ElectricityHighSpeedMonitoring_r21.xsd			
Enumerations.xsd (ver 2.0)*			
Events_r22.xsd			X
Faults_r15.xsd			
Gas_r19.xsd			
GasMarketWholesale_r20.xsd			
Header_r21.xsd			
HighSpeedMonitoring_r21.xsd			
MarketWholesale_r20.xsd			
MDMTRReport_r15.xsd			
MeterDataManagement_r19.xsd			
NetworkBilling_r15.xsd			
NMIDataAccess_r17.xsd			
NOSAssessment_r18.xsd			
NOSBooking_r18.xsd			
NOSCommon_r18.xsd			
NOSEquipment_r18.xsd			
Reports_r22.xsd			X
ServiceOrder_r17.xsd			
TableReplication_r15.xsd			
Transactions_r21.xsd			
No of files added	0		
No of files removed		0	
No of files modified			3
Total No of files			32

\*Note ver 2.0 of the enumeration file has been included.

## 5. Schema Test

### 5.1. Test Platforms

The new schema has been tested using the following platforms:

- XMLSpy 2004
- MSXML4 SP1
- Xerces 1.4.4 and 2.2.1

### 5.2. Test Cases

Change has been tested using the supplied Generic Report sample files.

- catsm\_generic\_C3\_request\_r22.xml
- catsm\_generic\_C4\_request\_r22.xml
- catsm\_generic\_noParameters\_response\_r22.xml
- catsm\_generic\_test\_response\_r22.xml
- mdmtm\_generic\_RM20\_request\_r22.xml

The following updated schema files have also been tested:

- AccCreationNotification\_r22.xml
- AmendMeterRouteDetails(RouteChange)\_r22.xml
- AmendMeterRouteDetails(SiteAccess)\_r22.xml
- AmendMeterRouteDetails(SiteAddress)\_r22.xml
- CATSChangeAlertToNFRO\_r22.xml
- CATSChangeAlertToVENCORP\_r22.xml
- CATSChangeRequestAlternateRetro\_r22.xml
- CATSChangeRequestAlternate\_r22.xml
- CATSChangeRequestRetro\_r22.xml
- CATSChangeRequestStandingDataResponseRetro\_r22.xml
- CATSChangeRequestStandingDataResponse\_r22.xml
- CATSChangeRequest\_r22.xml
- CATSChangeResponse\_r22.xml
- CATSChangeWithdrawal\_r22.xml
- CATSDataRequest\_r22.xml
- CATSNoticeOfReadFailure\_r22.xml
- CATSNotificationCDB\_r22.xml
- CATSNotificationCFRO\_r22.xml
- CATSNotificationCompletedCDB\_r22.xml
- CATSNotificationPendingCFRO\_r22.xml
- CATSNotificationWithdrawalCDB\_r22.xml
- CATSNotificationWithdrawalCFRO\_r22.xml
- CATSNotification\_r22.xml
- CATSObjectionNotification\_r22.xml
- CATSObjectionRequest\_r22.xml
- CATSObjectionResponse\_r22.xml
- CATSObjectionWithdrawal\_r22.xml
- CATSSDRTrafficLightReportResponser22.xml
- CATSSecurityReportr22.xml
- CATSSStandingDataQualityReportResponser22.xml
- ChangeRequestAllFieldsr22.xml
- CustomerDetailsNotification\_r22.xml

- GasInformationRequestData\_IDr22.xml
- GasInformationRequestDatar22.xml
- GasInformationResponseData\_ID\_r22.xml
- GasInformationResponseData\_IDr22.xml
- GasInformationResponseDatar22.xml
- GasRetrieveRequestData\_AgencyNominationDetailr21.xmlr22.xml
- GasRetrieveRequestData\_AgencyNominationHeaderr22.xml
- GasRetrieveRequestData\_BidSetCGDr22.xml
- GasRetrieveRequestData\_ForecastCGDr22.xml
- GasRetrieveRequestData\_ForecastValidationr22.xml
- GasRetrieveRequestData\_GasForecastValidationTyper22.xml
- GasRetrieveRequestData\_GetBidSetr22.xml
- GasRetrieveRequestData\_GetBidr22.xml
- GasRetrieveRequestData\_InjectionNominationCGDr22.xml
- GasRetrieveRequestData\_InjectionNominationr22.xml
- GasRetrieveRequestDatar22.xml
- GasRetrieveRequestDr22.xml
- GasRetrieveResponseData\_AgencyNominationDetailr21.xmlr22.xml
- GasRetrieveResponseData\_AgencyNominationHeaderr22.xml
- GasRetrieveResponseData\_BidSetCGDr22.xml
- GasRetrieveResponseData\_ForecastCGDr22.xml
- GasRetrieveResponseData\_ForecastValidationr22.xml
- GasRetrieveResponseData\_GasForecastValidationTyper22.xml
- GasRetrieveResponseData\_GetBidSetr22.xml
- GasRetrieveResponseData\_GetBidr22.xml
- GasRetrieveResponseData\_InjectionNominationCGDr22.xml
- GasRetrieveResponseData\_InjectionNominationr22.xml
- GasRetrieveResponseDatar22.xml
- GasRetrieveResponseDr22.xml
- GasSearchRequestDatarr22.xml
- GasSearchRequestData\_AgencyNominationr22.xml
- GasSearchRequestData\_forecastr22.xml
- GasSearchRequestData\_InjectionNominationr22.xml
- GasSearchRequestDatar22.xml
- GasSearchResponseDatar21.xmlr22.xml
- GasSearchResponseData\_AgencyNominationr22.xml
- GasSearchResponseData\_forecastr22.xml
- GasSearchResponseData\_InjectionNominationr22.xml
- GasSearchResponseDatar22.xml
- GasSubmitRequestData\_AgencyNominationConfirmationr22.xml
- GasSubmitRequestData\_AgencyNominationWithdrawr22.xml
- GasSubmitRequestData\_Bidr22.xml
- GasSubmitRequestData\_Forecastr22.xml
- GasSubmitRequestData\_InjectionNominationr22.xml
- GasSubmitRequestDatar22.xml
- GasSubmitRequestDr22.xml
- GasSubmitResponseData\_AgencyNominationConfirmationr22.xml
- GasSubmitResponseData\_AgencyNominationWithdrawr22.xml
- GasSubmitResponseData\_Bidr22.xml
- GasSubmitResponseData\_Forecastr22.xml
- GasSubmitResponseData\_InjectionNominationr22.xml
- GasSubmitResponseDatar22.xml

- GasSubmitResponseDr22.xml
- MDMReportRMr22.xml
- MDMTMeterDataDeliveryReportResponser22.xml
- MeterDataHistoryRequest\_r22.xml
- MeterDataMissingNotification\_r22.xml
- MeterDataNotification\_r22.xml
- MeterDataResponse\_r22.xml
- MeterDataVerifyRequest\_r22.xml
- MeterDataVerifyResponse\_r22.xml
- MeteredSupplyPointsCount\_r22.xml
- MeterNotificationMeterFix\_r22.xml
- MeterNotificationMIRNStatusUpdate\_r22.xml
- MeterReadInputNotification\_r22.xml
- NetworkDUoSBillingNotificationExclServ\_r22.xml
- NetworkDUoSBillingNotificationTariffD\_r22.xml
- NetworkDUoSBillingNotificationTariffV\_r22.xml
- NetworkDUoSBillingNotification\_DisputeRes\_r22.xml
- NetworkDUoSBillingNotification\_Dispute\_r22.xml
- NetworkDUoSBillingNotification\_PaymentAdvice\_r22.xml
- NMIDiscoveryRequest\_r22.xml
- NMIDiscoveryResponse\_r22.xml
- NMIStandingDataRequest\_r22.xml
- NMIStandingDataResponseGas\_r22.xml
- NMIStandingDataUpdateNotificationResponse\_r22.xml
- NMIStandingDataUpdateNotification\_r22.xml
- ReplicationNotificationMSATSCodeValuesr22.xml
- ReplicationNotificationStandingDataAccessRulesr22.xml
- ReportRequestChangeManagementr22.xml
- ReportRequestMasterr22.xml
- ReportResponseNMIMasterMeterConfigr22.xml
- ReportResponseStatisticsr22.xml
- SeqChangeRequestNotificationr22.xml
- SeqObjectionr22.xml
- ServiceOrderRequest(MeterFix)\_r22.xml
- ServiceOrderRequest(NewConnection)\_r22.xml
- ServiceOrderResponse(Completion)\_r22.xml
- ServiceOrderResponse(Initial)\_r22.xml
- ServiceOrderResponse(NoAccess)\_r22.xml
- SpecialReadRequest\_r22.xml
- SpecialReadResponse(NoAccess)\_r22.xml
- SpecialReadResponse\_r22.xml
- TransAck\_r22.xml
- TxnAckDuplicate\_r22.xml
- TxnNAck\_r22.xml

## 6. ASWG Endorsement

The ASWG votes for endorsement of the schema, with the included aseXML Change Requests, and the voting results are forwarded to NEMMCO for approval. When 75% of those ASWG members who voted endorse a schema, this represents an ASWG Recommendation for that schema. NEMMCO will not reject an ASWG Recommendation without first consulting with the ASWG.

The results of the ASWG vote for the final schema to be released are as follows:

Date of Vote: 29/05/2007

Option	# Votes	% Vote
For	6	86
Against	0	0
Abstained	1	14
Total Members Present	6	100%

\*Note Chairperson doesn't vote unless it a split vote.

## 7. NEMMCO Approval

The schema approval and approval date are identified below

Status	Date	Authorised by
<b>Approved</b> – The schema has been approved by NEMMCO and is formally released for use		