# Schema Change Request

Document ID 3

Change Type Enhancement

Title Added "AustralianStreetType" enumerations

Date 13 Feb 2003 Prepared By Darren Field

Priority

Notes

# **Document Control**

Version	Date	Author	Summary of Change
1.0	13/2/2003	Darren Field	Initial draft
1.1	3/3/2003	Darren Field	Added "PSGE" to list of enumerations
1.2	11/3/2003	Darren Field	Removed proposal to make the version attribute on electricity specific derived types 'required'. This maintains the status quo and allows further discussion at ASWG on the merits of having these attributes 'required'

# **Document Status**

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# 1. Change Proposal

#### 1.1. Description of the proposed change

The proposed changes include both business changes and schema technical changes.

Table 1-1, Proposed Changes

Item#	Change Description	Change Type					
Business (	Business Changes						
1	Add "WOOD", "PSGE" and "RTRN" to enumerated list for AustralianStreetType type definition  Enhancement						
Technical							
2	Make version attribute "required" instead of "optional" on all Gas Specific derived types impacted by the above change. Add optional version attributes to other derived types impacted by this change.						
3	Move fuel specific type definitions from Common and ServiceOrders schema file to fuel specific (Gas, Electricity) files	Enhancement					

## 1.2. Reason for Change

- 1. The three identified Street Types are not included in the schema but are currently in use by Melbourne councils. Therefore they are required in the enumerated list to enable these addresses to be passed via the aseXML schema.
- 2. Change required to bring the schema closer to alignment with the aseXML Schema Guidelines regarding derived types.
- 3. This change will provide better isolation of change between electricity and gas specific elements.

#### 1.3. Supplied Documents

#### 1.3.1 Business process document

Nil

#### 1.3.2 Data model

Nil

#### 1.3.3 ITDF Minutes

The ITDF minutes containing the request and approval of the use of additional Street Types are attached.

### 1.4. Impact assessments on Participant's systems

#### 1.4.1 Business Impact

- Participants are currently unable to raise any transactions that require address information for the MIRNs at addresses that use the requested Street Types. The main business transactions impacted are Service Order transactions.
- 2. N/A

#### 3. N/A

#### 1.4.2 Technical Impact

- 1. The change will impact any back end systems that validate or carry out data mapping on the Street Type. Possible impacted systems include, but are not restricted to, Service Order systems, MIRN Management systems and Billing systems.
- 2. Gas specific derived types were created with the version attribute as 'required', but this was changed in r10. The return to 'required' status should not change the impact to gas participants as the updating of this attribute should already be taken into consideration when assessing schema changes. Adding optional version attributes to other elements will have an impact to those participants that use version attributes in these transactions.
- 3. Nil

## 1.5. Affected Configuration Items (Baseline)

#### 1.5.1 Schema

The proposed baseline schema version for this change is aseXML\_r10.

# 2. Approval Proposal

### 2.1. Description of the proposed approval

The table below defines the action in relation to each change item as listed in the Description of the proposed change section.

Table 2-1, Proposed Change Approval

Item #	n Proposal Notes		Action
Business	Changes		
1	Add "WOOD", "PSGE" and "RTRN" to enumerated list for AustralianStreetType type definition	Enhancement	Approved
Technica	al changes		
2	Make version attribute "required" instead of "optional" on all Gas Specific derived types impacted by the above change. Add optional version attributes to other derived types impacted by this change.	Bug Fix	Approved
3	Move fuel specific type definitions from Common and ServiceOrders schema file to fuel specific (Gas, Electricity) files	Enhancement	Approved

## 2.2. Configuration Items (New Baseline)

#### 2.2.1 Draft schema

New schema aseXML\_r11 is attached.

#### 2.2.2 Schema change description

The schema has been changed to include the three new Street Types as enumerations in the ClientInformation schema file. All derived types and transactions impacted by this change have had the version attributes upgraded to r11

The aseXML Guidelines have been updated to state that all derived types have a mandatory (required) version attribute and this is attribute must be set to the Release Identifier of the change that last impacted it. Some of these attributes were changed from 'required' to 'optional' in the r10 changes. In order to bring the schema closer to alignment with the updated Schema Guidelines, all Gas specific derived types impacted by this change now have the version attribute set to 'required'. Other derived types that are impacted by this change will have a version attribute added but this attribute will be made optional. These and other version attributes currently set to 'optional' will be assessed following discussion by the ASWG of the merits of having this attribute 'required'.

Many Electricity specific type definitions were in the Common schema file. Additionally, some fuel specific types were defined in the ServiceOrders file. This made fuel specific schema changes difficult to isolate. Where possible the fuel specific types have now been moved to the fuel specific files (eg. Gas, Electricity) to enable better isolation.

#### 2.2.3 Change log

The following changes have been implemented:

Chg No	Description	FileName	Item#
1	AseXML namespace change to urn:aseXML:r11 and include modified files	aseXML	All
2	Added type definition for Release Identifier value "r11"	Events	All
3	Added street type values "WOOD", "PSGE" and "RTRN" to the enumerated list AustralianStreetType	ClientInformation	1
4	Version attribute of the transaction complex types <i>AppointmentRequest</i> and <i>AppointmentResponse</i> set to r11.	Appointments	1
5	Version attribute added to derived complex types <i>ElectricityNMIMasterRow</i> and <i>ElectricityCATSChangeRequestNMIMasterRow</i> . Attribute set to r11 and made 'optional'.	CATSTableReplication	1
6	Version attribute of the derived complex type <i>ElectricityNMIMasterRowBDT</i> set to r11.	CATSTableReplication	1
7	Moved the following type definitions from Common to Electricity:  LicenseNumber SafetyCertificateID License NMIClassificationDescription NMIStatusCode NMIStatusDescription NMIDataStreamSuffix ProfileName ProfileName ProfileDescription MeterAdditionalSiteInformation MeterAdditionalSiteInformation MeterCalibrationTables MeterCommunicationsEquipmentType MeterCommunicationsProtocol MeterCommunicationsProtocol MeterDataVolidations MeterDataVolidations MeterIstimationInstructions MeterIstimationInstructions MeterInstallationTypeCode MeterInstallationTypeDescription MeterInstallationTypeDescription MeterPoaram MeterPassword MeterPassword MeterPassword MeterPoint MeterPoint MeterReadTypeCode MeterReadTypeCode MeterReadTypeCode MeterReadSurementType MeterRoute MeterPoint MeterPoint MeterPoint MeterPoint MeterTestResultNotes MeterTestResultNotes MeterTransformerLocation MeterTransformerLocation MeterTransformerLocation MeterTransformerLocation MeterTransformerLocation MeterTransformerLocation MeterTransformerRatio MeterTransformerType MeterControlledLoad MeterDailFormat MeterRegisterStatusCode MeterRegisterStatusCode MeterPointOfMeasure	Common/Electricity	3

Chg No	Description	FileName	Item#	
8	Moved the following type definitions from ServiceOrders to Common:  • ServicePoint	Common/ServiceOrders	3	
9	Moved the following type definitions from Gas to Common:  GasMeterPosition GasMeterDogCode	Common/Gas	3	
10	Version attribute of the transaction complex type CustomerDetailsNotification set to r11	CustomerDetails	1	
11	Moved the following type definitions from ServiceOrders to Electricity:	ServiceOrders/Electricity	3	
12	Version attribute of the derived complex type <i>ElectricityStandingData</i> set to r11	Electricity	1	
13	Moved the following type definitions from ServiceOrders to Gas:  GasServiceOrderNotificationData GasServiceOrderDetails GasServiceOrderType	ServiceOrders/Gas	3	
14	Version attribute of the derived complex type GasStandingData set to r11	Gas	1	
15	Version attribute of the derived complex type GasStandingData made 'required' instead of 'optional'.	Gas	2	
16	Changed definition of element <i>PlumberLicenceNumber</i> to string with maximum length of 5 characters	Gas	3	
17	Version attribute of the transaction complex type NMIDiscoveryRequest set to r11	NMIDataAccess	1	
18	Version attribute of the transaction complex type ServiceOrderRequest set to r11	ServiceOrders	1	
19	Version attribute of the transaction complex type ServiceOrderNotification set to r11	ServiceOrders	1	

# 2.3. Dependency analysis

Item#	Transactions Impacted	Derived Type Impacted	Schema Filename	Modified Types	Base Type	Used by "Parent" Types
	AppointmentsResponse ServiceOrderRequest ServiceOrderNotification SpecialReadRequest SpecialReadResponse CustomerDetailsNotification NMIDiscoveryRequest N/A	GasStandingData ElectricityNMIMasterRow ElectricityCATSChangeRequestNMIMaster Row ElectricityNMIMasterRowBDT GasStandingData	ClientInformation_r11.xsd CATSTableReplication_r11.xsd CustomerDetails_r11.xsd Electricity_r11.xsd Gas_r11.xsd NMIDataAccess_r11.xsd ServiceOrder_r11.xsd	,	PartialComponents AustralianStructuredAddress Components ElectricityNMIMasterGroup	AustralianPartialAddress AustralianAddress Address
		ElectricityCATSChangeRequestNMIMaster Row	Gd5_111.x5d			
3	N/A		Common_r11.xsd Electricity_r11.xsd Gas_r11.xsd ServiceOrder_r11.xsd	N/A	N/A	N/A

#### 2.4. Test

#### 2.4.1 Test Platforms

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

- o XMLSpy 4.3
- o MSXML4 SP1
- o Xerces 1.4.4 and 2.2.1

#### 2.4.2 Test Cases

The following files have been tested against the new schema and are attached:

- o AccCreationNotification\_r11.xml
- o AmendMeterRouteDetails(RouteChange)\_r11.xml
- o AmendMeterRouteDetails(SiteAccess)\_r11.xml
- o AmendMeterRouteDetails(SiteAddress)\_r11.xml
- o CATSChangeAlertToNFRO\_r11.xml
- o CATSChangeAlertToVENCorp\_r11.xml
- o CATSChangeRequest\_r11.xml
- o CATSChangeRequestAlternate\_r11.xml
- o CATSChangeRequestAlternateRetro\_r11.xml
- CATSChangeRequestRetro\_r11.xml
- $\circ \quad CATS Change Request Standing Data Response\_r11.xml \\$
- o CATSChangeRequestStandingDataResponseRetro\_r11.xml
- o CATSChangeResponse r11.xml
- o CATSChangeWithdrawal\_r11.xml
- o CATSDataRequest\_r11.xml
- o CATSNoticeOfReadFailure\_r11.xml
- CATSNotification\_r11.xml
- o CATSNotificationCDB\_r11.xml
- o CATSNotificationCFRO\_r11.xml
- o CATSNotificationCompletedCDB\_r11.xml
- o CATSNotificationPendingCFRO\_r11.xml
- o CATSNotificationWithdrawalCDB\_r11.xml
- o CATSNotificationWithdrawalCFRO\_r11.xml
- CATSObjectionNotification\_r11.xml
- CATSObjectionRequest\_r11.xml
- o CATSObjectionResponse\_r11.xml
- CATSObjectionWithdrawal\_r11.xml
- ChangeRequestAllFields\_r11.xml
- o ChangeRequestAllFieldsMeterConfig\_r11.xml

- o ChangeRequestAllFieldsMeterConfig\_r11.xml
- o CurrentRetailerConfirmationRequest.xml
- o CurrentRetailerConfirmationRequest\_r11.xml
- o CurrentRetailerConfirmationResponse.xml
- $\circ \quad Current Retailer Confirmation Response\_r 11.xml$
- FieldWorkNotification\_r11.xml
- o MDMReportRM11\_r11.xml
- o MDMReportRM16\_r11.xml
- o MDMReportRM21 r11.xml
- o MeterDataHistoryRequest\_r11.xml
- o MeterDataHistoryResponse\_r11.xml
- o MeterDataMissingNotification\_r11.xml
- o MeterDataNotification\_r11.xml
- o MeterDataResponse\_r11.xml
- o MeterDataVerifyRequest\_r11.xml
- o MeterDataVerifyResponse\_r11.xml
- o MeteredSupplyPointsCount\_r11.xml
- o MeterNotificationMeterFix\_r11.xml
- o MeterNotificationMeterRemoval\_r11.xml
- o MeterReadInputNotification\_r11.xml
- o NetworkDUoSBillingNotification\_r11.xml
- o NMIDiscoveryRequestAddr(RTRN)\_r11.xml
- o NMIDiscoveryRequestAddr(WOOD)\_r11.xml
- o NMIDiscoveryRequestAddr(PSGE)\_r11.xml
- o NMIDiscoveryRequestDPID\_r11.xml
- o NMIDiscoveryRequestMeter\_r11.xml
- o NMIDiscoveryResponse\_r11.xml
- o NMIStandingDataRequest\_r11.xml
- o NMIStandingDataResponse\_r11.xml
- o NMIStandingDataResponseMeterConfig\_r11.xml
- o NMIStandingDataUpdateNotification\_r11.xml
- $o \quad NMIS tanding Data Update Notification Response\_r11.xml \\$
- o ReplicationNotificationAddress\_r11.xml
- o ReplicationNotificationCATSChangeResponse\_r11.xml
- $\circ \quad Replication Notification CATS Streamlined CR Codes\_r11.xml \\$
- ReplicationNotificationMeter\_r11.xml
- o ReplicationNotificationMeterConfig\_r11.xml
- $\circ \quad Replication Notification Network Tariff Codes\_r11.xml \\$
- o ReplicationNotificationStandingDataAccessRules\_r11.xml
- o ReportRequestMeterConfig\_r11.xml

- $\circ \quad ReportResponseNMIMasterMeterConfig\_r11.xml \\$
- o Seq06ObjectionNotification\_r11.xml
- o ServiceOrderRequest(MeterFix)\_r11.xml
- o ServiceOrderRequest(NewConnection)\_r11.xml
- o ServiceOrderResponse(Completion)\_r11.xml
- o ServiceOrderResponse(Initial)\_r11.xml
- $\circ \quad SnapshotReportMasterDataStreams\_r11.xml$
- $\circ \quad Special Read Request\_r11.xml$
- o SpecialReadResponse(NoAccess)\_r11.xml
- o SpecialReadResponse\_r11.xml
- o TransAck\_r11.xml
- o TxnNAck\_r11.xml

# 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

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

- o XMLSpy 4.3 and XMLSpy 5.3
- o MSXML4 SP1
- o Xerces 1.4.4 and 2.2.1

#### 3.1.2 Test Cases

Spot checks have been performed on the supplied example files. The checks proved that schema was validating with no errors.

## 3.2. Dependency analysis

Dependency analysis presented in 1.1 covered all dependencies.

### 3.3. Conformance Report

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

Table 3-1, Change Proposal Conformance Details

Schema Filename Impacted by Item #		Conformance Details	
Appointments_r11.xsd	1	Conforms	
aseXML_r11.xsd	All	Conforms	
CATSTableReplication_r11.xsd 1		Version attributes on derived types are optional whilst the Guidelines require mandatory. The issue of the attribute status will be addressed by ASWG.	
ClientInformation_r11.xsd	1	Conforms	
Common_r11.xsd	3	Conforms	
CustomerDetails_r11.xsd	1	Conforms	
Electricity_r11.xsd	1, 3	Version attributes on derived types are optional whilst the Guidelines require mandatory. The issue of the attribute status will be addressed by ASWG.	

Events_r11.xsd	All	Conforms
Gas_r11.xsd	1, 2, 3	Conforms
NMIDataAccess_r11.xsd	1	Conforms
ServiceOrder_r11.xsd	1, 3	Conforms

# 4. Review Disposition

The ASWG assists developers with schema related queries and confirms appropriateness of development against criteria.

## 4.1. Description of Changes - Approved and Accepted

ASWG provides comments on the schema design and soundness of the solution.

The schema review contains selected items from the Change log if correction of an item required. The Change log can also be extended with additional changes that are result of ASWG comments or the developer corrections.

This table is extensible. It should log all the changes on the schema between draft schema to the final.

Table 4-1, Review Notes for proposed approvals

Item#	Reviewer's Comments	Status
Business (	Changes	
1	As the address is 'significant data structure shared across multiple transactions' (3.2.8), another option for implementing this change could be to introduce the version attribute to the address types. This will localize the change and suppress significant version ripple effect across multiple transactions. As result, the approach will therefore be more in line with the Guidelines.  The urgency of schema release and unclear decision on version attributes status on derived and	Accepted
	other types, lead towards implementation of former (defined in proposal) option.	
Technical	changes	
2	The ASWG needs to address and investigate the issue of version attributes on the derived ( and possibly other commonly used) types. Use and function of these attributes needs to be clarified and solution applicable all through the markets defined.	Accepted
3.	ServicePoint type contains the electricity and gas types.	Accepted
	Due to relocation of ServicePoint from ServiceOrder to Common, purely gas types GasMeterPosition and GasMeterDogCode ended up in Common.	
	The relocation is justified by the use of ServicePoint in CustomerDetails, ServiceOrders and GasStandingData and Xerces parsing order requirements.	

Note: Item# is a reference to items listed in the Description of the proposed approval.

## 5. Resolution

The ASWG provides a resolution for each change item contained in the Approval Proposal. The resolution is forwarded to the Originator for implementation considerations as required by respective Change Management Process.

## 5.1. Changes Approved and Accepted

The ASWG compiles the list of change items proposed for approval together with their resolution status in the table below.

The following is the list of changes with the approval status:

Table 5-1, Change log with approval status

Chg No	Description	FileName	Item#	Status
1	AseXML namespace change to urn:aseXML:r11 and include modified files	aseXML	All	Approved
2	Added type definition for Release Identifier value "r11"	Events	All	Approved
3	Added street type values "WOOD", "PSGE" and "RTRN" to the enumerated list <i>AustralianStreetType</i>	ClientInformation	1	Approved
4	Version attribute of the transaction complex types <i>AppointmentRequest</i> and <i>AppointmentResponse</i> set to r11.	Appointments	1	Approved
5	Version attribute added to derived complex types ElectricityNMIMasterRow and ElectricityCATSChangeRequestNMIMasterRow. Attribute set to r11 and made 'optional'	CATSTableReplication	1	Approved
6	Version attribute of the derived complex type ElectricityNMIMasterRowBDT set to r11.	CATSTableReplication	1	Approved

Chg No	Description	FileName	Item#	Status
7	Moved the following type definitions from Common to Electricity:	Common/Electricity	3	Approved
	LicenseNumber			
	SafetyCertificateID			
	License			
	NMIClassificationDescription			
	NMIStatusCode			
	NMIStatusDescription			
	NMIDataStreamSuffix			
	ProfileName			
	ProfileDescription			
	MeterAdditionalSiteInformation			
	MeterAssetManagementPlan     MeterCollingsingTables			
	MeterCalibrationTables     MeterCommunicationsEquipmentType			
	MeterCommunicationsEquipment Type     MeterCommunicationsProtocol			
	Meter Constant     Meter Constant			
	Meter Constant     Meter Data Conversion			
	Meter Data Validations     Meter Data Validations			
	MeterEstimationInstructions			
	MeterHazard			
	MeterInstallationTypeCode			
	MeterInstallationTypeDescription			
	MeterLocation			
	MeterManufacturer			
	MeterMeasurementType			
	MeterModel			
	MeterPassword			
	MeterPoint			
	MeterProgram			
	MeterReadTypeCode			
	MeterRemotePhoneNumber			
	MeterRoute     MeterStatusCode			
	<ul><li>MeterStatusCode</li><li>MeterTestCalibrationProgram</li></ul>			
	MeterTestCanorationFlogram     MeterTestPerformedBy			
	Meter Test enormed by     Meter Test Result Accuracy			
	MeterTestResultNotes			
	MeterTransformerLocation			
	MeterTransformerRatio			
	MeterTransformerType			
	MeterUse			
	MeterUserAccessRights			
	MeterConsumptionType			
	MeterControlledLoad			
	MeterDemand			
	MeterDialFormat			
	MeterMultiplier			
	MeterNetworkAdditionalInformation			
	MeterRegisterIdentifier     MaterParistorStatusCode			
	<ul><li>MeterRegisterStatusCode</li><li>MeterTimeOfDay</li></ul>			
	Meter TimeOlDay     MeterUnitOfMeasure			
0		G 19 1 0 1	2	
8	Moved the following type definitions from ServiceOrders to Common:	Common/ServiceOrder s	3	Approved
	ServicePoint	5		
9	Moved the following type definitions from Gas to Common:	Common/Gas	3	Approved
	<ul><li>GasMeterPosition</li><li>GasMeterDogCode</li></ul>			
10	Version attribute of the transaction complex type	CustomerDetails	1	Approved
10	CustomerDetailsNotification set to r11	CustomerDetails	1	прричен

Chg No	Description	FileName	Item#	Status
11	Moved the following type definitions from ServiceOrders to Electricity:	ServiceOrders/Electrici ty	3	Approved
12	Version attribute of the derived complex type <i>ElectricityStandingData</i> set to r11	Electricity	1	Approved
13	Moved the following type definitions from ServiceOrders to Gas:  GasServiceOrderNotificationData GasServiceOrderDetails GasServiceOrderType	ServiceOrders/Gas	3	Approved
14	Version attribute of the derived complex type GasStandingData set to r11	Gas	1	Approved
15	Version attribute of the derived complex type GasStandingData made 'required' instead of 'optional'.	Gas	2	Approved
	Changed definition of element <i>PlumberLicenceNumber</i> to string with maximum length of 5 characters	Gas	3	Approved
17	Version attribute of the transaction complex type NMIDiscoveryRequest set to r11	NMIDataAccess	1	Approved
18	Version attribute of the transaction complex type ServiceOrderRequest set to r11	ServiceOrders	1	Approved
19	Version attribute of the transaction complex type ServiceOrderNotification set to r11	ServiceOrders	1	Approved

Note: Chgn No is a reference to items listed in Change log