

# SCHEMA MANIFEST FOR GAS RETAIL MARKET TRANSITION TO ASEXML SCHEMA VERSION R40

## 1. PURPOSE

The purpose of this document is to provide a guide for schema releases r13 through r40. This document is a guideline only; schema release notes are authoritative and take precedence over this document.

## 2. R13-29 SCHEMA MANIFEST

### 2.1. Schema manifest

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

#### 2.1.1. Change from r13 to r16

File names	Added	Removed	Modified
Acknowledgements_r15.xsd			
aseXML_r29.xsd			X
BAR_r15.xsd			
BulkDataTool_r15.xsd			
CATSReports_r28.xsd			X
CATSTableReplication_r29.xsd			X
ClientInformation_r15.xsd			
Common_r29.xsd			X
CustomerDetails_r19.xsd			X
CustomerTransfer_r29.xsd			X
Electricity_r25.xsd			X
ElectricityHighSpeedMonitoring_r26.xsd	X		X
ElectricityMMS_r28.xsd	X		X
ElectricityMasterStandingData.xsd	X		
Enumerations.xsd			X
Events_r29.xsd			X
Faults_r15.xsd			
Gas_r29.xsd			X
GasMarketWholesale_r20.xsd	X		
Header_r28.xsd			X
HighSpeedMonitoring_r26.xsd	X		X
MarketWholesale_r20.xsd	X		
MDMTRReport_r15.xsd			

File names	Added	Removed	Modified
MeterDataManagement_r29.xsd			X
NetworkBilling_r15.xsd			
NMIDataAccess_r17.xsd			X
NOSAssessment_r28.xsd	X		X
NOSBooking_r28.xsd			X
NOSCommon_r28.xsd	X		X
NOSEquipment_r18.xsd			X
OneWayNotification_r25.xsd	X		
Reports_r22.xsd			X
ServiceOrder_r17.xsd			X
TableReplication_r15.xsd			
Transactions_r28.xsd			X
<b>No of files added</b>	2		
<b>No of files removed</b>		0	
<b>No of files modified</b>			27
<b>Total No of files</b>			35

### 2.1.2. Change from r16 to r29

File names	Added	Removed	Modified
Acknowledgements_r15.xsd			
aseXML_r29.xsd			X
BAR_r15.xsd			
BulkDataTool_r15.xsd			
CATSReports_r28.xsd			X
CATSTableReplication_r29.xsd			X
ClientInformation_r15.xsd			
Common_r29.xsd			X
CustomerDetails_r19.xsd			X
CustomerTransfer_r29.xsd			X
Electricity_r25.xsd			X
ElectricityHighSpeedMonitoring_r26.xsd	X		X
ElectricityMMS_r28.xsd	X		X
ElectricityMasterStandingData.xsd	X		
Enumerations.xsd			X
Events_r29.xsd			X

File names	Added	Removed	Modified
<b>Faults_r15.xsd</b>			
<b>Gas_r29.xsd</b>			X
<b>GasMarketWholesale_r20.xsd</b>	X		
<b>Header_r28.xsd</b>			X
<b>HighSpeedMonitoring_r26.xsd</b>	X		X
<b>MarketWholesale_r20.xsd</b>	X		
<b>MDMTRReport_r15.xsd</b>			
<b>MeterDataManagement_r29.xsd</b>			X
<b>NetworkBilling_r15.xsd</b>			
<b>NMIDataAccess_r17.xsd</b>			X
<b>NOSAssessment_r28.xsd</b>	X		X
<b>NOSBooking_r28.xsd</b>			X
<b>NOSCommon_r28.xsd</b>	X		X
<b>NOSEquipment_r18.xsd</b>			X
<b>OneWayNotification_r25.xsd</b>	X		
<b>Reports_r22.xsd</b>			X
<b>ServiceOrder_r17.xsd</b>			X
<b>TableReplication_r15.xsd</b>			
<b>Transactions_r28.xsd</b>			X
<b>No of files added</b>	2		
<b>No of files removed</b>		0	
<b>No of files modified</b>			27
<b>Total No of files</b>			35

## 2.2. Changes

The following ASWG Change Requests have been included in the schema releases for R14 to R29.

Schema	CR#	Description
14	16	Modified the existing schema to support National B2B processes for electricity.
14	17	Updated the schema to include additional Network Outage Scheduler (NOS) transactions.
15	19	Bug fix and enhancement for NOS Transactions
15	20	Modified copyright and disclaimer presentation in schema files. Added Australian Street type definition to explain the usage of enumerations
16	18	Modified the schema to add a new aseXML element called NetworkID to GasMasterStandingData
16	22	Modified the existing schema to include additional Network Outage Scheduler (NOS) transactions
17	23	B2B Electricity transactions
18	24	NOS Enhancements

Schema	CR#	Description
18	25	Customer Details ConcessionCard Fix
19	26	WA Electricity Market Requirements for Changes to aseXML
19	27	MSATS Enhancements
20	28	Incorporation VicGas Wholesale Market Transactions (Web Exchanger)
20	29	MSATS schema documentation and bug fix
21	30	New transactions and supporting types for the introduction High Speed Monitoring (HSM) additions
21	31	Introduction of new simple type of NonZeroLengthString
22	34	MSATS Generic Report Parameters
22	35	aseXML Licence Update
23	36	Modify data type HSMComtradeText Delete redundant data type HSMComtradeTextFile
24	37	New transactions and supporting types to enable Triggered HSM data to be requested.
25	38	B2B One Way Notification, New NMI Standing Data Feeder Class and extensible Electricity Master Standing Data and new version for Meter Data Notifications
26	39	This Change Proposal is to include new as well as modified transaction types that have been identified for accomplishing business needs for delivering Triggered Data to Market Operator.
26	40	Addition of a new Street Type to the aseXML enumeration list of 'Bay'
27	41	This Change Proposal is to modify Certificate of Compliance (CoC) Certificate numbers to include 8 digit certificates numbers that are being issued by Plumbing Industry Commission (PIC).
27	42	Addition of new Street Types, new Street Suffixes, new Floor Types and new Flat or Unit Types that exist o in the Australian Standard AS4590:2006 but are not in the the respective aseXML enumeration lists contained in Enumerations.xsd.
28	43	This change proposal consists of three independent changes as listed below: 1. To create a new MMSWindAvailabilityRequest transaction and associated complex types. 2. To provide a new report request and response format to inform participants about the current status of their MSATS Limits. 3. To accommodate new certainty levels agreed by TNSPs and accommodate NEMMCO to AEMO name change for an enumerated value of EnumResubmitReasonType
29	45	Provide two new fields to ElectricityMasterStandingData which will enable participants to record and notify other participants of 'Customer Classification' data ("CustomerClassificationCode" and "ConsumptionThresholdCode").

Schema	CR#	Description
	46	Gas industry participants that operate in Victoria, Queensland and South Australian have requested a modification to the existing NMIDiscoveryResponse transaction by adding two new fields to the existing NMIDiscoveryResponse transaction. These two new fields will be labelled as "CustomerClassificationCode" and "ConsumptionThresholdCode" with the field attributes/format being "string" and the length defined as 20 for both fields.
	47	In MSATS database sequences are used to generate primary keys for some tables. Some of these are also used as identifiers for transactions and other data exchanged between MSATS and participants via aseXML schema. Over the years three of these sequence numbers have grown substantially and may soon exceed the maximum size defined for them in the database. The simple types in aseXML which correspond to these three database sequences are <ul style="list-style-type: none"> <li>• CATSRequestIdentifier</li> <li>• CATSObjectionIdentifier</li> <li>• MDMActivityIdentifier</li> </ul>

### 2.3. File change summary

The section identifies and lists any changes between the various versions of the schema files. Note the schema release notes should be referred to as the authoritative source of changes. The schema release notes can be located at:

- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r14.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r14.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r15.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r15.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r16.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r16.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r17.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r17.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r18.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r18.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r19.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r19.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r20.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r20.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r21.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r21.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r22.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r22.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r23.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r23.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r24.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r24.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r25.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r25.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r26.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r26.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r27.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r27.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r28.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r28.pdf)
- [http://www.nemmco.com.au/asexml/Schema%20Release%20Notes\\_r29.pdf](http://www.nemmco.com.au/asexml/Schema%20Release%20Notes_r29.pdf)

The master aseXML reference page (focused on r29) on the AEMO website is:

- <http://www.aemo.com.au/asexml/schemas.html#r29>

## 2.4. Attachment B – List of transactions requiring certification

The following table lists the Transactions requiring recertification for the VICGAS R16 schema Industry release scheduled for July 2005.

Transaction to be recertified	Change in Transaction Version	Element affected	Change to Type or reason causing recertification	Change in version attribute from to
AccountCreationNotification	None	AccountCreationData	NMIStandingData	r13 to r16
GasMeterNotification/MeterFix	None	MeterFix	NMIStandingData	r13 to r16
GasMeterNotification/MIRNStatusUpdate	None	MIRNStatusUpdate	NMIStandingData	r13 to r16
AmendMeterRouteDetails	r9 to r14	AmendSiteAccessDetails	GasStandingDataUpdate	r13 to r16
CATChangeRequest	None	NMIStandingData	NMIStandingData	r13 to r16
CATSDataRequest	None	NMIStandingData	NMIStandingData	r13 to r16
CATSNotification	None	NMIStandingData	NMIStandingData	r13 to r16
CustomerDetailsNotification	r12 to r14	CSVCustomer	CSVCustomer added	
MeterDataMissingNotification	r9 to r14	MeterDataMissingNotification	MeterDataMissingNotification	r9 to r14
MeterDataNotification	r9 to r14	MeterDataNotification	Added option elements RecordCount, RequestID, BlockNumber and LastBlockFlag to MeterDataNotification type	r9 to r14
MeterDataVerifyRequest	None	VerifyRequestData	GasMeterVerifyRequestData	r13 to r14
MeterReadInputNotification	None	ReadInputData	NMIStandingData	r13 to r16
NMIDiscoveryRequest	r12 to r14	NMIDiscoveryRequest	Added optional elements: RequestID, Retailer, CustomerName and BusinessName to NMIDiscoveryRequest type	r12 to r14
NMIDiscoveryResponse	r12 to r14	NMIStandingData	NMIStandingData	r13 to r16
NMIStandingDataResponse	None	NMIStandingData	NMIStandingData	r13 to r16
ServiceOrderRequest	r12 to r14	ServiceOrderRequest	ServiceOrderRequest	r12 to r14
ServiceOrderResponse	r13 to r14	ServiceOrderResponse	ServiceOrderNotification	r13 to r14
SpecialReadRequest	r12 to r14	SpecialReadRequest	ServiceOrderRequest	r12 to r14
SpecialReadResponse	r13 to r14	SpecialReadResponse	ServiceOrderNotification	r13 to r14

The following table lists the Transactions requiring recertification for the R29 schema Industry release scheduled for July 2012.

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
AccountCreationNotification	r16 to r29	AccCreationNotification_r16.xml	AccountCreationData	GasStandingData	r16 to r29
AmendMeterRouteDetails	r14 to r19	AmendMeterRouteDetails(RouteChange)_r16.x	AmendMeterRouteDetails	<p><b>NMIStandingData</b>                      Added Sub element Hazard                      Removed Sub element HazardDescription</p> <p><b>SiteAddressDetails</b>                      Change of NMI type from NMIWithChecksum to NMI.                      Change of Address type from AustralianAddress to Address.                      Added EffectiveDate</p>	<p>r16 to r29</p> <p>None</p>

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
AmendMeterRouteDetails	r14 to r19	AmendMeterRouteDetails(SiteAccess)_r16.xml	AmendMeterRouteDetails	<p><b>NMIStandingData</b>            Added Sub element Hazard            Removed Sub element HazardDescription</p> <p><b>SiteAddressDetails</b>            Change of NMI type from NMIWithChecksum to NMI.            Change of Address type from AustralianAddress to Address.            Added EffectiveDate</p>	r16 to r29
			AmendSiteAccessDetails	<p><b>NMIStandingData</b>            Added Sub element Hazard            Removed Sub element HazardDescription</p>	None
AmendMeterRouteDetails	r14 to r19	AmendMeterRouteDetails(SiteAddress)_r16.xml	AmendMeterRouteDetails	<p><b>NMIStandingData</b>            Added Sub element Hazard            Removed Sub element HazardDescription</p>	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSChangeRequest	r4 to r29	CATSChangeRequest_r16.xml	<b>CATSChangeRequest</b>	<b>CATSChangeRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
CATSChangeRequest	r4 to r29	CATSChangeRequestAlternate_r16.xml	<b>CATSChangeRequest</b>	<b>CATSChangeRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSChangeRequest	r4 to r29	CATSChangeRequestAlternateRetro_r16.xml	<b>CATSChangeRequest</b>	<b>CATSChangeRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
CATSChangeRequest	r4 to r29	CATSChangeRequestRetro_r16.xml	<b>CATSChangeRequest</b>	<b>CATSChangeRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSChangeRequest	r4 to r29	CATSChangeResponse_r16.xml	CATSChangeResponse	<b>CATSChangeResponse</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
CATSChangeRequest	r4 to r29	CATSChangeWithdrawal_r16.xml	CATSChangeWithdrawal	<b>CATSChangeWithdrawal</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSDataRequest	r7 to r29	CATSDataRequest_r16.xml	CATSDataRequest	<p><b>CATSDataRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits</p>	r7 to r29
			NMISStandingData	<p><b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode</p>	r16 to r29
CATSDataRequest	r7 to r29	CATSNoticeOfReadFailure_r16.xml	CATSDataRequest	<p><b>CATSDataRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits</p>	r7 to r29
			NMISStandingData	<p><b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode</p>	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSNotification	r10 to r29	CATSNotificationCDB_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
CATSNotification	r10 to r29	CATSNotificationCFRO_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSNotification	r10 to r29	CATSNotificationCompletedCDB_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
CATSNotification	r10 to r29	CATSNotificationPendingCFRO_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSNotification	r10 to r29	CATSNotificationWithdrawalCDB_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
CATSNotification	r10 to r29	CATSNotificationWithdrawalCFRO_r16.xml	<b>CATSNotification</b>	<b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r10 to r29
			<b>NMISstandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSNotification	r10 to r29	CATSNotification_r16.xml	<b>CATSNotification</b>	<p><b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits</p> <p><b>ElectricityStandingData</b> Added new simpleType FeederClass</p>	r10 to r29
CATSNotification	r10 to r29	CATSObjectionNotification_r16.xml	<b>CATSNotification</b>	<p><b>CATSNotification</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits</p> <p><b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode</p>	r10 to r29
CATSObjectionRequest	r4 to r29	CATSObjectionRequest_r16.xml	<b>CATSObjectionRequest</b>	<p><b>CATSObjectionRequest</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits</p>	r4 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CATSObjectionResponse	r4 to r29	CATSObjectionResponse_r16.xml	<b>CATSObjectionResponse</b>	<b>CATSObjectionResponse</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
CATSObjectionWithdrawal	r4 to r29	CATSObjectionWithdrawal_r16.xml	<b>CATSObjectionWithdrawal</b>	<b>CATSObjectionWithdrawal</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r4 to r29
CATSChangeAlert	r9 to r29	CATSChangeAlertToNFRO_r16.xml	<b>CATSChangeAlert</b>	<b>CATSChangeAlert</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r9 to r29
CATSChangeAlert	r9 to r29	CATSChangeAlertToVENCorp_r16.xml	<b>CATSChangeAlert</b>	<b>CATSChangeAlert</b> sub element InitiatingRequestID is defined by CATSRequestIdentifier type Which has been increased in size from 10 digits to 15 digits	r9 to r29

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
CustomerDetailsNotification	r14 to r18	CustomerDetailsNotification.xml (New)	<b>CustomerDetailsNotification</b>	<b>CustomerDetailsNotificaiton</b>  Note: There are few changes from r14 to r17 and one change from r17 to r18. However, there is no impact since gas customer details is in CSVData element	r14 to r18
MeterDataMissingNotification	None	MeterDataMissingNotification_r16.xml	<b>N/A</b>		
MeterDataMissingNotification	None	MeterDataHistoryRequest_r16.xml	<b>N/A</b>		
MeterDataMissingNotification	None	MeterDataHistoryResponse_r16.xml	<b>N/A</b>		
GasMeterNotification	None	MeterNotificationMeterFix_r16.xml	<b>MeterFix</b>	<b>MeterFix</b>  Sub element Master data has had CustomerClassificationCode and ConsumptionThresholdCode added	r16 to r29
GasMeterNotification	None	MeterNotificationMIRNStatusUpdate_r16.xml	<b>MIRNStatusUpdate</b>	<b>MIRNStatusUpdate</b> Sub element Master data has had CustomerClassificationCode and ConsumptionThresholdCode added	r16 to r29
MeterDataNotification	r14 to r25	MeterDataNotification_r16.xml	None	<b>MeterDataNotification</b> Addition of OneWayNotification into the schema added type CSVDataWithName which is used for CSVConsumptionData, CSVIntervalData & CSVProfileData	r14 to r25

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
MeterDataResponse	r6 to r29	MeterDataResponse_r16.xml	None	<b>MeterDataResponse</b> sub element ActivityID is defined by type MDMActivityIdentifier Which has been increased in size from 10 digits to 15 digits	r6 to r29
MeterDataVerifyRequest	None	MeterDataVerifyRequest_r16.xml	<b>VerifyRequestData</b>	<b>GasMeterVerifyRequestData</b> uses NMITransactionBase type instead of NMIStandingData	r14 to r17
MeterDataVerifyResponse	None	MeterDataVerifyResponse_r16.xml	None		
MeterReadInputNotification	None	MeterReadInputNotification_r16.xml	<b>ReadInputData</b>	<b>GasStandingData</b>	r16 to r29
NMIDiscoveryResponse	r14 to r17	NMIDiscoveryResponseGas_r16.xml	<b>NMIDiscoveryResponse</b>  <b>NMIStandingData</b>	<b>NMIDiscoveryResponse</b> Comment and RequestID removed from NMIDiscoveryResponse  <b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r14 to r17   r16 to r29
NMIStandingDataResponse	None	NMIStandingDataResponseGas_r16.xml	<b>NMIStandingData</b>	<b>GasStandingData</b> addition of new elements CustomerClassificationCode and ConsumptionThresholdCode	r16 to r29
NMIStandingDataUpdateNotification	None	NMIStandingDataUpdateNotification_r16.xml	None		

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
NMISTandingDataUpdateResponse	r6 to r29	NMISTandingDataUpdateNotificationResponse_r16.xml	<b>NMISTandingDataUpdateResponse</b>	<b>NMISTandingDataUpdateResponse</b> Sub element ActivityID is defined by type MDMActivityIdentifier Which has been increased in size from 10 digits to 15 digits	r6 to r29
ServiceOrderRequest	r14 to r17	<ul style="list-style-type: none"> <li>ServiceOrderRequest(MeterFix)_r16.xml</li> <li>ServiceOrderRequest(NewConnection)_r16.xml</li> </ul>	<b>ServiceOrderRequest</b>  <b>RequestData</b>	<b>ServiceOrderRequest</b> Added actionType enumeration "Replace"  <b>GasServiceOrderDetails</b> COCNumber increase size from 7 to 8 digits.	r14 to r17  r9 to r27
ServiceOrderResponse	r14 to r17	<ul style="list-style-type: none"> <li>ServiceOrderResponse(Completion)_r16.xml</li> <li>ServiceOrderResponse(Initial)_r16.xml</li> <li>ServiceOrderResponse(NoAccess)_r16.xml</li> <li>ServiceOrderResponse(StandingData)_r16.xml</li> </ul>	<b>ServiceOrderResponse</b>  <b>NMISTandingData</b>	<b>ServiceOrderResponse</b> <i>ServiceOrderType</i> made optional due to use of the <i>ServiceOrderHeader</i>  <b>GasStandingData</b>	r14 to r17  r16 to r29
SpecialReadRequest	r14 to r17	SpecialReadRequest_r16.xml	<b>SpecialReadRequest</b>	<b>SpecialReadRequest</b> Uses ServiceOrderResponse type	r14 to r17
SpecialReadResponse	r14 to r17	<ul style="list-style-type: none"> <li>SpecialReadResponse(NoAccess)_r16.xml</li> <li>SpecialReadResponse_r16.xml</li> </ul>	<b>SpecialReadResponse</b>	<b>SpecialReadResponse</b> Uses ServiceOrderResponse type	r14 to r17
Acknowledgements	N/A	<ul style="list-style-type: none"> <li>TransAck_r16.xml</li> <li>TxnNAck_r16.xml</li> </ul>	N/A		

Transaction to be recertified	Change in Transaction Version	Filename	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
Other <ul style="list-style-type: none"> <li>• CurrentRetailerConfirmationRequest</li> <li>• CurrentRetailerConfirmationResponse</li> <li>• FieldWorkNotification</li> <li>• MeteredSupplyPointsCountUpdate</li> <li>• NetworkDUoSBillingNotification</li> </ul>	None	<ul style="list-style-type: none"> <li>• CurrentRetailerConfirmationRequest_r16.xml</li> <li>• CurrentRetailerConfirmationResponse_r16.xml</li> <li>• FieldWorkNotification_r16.xml</li> <li>• MeteredSupplyPointsCount_r16.xml</li> <li>• NetworkDUoSBillingNotification_DisputeRes_r16.xml</li> <li>• NetworkDUoSBillingNotification_Dispute_r16.xml</li> <li>• NetworkDUoSBillingNotification_PaymentAdvice_r16.xml</li> <li>• NetworkDUoSBillingNotification_r16.xml</li> </ul>	None		

## 2.5. References

The R29 changes summary spreadsheet provides more detail on the rationale for the various ratings. The author (Maja Spuzic) provides the document as a best endeavour and no liability shall be accepted on the content accuracy. The information provided should be validated by the user when applied to a production system.

### 3. R29-R40 SCHEMA MANIFEST

#### 3.1. Schema manifest

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

File names	Added	Removed	Modified
Acknowledgements_r15.xsd			
aseXML_r40.xsd			X
BAR_r31.xsd			X
BulkDataTool_r33.xsd			X
CATSReports_r39.xsd			X
CATSTableReplication_r35.xsd			X
ClientInformation_r36.xsd			X
Common_r39.xsd			X
CustomerDetails_r38.xsd			X
CustomerTransfer_r29.xsd			
Electricity_r36.xsd			X
ElectricityEnumerations.xsd	X		
ElectricityMasterStandingData_r39.xsd	X		
Enumerations.xsd			X
Events_r40.xsd			X
Faults_r33.xsd			X
Gas_r40.xsd			X
GasEnumerations.xsd	X		
GasMarketWholesale_r34.xsd	X		
Header_r37.xsd			X
HighSpeedMonitoring_r33.xsd	X		
HubManagement_r37.xsd	X		
MarketWholesale_r20.xsd	X		
MDMTReport_r39_p1.xsd			X
MeterDataManagement_r36.xsd			X
NetworkBilling_r34.xsd			X
NMIDataAccess_r39.xsd			X
NOSAssessment_r38.xsd			X
NOSBooking_r38.xsd			X
NOSCommon_r38.xsd			X

File names	Added	Removed	Modified
NOSEquipment_r33.xsd			X
OneWayNotification_r36.xsd	X		
P2P_r36.xsd	X		
Reports_r39.xsd			X
ServiceOrder_r36.xsd			X
TableReplication_r33.xsd			X
Transactions_r38.xsd			X
<b>No of files added</b>	9		
<b>No of files removed</b>		0	
<b>No of files modified</b>			25
<b>Total No of files</b>			38

### 3.2. Changes

The following ASWG Change Requests have been included in the schema releases for R30 to R40.

Schema	CR#	Description
30	44	<p>Address related types within the schema do not have a defined character sizing and industry specific build packs have used a certain size for these. I.e. for Street type they have assume 4 char. Recent changes to the enumerations supplied as part of CR 42 identified that some of the enumerations were larger than the expected sizing. Participants have legitimately built systems that will not allow the larger enumerations to be stored as they have used the sizing in the build pack documentation.</p> <p>Since these are legitimate enumeration and to avoid the likelihood of new enumerations appearing that will cause a similar issue it is proposed to specify the size of these enumerated type such that Participant can build to a certain standard and to accommodate the likely possible enumerated type length.</p> <p>Note although the oversized enumerations could be accommodated with this change they have not been included so that their specific implementation can be separated from these changes so that they can be adopted by industry as required</p> <p><b>Addition of size constraint on the following types in the enumerations.xsd file:</b>  <b>AustralianStreetType (4) AustralianStreetSuffix (2) AustralianFlatOrUnitType (4)</b>  <b>AustralianFloorOrLevelType (2) AustralianPostalDeliveryType (11)</b></p> <p>Modify the Schema Guidelines / Change management Guidelines to indicate that via the fast track change process enumerations can only be added. They can't be removed or modified</p>
30	48	<p>To ensure that the new GMC2010 web services aseXML schema is capable of supporting the new business procedures associated with the new AMDQ Nomination services provided through the web exchanger. Perceived benefits:</p> <ul style="list-style-type: none"> <li>Inclusion of new AMDQ transaction to support Web Services automation for the new AMDQ nominations as requested by business functional requirement.</li> </ul>

Schema	CR#	Description
31	49	<p>Gas Release 32 will be introducing two changes to the AEMO Web Exchanger GUI. In order for the associated Web Services functionality to remain consistent with the Web Exchanger GUI functionality, two schema changes are required to support these changes. High level descriptions of the two changes are detailed below: 1. Injection Hedge Nomination (IHN) and AMIQ Profile Decoupling: Market Participants will now be able to submit an AMIQ profile in the Web Exchanger GUI without having to also specify IHN for the same day. This will require the IHNS element in GasIHNTYPE to become optional for Web Service submissions.</p> <p>These changes are scheduled for release into the Production systems in early April 2013.</p>
31	50	<p>The first change is to amend existing transaction NMI Standing Data Request which will help retailers to find out the current or most recent retailer for a NMI. In situations such as erroneous transfers, site abolishment, the retailers need get this information. The need for this has been discussed, assessed and approved in the B2B &amp; MSATS Reference Group (BMRG).</p> <p>The second change relates to way AEMO addresses the needs of TUOS (Transmission Usage of System) and TSDF (Transmission System Demand Forecasting) in the state of Victoria. It has been decided to use MSATS to address the needs of TUOS and TSDF. That requires additional data-stream types than are currently available (e.g. data stream which store reactive energy that is not used for market settlement). It is proposed to meet this need by removing the enumeration restriction on data-stream simple type. This will enable alterations to data-stream types in future without having to undertake schema version upgrade. The validation around data-stream types will be forced in respective market systems. These changes are scheduled for release into the Production systems in early May 2013.</p>
32	51	<p>Provide a new report response format to provide feedback to participants about the current status of their processing by MSATS systems</p>

Schema	CR#	Description
32	52	<p>Adding new values to Customer Details Request (CDR) transaction. QC776- SD - Customer and Site Details - Pack 2 v2.00.docx, Solution 776-1-N7</p> <p>The intention of this solution is to revise the Customer Details Request (CDR) transaction to distinguish between instances where a response from a Retailer can be automated, from those requests where manual follow-up is required</p> <p>Requirements: Add the following new enumeration values to the simple type RequestReason:</p> <ul style="list-style-type: none"> <li>• Transfer complete, no CDN received</li> <li>• New Connection, no CDN received</li> <li>• No response to rejected CDN</li> <li>• Data Quality Issue</li> </ul> <p>Current simple type RequestReason enumeration values are:</p> <ul style="list-style-type: none"> <li>• Returned Mail</li> <li>• Missing Customer Details</li> <li>• Confirm Life Support</li> <li>• Other</li> </ul> <p>QC776- SD - Customer and Site Details - Pack 1 v2.00.docx, Solution 776-5-N2. The intention of this solution is to ensure that any connection point with Life Support is not adversely affected by any planned works or outages.</p> <p>Requirements:</p> <p><input type="checkbox"/> Add new enumeration values to simple type MovementType:</p> <p>Current MovementType values are:</p> <ul style="list-style-type: none"> <li>• Update</li> <li>• Reconciliation</li> <li>• Site Vacant</li> </ul> <p>Add a new value 'Rec - confirm no SensitiveLoad' for RequestReason for the CustomerDetailsRequest</p> <p>"Rec - confirm no SensitiveLoad" means DNSP believes a NMI has a SensitiveLoad value other than 'None' and was not included in the Reconciliation Process.</p> <p>Current Reason values as defined by simple type RequestReason are:</p> <ul style="list-style-type: none"> <li>• Returned Mail</li> <li>• Missing Customer Details</li> <li>• Confirm Life Support</li> <li>• Other</li> </ul>
33	54	Make the definition of version attribute of all transactions consistent.

Schema	CR#	Description
33	55	<p>Replace the existing MMSWindAvailabilityRequest transaction and associated complex types with the more generic MMSIntermittentGenAvailabilityRequest transaction and associated complex types.</p> <p>The NEM requires forecast wind plant production (MW) in a range of future timeframes from 5 minutes to 2 years. In order to get sufficient accuracy two items of forecast plant availability are required from the wind farm owner, the number of turbines available for generation, and the possibility of wind farm upper limit. This data can be supplied to AEMO via a web screen that forces the plant owner to enter the data twice, once into their internal planning system and once into the MMS. To improve the efficiency by entering once and allowing bulk data transfers a file format is needed. This new transaction will allow for entering the forecast data by period (half hour) and by day.</p>
33	56	<p>Since 2012, industry participants have experienced a number of issues associated with duplicate address attributes. These include:</p> <ul style="list-style-type: none"> <li>Operational issues – such as rejected service orders and NMI/MIRN discovery request, increasing exceptions that require manual intervention by retailers and distributors, and differences in customer addresses across gas and electricity.</li> <li>Customer issues – the inability to meet customer expectations, leading to customer dissatisfaction and ombudsman complaints, and wrongful disconnections due to customers not receiving disconnection warning notices.</li> <li>Regulatory issues – potential compliance breaches in gas with the enumerations list not matching the allowed values in the GIP and SP.</li> </ul> <p>The reason for this change is to mitigate the issues mentioned above.</p>
34	57	<p>Jemena's announcement to replace their retail gas systems provided with an opportunity to move towards a common schema.</p> <p>The proposed design is based on the current arrangements in Victoria with consideration of specific jurisdictional allowances for NSW and ACT.</p>
34	58	<p>Create a new version 6A from version 6.0 by adding duplicates available in v5.0 and NARGP specific report names from version 7.0.</p> <p>AEMO and participants have not yet removed duplicates from their systems and hence deployment of enumerations v7.0 with NARGP will result in schema validation failures. Therefore NARGP has proposed to go ahead with Enumerations version 6A as an interim measure that has the current duplicates and the NARGP specific report names.</p>
35	59	<p>Provide changes required to support the Power of Choice program.</p> <ul style="list-style-type: none"> <li>Allocate the NMI ranges for Embedded Network Managers (ENM) to use when creating Child NMIs for their respective embedded network/s.</li> <li>Provide additional information against the Embedded Networks namely Embedded Network Operator (ENO), DLF code and TNI code.</li> <li>New Meter Register Status Code of 'D' for 'Remotely Disconnected'.</li> </ul>

Schema	CR#	Description
36	60	<p>Provide changes required to support the Power of Choice program.</p> <ul style="list-style-type: none"> <li>• Enable multiple notified parties to be specified in the service order request and response transactions.</li> <li>• Provide a one way notification type transaction to deliver details and progress information on service orders to multiple notified parties as a one way notification.</li> <li>• Implement pre installation request and response, and site access request transactions as customer and site detail transactions.</li> <li>• Provide remote service request and response transactions as metering transactions.</li> <li>• Provide notice of metering works transaction as a one way notification.</li> <li>• Add life support, meter safety certificate, and coordination information to service order request transactions.</li> <li>• Add email address to customer details notification.</li> <li>• Modify the SwitchingServiceRequired element from Boolean to string.</li> <li>• Update enumerations used in service order type and service order sub-type to reflect new Power of Choice requirements.</li> <li>• Add P2PDataExchange freeform transaction to support unbounded peer to peer exchanges.</li> <li>• Add PlannedInterruptionNotification transaction.</li> <li>• Add MeterFaultAndIssueNotification transaction.</li> <li>• Add new transaction groups to assign against the new transaction types.</li> </ul>
37	61	<p>Provide transactions required to support the Power of Choice program in regards to Hub management for API users.</p> <p>Agreement to revert Electricity Master Standing data file to schema versioned.</p>
38	62	<ol style="list-style-type: none"> <li>1. TNSPs has request the ability to select "Voltage Control" as the reason of electricity network outages. This is due to AEMO control room requesting TNSPs to take network equipment out of service to maintain secure voltage level in some part of the grid.</li> <li>2. TNSPs has request to select "Other" as electricity network outage scope of work.</li> <li>3. AEMO power system operation team request to have ability to distinguish between planned outages and unplanned outages</li> <li>4. AEMO power system operation team request to have ability to distinguish projects related outages</li> </ol>
38	63	<p><b>Enable retailers and network operators to request and transmit details on customers using life support equipment.</b></p>
39	64	<p>Following changes to support 5-Minute Settlement and Global settlement:</p> <ul style="list-style-type: none"> <li>• Addition of new RM Reports</li> <li>• Update of existing 'LastSequenceNumber' elements to optional</li> <li>• Addition of new x of y message block</li> <li>• Addition of new Second TNI number for Cross boundary NMIs</li> </ul>
39	65	<p>Following changes to support Customer Switching:</p> <ul style="list-style-type: none"> <li>• Addition of Previous Read Dates to NMI Standing Data Response</li> </ul>

Schema	CR#	Description
39_p1	69	Following changes to support 5-Minute Settlement and Global Settlement: <ul style="list-style-type: none"> <li>Update the element type assigned to the LocalArea element name for the RM43 and RM46 reports:</li> </ul>
40	67	The following changes to support the Q4 2021 gas retail system change: <ul style="list-style-type: none"> <li>adding new gas Service Order Job Enquiry Codes (JECs) to the existing JEC enumeration list (see section 1.1.1);</li> <li>creating a non-versioned “GasEnumerations.xsd” and moving the JEC enumeration into file (see section 1.1.2); and</li> <li>amending the ASWG Change Management Process documentation to include a section that explains the change process for non-versioned enumerations files.</li> </ul>
40	68	The following changes to support the Q4 2021 gas retail system change: <ul style="list-style-type: none"> <li>Adding the “Trailer AC” and “No Reg” meter-status values to the existing enumeration list for the Meter Status field</li> </ul>

### 3.3. File change summary

The section identifies and lists any changes between the various versions of the schema files. Note the schema release notes should be referred to as the authoritative source of changes. The schema release notes can be located at:

- [https://aemo.com.au/media/Files/Other/asexml/aseXML\\_schema\\_release\\_r30.pdf](https://aemo.com.au/media/Files/Other/asexml/aseXML_schema_release_r30.pdf)
- [https://aemo.com.au/media/Files/Other/asexml/Schema\\_Release\\_Notes\\_r31.pdf](https://aemo.com.au/media/Files/Other/asexml/Schema_Release_Notes_r31.pdf)
- [https://aemo.com.au/media/Files/Other/asexml/Schema\\_Release\\_Notes\\_r32.pdf](https://aemo.com.au/media/Files/Other/asexml/Schema_Release_Notes_r32.pdf)
- [https://aemo.com.au/media/Files/Other/asexml/aseXML\\_Schema\\_Release\\_33v1\\_1\\_2.pdf](https://aemo.com.au/media/Files/Other/asexml/aseXML_Schema_Release_33v1_1_2.pdf)
- [https://aemo.com.au/media/Files/Other/asexml/aseXML\\_Schema\\_Release\\_Notes\\_Enumerations\\_v6.docx](https://aemo.com.au/media/Files/Other/asexml/aseXML_Schema_Release_Notes_Enumerations_v6.docx)
- [https://aemo.com.au/media/Files/About%20the%20industry/Information%20Systems/aseXML/2015/aseXML\\_Schema\\_Release\\_r34v0\\_3.docx](https://aemo.com.au/media/Files/About%20the%20industry/Information%20Systems/aseXML/2015/aseXML_Schema_Release_r34v0_3.docx)
- [https://aemo.com.au/media/Files/About%20the%20industry/Information%20Systems/aseXML/2015/aseXML\\_Schema\\_Release\\_Notes\\_Enumerations\\_v6A.docx](https://aemo.com.au/media/Files/About%20the%20industry/Information%20Systems/aseXML/2015/aseXML_Schema_Release_Notes_Enumerations_v6A.docx)
- [https://aemo.com.au/-/media/Files/IT\\_Changes/aseXML/aseXMLSchemaReleaseNotesr35v02.docx](https://aemo.com.au/-/media/Files/IT_Changes/aseXML/aseXMLSchemaReleaseNotesr35v02.docx)
- [https://aemo.com.au/-/media/Files/IT\\_Changes/aseXML/2017/aseXMLSchemaReleaseNotesr36v01.docx](https://aemo.com.au/-/media/Files/IT_Changes/aseXML/2017/aseXMLSchemaReleaseNotesr36v01.docx)
- [https://aemo.com.au/-/media/Files/IT\\_Changes/aseXML/2017/aseXMLSchemaReleaseNotesr37v01.docx](https://aemo.com.au/-/media/Files/IT_Changes/aseXML/2017/aseXMLSchemaReleaseNotesr37v01.docx)
- [https://aemo.com.au/-/media/Files/IT\\_Changes/aseXML/2018/aseXMLSchemaReleaseNotesr38v02.docx](https://aemo.com.au/-/media/Files/IT_Changes/aseXML/2018/aseXMLSchemaReleaseNotesr38v02.docx)
- [https://aemo.com.au/-/media/files/it\\_changes/asexml/2020/asexmlschemareleasenotesr39v01\\_1.docx](https://aemo.com.au/-/media/files/it_changes/asexml/2020/asexmlschemareleasenotesr39v01_1.docx)
- [https://aemo.com.au/-/media/files/it\\_changes/asexml/2020/r39\\_p1/asexmlschemareleasenotes\\_r39\\_p1.docx](https://aemo.com.au/-/media/files/it_changes/asexml/2020/r39_p1/asexmlschemareleasenotes_r39_p1.docx)

- [https://aemo.com.au/-/media/files/it\\_changes/asexml/2020/r40/asexmlschemareleasenotes\\_r40.docx](https://aemo.com.au/-/media/files/it_changes/asexml/2020/r40/asexmlschemareleasenotes_r40.docx)

The master aseXML reference page (focused on r40) on the AEMO website is:

- <https://aemo.com.au/en/energy-systems/market-it-systems/asexml-standards/asexml-schemas#r40>

### 3.4. Attachment B – List of gas retail transactions impacted

The following table lists the Transactions impacted and requiring recertification for the VICGAS r40 schema Industry release.

Transaction to be recertified	Change in Transaction Version	Element affected	Change to Type or reason causing recertification	Change in version attribute from / to
AccountCreationNotification	None	AccountCreationData	GasStandingData GasMultiMeterStandingData	r29 to r40 r34 to r40
GasMeterNotification/MeterFix	r9 to r34	MeterFix	GasStandingData	r16 to r40
GasMeterNotification/MIRNStatusUpdate	r9 to r34	MIRNStatusUpdate	GasStandingData	r16 to r40
AmendMeterRouteDetails	None	AmendSiteAccessDetails	GasStandingDataUpdate	r29 to r40
CATChangeRequest	None	NMIStandingData	GasStandingData	r29 to r40
CATSDataRequest	None	NMIStandingData	GasStandingData	r29 to r40
CATSNotification	None	NMIStandingData	GasStandingData	r29 to r40
CustomerDetailsNotification	r18 to r36			
MeterReadInputNotification	None	ReadInputData	GasStandingData	r29 to r40
NetworkDUoSBillingNotification	r13 to r34			
NMIStandingDataRequest	r4 to r31			
NMIDiscoveryResponse	r12 to r17	NMIStandingData	GasStandingData GasMultiMeterStandingData	r29 to r40 r34 to r40
NMIStandingDataResponse	r4 to r39	NMIStandingData	GasStandingData GasMultiMeterStandingData	r29 to r40 r34 to r40
NMIStandingDataUpdateNotification	None	SingleNMIStandingData	GasStandingDataUpdate	r29 to r40
ServiceOrderRequest	r17 to r36	ServiceOrderRequest ServiceOrderRequestData	GasServiceOrderDetails GasServiceOrderType	r27 to r36 r13 to r40
ServiceOrderResponse	r17 to r36	ServiceOrderType NotificationData	GasServiceOrderType GasServiceOrderNotificationData	r13 to r40 r13 to r40
SpecialReadRequest	r17 to r36	SpecialReadRequest	GasServiceOrderType	r13 to r40
SpecialReadResponse	r17 to r36	ServiceOrderType NotificationData	ServiceOrderNotification GasServiceOrderNotificationData	r13 to r40 r13 to r40

### **3.5. References**

The R40 changes summary spreadsheet is provides more detail on the rationale for the various ratings. This document is provided as a best endeavour and no liability shall be accepted on the content accuracy. The information provided should be validated by the user when applied to a production system.