

MSATS 46.89 TECHNICAL SPECIFICATION - DECEMBER 2017

**AEMO RELEASE SCHEDULE SERIES:
MSATS1217SMP**



Published **5 June 2017** **Version 0.07** **DRAFT**

Schedule **Pre-production:** **Tuesday 15 August 2017**

Production part 1: Tuesday 19 September 2017

New B2M schema
r35 released

Production part 2: Friday 1 December 2017

Shared Market
Protocol (SMP)
changes and B2B
schema r36 released



IMPORTANT NOTICE

Purpose & audience

This document describes the technical changes required to participant's systems for the MSATS 46.89 Release - December 2017 (Release). The Australian Energy Market Operator (AEMO) provides this information as a service targeting business analysts and IT staff in participant organisations. It provides guidance about the changes to their market systems under the National Gas or Electricity Rules (Rules), as at the date of publication.

How to use this document

- If you have questions about the business aspects of these changes, please see Consultations on [AEMO's website](#).
- The references listed throughout this document are primary resources and take precedence over this document.
- [Text in this format](#) indicates a reference to a document on [AEMO's website](#).
- This document is written in plain language for easy reading. Where there is a discrepancy between the Rules, and information or a term in this document, the Rules take precedence.
- Italicised terms are defined in the National Electricity Rules. Any rules terms not in this format still have the same meaning.
- Capitalised terms are defined in the Glossary. Any terms not in this format still have the same meaning. For an explanation of abbreviations or special terms, see Glossary on page 41.
- Actions to complete in the [Web Portal interface](#) are bold and dark blue.

AEMO reference numbers

Included in each project heading is a Quality Centre Identifier (QCID) that provides useful tracking information. There may be none, one, or more QCIDs relevant to each project heading.

References to change notices are CN followed by the change notice number.

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Distribution

Available to the public.

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Documents made obsolete

The release of this document changes only the version of MSATS 46.89 Technical Specification - December 2017.

Further Information

For further information, please visit AEMO's website www.aemo.com.au or contact:

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CONTENTS

1	B2B Enhancements.....	1
1.1	New B2B aseXML schema	1
1.2	Create New Transactions	10
1.3	B2B Upload File	25
1.4	Search Transaction Log	26
1.5	B2B Hub Queue	26
1.6	Participant System Status	30
1.7	B2B Hub Dashboard	31
1.8	B2B Modify Functionality	32
1.9	B2B Transforms	32
1.10	Additional interface changes.....	35
1.11	User Rights Management (URM)	35
1.12	Batch Handlers	36
2	Baseline assumptions	37
2.1	Software	37
2.2	aseXML schemas	37
2.3	B2B transforms	38
2.4	Web Services schemas	38
2.5	Rules, procedures, processes, and guidelines	39
3	Implementation.....	40
3.1	Approval or agreement to change	40
3.2	Transitioning.....	40
3.3	Implications	40
3.4	Risks	40
3.5	Upgrade options.....	40
4	Related Resources	41
5	Glossary	42

PROJECT LIST

The MSATS 46.89 Technical Specification - December 2017 includes enhancements for the Power of Choice (PoC) implementation program - Shared Market Protocol (SMP).



1 B2B ENHANCEMENTS

The Market Settlement and Transfer Solution, MSATS 46.89 Release - December 2017 (Release) includes changes related to participants' IT systems. This technical specification describes the Power of Choice (POC) SMP enhancements covering the B2B services planned by AEMO from a participant perspective. AEMO provides this information as a service targeting business analysts and IT staff in participant companies.

This Technical Specification is a DRAFT only. The screenshots are examples only and are not the final design. AEMO will update and publish this document as more information becomes available.

For more details about the Power of Choice implementation program, see [Power of Choice](#) on AEMO's website.

1.1 New B2B aseXML schema

1.1.1 Overview

As part of the [B2B Framework rule changes](#) and the supporting [B2B Procedures](#), this Release introduces a new B2B aseXML schema: r36.

This technical specification explains the new B2B aseXML schema r36. For details about the B2M aseXML schema r35, see the [MSATS 46.88 Technical Specification – December 2017 Embedded Networks](#).

1.1.2 B2B aseXML schema change summary

This table provides a summary of the changes in the B2B aseXML schema r36:

- **Modified types:** A full list of changed types.
- **Derived types:** A list of any types derived from a modified type and therefore modified by default.
- **Versioned types affected:** A list of all versioned types requiring the version attribute updated.
- **Transactions potentially affected:** A list of all transactions containing a modified type, either directly or using a type substitution.
- **Schema files affected:** A list of schema files changed in some way for this schema.

For full details about the changes in the B2B aseXML schema r36, see the [Schema Release Notes r36](#) on AEMO's website>Electricity>IT Systems>aseXML Standards.



Modified types	Derived types	Versioned types affected	Transactions potentially affected	Schema files affected
				aseXML_r34.xsd
				Events_r34.xsd
ServiceOrderType ServiceOrderSubType ElectricityMeter ElectricityServiceOrderDetails ElectricityMeterRegisterDetail	ElectricityMeter ElectricityMeters	ElectricityStandingData ServiceOrderRequestData	NMIDiscoveryResponse NMISstandingDataResponse CATSChangeRequest CATSNotification CATSDataRequest ServiceOrderRequest ServiceOrderResponse AmendMeterRouteDetails AccountCreationNotification MeterReadInputNotification SpecialReadRequest SpecialReadResponse NMISstandingDataUpdateNotification CATSBulkDataRequest MeterReadingReferenceDataResponse ReportResponse	Electricity_r36.xsd
ElectricityMasterStandingData		ElectricityStandingData	MeterDataVerifyRequest MeterDataMissingNotification NMISstandingDataResponse NMIDiscoveryResponse CATSChangeRequest CATSNotification CATSDataRequest ReplicationNotification ReportResponse	ElectricityMasterStandingData.xsd
ServiceOrderRequest ServiceOrderResponse			ServiceOrderRequest ServiceOrderResponse SpecialReadRequest SpecialReadResponse	ServiceOrder_r36.xsd



Modified types	Derived types	Versioned types affected	Transactions potentially affected	Schema files affected
CustomerDetail		GasServiceOrder Details	ServiceOrderRequest ServiceOrderResponse CustomerDetailsNotificati on	CustomerDetails_r36.x sd

1.1.3 What to do before pre-production

AEMO recommends participants on B2B aseXML schema versions preceding r32 transition to r32 before the pre-production date: Tuesday 15 August 2017.

1.1.4 Pre-production implementation

To be confirmed.

After deployment of the pre-production release, Tuesday 15 August 2017, AEMO expects participants to send B2B messages using r36.

Participants can still send previous schema versions and MSATS will deliver them but they will not align with the B2B procedures v3.00 (effective 1 December 2017).

1.1.5 Part 1 – aseXML transitioning

To be confirmed.

Part 1 of this Release, Tuesday 19 September 2017, applies for MSATS 46.88 Release (EN/MC), see [AEMO's website>IT Systems>IT Change and Release Management](#).

Participants using B2M can begin their transition to r35 from Part 1 of this Release Tuesday 19 September 2017.

1.1.6 Part 2 – Production implementation

To be confirmed.

The new aseXML B2B schema r36 and the B2B procedures version 3.00 become active. After deployment of the production release, Friday 1 December 2017, AEMO expects participants to send B2B Messages using the B2B schema r36.

Participants can still send previous schema versions and MSATS will deliver them but they will not align with the B2B procedures v3.00 (effective 1 December 2017).

Transitioning is part of AEMO's POC transition and cutover activities. There is no action required from participants in the B2B Transform interface, from the production release participants' B2B schema is automatically set to r36.

For this Release only, AEMO does not support transforms from the current schema r32 to the new schema r36.

To learn more about MSATS B2B and the aseXML B2B schema, see [Guide to MSATS B2B](#).



To obtain schemas, guidelines, whitepapers etc., see aseXML Standards on [AEMO's website](#)>IT Systems.

1.1.7 Impacts of not upgrading to B2B aseXML schema r36

Participants not upgraded by Friday 1 December 2017, risk not being able to transact with other participants complying with the B2B Procedures v3.00.

1.1.8 B2B aseXML schema change time frames

To be confirmed

Phase	Date	Event
Pre-production	Tuesday 15 August 2017	After the release on this day participants on B2B aseXML schema versions preceding r36 should transition to r36.
Part 1 production	Tuesday 19 September 2017	For MSATS Release 46.88 participants using B2M can complete their transition to r35 from Part 1 of this Release. Transforms are supported between r31 and r35.
Part 2 production	Friday 1 December 2017	Shared Market Protocol (SMP) changes including r36 released AEMO transitions all participants to the B2B schema r36. There is no action required from participants in the B2B Transform interface. The new aseXML B2B schema r36 and the B2B procedures version 3.00 become active. AEMO expects participants to send B2B Messages using the B2B schema r36. Participants can still send previous schema versions and MSATS will deliver them but they will not align with the new B2B procedures v3.00 (effective 1 December 2017). For MSATS Release 46.88, the new B2M schema r35 and the CATS and WIGS Procedures v4.2 become active. Participants who have transitioned to B2M schema r35 can send and receive the new schema values. For details about MSATS 46.88 Release (EN/MC), see AEMO's website >IT Systems>IT Change and Release Management.

1.1.9 Validation Module Software

The Validation Module software changes to support the new B2B aseXML schema. At implementation time, participants can download the new Validation Module software [version 1.0.26](#) from the Retail and Metering section of [AEMO's website](#).

The Validation Module software changes to include the following new fields:

Create Transaction	Field	Format	Required	Validation
Customer Details Notification	Email Address	VARCHAR(100)	Optional	MSATS validates it is a correct email format.



Create Transaction	Field	Format	Required	Validation
Meter Fault and Issue Notification	Duration	VARCHAR(5)	Optional	The format of the field is: HH:MM
Meter Fault and Issue Notification	Supply On	CHAR(1)	Yes	Allowed values: <ul style="list-style-type: none"> Y N
Meter Fault and Issue Notification	Supply Off	CHAR(40)	Optional This field is required when the SUPPLY ON value is No	Allowed values: <ul style="list-style-type: none"> Remove Fuse Remote Local Meter Disconnection Pillar-Box Pit Or Pole-Top
Meter Fault and Issue Notification	Reason For Notice	VARCHAR(50)	Yes	Allowed values: <ul style="list-style-type: none"> Meter Family Failure Accuracy Failure Timeswitch/Controlled Load Failure Contactor Failure No Display Communication Failure Meter Verification Malfunction Area Event Metrology Threshold Breach Meter Bypassed Physical Damage Theft/Tampering Other
Meter Fault and Issue Notification	Notes	VARCHAR (240)	Optional This field is required when Reason For Notice - Other is used.	n/a
Notice of Metering Works	Work Type	VARCHAR(50)	Yes	Allowed values: <ul style="list-style-type: none"> Exchange Equipment Install Equipment Remove Equipment Relocate



Create Transaction	Field	Format	Required	Validation
Notice of Metering Works	Energisation Status	VARCHAR (50)	Yes	Allowed values: <ul style="list-style-type: none"> Active Not Connected Deenergised Before Meter Deenergised At Meter Deenergised After Meter
Notice of Metering Works	Primary Voltage	VARCHAR(8)	Yes	Allowed values: <ul style="list-style-type: none"> 230V 400V 11KV 22KV 33KV 66KV 132KV Other HV
Notice of Metering Works	Supply Phase	VARCHAR(20)	Optional	Allowed values: <ul style="list-style-type: none"> 1-Phase 2-Phase 3-Phase
Notice of Metering Works	General Supply	VARCHAR(3)	Optional	Allowed values: <ul style="list-style-type: none"> Yes No
Notice of Metering Works	Controlled Load	VARCHAR(3)	Optional	Allowed values: <ul style="list-style-type: none"> Yes No
Notice of Metering Works	Generation Type	VARCHAR(5)	Optional	Allowed values: <ul style="list-style-type: none"> Net Gross None
Notice of Metering Works	Network Device Location	VARCHAR(14)	Optional	Allowed values: <ul style="list-style-type: none"> Before Meter After Meter
Notice of Metering Works	Control Equipment Type	VARCHAR(25)	Optional	Allowed values: <ul style="list-style-type: none"> Internal Relay External Relay Internal Time Switch External Time Switch
Notice of Metering Works	Transformer Type	VARCHAR(2)	Optional	Allowed values: <ul style="list-style-type: none"> CT VT



Create Transaction	Field	Format	Required	Validation
Notice of Metering Works	Removed Equipment Type	VARCHAR(25)	Optional	Allowed values: <ul style="list-style-type: none">Basic MeterInterval MeterNetwork DeviceControl EquipmentInstrument Transformer
Notified Party	Service Order Type	VARCHAR(22)	Yes	Allowed values: -All current service order types.
Notified Party	Notification Status	VARCHAR(30)	Yes	Allowed values: <ul style="list-style-type: none">SO RequestedSO RejectedSO CompletionAccepted by Notified PartyRejection by Notified PartyNotified Party Stopped
Planned Interruption Notification	Reason for Interruption	VARCHAR(50)	Optional	Allowed values: <ul style="list-style-type: none">Meter Exchange - IndividualMeter Exchange - RolloutMeter Replacement – Family MaintenanceMeter TestMeter Fault InvestigationDistribution WorksOther
Planned Interruption Notification	Duration	VARCHAR(5)	Yes	The format of the field is: HH:MM
Planned Interruption Notification	Notes	VARCHAR (240)	Optional Required when Reason For Interruption - Other is used.	n/a
Remote Service Response	Error Description	VARCHAR(240)	Optional	n/a



Create Transaction	Field	Format	Required	Validation
Site Access Request	Reason	VARCHAR(40)		Allowed values: <ul style="list-style-type: none"> ▪ New Retailer for site ▪ Records old and need to be updated ▪ No Access details on file for NMI ▪ No Hazard Details on file for NMI ▪ Site Visit Required ▪ Other
Site Access Request	Special Notes	VARCHAR(240)	Optional Required if Reason - Other is selected.	n/a
Verify Meter Data Request	Investigation code drop-down	Drop-down list	Yes	Allowed values: <ul style="list-style-type: none"> ▪ Confirm Reading For Vacant Site ▪ Confirm Zero Consumption ▪ Incomplete Data ▪ Invalid MDFF Data ▪ Invalid Standing Data ▪ Missing Datastream ▪ Require Actual Reading or Substitute ▪ Require Final Substitute ▪ Scheduled Reading Required ▪ Service Order Reading Required ▪ Verify High Reading ▪ Verify Low Reading ▪ Verify/Missing Register ▪ Require Estimate Data ▪ Meter Churn ▪ Other

1.1.10 Participant Batcher Software

There is a new version of the Participant Batcher software supporting the new B2B aseXML schema. At implementation time, participants can download the new Participant Batcher software version 2.10 from the Retail and Metering section of [AEMO's website](#).

1.1.11 SMP and eHub

AEMO's e-Hub is extended as part of the Shared Market Protocol (SMP) project, adding a new B2B web service framework. The AEMC's rule development process drives the requirements for these changes.

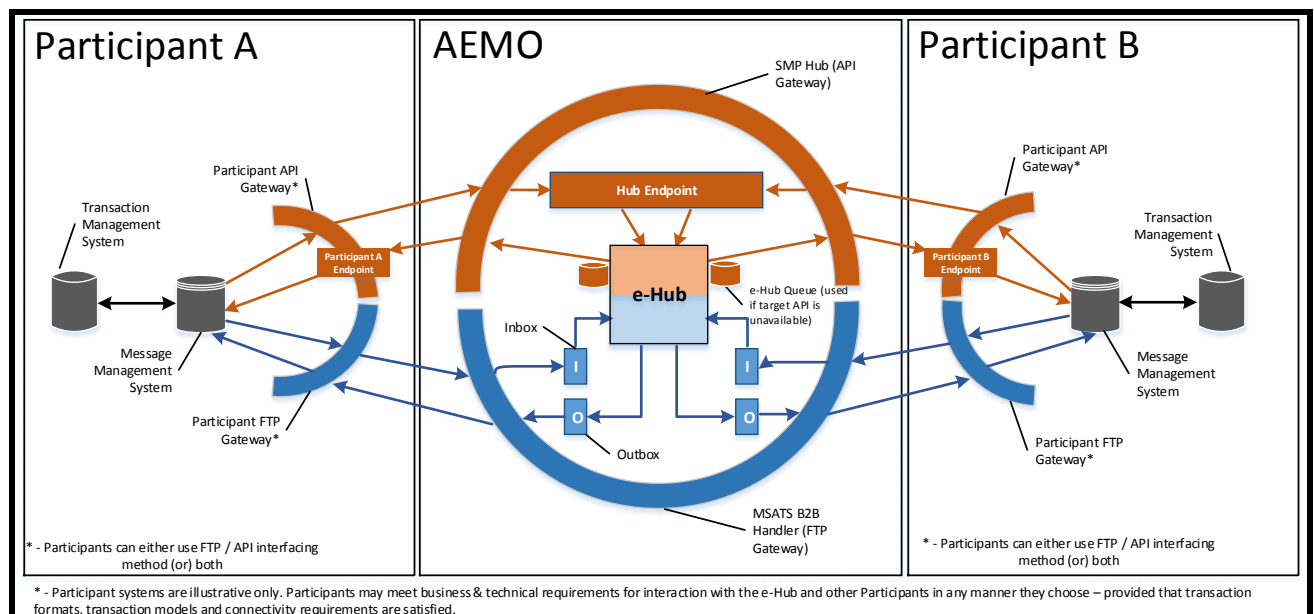
For more information about the B2B Framework rule changes, see Updating the B2B Framework Rule Change on the AEMC website.

The e-Hub allows participants to send and receive B2B messages and acknowledgements in their chosen protocol (FTP or API), irrespective of the sender or receiver's chosen protocol. This works by incorporating the existing MSATS B2B Browser and Batch Handlers (using the FTP Hokey-pokey Protocol) with the new e-Hub APIs.

The e-Hub consist of:

1. The **MSATS B2B Browser**.
2. The **MSATS B2B Handlers** using the existing FTP Hokey-pokey Protocol.
3. The new **e-Hub API Platform**, containing:
 - a. The **e-Hub API Gateway** where participants can use web service API's for sending and receiving electricity retail B2B transactions. The gateway supports interoperability with the existing FTP Hokey-pokey Protocol.
 - b. The **e-Hub API Portal** where registered participants can discover API's and obtain their API keys.

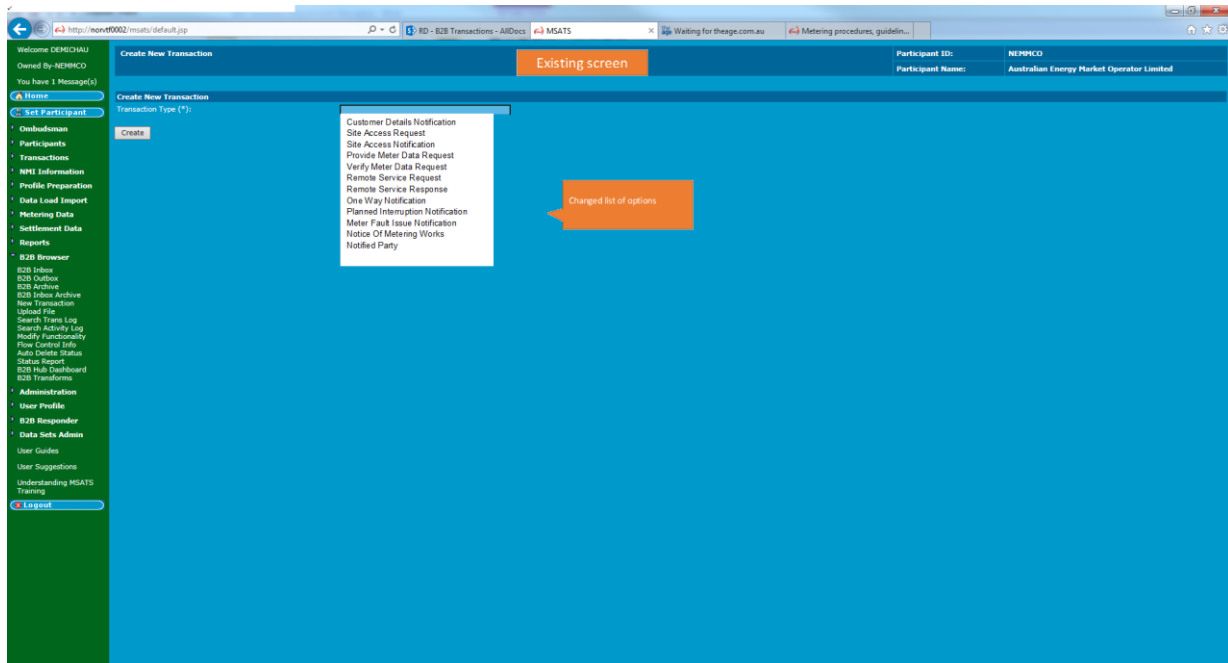
For information about the technical specifications for the delivery of B2B Transactions using the e-Hub API Gateway, see Shared Market Protocol Technical Guide.



1.2 Create New Transactions

The following changes are made to the Create New Transaction interface:

1. The recipient's role displays in the **To** drop-down field, filtered by eligible roles for the transaction type: LNSP, FRMP, LR, RP, ROLR.
2. A new Notify Party is added in the **To** drop-down field, filtered by eligible roles for the transaction type, currently Service Order Request.
3. Message creation integrates with the e-Hub.



1.2.1 B2B Transactions summary

To reflect the changes in the new aseXML B2B schema r36 and the differences between the existing FTP Hokey-pokey Protocol and the new API Web Services Protocol, there are changes to some existing B2B Transaction interfaces and some new transaction interfaces created.

This table provides a summary of the new and changed B2B Transactions:

Transaction	Procedure	Status	MSATS B2B interface change
Create New Transaction	n/a	Changed	Change to options in the Transaction Type drop-down field. See page 10.
Customer Details Notification	CSDN	Changed	A new Email Address field added.
Meter Fault and Issue Notification	OWN	New	n/a



Transaction	Procedure	Status	MSATS B2B interface change
Notice of Metering Works	OWN	New	n/a
Notified Party	OWN	New	n/a
Planned Interruption Notification	OWN	New	n/a
Remote Service Request	MDP	New	n/a
Remote Service Response	MDP	New	n/a
Site Access Request	CSDN	New	n/a
Verify Meter Data Request	MDP	Changed	Change to options in the Investigation Code drop-down field.

1.2.2 Customer Details Notification

The existing Customer Details Notification has a new email address field. This field is included in the Validation Module software.

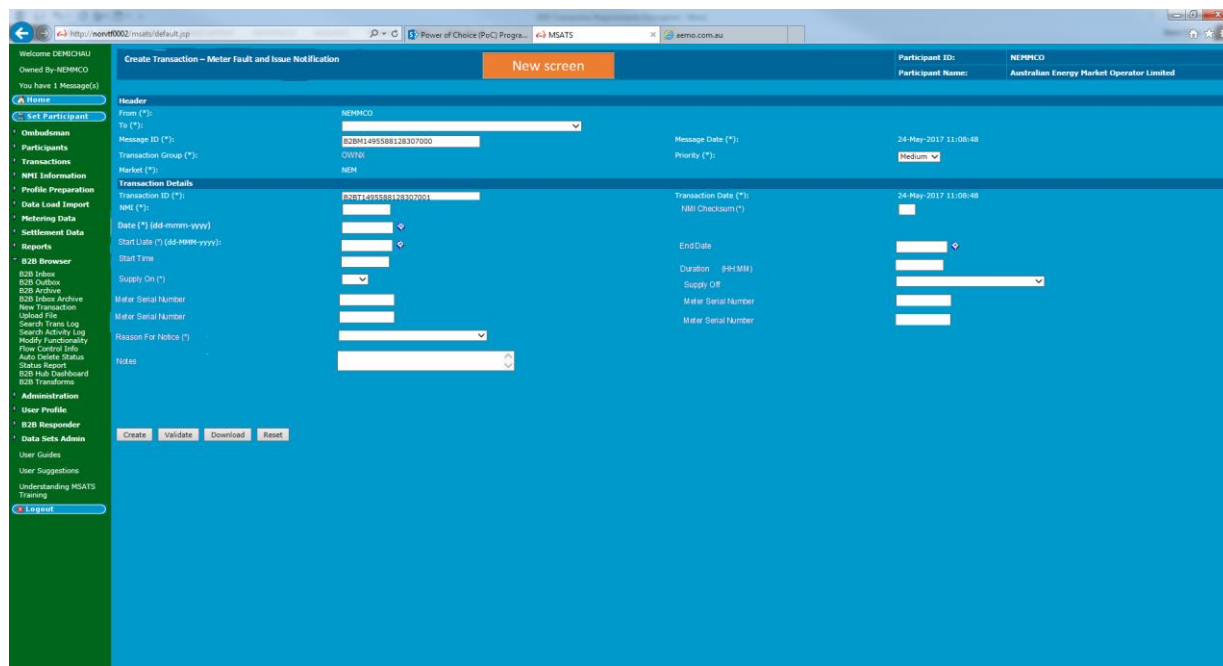
The screenshot shows the MSATS web interface for creating a Customer Details Notification transaction. The form is divided into several sections:

- Header:** Includes fields for From (*), To (*), Message ID (*), Transaction Group (*), and Market (*).
- Transaction Details:** Includes fields for Transaction ID (*), Indicating Transaction ID, Service Load (*), Last Modified Date (*), and Transaction Date (*).
- Customer Contact Name:** Includes fields for Name Title, Given Name, Family Name, Name Suffix, and Email Address. A red callout bubble points to the Email Address field with the text "New field required."
- Business Contact Name:** Includes fields for Name Title, Given Name, Family Name, Name Suffix, and Business Name.
- Phone Numbers:** Includes fields for Prefix, Number, and Service Type.
- Address:** Includes fields for Flat Or Unit Type, Floor Or Level Type, Building Or Property Name 1, Building Or Property Name 2, Location Descriptor, House Number, Lot Number, Street Name, Street Type, Street Suffix, and Postal Or Delivery Point.



1.2.3 Meter Fault and Issue Notification

There is a new Meter Fault and Issue Notification transaction.



The interface has the following fields:

Field	Format	Required	Type	Validations
NMI	CHAR(10)	Yes	Text	
NMI Checksum	CHAR(1)	Yes	Text	
Date	DATE	Yes	Text	
Start Date	DATE	Optional	Text	
Start Time	TIME	Optional	Text	
End Date	DATE	Optional	Text	
Duration	VARCHAR(5)	Optional	Text	If complete, the format of the field is: HH:MM



Field	Format	Required	Type	Validations
Supply On	CHAR(1)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">YN
Supply Off	CHAR (40)	Optional This field is required when the SUPPLY ON value is No	Drop-down	Allowed values: <ul style="list-style-type: none">Remove FuseRemoteLocal Meter DisconnectionPillar-Box Pit Or Pole-Top
Meter Serial Number	VARCHAR (12)	Optional	Text	This is a repeatable field.
Reason For Notice	VARCHAR(50)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">Meter Family FailureAccuracy FailureTimeswitch/Controlled Load FailureContactor FailureNo DisplayCommunication FailureMeter VerificationMalfunctionArea EventMetrology Threshold BreachMeter BypassedPhysical DamageTheft/TamperingOther
Notes	VARCHAR (240)	Optional This field is required when Reason For Notice - Other is used.	Text	n/a



1.2.4 Notice of Metering Works

There is a new Notice of Metering Works transaction.

The interface has the following fields:

Field	Format	Required	Type	Validations
Nomw ID	VARCHAR(12)	Yes	Text	n/a
NMI	CHAR(10)	Yes	Text	n/a
NMI Checksum	CHAR(1)	Yes	Text	n/a
Work Type	VARCHAR(50)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none"> Exchange Equipment Install Equipment Remove Equipment Relocate
Field Work Date Time	DATETIME	Yes	Text	n/a
Customer Classification Code	VARCHAR(15)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none"> Residential Business



Field	Format	Required	Type	Validations
Energisation Status	VARCHAR (50)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">ActiveNot ConnectedDeenergised Before MeterDeenergised At MeterDeenergised After Meter
Primary Voltage	VARCHAR(8)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">230V400V11KV22KV33KV66KV132KVOther HV
Latitude	NUMERIC (s2.7)	Optional	Text	n/a
Longitude	NUMERIC (s3.7)	Optional	Text	n/a
Participant ID	VARCHAR(10)	Yes	Text	n/a
Total Installed Meters	NUM(2)	Yes	Text	n/a
Meter Serial Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Supply Phase	VARCHAR(20)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none">1-Phase2-Phase3-PhaseOther Multi-Phase This is a repeatable field.
General Supply	VARCHAR(3)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none">YesNo This is a repeatable field.
Controlled Load	VARCHAR(3)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none">YesNo This is a repeatable field.



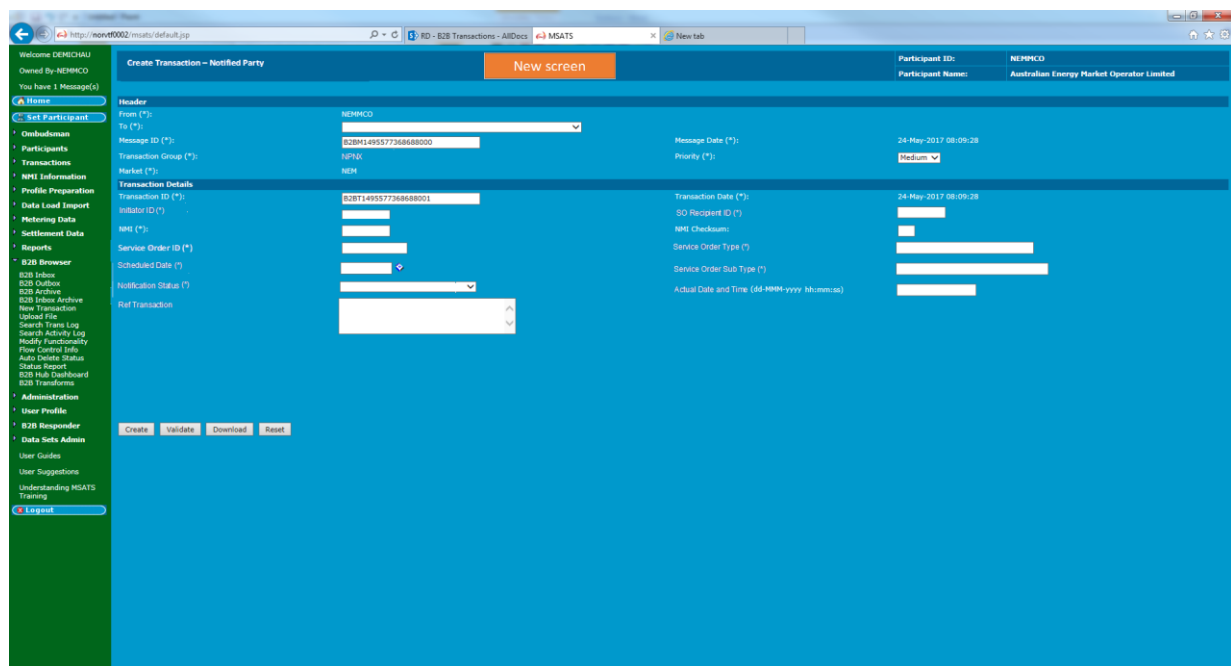
Field	Format	Required	Type	Validations
Generation Type	VARCHAR(5)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> Net Gross None This is a repeatable field.
Total Installed Network Devices	NUM(2)	Yes	Text	n/a
Network Device Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Network Device Location	VARCHAR(14)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> Before Meter After Meter This is a repeatable field.
Control Equipment Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Control Equipment Type	VARCHAR(25)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> Internal Relay External Relay Internal Time Switch External Time Switch This is a repeatable field.
Control Channel	VARCHAR(12)	Optional	Text	This is a repeatable field.
Control Connected Meter Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Transformer Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Transformer Type	VARCHAR(2)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> CT VT This is a repeatable field.
Transformer Ratio	VARCHAR(20)	Optional	Text	n/a
Transformer Connected Meter Number	VARCHAR(12)	Optional	Text	This is a repeatable field.
Total Removed Meters	NUM(2)	Optional	Text	n/a
Total Removed Other	NUM(2)	Optional	Text	n/a
Removed Equipment Number	VARCHAR(12)	Optional	Text	This is a repeatable field.



Field	Format	Required	Type	Validations
Removed Equipment Type	VARCHAR(25)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> Basic Meter Interval Meter Network Device Control Equipment Instrument Transformer This is a repeatable field.
Removed Register	VARCHAR(10)	Optional	Text	This is a repeatable field.
Removed Meter Reading	VARCHAR(15)	Optional	Text	n/a
Notes	VARCHAR(240)	Optional	Text	n/a

1.2.5 Notified Party

There is a new Notified Party transaction.



The interface has the following fields:

Field	Format	Required	Type	Validations
Initiator ID	VARCHAR(10)	Yes	Text	n/a
SO Recipient ID	VARCHAR(10)	Yes	Text	n/a

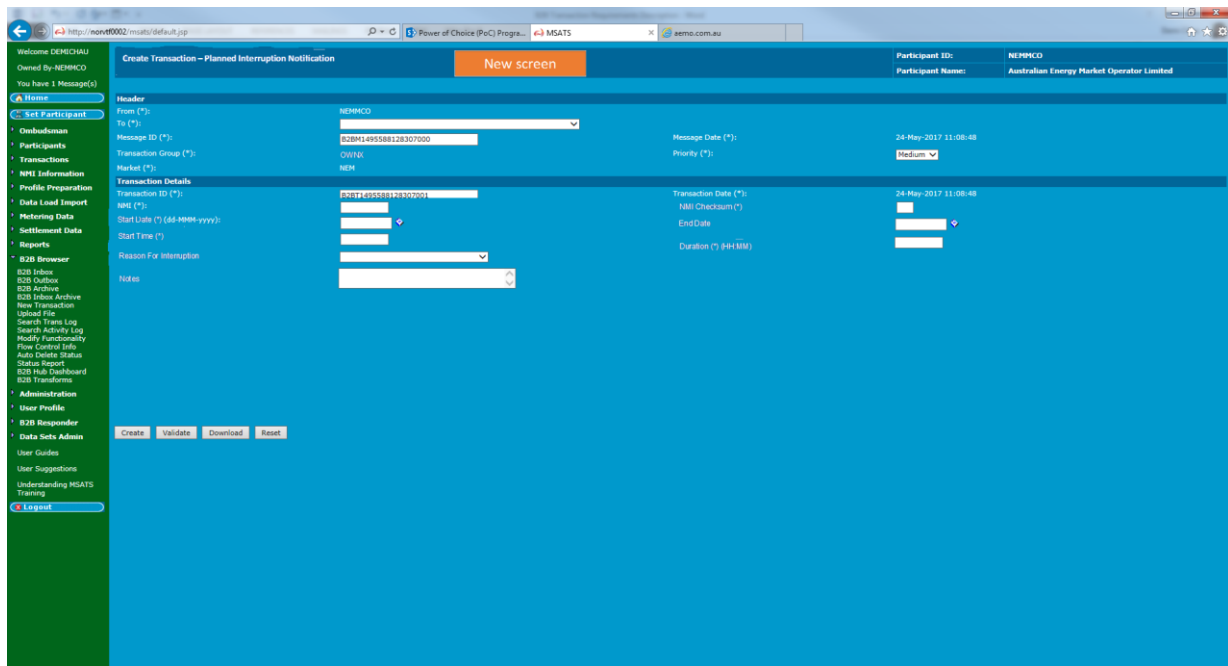


Field	Format	Required	Type	Validations
NMI	CHAR(10)	Yes	Text	n/a
NMI Checksum	CHAR(1)	Optional	Text	n/a
Service Order ID	VARCHAR(15)	Yes	Text	n/a
Service Order Type	VARCHAR(22)	Yes	Drop-down	Allowed values: -All current service order types.
Service Order Sub Type	VARCHAR(40)	Yes	Drop-down	Allowed values: The list of service order subtypes that change depending on the service order type selected.
Scheduled Date	DATE	Yes	Text	n/a
Actual Date And Time	DATETIME	Optional	Text	n/a
Notification Status	VARCHAR(30)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">SO RequestedSO RejectedSO CompletionAccepted by Notified PartyRejection by Notified PartyNotified Party Stopped
Ref Transaction	aseXML	Optional	Text	n/a



1.2.6 Planned Interruption Notification

There is a new Planned Interruption Notification transaction.



The interface has the following fields:

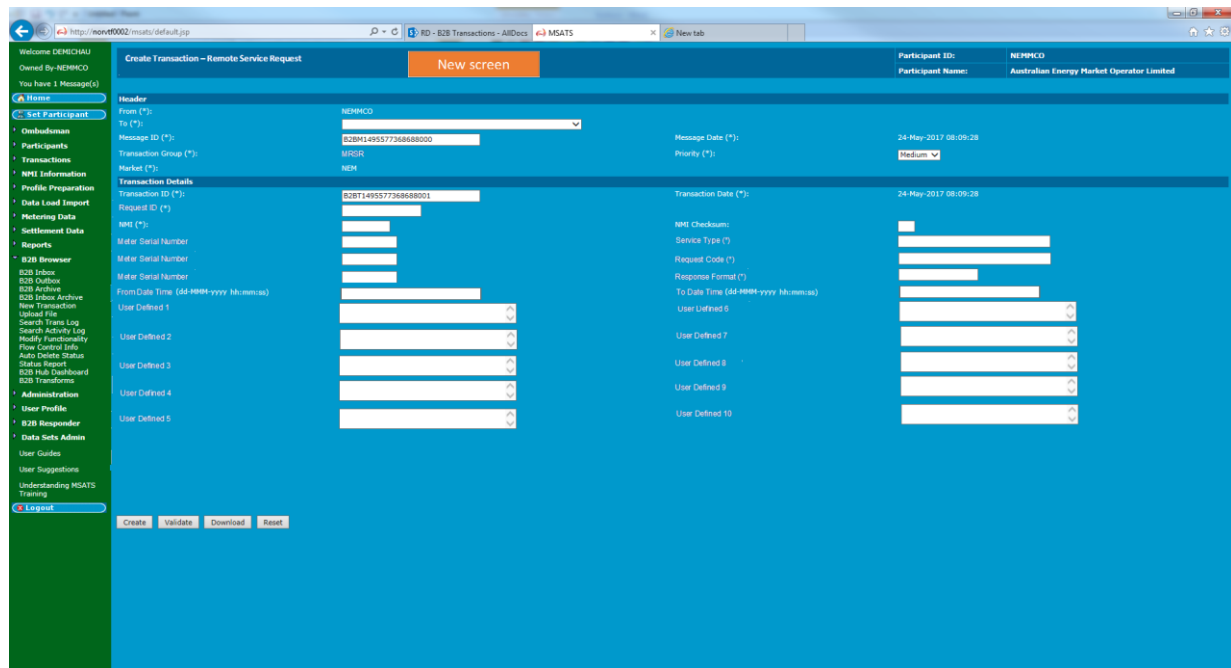
Field	Format	Required	Type	Validations
NMI	Char(10)	Yes	Text	n/a
NMI Checksum	Char(1)	Yes	Text	n/a
Start Date	DATE	Yes	Text	n/a
Start Time	TIME	Yes	Text	n/a
End Date	DATE	Optional	Text	n/a
Duration	VARCHAR(5)	Yes	Text	The format of the field is: HH:MM
Reason For Interruption	VARCHAR(50)	Optional	Drop-down	Allowed values: <ul style="list-style-type: none"> ▪ Meter Exchange - Individual ▪ Meter Exchange - Rollout ▪ Meter Replacement – Family Maintenance ▪ Meter Test ▪ Meter Fault Investigation ▪ Distribution Works ▪ Other



Field	Format	Required	Type	Validations
Notes	VARCHAR (240)	Optional	Text	This field is mandatory when Reason For Interruption - Other is used.

1.2.7 Remote Service Request

There is a new Remote Service Request transaction.



The interface has the following fields:

Field	Format	Required	Type	Validations
Request ID	VARCHAR(15)	Yes	Text	n/a
NMI	CHAR(10)	Yes	Text	n/a
NMI Check Sum	CHAR(1)	Original	Text	n/a
Meter Serial Number	VARCHAR(12)	Original	Text	This is a repeatable field.
Service Type	VARCHAR(40)	Yes	Text	n/a
Request Code	VARCHAR(40)	Yes	Text	n/a
Response Format	VARCHAR(20)	Yes	Text	n/a

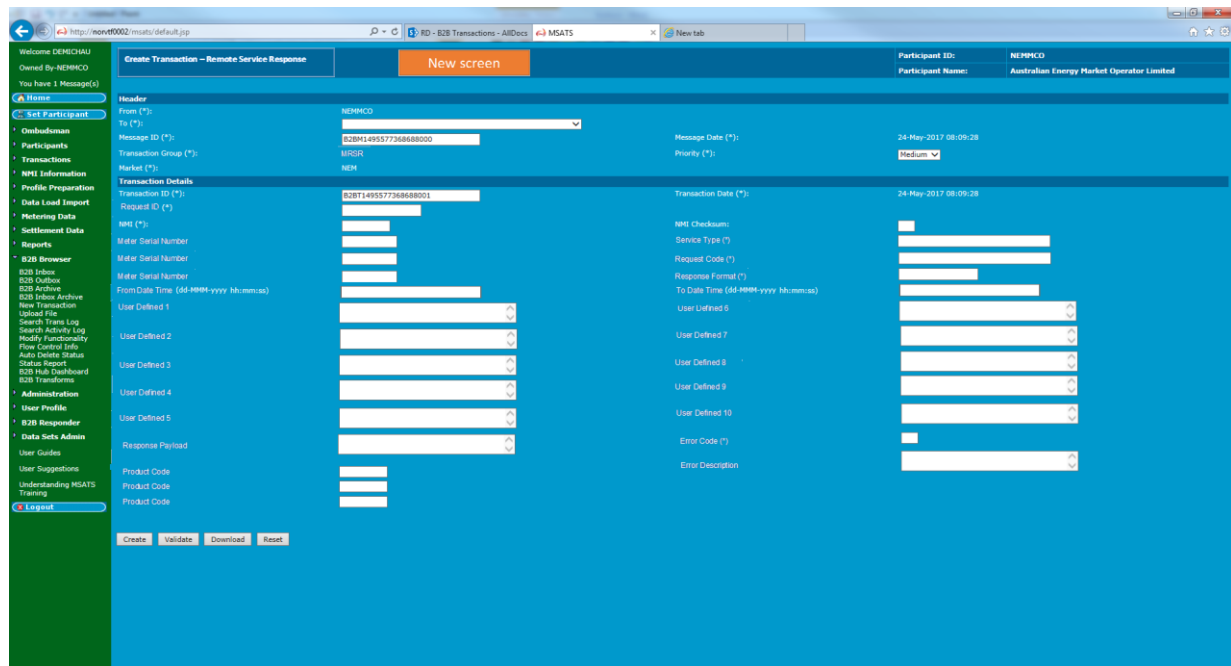


Field	Format	Required	Type	Validations
From Date Time	DATETIME	Original	Text	n/a
To Date Time	DATETIME	Original	Text	n/a
User Defined 1	VARCHAR(240)	Original	Text	n/a
User Defined 2	VARCHAR(240)	Original	Text	n/a
User Defined 3	VARCHAR(240)	Original	Text	n/a
User Defined 4	VARCHAR(240)	Original	Text	n/a
User Defined 5	VARCHAR(240)	Original	Text	n/a
User Defined 6	VARCHAR(240)	Original	Text	n/a
User Defined 7	VARCHAR(240)	Original	Text	n/a
User Defined 8	VARCHAR(240)	Original	Text	n/a
User Defined 9	VARCHAR(240)	Original	Text	n/a
User Defined 10	VARCHAR(240)	Original	Text	n/a



1.2.8 Remote Service Response

There is a new Remote Service Response transaction.



The interface has the following fields:

Field	Format	Required	Type	Validations
Request ID	VARCHAR(15)	Yes	Text	n/a
NMI	CHAR(10)	Yes	Text	n/a
NMI Checksum	CHAR(1)	Optional	Text	n/a
Meter Serial Number	VARCHAR(12)	Yes	Text	n/a
Service Type	VARCHAR(40)	Yes	Text	n/a
Request Code	VARCHAR(40)	Yes	Text	n/a
Response Format	VARCHAR(20)	Yes	Text	n/a
From Date Time	DATETIME	Optional	Text	n/a
To Date Time	DATETIME	Optional	Text	n/a



Field	Format	Required	Type	Validations
User Defined 1	VARCHAR(240)	Optional	Text	n/a
User Defined 2	VARCHAR(240)	Optional	Text	n/a
User Defined 3	VARCHAR(240)	Optional	Text	n/a
User Defined 4	VARCHAR(240)	Optional	Text	n/a
User Defined 5	VARCHAR(240)	Optional	Text	n/a
User Defined 6	VARCHAR(240)	Optional	Text	n/a
User Defined 7	VARCHAR(240)	Optional	Text	n/a
User Defined 8	VARCHAR(240)	Optional	Text	n/a
User Defined 9	VARCHAR(240)	Optional	Text	n/a
User Defined 10	VARCHAR(240)	Optional	Text	n/a
Response Payload	DATA	Optional	Text	n/a
Error Code	VARCHAR(4)	Yes	Text	n/a
Error Description	VARCHAR(240)	Optional	Text	n/a
Product Code	VARCHAR(10)	Optional	Text	This is a repeatable field.



1.2.9 Site Access Request

There is a new Site Access Request transaction.

The interface has the following fields:

Field	Format	Required	Type	Validations
NMI	CHAR(10)	Yes	Text	n/a
NMI Checksum	CHAR(1)	Optional	Text	n/a
Reason	VARCHAR(40)	Yes	Drop-down	Allowed values: <ul style="list-style-type: none">▪ New Retailer for site▪ Records old and need to be updated▪ No Access details on file for NMI▪ No Hazard Details on file for NMI▪ Site Visit Required▪ Other
Special Notes	VARCHAR(240)	Optional	Text	Mandatory if Reason - Other is selected.



1.2.10 Verify Meter Data Request

There are changes to the existing Verify Meter Data Request transaction.

Existing screen

Participant ID: NEMMCO
Participant Name: Australian Energy Market Operator Limited

Transaction ID (*): B2BT1493751594287001
Transaction Date (*): 26-May-2017 08:33:14

Investigation Code (*) dropdown menu options:

- Confirm Reading For Vacant Site
- Confirm Zero Consumption
- Incomplete Data
- Invalid MDFF Data
- Invalid Standing Data
- Missing Datastream
- Require Actual Reading or Substitute
- Require Final Substitute
- Scheduled Reading Required
- Service Order Reading Required
- Verify High Reading
- Verify Low Reading
- Verify/Missing Register
- Require Estimate Data
- Meter Churn
- Other

Changes are made to the following options in the interface:

Options	Status
Recipient not responsible for the NMI	Removed
Require Latest Version	Removed
Verify/Missing Register	Added
Require Estimate Data	Added
Meter Churn	Added

1.3 B2B Upload File

The current B2B Upload File interface changes to include integration of retail B2B transactions with the new e-Hub; non-retail B2B transactions are unaffected.



Participants acting as Initiators can upload zip and XML Messages for delivery to a recipient based on their Transaction Group Protocol Preference, where:

- **FTP** indicates the Initiator elects to send all messages of the Transaction Group using the FTP Hokey-pokey Protocol so the message is delivered to the Recipient's B2B Inbox.
- **API** indicates the Initiator elects to send all messages of the Transaction Group using the API Web Services Protocol so the message is delivered to the e-Hub API Gateway.

Screenshot

1.4 Search Transaction Log

Screenshot

1.5 B2B Hub Queue

This is a new interface and functionality reflecting queued messages in the e-Hub API Gateway. This interface provides participants selecting to use web services the ability to manage and acknowledge B2B Messages. The functionality is similar to the existing B2B Outbox interface.

1. **Messages and Errors:** Reports the count of messages in the hub and the count of messages matching the search criteria, after each search.
 - White text = normal messages.
 - Yellow text = error messages.
2. **Search criteria**
3. **B2B Hub Queue Contents**



B2B Hub Queue

Participant ID: NEMMCO

Participant Name: Australian Energy Market Operator Limited

6 Message(s) Match Search Criteria

17 Message(s) Total Queued

1

Search Criteria

2

☐ Message Context ID / File Name

Message Context ID / File Name (* as wildcard):

☐ Assisted Filename

Transaction Groups:

SITE
SORD
MTRD
CUST
OWNP

Message Type:

Priority:

From Participant ID:

Participant Message ID:

Received From Date (dd-mmm-yyyy):

Received To Date (dd-mmm-yyyy):

Received From Time (hh:mm:ss):

Received To Time (hh:mm:ss):

Search

Reset

B2B Hub Queue Contents

3

If a button or link is inactive, you do not have permission to perform the action

Delete Selected Acknowledgments

Select All Acknowledgments

De-Select All Acknowledgments

Acknowledge Selected Messages

Select All Messages

De-Select All Messages

	Context ID / File Name	Message ID	Message Type	Received Date	Priority	From	Action
<input type="checkbox"/>	file 1	B2B-1	Transaction Message	recievedDate	Low	CITIPP	<div><div>• Download</div><div>• Reject</div></div>
<input type="checkbox"/>	file 2	B2B-2	Message Acknowledgement	recievedDate	Medium	CITIPP	<div><div>• Download</div><div>• Delete</div></div>
<input type="checkbox"/>	file 3	B2B-3	Transaction Acknowledgement	recievedDate	High	CITIPP	<div><div>• Download</div><div>• Reject</div></div>

View file

Sort by column headings

View, reject, or delete message



1.5.1 B2B View Acknowledgement

View Message Acknowledgement	Participant ID:	NEMMCO		
	Participant Name:	Australian Energy Market Operator Limited		

Message: outbox\sordmnemmcob2bb1418001321226000.ack

Header

From: NEMMCO
To: NEMMCO
Message ID: B2BM1491872667737000 Message Date: 11-Apr-2017 11:04:27
Transaction Group: SORD Priority: Medium
Market: NEM

Message Acknowledgement

Initiating Message ID: B2BM1418001201179000 Status: Accept
Receipt ID: B2BR1491872667737001 Receipt Date: 2017-04-11T11:04:27.0+10:00

Duplicate:

Transaction Acknowledgements

Initiating Transaction ID	Receipt ID	Receipt Date	Status	Action
---------------------------	------------	--------------	--------	--------

[Download](#)

1.5.2 B2B View Message

View Message	Participant ID:	NEMMCO		
	Participant Name:	Australian Energy Market Operator Limited		

Message: outbox\sordmnemmcob2bb1418001321226000.zip

Header

From: NEMMCO
To: NEMMCO
Message ID: B2BM1418001201179000 Message Date: 8-Dec-2014 11:13:21
Transaction Group: SORD Priority: Medium
Market: NEM

Transactions

Transaction ID	Transaction Type	NMI	Initiating Transaction ID	Action
B2BT1418001201179001	Allocate NMI			

[Download](#)



1.5.3 B2B Delete File

Screenshot

1.5.4 B2B Create Message Acknowledgement

Create Message Acknowledgement		Participant ID:	NEMMCO
		Participant Name:	Australian Energy Market Operator Limited
Message To Acknowledge: sordmnemmcob2bb1418001321226000.zip			
Header			
From (*):	NEMMCO		
To (*):	NEMMCO		
Message ID (*):	B2BM1493860326239000	Message Date (*):	4-May-2017 11:12:06
Transaction Group (*):	SORD	Priority (*):	Medium
Market (*):	NEM		
Acknowledgement			
Initiating Message ID (*):	B2BM1486507410936000		
Receipt ID:	B2BR1493860326255000	Receipt Date (*):	4-May-2017 11:12:06
Status (*):	<input type="text"/>		
Duplicate:	<input type="text"/>		
Event			
Class:	<input type="text"/>		
Code/Description/Severity (*):	<input type="text"/>		
Key Info:	<input type="text"/>		
Context:	<input type="text"/>		
Explanation:	<input type="text"/>		
<input type="button" value="Create"/> <input type="button" value="Cancel"/>			

1.5.5 B2B Create Message Acknowledgements – Accept

Create Message Acknowledgements - Accept		Participant ID:	NEMMCO	
		Participant Name:	Australian Energy Market Operator Limited	
Message To Acknowledge	Message ID (*)	Receipt ID (*)	Status (*)	Action
sordmnemmcob2bb1418001321226000.zip	B2BM1493946090463000 x	B2BR1493946090463001	Accept	Download Initiating



1.5.6 B2B Create Message Acknowledgement Confirmation

The create status of the acknowledgements are as follows:

sordmnemmcob2bb1418001321226000.zip

Success

Return to the "B2B Hub Queue" screen.

1.6 Participant System Status

The Participant System Status interface, under the Participants menu changes name to Participant FTP System Status, supporting the FTP Hokey-pokey Protocol.

Participant FTP System Status		Participant ID:	NEMMCO						
		Participant Name:	Australian Energy Market Operator Limited						

Participant FTP System Status									
System	Mode Type	Box	Status	Description	Transaction Groups	Reason	Resolution	Start Time	Heartbeat Time
<div></div>	<div></div>	<div></div>	<div></div>						



1.7 B2B Hub Dashboard

B2B Hub Dashboard interface, under the B2B Browser menu changes name to B2B FTP Dashboard, supporting the FTP Hokey-pokey Protocol.

▶ **Settlement Data**

▶ **Reports**

▶ **B2B Browser**

B2B Inbox

B2B Outbox

B2B Hub Queue

B2B Archive

B2B Inbox Archive

New Transaction

Upload File

Search Trans Log

Search Activity Log

Modify Functionality

Flow Control Info

Auto Delete Status

Status Report

B2B FTP Dashboard

B2B Transforms

▶ **Administration**

▶ **User Profile**

B2B FTP Dashboard (Current Status)

Participant ID:**NEMMCO**

Participant Name:**Australian Energy Market Operator Limited**

Report

Participant (*):

View Report

1.8 B2B Modify Functionality

The B2B Modify Functionality interface, under the B2B Browser menu has an additional checkbox to support the B2B Hub Queue, Delete Hub Queue Message Acknowledgement.

When Participant Administrators select **Create Response Message Acknowledgement**, the B2B Hub Queue contents table provides a **Reject** action.

Toggle Modify Functionality	Participant ID:	NEMMCO
	Participant Name:	Australian Energy Market Operator Limited

Functionality	Toggle On
Delete File	<input checked="" type="checkbox"/>
Upload File (No Validation)	<input checked="" type="checkbox"/>
Create Response Message Acknowledgement	<input checked="" type="checkbox"/>
Auto Delete From Inbox	<input checked="" type="checkbox"/>
Create New Transaction	<input checked="" type="checkbox"/>
Create Response Transaction	<input checked="" type="checkbox"/>
Create Response Transaction Acknowledgement	<input checked="" type="checkbox"/>
Upload & Validate Transaction	<input checked="" type="checkbox"/>
Delete Hub Queue Message Acknowledgement	<input type="checkbox"/>

1.9 B2B Transforms


To support interoperability the existing B2B Transforms interface name changes to B2B Transforms and Protocol. This interface allows participants to transition schemas and FTP or API protocols.

Participants can set different protocols for different Transaction Groups but the protocol must be the same within a Transaction Group. For example, for a SORD transaction you cannot send in FTP and receive in API.



B2B Transforms and Protocol				Participant ID: NEMMCO					
				Participant Name: Australian Energy Market Operator Limited					
You have 0 B2B messages parked out of the allowed 480. You have -4 minutes to complete your change.									
B2B transaction group	Receiving schema version	Change to version	Change to Protocol	Outbox Messages	ACKS	Hub Queue Messages	ACKS	Parked Messages	ACKS
CUST	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	17	3	0	0	0	0
MTRD	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	0	0	0	0	0	0
OWNP	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	6	0	0	0	0	0
SITE	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	36	6	0	0	0	0
SORD	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	0	1	0	0	0	0
<input type="button" value="Start change"/> <input type="button" value="Cancel change"/> <input type="button" value="Refresh"/> <input type="button" value="Complete change"/>									
Receiving schema version		Transforms applied							
r25		r32 to r25							
r32		r25 to r32							

1.9.1 Stopped interface

B2B Transforms and Protocol		Participant ID: NEMMCO	
		Participant Name: Australian Energy Market Operator Limited	
 You are stopped for B2B messages. Please acknowledge your B2B messages and then click refresh to complete your schema version change.			
<input type="button" value="Refresh"/>			

1.9.2 Already Started/Parked interface

: The 'Start Change' process is already in progress.

You have 0 B2B messages parked out of the allowed 480. You have 29 minutes to complete your change.

B2B transaction group	Receiving schema version	Change to version	Change to Protocol	Outbox Messages	ACKS	Hub Queue Messages	ACKS	Parked Messages	ACKS
CUST	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	17	3	0	0	0	0
MTRD	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	0	0	0	0	0	0
OWNP	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	6	0	0	0	0	0
SITE	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	36	6	0	0	0	0
SORD	r32	<input type="text" value="r32"/>	<input type="text" value="FTP"/>	0	1	0	0	0	0
<input type="button" value="Start change"/> <input type="button" value="Cancel change"/> <input type="button" value="Refresh"/> <input type="button" value="Complete change"/>									
Receiving schema version		Transforms applied							
r25		r32 to r25							
r32		r25 to r32							



1.9.3 Not started/parked interface

: The parkbox has not been created. 'Start Change' must be requested first.

You have 0 B2B messages parked out of the allowed 480.

You have 30 minutes to complete your change.

B2B transaction group	Receiving schema version	Change to version	Change to Protocol	Outbox		Hub Queue		Parked	
				Messages	ACKS	Messages	ACKS	Messages	ACKS
CUST	r32	r32 ▼	FTP ▼	17	3	0	0	0	0
MTRD	r32	r25 ▼	FTP ▼	0	0	0	0	0	0
OWNP	r32	r32 ▼	FTP ▼	6	0	0	0	0	0
SITE	r32	r32 ▼	FTP ▼	36	6	0	0	0	0
SORD	r32	r32 ▼	FTP ▼	0	1	0	0	0	0

Start change

Cancel change

Refresh

Complete change

Receiving schema version	Transforms applied
r25	r32 to r25
r32	r25 to r32

1.9.4 System error interface

B2B Transforms and Protocol

Participant ID:

NEMMCO

Participant Name:

Australian Energy Market Operator Limited



Unexpected error has occurred.

Please try again. If the error persists please contact AEMO support hub.

Refresh

1.9.5 No Change interface

: Neither schema version nor protocol is changed for any transaction group

You have 0 B2B messages parked out of the allowed 480.

You have 27 minutes to complete your change.

B2B transaction group	Receiving schema version	Change to version	Change to Protocol	Outbox		Hub Queue		Parked	
				Messages	ACKS	Messages	ACKS	Messages	ACKS
CUST	r32	r32 ▼	FTP ▼	17	3	0	0	0	0
MTRD	r32	r32 ▼	FTP ▼	0	0	0	0	0	0
OWNP	r32	r32 ▼	FTP ▼	6	0	0	0	0	0
SITE	r32	r32 ▼	FTP ▼	36	6	0	0	0	0
SORD	r32	r32 ▼	FTP ▼	0	1	0	0	0	0

Start change

Cancel change

Refresh

Complete change

Receiving schema version	Transforms applied
r25	r32 to r25
r32	r25 to r32



1.10 Additional interface changes

AEMO also expects to create or change the following interfaces because of this release. We will provide further detail as the changes are locked in.

Changing:

- Search Translog
- B2B Responder Create and Search
- Create Participant
- Search Activity Log
- Administration System Status

New:

- New Accreditation
- B2B P2P
- B2B/B2M Alerts and Notifications

1.11 User Rights Management (URM)

1.11.1 B2B Hub Queue

A new interactive entity exists for maintaining user rights, called B2B Hub Queue. Participant administrators grant delete, create, update, and read rights to their participant users to use the B2B Hub Queue.

Screenshot

1.11.2 B2B Transforms

The existing B2B Transforms interactive entity is renamed B2B Transforms and Protocols.

Screenshot

1.11.3 B2B Hub Dashboard

The existing B2B Hub Dashboard interactive entity is renamed B2B FTP Dashboard.

Screenshot

AEMO automatically migrates participants currently having rights to changing entities; no action is required from participants.

For help maintaining user rights, see [Guide to User Rights Management](#).



1.12 Batch Handlers

For interoperability, the current Batch Handlers change to interface with the e-Hub API Gateway, ensuring back-end message exchange transparency for participants. The batch handlers address the following B2B retail transaction groups: MTRD, MRSR, SORD, CUST, SITE, OWNP, OWNX, NPNX, and PTPE.

MSATS Batch Handler modifications include:



2 BASELINE ASSUMPTIONS

AEMO works to the assumption that participants' systems are compliant with the minimum supported configuration of the following.

2.1 Software

The current versions of MSATS software are:

Software	Version	Release
MSATS	3.0	46.89
Participant Batcher	2.10	46.89 changes for this release
Validation Module	1.0.26	46.89 changes for this release
Web Services	1.04	46.88
Java	8	The software is supplied with source code so participants can recompile with any Java version
Windows service	64 bit JRE	32 bit JRE still supported

You can find MSATS software and guides on AEMO's website>Retail and metering>Market Settlement and Transfer Solutions.

2.2 aseXML schemas

The supported aseXML versions and enumerations for MSATS release 46.89 are:

Participant Schema	Latest	Current	Superseded	Release	Enumerations	AEMO website
B2M	r35	r35	r31	46.88	7.0	aseXML standards
B2B	r36	r36	-	46.89	8.0	aseXML standards

The aseXML schema changes explained in this technical specification only apply to the B2B schema.



Notes

- When participants update their aseXML schema version in:
 - The **MSATS web portal**: the change is reflected after 2:30 am the next day.
 - The **Batch Handlers**: (the schema change for batch services is immediate).
- Participants need to keep up-to-date with aseXML schema changes.
- To see your current schema versions, in the MSATS Web Portal:
 - B2M schema: Participants > Participant Schema.
 - B2B schema: B2B Browser > B2B Transforms.

To learn more about transitioning to a new B2B aseXML schema, see the [Guide to Transition of aseXML](#).

To obtain schemas, guidelines, and whitepapers, see aseXML Standards on [AEMO's website](#) > IT Systems.

2.3 B2B transforms

AEMO requires participants to use aseXML B2B schema r36. Participants can check their nominated aseXML version for receiving B2B transactions in the MSATS web portal > B2B Browser > B2B Transforms.

No transforms will apply for this Release:

Supported	Not supported	Release
r36 only	B2B transforms from r25 to r32. B2B transforms from r32 to r36.	46.89 Changes for this Release

To learn more about B2B Transforms, see the [Guide to MSATS B2B](#).

2.4 Web Services schemas

The aseXML schema versions change for web services:

Web service	Current	Superseded	Release
C4 – NMI Master Report	r35	r31	46.88
MSATS Limits	r35	r31	46.88
NMI Discovery – type 1	r35	r31	46.88
NMI Detail	r35	r31	46.88



Web service	Current	Superseded	Release
NMI Discovery – type 3	r35	r31	46.88
Participant System Status	r35	r32	46.88

2.5 Rules, procedures, processes, and guidelines

AEMO consultations are key reference documents and take precedence over this document. For open consultations and recently closed consultations, see Stakeholder Consultation on [AEMO's website](#).

Name	Version	Effective/indicative date	Changes in this Release	AEMO website
Metering Procedures, Guidelines, and Processes	Web page	n/a	n/a	Retail & Metering
B2B Procedures	3.0 In consultation	1 December 2017	yes	Stakeholder Consultation
CATS & WIGS Procedures	4.2	1 December 2017	Changes for 46.88	Stakeholder Consultation
MDM Procedures	3.3	1 December 2017	Changes for 46.88	Stakeholder Consultation
NEM ROLR Procedures	1.4	1 December 2017	Changes for 46.88	Stakeholder Consultation

Participants using other standards critical to their business are strongly advised to participate in the pre-production rollout and testing period.



3 IMPLEMENTATION

3.1 Approval or agreement to change

AEMO seeks approval to proceed from all participant change controllers: close of business: Monday, 31 July 2017.

3.2 Transitioning

The Power of Choice team will release details about the activities required for transitioning and cutover closer to the pre-production implementation date.

3.3 Implications

To maintain systems in-line with AEMO's market systems, participants need to:

- Review and assess the impact on their market systems with respect to the changes implemented as part of this Release.
- Change their systems prior to the implementation of this Release.
- Schedule staff and resources to upgrade their market systems for the implementation of this Release.

3.4 Risks

There is a 1 December 2017 business obligation for this Release so the risk is with the ability of participants' IT staff to make their required IT system changes by the implementation dates.

3.5 Upgrade options

Because there is a 1 December 2017 business obligation for this Release, there are no upgrade options. The key is upgrading to the aseXML schema r36.

3.5.1 What happens if I do not upgrade?

For impacts to participants not upgrading to the aseXML schema r36, see **Error! Reference source not found. Error! Bookmark not defined..**



4 RELATED RESOURCES

You can find the following resources on AEMO's website:

Name	Detail
aseXML Standards	aseXML schemas, guidelines, and whitepapers.
B2B Framework rule changes	Information on the AEMC website detailing the changes to the B2B framework.
Guide to MSATS B2B	Information about how to do B2B Transforms and the B2B functions available in MSATS.
Guide to Transition of aseXML	Provides information for participants transitioning to another aseXML schema version.
MSATS 46.88 Release Technical Specification – December 2017	Information about the MSATS Release 46.88 EN/MC that includes the new B2M schema r35 and the CATS and WIGS Procedures v4.2.
Power of Choice	Details about the Power of Choice implementation program.
Power of Choice – B2B Procedure Changes	Details about the changes to B2B procedures for Power of Choice.
Schema Release Notes r36	Full details about the changes in the B2B aseXML schema r36.
Shared Market Protocol Technical Guide (not yet published)	Provides participants with the technical specifications for the delivery of B2B Transactions to assist participants with developing their own systems to utilise the e-Hub API Gateway.
Validation Module Software	AEMO provides the Validation Module software to participants so they can do on-site transaction validations.

5 GLOSSARY

For easy reading, this technical specification is written in plain language. If there is a discrepancy between information or a term in this document, the Rules and procedures take precedence.

Abbreviations

Abbreviation	Explanation
AEMC	Australian Energy Market Commission
B2B	Business-to-business. A Generic term used to refer to defined business-to-business interactions between participants. It excludes interactions between a participant and AEMO's market systems such as MSATS.
B2M	Business-to-market; Interactions between a participant and AEMO's market systems such as MSATS.
CSDN	B2B Procedure: Customer Site Details Notification Process.
FRC	Full Retail Contestability
FTP	File Transfer Protocol
MDP	B2B Procedure: Meter Data Process.
MSATS	Market Settlement and Transfer Solution.
OWN	B2B Procedure: One Way Notification Process.
SMP	Shared Market Protocol
SSL	Secure Sockets Layer

Special terms

Term	Definition
API Web Services Protocol	The new web services provided to support B2B messaging, offering an alternative to the current FTP interface.
aseXML	A standard developed by Australian energy industries to facilitate the exchange of information between energy industry participants. A set of schemas and usage guidelines defining how data is exchanged under FRC in the gas and electricity industries.
aseXML B2B Schema	Specification used to describe the structure of an aseXML Message.



Term	Definition
B2B Acceptance	When used in the context of a B2B Transaction, indicates the B2B Recipient of the B2B Transaction has accepted it using a BusinessAcceptance/Rejection with an ase:Status of Accept .
B2B Acknowledgment	A generic term referring to an aseXML-format Message or Transaction Acknowledgement, specifically within the context of a B2B interaction. A B2B Acknowledgement is the physical interpretation of a Business Signal. Often referred to as: <ul style="list-style-type: none">▪ Positive: Indicating correctness of the associated file.▪ Negative: Indicating an error with the associated file.
B2B Browser	The existing MSATS B2B Browser that is now part of the e-Hub.
B2B Inbox	The file folder where participants publish B2B messages and acknowledgements for other participants.
B2B Initiator	Participant initiating a B2B Message.
B2B Message	A B2B Transaction or Acknowledgement sent between a B2B Initiator and a B2B Recipient.
B2B Message Acknowledgement	An aseXML realisation of a business receipt.
B2B Outbox	The file folder where FTP Hokey-pokey Protocol participants receive B2B messages and acknowledgements from other participants.
B2B Recipient	Participant receiving a B2B Transaction (sent by a B2B Initiator).
B2B Rejection	When used in the context of a B2B Transaction, indicates the B2B Recipient of the B2B Transaction has rejected it using a BusinessAcceptance/Rejection with an ase:Status of Reject .
B2B Transaction	Facilitates the process of consumer connection point transfers and the management of <i>NMI Standing Data</i> .
B2B Transaction Acknowledgement	An aseXML realisation of a Business Acceptance/Rejection
B2B Transaction Group	The Transaction Group field in an aseXML Message.
B2B Transaction Group Protocol Preference	The preference a participant sets at a B2B Transaction Group level for their sending and receiving protocol: FTP or API. Participants can set different protocols for different Transaction Groups but the protocol must be the same within a Transaction Group. For example, for a SORD transaction you cannot send in FTP and receive in API.
B2B Transforms	Participants can nominate the B2B aseXML schema release they want to use for receiving B2B transactions and acknowledgements.



Term	Definition
C1 report	Data Replication Resynchronisation Report.
C7 report	New Participant Data Access.
Data Stream	A stream of metering data associated with a connection point, represented by a NMI. A NMI can have multiple Data Streams (e.g. from one or more meters, or from one or more channels or registers that comprise a single meter). Each Data Stream is identified by a unique suffix associated with the NMI.
e-Hub	The existing MSATS B2B Browser, MSATS B2B Handlers and the new e-Hub API Platform.
e-Hub API Gateway	The new interface for participants to interact with B2B using web services.
e-Hub API Portal	The new web interface for participants to view API details and manage API keys.
Enumerations	The Enumerations.xsd file containing acceptable aseXML attributes.
FTP Hokey-pokey Protocol	The existing B2B file FTP exchange protocol.
Interoperability	Refers to the different protocols participants can use to exchange B2B data, irrespective of the sender or receiver's B2B Transaction Group Protocol Preference: FTP or API.
Meter Status Code	A single character code, indicating the status of the meter.
Network Tariff	The rate an NSP charges a <i>retailer</i> for the use of its <i>network</i> .
NMI Discovery	NMI Discovery is an MSATS function allowing participants to discover a customer's NMI and checksum or discover sufficient standing data about the NMI.
NMI Standing Data	Connection point data
NMI Status Code	A code identifying the status of a NMI, e.g. active or inactive.
Participant ID	Registered participant identifier
PMS Reports	Performance Monitoring System traffic light reports.
Read Type Code	A code required on change request records for change of retailer transactions, indicating whether the transfer is to occur on the NSRD or some other date (e.g. a previous read date).
Register Status Code	A single character code indicating if the register is active.
Stopbox	The file folder where participants receive stop and warning files.



Term	Definition
Stop File	A file generated by the e-Hub when a participant's FTP Outbox of queued messages exceeds the High Water Mark.
Stopped	Describes the state of a participant's Outbox if a Stop File is in place.
Validation Module	Software AEMO provides to participants so they can do on-site transaction validations.
Water Mark – High	The upper limit of the message queue scale. When a participant's message queue reaches a High Water Mark, a Stop File is generated.
Water Mark – Low	The lower limit of the message queue scale. If a Stop file is present, when a participant's message queue reaches a Low Water Mark the Stop File is removed.
Water Mark – Warn	A warning message advising the queue is reaching an upper limit.