

MSATS - Technical Specification - March 2024

2.0 March 2024

Meter Exemptions

Pre-production: Tuesday 3 October 2023

B2M aseXML r44

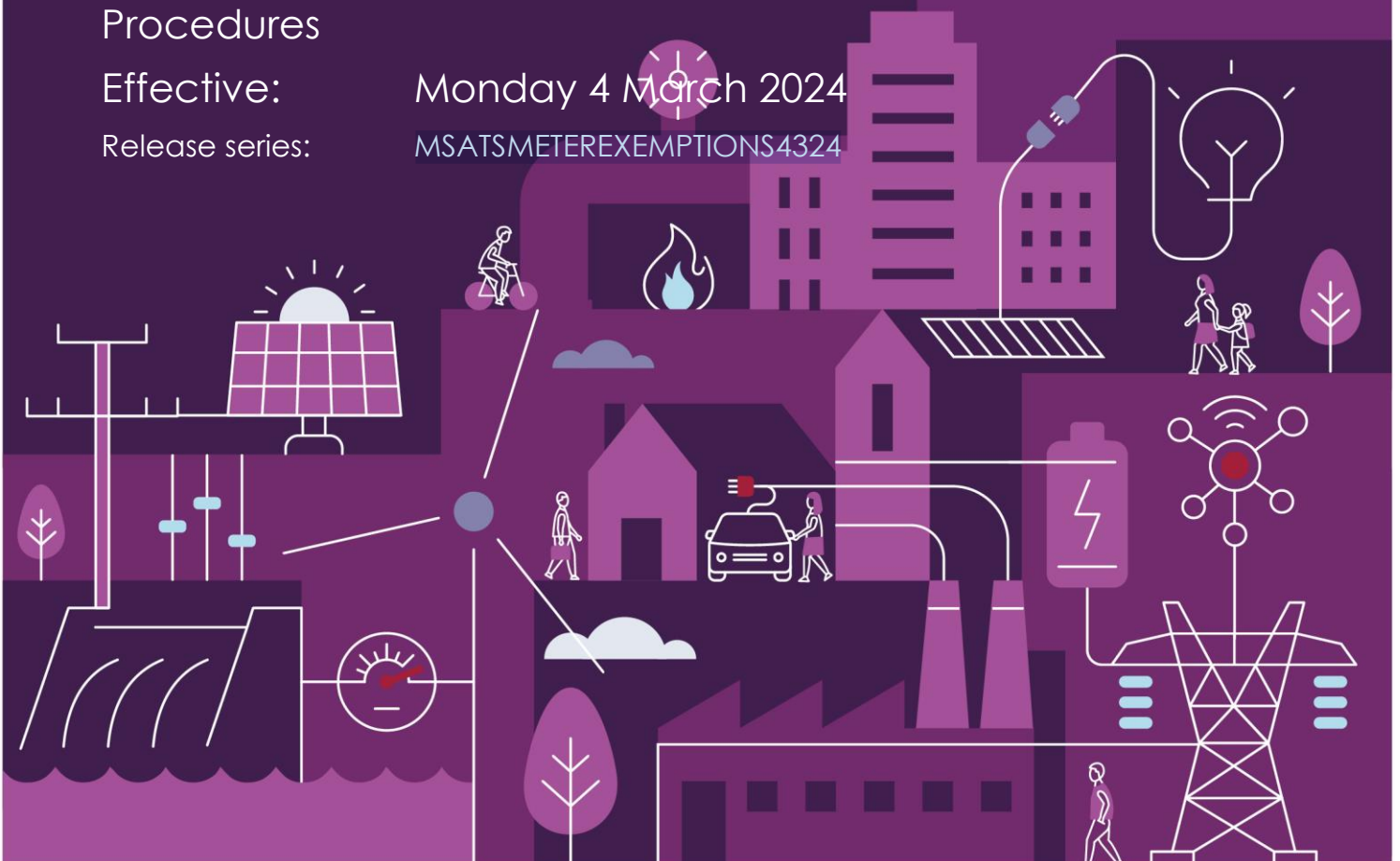
Pre-production: Tuesday 5 December 2023

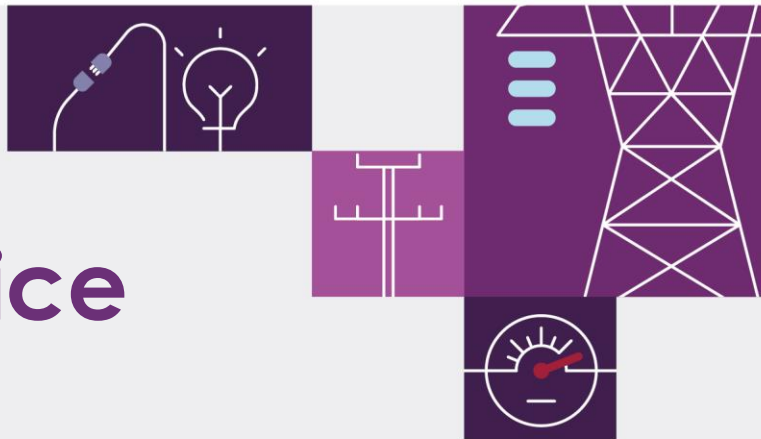
Production: Sunday 3 March 2024

Procedures

Effective: Monday 4 March 2024

Release series: MSATSMETEREXEMPTIONS4324





Important notice

Purpose & audience

This document describes the technical changes required to participants' systems for the MSATS - Technical Specification – November 2023 (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 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.
- Unless otherwise stated, you can find resources mentioned in this guide on AEMO's website.
- **Text in this format** is a link to related information. Some links require access to MarketNet.
- **Text in this format**, indicates a reference to a document on usually on [AEMO's website](#).
- **Text in this format** is an action to perform in the MSATS Web Portal.
- 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.
- Rules and Glossary Terms are capitalised and have the meanings listed against them in [the National Electricity Rules \(NER\)](#) and [Retail Electricity Market Glossary and Framework](#).

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Distribution

Available to the public.

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Version history

[v2.0](#) – Final version.

Documents made obsolete

The release of this document changes only the version of MSATS Technical Specification - March 2024.

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1 Introduction

1.1 Audience

AEMO provides this information as a service targeting business analysts and IT staff in participants' organisations.

The primary audience for this technical specification is:

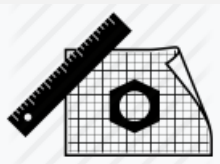
- Metering Coordinators with the MSATS role, Responsible Person (RP).

1.2 Objective

The MSATS - Technical Specification - March 2024 (Release) describes AEMO's **projects and enhancements** from participants' perspective, including related changes to participants' IT systems.

For details about MSATS functionality, see [Technical Guide to MSATS](#).

1.3 Status

Version	Status
V2.0	This technical specification is final. For updated information, see Guide to Metering Exemptions and Schema release r44 .
V1.01	Included pre-production refresh information.
V1.00	The design continues to evolve. We expect further small changes as testing continues.
V0.01	 Initial Draft for review. The design is not ready for participants' builds. Presents the MSATS - Technical Specification – March 2024 evolving design. This is a very early design as the procedures are not yet finalised. Please send feedback to techwriters@aemo.com.au

1.4 Release dates

Scheduled for implementation in:

- Meter exemptions pre-production: Tuesday 3 October 2023
- B2M aseXML r44 pre-production: Tuesday 5 December 2023
- Production: Sunday 3 March 2024
- Procedures effective: Monday 4 March 2024

1.5 Projects and enhancements

Project	Description	Type
MSDR	Metering Installation Exemption Automation Consultation	Consultation
B2M aseXML	r43–r44	Enhancement for project

1.6 Forums and meetings

1.6.1 Implementation forum

The [Implementation Forum](#) coordinates readiness activities and is the main stakeholder forum for direct input into the planning and execution for the following projects:

- Meter Exemption Process (MCPI)

1.6.2 MSUG meetings

The [Market Systems User Group](#) (MSUG) is an industry user group established to discuss NEM wholesale and retail IT systems releases. Its purpose is to facilitate the continuing improvement of AEMO's IT systems by seeking feedback and collaboration from participants.

It is open to all interested parties, with invitations sent to all Registered Participants. If you have a technical question for a project and want to attend the MSUG, so you get an invite, ask your company's support team to include your email address in their [AEMO Help Desk Bulletin \(CRM\)](#).

1.6.3 NEM Reform program stakeholder engagement

Details about the NEM Reform Forums, Working Groups, and related AEMO forums: [NEM Reform Stakeholder Engagement](#).

1.7 Rule and procedure changes

The following rules and procedures take precedence over technical specifications and guides.

Project	Title	Version /status	Effective
MSDR	Exemption Procedure – Meter Installation Malfunctions	v1.3	4 March 2024
	Metering Exemption (Small Customer Metering Installation)	v1.4	4 March 2024
	Metering Installation Exemption Automation Consultation	Final	4 March 2024
	Metering Installation Exemption Guideline Supplement to the Metering NEM Exemption Procedure	v1.0	4 March 2024

1.8 Related software

No related software.

1.9 Related documents

No related documents.

1.10 Approval to change

No approval or agreement to change required from Participant change controllers.

AEMO sought approval in the [Metering Installation Exemption Automation Consultation](#).

1.11 Version numbers

AEMO releases new versions of this document as the technical requirements are streamlined.

Incremental version numbers such as 0.01, 1.01, 2.01 and so on mean a draft version or a small change to the technical specification.

Major version numbers such as 1.00, 2.00 means there are substantial changes to the technical specification. Participants must carefully review the changes detailed in this Release.

1.12 Changes in this version

Final version.

2 Proposed Timeline

Milestone	Date	Description
Approval required	n/a	No approval required. For details, see Approval to change
MSATS pre-production refresh	4 March 2024 – 8 March 2024 Refreshed with production data from 7 February, 2024	Refresh of the pre-production systems with data refreshed from the production system An outage can occur to the pre-production environment during this period. Participant access is not restricted, however, AEMO do not guarantee the pre-production data content or system availability. During the refresh, access to other AEMO systems such as AWEFS, EMMS, OPDMS, and STTM etc. may be intermittently affected
MSUG meeting	Wednesday, 7 February 2024	Market Systems User Group Meeting (MSUG) to review the implementation of this pre-production release and ask AEMO technical SMEs questions This date is tentative. The project manager will provide an invitation one week prior to the meeting
Revised Technical Specification	January 2024 If required	AEMO releases new versions of this document as the technical requirements are streamlined. During the project this document is the source of truth From the pre-production release, the technical specification is no longer updated, the related documents become the source of truth Release schedules and technical specifications
Meter exemptions pre-production implementation	Monday 25 September 2023 – Sunday 1 October 2023	AEMO implements components of the Release to pre-production for Participant testing AEMO has full access to the system during this period Participant access is not restricted; however, the data content or system availability is not guaranteed
Meter exemptions pre-production systems available	Tuesday 3 October 2023	Testing period begins for participants after they have been notified
B2M aseXML r44 pre-production implementation	Tuesday 5 December 2023 10.00 am – 2.00 pm	AEMO implements components of the Release to pre-production for Participant testing AEMO has full access to the system during this period Participant access is not restricted; however, the data content or system availability is not guaranteed
B2M aseXML r44 pre-production systems available	Tuesday 5 December 2023 After 2.00 pm	Testing period begins for participants after they have been notified

Proposed Timeline

Milestone	Date	Description
Related Documents publication	Tuesday 3 October 2023	Release of guides and resources mentioned in Related documents on page 3
Production implementation	Sunday 3 March 2024 10.00 am – 2.00 pm	AEMO implements the release to production
Production systems available	Sunday 3 March 2024 After 2.00 pm	Production systems are available
Procedures effective	Monday 4 March 2024	Rules and procedures effective

3 Participant Impact

3.1 B2M aseXML r44

AEMO encourages participants currently using aseXML schema version r43 to migrate to aseXML schema version r44 prior to this release. For help transitioning, see [Transition of aseXML](#).

3.1.1 Not ready to transition with AEMO?

If your B2M aseXML schema preference is Latest, you must be ready to transition with AEMO.

If you are not ready to transition your B2M aseXML schema with AEMO:

1. Change your schema preference to Current before the Release Dates.
2. When AEMO transitions we move you to the Superseded preference.
3. When ready, complete your upgrade and observe the processing is correct. You may still receive some older aseXML versions for a short time during the transition period, around 24 hours.
4. Change your schema preference to Current.

For help transitioning, see [Transition of aseXML](#).

3.1.2 aseXML B2M schema r44

LATEST	CURRENT	SUPERSEDED
r44	r44	r43

For details, see [B2M aseXML schema](#).

3.1.3 aseXML schema change impact summary

For details, see:

- [New or changed B2M schema elements](#)
- [aseXML r44 Draft Files and Changes](#)

Affected files	Modified	Derived	Versioned	Potential affected transactions
aseXML	Included file versions	n/a	File name	n/a
Events	r44	n/a	File name	n/a
ElectricityMasterStandingData	ElectricityNMIMasterGroup	ElectricityCATSChangeRequestNMIMasterRow ElectricityNMIMasterRowBDT ElectricityNMIMasterRow	File name ElectricityStanding Data	NMIStandingDataRe sponse ReportResponse CATSChangeReque st
MDMTReports	MDMTSettlementCaseDetailsReportParameters	n/a	File name	n/a
Electricity	MeterMalfunctionExemptionNumber	n/a	File name	n/a

3.1.4 B2M aseXML schema preference lower than r44

For participants having a B2M aseXML schema preference lower than r44 the **new aseXML items** are removed from Message Responses with a comment flagging the removal in the transformed aseXML Payload.

3.1.5 B2M aseXML schema transition

For details, see **B2M schema release implementation**.

3.2 Meter exemptions

Metering Coordinators need to schedule staff and resources to automate the new **Meter Exemption Process** in MSATS.

3.2.1 Metering exemptions user rights management

For access to the pre-production and production metering exemptions interfaces for Participant Users, Participant Administrators must provide user rights access. For details, see **MSATS - Technical Specification - November 2023**.

3.2.2 Transition of existing meter exemptions

To support the initial management of exemptions, AEMO transitions all metering exemptions into MSATS where the end date of the exemption is greater than or equal to Sunday 3 March 2024. The transition includes all NMIs registered against the exemption at the time of registration.

It is the responsibility of participants to update actioned NMIs between the date of registration assigned to the exemption.

The active Metering Coordinator on the NMI must match the Metering Coordinator on the exemption, otherwise the NMI is rejected.

4 B2M aseXML schema changes

4.1 Change summary

Project	Change
MSATS Standing Data Review (MSDR)	<p>In ElectricityNMIMasterGroup:</p> <ul style="list-style-type: none"> Update MeterMalfunctionExemptionExpiryDate element so that its nilable attribute can be set to <i>true</i> <p>Increase the MeterMalfunctionExemptionNumber element's length from 8 to 15 characters.</p> <p>Update RM51 Report Name to reflect report request and response</p> <p>Remove unsupported CR64a RM Report details</p>

4.1.1 Schema versions

After the 51.0 Release, the B2M schema has the following supported schema versions for CATS, NMID, and MDMT transaction types:

LATEST	CURRENT	SUPERSEDED
r44	r44	r43

For help transitioning your B2M aseXML schema, see [B2M aseXML schema, Basic steps to transition, and Transition timing.](#)

4.1.2 Release implementation

During the **pre-production and production implementations**, participants' preferences for their B2M transaction receiving schema version is transitioned by AEMO in the **MSATS Web Portal > Participants > Participant Schema** as follows:

Before 51.0 release			During 51.0 implementation	After 51.0 release	
Transaction group	B2M participant schema	Outbound schema version		B2M participant schema	Outbound schema version
CATS	LATEST	r43		LATEST	r44

Before 51.0 release			During 51.0 implementation	After 51.0 release	
Transaction group	B2M participant schema	Outbound schema version		B2M participant schema	Outbound schema version
NMID	LATEST	r43	AEMO transitions participants on LATEST to r44 for continued compliance	LATEST	r44
MDMT	LATEST	r43		LATEST	r44
CATS	CURRENT	r43		Participants on CURRENT remain on r43, with the setting changed to Superseded. Participants can choose when to transition to the new Current/Latest setting	SUPERSEDED
NMID	CURRENT	r43	SUPERSEDED		r43
MDMT	CURRENT	r43	SUPERSEDED		r43
CATS	SUPERSEDED	r42	AEMO transitions participants on the SUPERSEDED version r42 to the new Superseded version r43. r42 and earlier versions are unsupported; all responses return in r44	SUPERSEDED	r43
NMID	SUPERSEDED	r42		SUPERSEDED	r43
MDMT	SUPERSEDED	r42		SUPERSEDED	r43

AEMO encourages participants currently using aseXML schema version r42 to migrate to aseXML schema version r43 prior to this Release. For help transitioning, see [Transition of aseXML](#).

4.1.3 Removed schema elements

- MDMTMDPDataDeliveryReportParameters - RM7

- MDMTDatePPSBMPGeneratedReportParameters – RM8
- MDMTMSPLoadAggregationErrorReportParameters – RM10
- MDMTWholesaleMaxValueReportParameters – RM12
- MDMTDataVersionComparisonReportParameters – RM14
- MDMTMultipleVersionsReportParameters – RM15
- MDMTElectricityIntervalDataReportParameters – RM18
- AggregatedActualvsEstimate – RM19
- Update ReportName for RM51 in documentation element from RegulatedSAPSGenerationReconciliation to RegulatedSAPSGeneratorReconciliation in MDMTSettlementCaseDetailsReportParameters.

For examples of file changes, see aseXML r44 Files and Changes.

4.2 Schema scenarios

aseXML field	Scenario	R44	R43
MeterMalfunctionExemptionNumber	If > 8 digits field is removed from transformed file and a new comment added	<code><MeterMalfunctionExemptionNumber>100000000000366</MeterMalfunctionExemptionNumber></code>	<code><!--MeterMalfunctionExemptionNumber is not valid in aseXML r43. Please upgrade your aseXML schema to current or latest.--></code>
	If ≤ 8 digits transformed file has same value	<code><MeterMalfunctionExemptionNumber>12345678</MeterMalfunctionExemptionNumber></code>	<code><MeterMalfunctionExemptionNumber>12345678</MeterMalfunctionExemptionNumber></code>
	If empty transformed file displays nillable attribute	<code><MeterMalfunctionExemptionNumber></MeterMalfunctionExemptionNumber></code>	<code><MeterMalfunctionExemptionNumber/></code>
MeterMalfunctionExemptionExpiryDate	If exists transformed file has same date	<code><MeterMalfunctionExemptionExpiryDate>2024-11-23</MeterMalfunctionExemptionExpiryDate></code>	<code><MeterMalfunctionExemptionExpiryDate>2024-11-23</MeterMalfunctionExemptionExpiryDate></code>
	If date is null, field is removed from transformed file and a new comment added	<code><MeterMalfunctionExemptionExpiryDate xsi:nil="true"></MeterMalfunctionExemptionExpiryDate></code>	<code><!--MeterMalfunctionExemptionNumber is not valid in aseXML r43. Please upgrade your aseXML schema to current or latest.--></code>

5 Meter Exemptions

Automate the manual Meter Exemption process in MSATS. For more details, see **Meter Exemption Guideline**.

5.1 Meter exemption details

Available interfaces	Web > MSATS Web Portal > Metering Exemptions API > Metering Exemptions
Participant role	Metering Coordinator (MC) MSATS role = RP
Functions	Create, monitor, and resolve exemptions for their Participant ID
Format	JSON schema and csv payload
CATS notifications	None
Access rights	New URM entity for Registered Metering Coordinators (RPs) to create, monitor, and resolve exemptions for their Participant ID
Prerequisites	Participant Users require access rights to create or view API or web meter exemptions

5.2 Meter exemptions user rights management (URM)

5.2.1 API interface

API endpoint	Entity	Type
exemptionList	Web Service getMeterExemptionList	Interactive
exemptionDetails	Web Service getMeterExemption	Interactive
submission	Web Service submitMeterExemption	Interactive

5.2.2 Web interface

Entity	Type
Meter Exemptions	Interactive

For details about Participant Administration and User Rights Access, see [Guide to User Rights Management](#).

5.3 Who does what when

Action	Responsible	From Status	To Status	Description
Create an Exemption	MC	New	FOR REVIEW	Create and saves the exemption request On save, AEMO creates the exemption number and notifies the MC
Review Exemption	AEMO	FOR REVIEW	REJECTED	Exemption rejected Update status and notify the MC
Review Exemption	AEMO	FOR REVIEW	APPROVED	Exemption approved Update status and notify the MC
Review Exemption	AEMO	FOR REVIEW	MORE DATA	More information required Update status and notify the MC
Participant provides more data	MC	MORE DATA	FOR REVIEW	Provide supporting information to meter@aemo.com.au Update status and notify the MC
Exemption due to expire	AEMO	ACTIVE	ACTIVE	21 calendar days prior to the exemption end date Notify the MC
Exemption exceeds end date	AEMO	ACTIVE	EXPIRED	Update status and notify the MC
Participant requests extension	MC	ACTIVE	FOR REVIEW	Update exemption details to request more time

Action	Responsible	From Status	To Status	Description
Participant cancels exemption	MC	ACTIVE MORE DATA	CANCELLED	Withdraws the exemption Update status and notify the MC
Resolve extension	MC	ACTIVE	RESOLVED	Resolve NMIs and complete exemption

5.4 Standing data access rules

Participants have access to view the data according to the Standing Data Access Rules:

Data Item	Description	Jurisdiction	Standing Data Access Rights											NMI Discovery				
			DRSP	FRMP	ENLR	LNSP	MDP	MPB	MPC	RP	RoLR	NEMM	NSP2	Search 1	Search 2	Search 3	MC Search	
Meter Malfunction Exemption Number	The exemption number granted by AEMO when a meter malfunction exemption is granted .	ALL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes		Yes
Meter Malfunction Exemption Expiry Date	The end date of the meter malfunction exemption.	ALL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes		Yes

5.5 Metering exemptions API

Function	Endpoint	Method	Remarks
List exemptions	getMeterExemptionList	GET	Returns a list of participant exemptions by meterExemptionId
Display exemption Details	getMeterExemption	GET	Returns details for the selected Exemption ID and first 500 NMIs You can restrict the search by entering the NMI value
Create and update exemption and NMI details	submitMeterExemption	POST	Create and update exemption details Create and Update NMI details

For details about the draft Metering exemptions API, see [Metering Exemptions API Reference](#).

5.6 MSATS web portal > metering exemptions

There is a new web interface for creating and maintaining Metering Exemptions in the MSATS Web Portal > Metering Exemptions

For details about the new Metering exemptions web interface, see [Guide to Metering Exemption](#).

5.6.1 Participant contacts

The MSATS Web Portal > Participant > Participant Contacts interface has a new Meter Exemption Contact Type for populating the contacts details in the Meter Exemption web interface. For help updating your details, see [Participant Contacts](#).

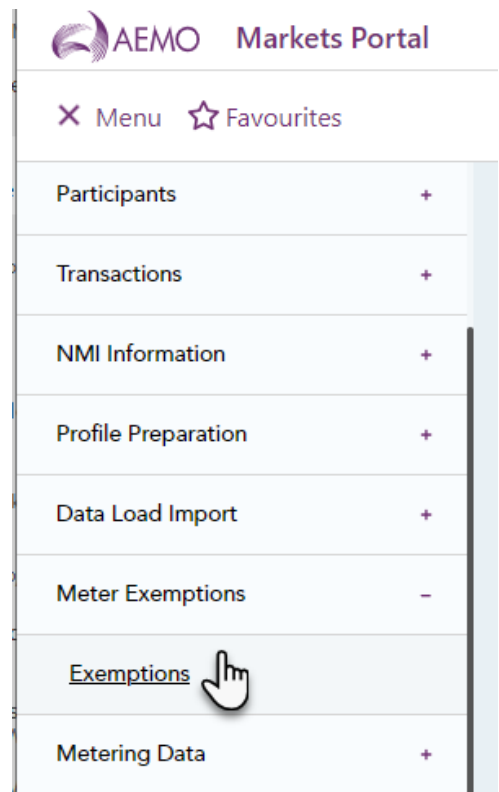
5.7 New meter malfunction fields access

The MSATS interfaces are updated with 2 new Meter Malfunction code fields:

- Meter Malfunction Exemption Number
- Meter Malfunction Exemption Expiry Date

The 2 new fields are included in:

- Obtain Standing Data – Results
- NMI Master – View
- Point In Time NMI Master Summary
- C1, C4, and C7 Reports.
- MSATS Snapshot Report.



5.8 MSATS configurable code fields

AEMO recommends participants do not hard code the AEMO MSATS configurable fields.

5.8.1 Meter exemption category codes

Code	Description
MALFUNCTION	List of Metering Installation Malfunction
TYPE4A	Type 4A (No Remote Communication)

5.8.2 Meter exemption hierarchy codes

Allowable combinations of Category, Type, and Nature codes for meter exemptions.

Code 1 - Category	Code 2 - Type	Code 3 - Nature
MALFUNCTION	DEFECTIVE	ACCESS
	DEFECTIVE	CUSTOMER
	DEFECTIVE	SAFETY
	DEFECTIVE	TECHNICAL
	FAMILY	ACCESS
	FAMILY	CUSTOMER
	FAMILY	SAFETY
	FAMILY	TECHNICAL

Meter Exemptions

Code 1 - Category	Code 2 - Type	Code 3 - Nature
	SHARED	ACCESS
	SHARED	CUSTOMER
	SHARED	SAFETY
	SHARED	TECHNICAL
TYPE4A	ENVIRON	ACCESS
	ENVIRON	ADMIN
	ENVIRON	CUSTOMER
	ENVIRON	SAFETY
	ENVIRON	TECHNICAL
	NOALTNWK	ACCESS
	NOALTNWK	ADMIN
	NOALTNWK	CUSTOMER
	NOALTNWK	TECHNICAL
	NOPUBNWK	ACCESS
	NOPUBNWK	ADMIN

Code 1 - Category	Code 2 - Type	Code 3 - Nature
	NOPUBNWK	TECHNICAL

5.8.3 Meter exemption nature codes

Code	Parent type	Description
ACCESS	DEFECTIVE	Access issue
SAFETY	DEFECTIVE	Safety issue
TECHNICAL	DEFECTIVE	Site technical issue
CUSTOMER	DEFECTIVE	Customer work/upgrade required
ACCESS	FAMILY	Access issue
SAFETY	FAMILY	Safety issue
TECHNICAL	FAMILY	Site technical issue
CUSTOMER	FAMILY	Customer work/upgrade required
ACCESS	SHARED	Access issue
SAFETY	SHARED	Safety issue
TECHNICAL	SHARED	Site technical issue
CUSTOMER	SHARED	Customer work/upgrade required
ACCESS	NOPUBNWK	Access issue
TECHNICAL	NOPUBNWK	Site technical issue
ADMIN	NOPUBNWK	Mc admin issue
ACCESS	NOALTNWK	Access issue
TECHNICAL	NOALTNWK	Site technical issue

Code	Parent type	Description
CUSTOMER	NOALTNWK	Customer work/upgrade required
ADMIN	NOALTNWK	MC admin issue
ACCESS	ENVIRON	Access issue
SAFETY	ENVIRON	Safety issue
TECHNICAL	ENVIRON	Site technical issue
CUSTOMER	ENVIRON	Customer work/upgrade required
ADMIN	ENVIRON	MC admin issue

5.8.4 Meter exemption NMI status codes

Code	Description
ACTIVE	Active
CANCELLED	Cancelled
EXPIRED	Expired
NEW	New
REJECTED	Rejected
REMOVED	Removed
RESOLVED	Resolved

5.8.5 Meter exemption status codes

Code	Description
REVIEW	Review
REJECTED	Rejected

Code	Description
MORE DATA	More information required
CANCELLED	Cancelled
ACTIVE	Active
EXPIRED	Expired
RESOLVED	Resolved

5.8.6 Meter exemption type codes

Code	Parent code	Description
DEFECTIVE	MALFUNCTION	Defective/faulty metering equipment
FAMILY	MALFUNCTION	Meter family failure
SHARED	MALFUNCTION	Shared fuse (shared supply)
NO PUBNWK	TYPE4A	No public telecoms network
NOALTNWK	TYPE4A	No alternative telecoms network
ENVIRON	TYPE4A	Physical or environmental conditions preventing remote comms

6 FAQs

6.1 Meter exemption

What happens after you create an exemption?

1. AEMO reviews and either: approves, asks for more information, or rejects the exemption. If the status is:
 - **Approved:**
Where the exemption category is MALFUNCTION, the NMI Standing Data fields: Meter Malfunction Exemption Number and Meter Malfunction Exemption Expiry Date are updated for each active NMI in the Exemption using a CR5101 Change Request (CR). Completion of the CR notifies all participants according to the CATS Procedures.
Where the exemption category is TYPE4A the Exemption ID is included in the next SDQ report, notifying the requesting participant.
 - **More Data:** Participants must provide the extra information requested by AEMO to support the request for exemption.
 - **Rejected:** The exemption and associated NMI exemption status is set to Rejected, no further action or updates are possible.

How do I provide the extra information AEMO asked for?

Metering exemptions > Exemptions > Exemption ID

1. Find the exemption to provide more information for.
2. In the **NMI Table**, enter the requested information or send supporting documents referencing the exemption ID to Metering@aemo.com.au
3. Select **Send for Review**.
4. The exemption status changes **For Review**
5. AEMO assess the requested information.

What happens if AEMO rejects my exemption request?

The exemption status is set to Rejected with no further action or updates possible.

When a Metering Exemption is withdrawn, is a new CR5101 sent with a null expiry date?

Yes, if the expiry date is null, you get a notification.

Are all Metering Exemption IDs always 15 characters?

Yes, new Metering Exemptions IDs are 15 characters. Older Metering Exemption IDs using the manual process are 8 characters.

Are there any changes for retailers?

There are changes in the Standing Data, but not for Metering Exemptions (only 5101). As part of the current change request process, AEMO notifies the participants about the changes made to the Standing Data, relevant to the new elements being added or removed.

Are changes in exemption number or date updated in the Standing Row Data?

Yes.

Does granting an exemption to a Metering Exemption provides the same ID with a new expiry date?

Yes, the same ID is provided with a new expiry date.

How can the participants recover unprocessed transaction in their systems if transformation fails?

If transformation fails, AEMO send an original file with the transaction in the r43 schema.

If one of the NMIs in a metering exemption request fails validation at AEMO, for example, Exemption Category, Nature, etc., is there a rejection at the NMI level?

Yes. For example, if you submit a metering exemption with 1000 NMIs and one fails the validation, 999 is accepted and 1 is rejected. A reason for the rejection is provided.

Will there be any test scope documentation for Industry Testing or participants have to create their own test scenarios?

The Industry Testing is not an AEMO coordinated testing. If participants are creating a test scenario, they have to ensure that it is coordinated with the testing process and AEMO personnel can reject or approve them, depending on the requirements. The participants can then manage the NMI within the exemptions.

If we are doing testing, do we need to inform AEMO?

No, Metering Exemptions is pre-production testing only, however, if required AEMO can provide participant support. For details, contact NEMReform@aemo.com.au.

How do we test metering exemptions because we need confirmation to send exemptions?

Participants are supported via the NEM reform mailbox. We’re also running Q&A if you're on the ITWG mailing list where you can make requests or get advice. To join the mailing list, send an email to nemreform@aemo.com.au.

Should SMALL be in the MSATS (WIGS) procedure?

Yes, Small and large are in the CATS procedures, others are in the WIGS procedures.

6.2 B2M aseXML r44

What happens if I don't do my aseXML upgrade until after AEMO's deployment?

It depends which schema are on Latest, Current, or Superseded.

If on latest change to current so not impacted.

FAMILY	MALFUNCTION	Meter family failure
SHARED	MALFUNCTION	Shared fuse (shared supply)
NO PUBNWK	TYPE4A	No public telecoms network

FAMILY	MALFUNCTION	Meter family failure
NOALTNWK	TYPE4A	No alternative telecoms network
ENVIRON	TYPE4A	Physical or environmental conditions preventing remote comms

Is the r44 schema live from 3 March 2024?

Yes, It is available after 2 pm, 3 March 2024.

When AEMO transforms from r44 to r43, are the r44 fields removed from the CR5101?

When the transformation happens from Current to Superseded, the fields are removed with a comment in the transformed file, for example < the meter exemption number is not valid in r43. Please upgrade your schema >.

Will migration of r43 to r44 schema change the meter exemption ID characters from 8 to 15?

No, the 8 characters of the Meter Exemption ID The ID is not changing and is migrated across with the schema changes.

Is there any transformation risk where r43 schema fails to occur and participants getting the r44 schema version of xml?

In the event of transformation failure, AEMO sends an original file and participants can reject the file.

Is there a holiday period for the implementation post release into production?

Participants can continue with superseded version with support for the r43 schema, but without receiving the new fields and no support for the r42 schema.

Is the r44 schema change only pertinent to Metering Exemptions and can participants, having no Metering Exemptions obligation, continue with r43 schema?

Yes, participants can continue with r43 schema as it is a superseded version, metering exemption details and expiry date will be recorded against the NMI. It is supported in r43 schema but it may end with a message < we can not provide you the data in the r43 schema >.

What is the definitive pre-production date for r44 schema?

Tuesday, 5 December 2023.

7 Implementation

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.
- Schedule staff and resources to upgrade their market systems for the production implementation of this Release.

7.1 Key considerations

- See [Participant Impact](#).

7.2 Upgrade options

7.2.1 Option 1

- Update local processes and technical interfaces to suit the changes.

7.2.2 Option 2

- If changes are irrelevant to participants' business processes and technical interfaces, ignore this release.

7.3 Risks

- Participants not updating do not receive the new aseXML fields.

8 Terms

You can find the following terms defined in the [National Electricity Rules \(NER\)](#) or [Retail Electricity Market Glossary and Framework](#)

8.1 Rules and procedure terms

Term	Term
AEMO	NMI
B2B	NMI Standing Data
CATS Procedures	Participant
Change Request	Participant Administrator (PA)
Energy	Participant ID
Market	Participant User
Metering Coordinator (MC)	Registered Participant
Meter	Responsible Person (RP)
Metering Provider (MP)	Role
MSATS	Site
MSATS Procedures	Standing Data Access Rules
NEM	Validation
NER	

8.2 Glossary

Abbreviation/Term	Explanation
Release	MSATS Technical Specification - March 2024
Release Dates	Pre-production: Tuesday 5 December 2023 Production: Sunday 3 March 2024
TBC	To be confirmed

9 References

- API Reference:** provides details about using AEMO's e-Hub as an interface to communicate information with AEMO. It assists wholesale electricity and gas participants developing their own APIs.
- Connecting to AEMO's Electricity IT systems:** Explains the IT interfaces available for participants and how to connect to them.
- Guide to CSV Data Format Standard:** Describes the generic csv (comma-separated-variables) data format standard used in numerous interfaces in AEMO's energy market systems, including some csv payloads.
- Guide to MSATS reports:** Explains the purpose, attributes, request, and delivery methods for MSATS participants' retail reports.
- Guide to MSATS Web Portal:** Assists participants to use the MSATS web portal functions. Requires MarketNet access.
- Guide to User Rights Management:** Assists Participant Administrators (PAs) to use the user rights management functions in the MSATS Web Portal.
- Metering Installation Exemption Guideline:** Application process and management of an application.
- MSATS Procedures:** Current and previous electricity retail procedure versions.
- Standing Data for MSATS:** Describes the data requirements for the CATS database elements stored for each NMI with relevant examples and definitions.
- Technical Guide to MSATS:** Supplement to the MSATS B2M policies, procedures, and guides providing an understanding of MSATS functionality and business rules.

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A1. aseXML r44 Files and Changes

Schema files

- aseXML_r44

aseXml_r44.xsd

Rename the changed file versions to aseXML_r44.xsd

```
<xsd:schema xmlns="urn:aseXML:r44" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
targetNamespace="urn:aseXML:r44" version="r44" xsi:schemaLocation="urn:aseXML:r44
aseXML_r44.xsd">
<xsd:include schemaLocation="Electricity_r44.xsd">
<xsd:include schemaLocation="ElectricityMasterStandingData_r44.xsd"/>
<xsd:include schemaLocation="Events_r44.xsd">
<xsd:include schemaLocation="MDMTReports_r44.xsd">
```

Electricity_r44.xsd

- Increase the MeterMalfunctionExemptionNumber element's length from 8 to 15 characters.
- Rename file version to Electricity_r44.xsd

```
<xsd:simpleType name="MeterMalfunctionExemptionNumber">
  <xsd:annotation>
    <xsd:documentation>
      Purpose - Identify the Meter Malfunction Exemption Number -
      MeterMalfunctionExemptionNumber
      Details - The exemption number granted by AEMO when a meter malfunction
      exemption is granted
    </xsd:documentation>
  </xsd:annotation>
  <xsd:restriction base="xsd:string">
    <xsd:maxLength value="15"/>
  </xsd:restriction>
</xsd:simpleType>
```

ElectricityMasterStandingData_r44.xsd

- In ElectricityNMIMasterGroup, update MeterMalfunctionExemptionExpiryDate element so that its nillable attribute can be set to *true*
- Rename file version to r44 version

```

<xsd:group name="ElectricityNMIMasterGroup">
  <xsd:annotation>
    <xsd:documentation>
Purpose - Common NMI Master elements across Standing Data and Change Requests
    </xsd:documentation>
  </xsd:annotation>
  <xsd:sequence>
    <xsd:element name="JurisdictionCode" type="JurisdictionCode"
nillable="true" minOccurs="0"/>
    <xsd:element name="NMIClassificationCode" type="NMIClassificationCode"
nillable="true" minOccurs="0"/>
    <xsd:element name="TransmissionNodeIdentifier"
type="TransmissionNodeIdentifier" nillable="true" minOccurs="0"/>
    <xsd:element name="DistributionLossFactorCode"
type="DistributionLossFactorCode" nillable="true" minOccurs="0"/>
    <xsd:element name="ParentEmbeddedNetworkIdentifier"
type="EmbeddedNetworkIdentifier" nillable="true" minOccurs="0"/>
    <xsd:element name="ChildEmbeddedNetworkIdentifier"
type="EmbeddedNetworkIdentifier" nillable="true" minOccurs="0"/>
    <xsd:element name="Address" type="AustralianPartialAddress"
nillable="true" minOccurs="0"/>
    <xsd:element name="Aggregate" type="YesNo" nillable="true"
minOccurs="0"/>
    <xsd:element name="Status" type="NMIStatusCode" nillable="true"
minOccurs="0"/>
    <xsd:element name="FlatOrUnitType" type="AustralianFlatOrUnitType"
nillable="true" minOccurs="0"/>
    <xsd:element name="FlatOrUnitNumber" type="AustralianFlatOrUnitNumber"
nillable="true" minOccurs="0"/>
    <xsd:element name="FloorOrLevelType" type="AustralianFloorOrLevelType"
nillable="true" minOccurs="0"/>
    <xsd:element name="FloorOrLevelNumber"
type="AustralianFloorOrLevelNumber" nillable="true" minOccurs="0"/>
    <xsd:element name="BuildingOrPropertyName"
type="AustralianBuildingOrPropertyName" nillable="true" minOccurs="0"/>
    <xsd:element name="BuildingOrPropertyName2"
type="AustralianBuildingOrPropertyName" nillable="true" minOccurs="0"/>
  </xsd:sequence>
</xsd:group>

```

```

        <xsd:element name="LocationDescriptor"
type="AustralianLocationDescriptor" nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumber" type="AustralianHouseNumber"
nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumberSuffix" type="AustralianHouseNumberSuffix"
nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumberTo" type="AustralianHouseNumber"
nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumberToSuffix"
type="AustralianHouseNumberSuffix" nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumber2" type="AustralianHouseNumber"
nillable="true" minOccurs="0"/>
        <xsd:element name="HouseNumber2Suffix"
type="AustralianHouseNumberSuffix" nillable="true" minOccurs="0"/>
        <xsd:element name="LotNumber" type="AustralianLotNumber" nillable="true"
minOccurs="0"/>
        <xsd:element name="SectionNumber" type="SectionNumber" nillable="true"
minOccurs="0"/>
        <xsd:element name="DPNumber" type="DepositedPlanNumber" nillable="true"
minOccurs="0"/>
        <xsd:element name="StreetName" type="AustralianStreetName"
nillable="true" minOccurs="0"/>
        <xsd:element name="StreetType" type="AustralianStreetType"
nillable="true" minOccurs="0"/>
        <xsd:element name="StreetSuffix" type="AustralianStreetSuffix"
nillable="true" minOccurs="0"/>
        <xsd:element name="AddressLine1" type="AustralianAddressLine"
nillable="true" minOccurs="0"/>
        <xsd:element name="AddressLine2" type="AustralianAddressLine"
nillable="true" minOccurs="0"/>
        <xsd:element name="AddressLine3" type="AustralianAddressLine"
nillable="true" minOccurs="0"/>
        <xsd:element name="SuburbOrPlaceOrLocality"
type="AustralianSuburbOrPlaceOrLocality" nillable="true" minOccurs="0"/>
        <xsd:element name="StateOrTerritory" type="AustralianStateOrTerritory"
nillable="true" minOccurs="0"/>
        <xsd:element name="PostCode" type="AustralianPostCode" nillable="true"
minOccurs="0"/>
        <xsd:element name="DeliveryPointIdentifier"
type="AustralianDeliveryPointIdentifier" nillable="true" minOccurs="0"/>
        <xsd:element name="GNAFPID"
type="GeocodedNationalAddressFilePersistentIdentifier" nillable="true"
minOccurs="0"/>
        <xsd:element name="DistanceFromSubstation" type="DistanceFromSubstation"
nillable="true" minOccurs="0"/>

```



```

        <xsd:element name="VoltageType" type="VoltageType" nillable="true"
minOccurs="0"/>
        <xsd:element name="PoleNumber" type="PoleNumber" nillable="true"
minOccurs="0"/>
        <xsd:element name="AccessDetails" type="AccessDetail" nillable="true"
minOccurs="0"/>
        <xsd:element name="FeederClass" type="FeederClass" nillable="true"
minOccurs="0"/>
        <xsd:element name="CustomerClassificationCode"
type="EMSDCustomerClassificationCode" nillable="true" minOccurs="0"/>
        <xsd:element name="CustomerThresholdCode"
type="EMSDCustomerThresholdCode" nillable="true" minOccurs="0"/>
        <xsd:element name="TransmissionNodeIdentifier2"
type="TransmissionNodeIdentifier" nillable="true" minOccurs="0"/>
        <xsd:element name="SharedIsolationPointFlag"
type="SharedIsolationPointFlag" nillable="true" minOccurs="0"/>
        <xsd:element name="MeterMalfunctionExemptionNumber"
type="MeterMalfunctionExemptionNumber" nillable="true" minOccurs="0"/>
        <xsd:element name="MeterMalfunctionExemptionExpiryDate" type="xsd:date"
nillable="true" minOccurs="0"/>
        <xsd:element name="ConnectionConfiguration"
type="ConnectionConfiguration" nillable="true" minOccurs="0"/>
        <xsd:element name="LastConsumerChangeDate" type="xsd:date"
nillable="true" minOccurs="0"/>
        <!-- can be skipped and have the nil value-->
    </xsd:sequence>
</xsd:group>

```

Events_r44.xsd

Include the r44 release identifier and rename the file version to Events_r44.xsd.

```

<xsd:simpleType name="r44">
    <xsd:annotation>
        <xsd:documentation>Purpose - Release r44 identifier.</xsd:documentation>
    </xsd:annotation>
    <xsd:restriction base="ReleaseIdentifier">
        <xsd:enumeration value="r44"/>
    </xsd:restriction>
</xsd:simpleType>

```

MDMTReports_r44.xsd

Remove the following elements:

- MDMTMDPDataDeliveryReportParameters - RM7
- MDMTDatePPSBMPGeneratedReportParameters -RM8
- MDMTMSPLoadAggregationErrorReportParameters - RM10
- MDMTWholesaleMaxValueReportParameters - RM12
- MDMTDataVersionComparisonReportParameters - RM14
- MDMTMultipleVersionsReportParameters - RM15
- MDMTElectricityIntervalDataReportParameters - RM18
- AggregatedActualvsEstimate - RM19

```

<xsd:complexType name="MDMTSettlementCaseDetailsReportParameters">
  <xsd:annotation>
    <xsd:documentation>
      Purpose - Parameter definition for SAPS Reconciliation
      Report Name - RegulatedSAPSGeneratorReconciliation
      MSATS Reports - RM51
    </xsd:documentation>
  </xsd:annotation>
  <xsd:complexContent>
    <xsd:extension base="BaseReportParameters">
      <xsd:sequence>
        <xsd:element name="SettlementCase"
type="MDMSettlementCaseIdentifier"/>
        <xsd:element name="ProfileArea" type="ProfileDescription"
minOccurs="0"/>
        <xsd:element name="TransmissionNodeIdentifier"
type="TransmissionNodeIdentifier" minOccurs="0"/>
        <xsd:element name="NMI" type="NMIBase" minOccurs="0"/>
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

```

A2. Version History

10.1 V1.01

- Included pre-production refresh information

10.2 V1.00

- Included metering exemptions user rights management
- Changes made to the change summary
- Changes made to the schema versions
- Made changes to the release implementation table
- Included schema scenarios
- Incorporated new FAQs

10.3 V0.01

Initial draft release