

May 2024 Metering Services Review Package 1 Consultation

Consultation Paper -
Standard Consultation for the
National Electricity Market

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia

Australian Energy Market Operator Ltd ABN 94 072 010 327

Explanatory statement and consultation notice

This Consultation Paper commences the first stage of the standard rules consultation procedure conducted by AEMO (**Consultation**) to consider the changes (**Changes**) which are proposed (**Proposal**) to the Retail Electricity Market Procedures (**REMPs**) under the National Electricity Rules (**NER**), which relate to:

1. The implementation of the Draft Rule of the Australian Energy Market Commission (**AEMC**) on Accelerating Smart Meter Deployment (**ASMD**).¹
2. The AEMO review of the processes for Retailers of Last Resort (**RoLR**).
3. The following three Issues and Change Forms (**ICFs**) raised by the Electricity Retail Consultative Forum (**ERCF**):
 - o ICF-077 Auto population of the Last Consumer Change Date (**LCCD**) based on NMI status.
 - o ICF-078 Alignment of Addressing in B2M Procedures.
 - o ICF-079 NEM 12 MDFF Inconsistencies.
4. Embedded Network settlement anomalies.

1. **Accelerating Smart Metering Deployment**

The ASMD Draft Rule enables the recommendations of the AEMC Final Report of the Review of the Regulatory Framework for Metering Services (**AEMC Metering Review**).²

The ASMD Draft Rule has the two overarching objectives to:

- Accelerate the deployment of smart meters in the National Electricity Market (**NEM**).
- Enable the provision of power quality data from smart meters to Distribution Network Services Providers (**DNSPs**).

The ASMD Draft Rule impacts AEMO's REMPs and Metering Procedures, as well as the related systems.

The ASMD Draft Rule:

- Introduces several changes to the Business to Market (**B2M**) framework, to enable:
 - o The recording of a Legacy Meter Replacement Plan by DNSPs, under which legacy meters are replaced by smart meters.
 - o The identification and tracking of defects.
- This Consultation focuses on this issue, among others.
- Requires changes to the Business to Business (**B2B**) system to facilitate a new process for shared isolation.
- Requires power quality data to be provided from small customer smart meter installations to DNSPs.
- Requires AEMO to produce a guideline document for the purposes of meter asset strategy.

¹ <https://www.aemc.gov.au/rule-changes/accelerating-smart-meter-deployment>

² <https://www.aemc.gov.au/market-reviews-advice/review-regulatory-framework-metering-services>

In pre-consultation with industry, AEMO has agreed in the Consultation to consult on those areas of the ASMD Draft Rule which are deemed high impact for participant systems, to enable the ASMD's successful start from 1 July 2025. Industry acknowledged that the Consultation presents a risk, to the extent, if any, that there are material changes between the ASMD Draft Rule and the ASMD Final Rule. However, industry noted that if the Consultation were to occur after the ASMD Final Rule is made, industry would not have the time to develop, build, test and deploy the necessary system changes.

2. Retailer of Last Resort

Recently, the Australian electricity and gas markets have experienced several RoLR events. In the last 24 months, the AEMC has identified a total of eight RoLR events. Such RoLR events have highlighted a number of issues in respect of the AEMO RoLR processes, as indicated in the feedback which AEMO has received from internal and external stakeholders. In particular, the reporting requirements on AEMO which are described in the NEM RoLR Processes Part A – MSATS Procedure: RoLR Procedures (**RoLR Procedures**) are not in step with AEMO or industry requirements.

Following an informal consultation process with the Electricity Retail Consultative Forum (ERCF), AEMO has recommended the removal from the RoLR Procedures of a number of RoLR reports that are no longer relevant for participants.

3. Issues and Change Forms

(a) ICF-077 Auto population of the LCCD based on NMI status

From 1 November 2023, all Current financially responsible Market Participants (**FRMPs**) have obligations to maintain the LCCD field within MSATS, in accordance with the CATS Procedures. The LCCD field has been introduced by AEMO to better support the intent of the Consumer Data Right Rule (**CDR Rule**). Specifically, the LCCD field enables customers to access data which spans multiple retailers at the same NMI.

The LCCD field will need to be populated across all new NMIs in MSATS. This need creates large transactional volumes and manual processing by retailers, if they must do the NMI updates.

For newly-created NMIs, the Current FRMP must populate the LCCD field. In this case, the LCCD is easily identifiable. Accordingly, AEMO could automatically populate the LCCD as part of the NMI update process, thereby removing the requirement for every retailer to build the same system and process logic to populate these NMIs.

Accordingly, AEMO proposes to auto-populate the LCCD field as part of the NMI update process. This initiative will reduce the transactional volumes and manual processing by retailers.

(b) ICF-078 Alignment of Addressing in B2M Procedures to AS4590.1:2017

ICF-078 seeks to align the address standard in the B2M Procedures with the AS4590.1:2017 standard, superseding the current NEM addressing, which is based on the AS4590-1999 standard.

AEMO's audit of the current NEM address standard against AS4590.1:2017 identified the discrepancies which will be detailed in this Consultation Paper.

This alignment to AS4590.1:2017 will:

- Ensure accurate, complete address data, leading to better service delivery and customer trust.
- Harmonize data standards between B2B and B2M, reducing operational errors and the potential for data discrepancies, leading to cost savings.

(c) ICF-079 NEM 12 MDFF Inconsistencies

The Meter Data File Format (**MDFF**) Specification NEM 12 has an inconsistent obligation relating to the provision of 400 block data for actual reads. Specifically, AEMO has identified the inconsistency between clauses 4.4 and 4.5 of the Meter Data File Format Specification NEM12 & NEM13 (**MDFF Specification**).

This inconsistency has led to different interpretations amongst participants as to how a NEM 12 should be formatted. Consequently, some parties have data rejected, requiring them to make software changes in their systems to accommodate the alternate interpretations of the MDFF.

Accordingly, ICF-079 proposes to remove the inconsistencies between clauses 4.4 and 4.5 of the MDFF Specification.

4. Embedded Network settlement anomalies

The AEMC in its draft rule determination 'Unlocking CER benefits through flexible trading', agreed with AEMO that settlement anomalies can occur during periods of system outages for embedded networks or as part of the proposed flexible trading arrangements. The settlement anomaly may occur when back up supply is recorded as on-market energy flows and currently exists in the embedded network market.

AEMO considers that this issue could be resolved by limiting the ability for NMIs in embedded networks to be activated or de-activated retrospectively and for MDPs to activate and de-activate datastreams in embedded networks retrospectively.

Stakeholder Consultation

AEMO has prepared this Consultation Paper to initiate discussion and facilitate feedback from stakeholders regarding the Proposal.

The detailed sections of this Consultation Paper include more information on the Proposal and AEMO's reasons for making the Proposal.

AEMO invites stakeholders to suggest alternative options where they do not agree that the Changes would achieve the relevant objectives.

AEMO also asks stakeholders to identify any unintended adverse consequences of the Changes.

Consultation notice

AEMO invites written submissions from interested persons on the issues identified in this Consultation Paper to NEM.Retailprocedureconsultations@aemo.com.au by 5:00pm (Melbourne time) on 11 July 2024.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this Consultation to the same email address.

Submissions may make alternative or additional proposals you consider may better meet the objectives of this consultation and the national electricity objective in section 7 of the National Electricity Law (**NEL**). Please include supporting reasons.

Before making a submission, please read and take note of AEMO's consultation submission guidelines, at <https://aemo.com.au/consultations>. Subject to those guidelines, submissions will be published on AEMO's website.

Please identify any parts of your submission that you wish to remain confidential and explain why. AEMO may still publish that information if it does not consider it to be confidential but will consult with you before doing so. Material identified as confidential may be given less weight in the decision-making process than material that is published.

Submissions received after the closing date and time will not be valid. AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Interested persons can request a meeting with AEMO to discuss any particularly complex, sensitive or confidential matters relating to the Proposal. NER 8.9.1(k) set out details. Meeting requests must be received by the end of the submission period and include reasons for the request. We will try to accommodate reasonable meeting requests but, where appropriate, we may hold joint meetings with other stakeholders or convene a meeting with a broader industry group. Subject to confidentiality restrictions, AEMO will publish a summary of matters discussed at stakeholder meetings.

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Stakeholder consultation process

As required by the NER, AEMO is consulting on the Proposal in accordance with the standard rules consultation procedure in NER 8.9.2.

This Consultation Paper uses terms defined in the NER, which are intended to have the same meanings. A glossary of additional terms and abbreviations is in Appendix A.

AEMO's indicative process and timeline for the Consultation are outlined below. Future dates may be adjusted, and additional steps may be included, if necessary, during the Consultation.

| Consultation steps | Dates |
|---------------------------------------|------------------|
| Consultation Paper published * | 29 May 2024 |
| Submissions due on Consultation Paper | 11 July 2024 |
| Draft Report published | 6 September 2024 |
| Submissions due on Draft Report | 18 October 2024 |
| Final Report published | 22 November 2024 |

* Change Marked Procedures for Metering Services Review, ICF-077 and ICF-078 will be provided at the Draft Report stage.

Pre-consultation engagement

Accelerated Smart Meter Deployment

At the request of the B2B Working Group, a Metering Services Review Working Group (**MSR-WG**) was established in response to the AEMC Metering Review Final Report. The MSR-WG's objective was to analyse the business and system changes required to meet the AEMC Metering Review Final Report's 21 recommendations.

Nominations for the MSR-WG were requested at the September 2023 ERCF. The MSR-WG is represented by five retailers, eight DNSPs and four Metering Coordinators.

The MSR-WG prioritised the 21 recommendations against "high", "medium", "low" and "not applicable" ratings.

The MSR-WG prioritised the following four recommendations from the AEMC Metering Review Final Report as "high":

- Universal deployment of smart meters by 2030.
- New regulatory arrangements to deliver smart meters for customers.
- Introduction of a process to encourage customers to remediate site defects, and to create regulatory oversight.
- Improve industry coordination and minimise negative customer impacts in shared fusing installations.

The ASMD Draft Rule has maintained the four recommendations from the AEMC Metering Review Final Report.

This Consultation Paper focuses on the first three recommendations. AEMO has considered the MSR-WG's feedback in the development of this Consultation Paper.

In addition to the MSR-WG, AEMO continues to regularly inform and update the ERCF in respect of the ASMD Draft Rule, as well as the AEMO Consultation.

Issues and Change Forms

AEMO has engaged industry participants through the ERCF Subgroup (**ERCF SG**) in the detailed analysis of the three ICFs. AEMO gathered feedback on those ICFs through written and face to face communication with the ERCF SG members. AEMO shared the analysis with the wider ERCF. These interactions formed the basis for recommending the inclusion of the three ICFs for inclusion in the Consultation.

Background

2.1 Context for this consultation

This consultation is seeking stakeholder feedback regarding the following:

1. The implementation of the ASMD Rule.
2. The AEMO review of the RoLR processes.
3. The three ICFs raised by the ERCF.
4. Embedded Network settlement anomalies

2.2 Accelerating Smart Meter Deployment

The ASMD Rule reflects the AEMC's self-initiated review report Review of the regulatory framework for metering services (AEMC Metering Review) on the reforms introduced in 2015 in the Expanding Competition in Metering and Related Services Rule. The Expanding Competition in Metering and Related Services Rule facilitated a market led approach to the deployment of smart meters.

The AEMC Metering Review found the implementation of the AEMC Expanding Competition in Metering and Related Services Rule had not met expectations and identified a range of issues with the existing metering framework:

- Misaligned incentives between stakeholders to install smart meters, slowing their adoption.
- Process inefficiencies in smart meter deployment, leading to higher costs.
- Poor customer outcomes in the transition to smart meters, damaging customers' experiences with retailers and the energy system.
- A lack of access to the data provided by smart meters, constraining the benefits the smart meters offer.

The AEMC Metering Review identified that under the current framework, the universal penetration of smart meters in the NEM would be achieved by around 2040 if no changes were made to the current structure. To progress a faster installation of smart meters, the AEMC Metering Review made 21 recommendations, grouped under 5 headings:

- Set a target and mechanism to deploy smart meters across the NEM.
- Reduce barriers to make deploying smart meters easier.
- Improve the customer experience when they get a smart meter.
- Opportunities to unlock further benefits of smart meters.
- Creating a fit for purpose testing and inspection regime.

The AEMC Metering Review recommended:

- The universal deployment of smart meters over the five-year period from July 2025 to June 2030.³ To achieve this, the AEMC recommended new regulatory arrangements for DNSPs to retire their legacy meters, to be replaced by Retailers with smart meters. There are additional recommendations in the AEMC Competition Report, including new industry processes for shared isolation and customers with site defects.
- The requirement that Metering Coordinators supply networks with power quality data to improve the management of their networks.
- The new meter testing and inspection requirements aimed at requiring Metering Coordinators to have cost-effective strategies in place.

The ASMD Draft Rule has the two overarching objectives to:

- Accelerate the deployment of smart meters in the NEM.
- Enable the provision of power quality data from smart meters to DNSPs.

The ASMD Draft Rule staggers the implementation of its reforms into three commencement dates:

- 25 July 2024 – schedule 3
 - Commencement of the transitional schedule including the Legacy Meter Replacement Plan (**LMRP**), including site defect process, to allow AER and AEMO to amend and publish procedures, guidelines and other document to account for the ASMD Rule.
- 22 January 2025 – schedule 1
 - Commencement of amendments to the metering installation malfunction framework, introduction of the Shared Fusing procedure and testing and inspection framework.
- 26 June 2025 – schedule 2
 - Commencement of the provision Power Quality Data from the Metering Coordinator to the DNSP for small customer metering installations.

As part of the pre-consultation process with the MSR-WG and the ERCF, AEMO is focusing the Consultation on the following three ASMD Draft Rule reform areas, which particularly impact participant systems:

- LMRP.
- Defects.
- Shared Fusing.

AEMO's proposed approach is as follows:

- This Consultation Paper considers the B2M impacts, specifically the impacts to AEMO's Procedures in respect of LMRP and Defects.
- Shared Fusing is a B2B matter, which is consulted via the Information Exchange Committee (IEC).
- The remaining components of the ASMD Rule reform will be consulted after the ASMD Final Rule.

³ The AEMC Metering Review's recommendations apply to New South Wales, the Australian Capital Territory, Queensland and South Australia.

2.3 Retailer of Last Resort

During a RoLR event, AEMO produces a total of 31 report types which are transmitted to a variety of internal and external stakeholders.

The functionality to generate these reports does not operate as originally intended. Accordingly, the significant involvement of AEMO operational staff is required to modify the reports before transmission to participants. Before investing time to improve the RoLR report functionality, AEMO, from an operational perspective, reviewed the functionality, concluding that:

- Some reports are no longer relevant, for example a tier one participant report.
- Some reports that are produced may not be needed by participants, for example, summary reports.
- The reports produced should be highly automated, so that in the case of a significant retailer failure:
 - AEMO does not risk failing to meet its obligations under the NEM RoLR Processes Part A – MSATS Procedure: RoLR Procedures (**RoLR Procedures**).
 - Information can be disseminated around the market as soon as possible.

2.4 Issues and Change Forms

2.4.1 ICF-077 Auto population of the LCCD based on NMI status

From 1 November 2023, all Current FRMPs have obligations to maintain the LCCD field within MSATS, in accordance with the CATS Procedures. The LCCD field has been introduced by AEMO to better support the intent of the CDR Rule. Specifically, the LCCD field enables customers to access data which spans multiple retailers at the same NMI.

For newly-created NMIs, the Current FRMP must populate the LCCD. The LCCD is easily identifiable. Accordingly, AEMO could automatically populate the LCCD as part of the NMI update process, thereby removing the requirement for every retailer to build the same system and process logic to populate those NMIs.

In assessing ICF-077, the following factors were considered:

- Over 300,000 new NMIs are connected annually, necessitating updates as they transition from 'Greenfield' to 'Active'.
- Retailers must independently update the LCCD for new NMIs, leading to industry-wide redundancy.
- The requirement to update the LCCD field involves significant transactional volume and manual processing, particularly impacting smaller retailers.

ICF-077 proposes that AEMO will auto-populate the LCCD field as part of the NMI update process, resulting in the following benefits:

- Reduced number of processes that retailers must manage, reduced service costs and reduced information timeframes.
- Reduced requirements of participants, reduced transactional burdens, and reduced needs for participants to routinely check the relevant information.

- Increased accuracy and compliance.

2.4.2 ICF-078 Alignment of Addressing in B2M Procedures to AS4590.1:2017

ICF-078 proposes to align the address standard in B2M Procedures with the AS4590.1:2017 standard, superseding the current NEM addressing, which is based on the AS4590-1999 standard.

Currently, this alignment is being reviewed more broadly by both Gas and Electricity (B2B and B2M) retail markets.

The AS4590-1999 standard has the following shortcomings:

- Truncation of longer address fields, risking capturing incomplete and inaccurate address data in NMI Standing Data.
- Increased manual corrections and data discrepancies, leading to operational inefficiencies.
- Impaired integration for new market entrants that have moved to the latest standards.
- Restrictions to the adoption of future technological advancements.

AEMO's audit of the current NEM address standard against the AS4590.1:2017 standard identified the following discrepancies:

- Category 1 - NEM Only - Some NEM addressing elements sit outside of AS standards.
- Category 2 - Minor Discrepancies - Instances of either no discrepancy or minor changes in field names, where the core concepts, meanings, character lengths, data types, and usage rules remain consistent with NEM standards.
- Category 3 - Methodology Variances - Different methods used to assemble individual address elements. Despite these variances, the final structure of the addresses aligns well, with no significant impact on the result.
- Category 4 - Field Length Discrepancies - Changes in the field length of address elements within AS4590.1:2017. Such modifications may lead to truncated address information during data exchanges between systems following NEM and AS4590.1:2017 standards.
- Category 5 - Enumerated Value Inconsistencies - Discrepancies in enumerated values for address elements could introduce data constraints. This may result in the non-acceptance of AS4590.1:2017-compliant addresses in the NEM B2M system.

The alignment to AS4590.1:2017 will:

- Ensure accurate, complete address data, leading to better service delivery and customer trust.
- Harmonize data standards between B2B and B2M, reducing operational errors and the potential for data discrepancies, leading to cost savings.

2.4.3 ICF-079 NEM 12 MDFF Inconsistencies

The MDFF Specification NEM 12 has an inconsistent obligation relating to the provision of 400 block data for Actual reads. AEMO has identified the inconsistency between clauses 4.4 and 4.5 of the MDFF Specification.

This inconsistency has led to different interpretations amongst participants as to how a NEM 12 should be formatted. Consequently, some parties have data rejected, requiring them to make software changes in their systems to accommodate the alternate interpretations of the MDFF.

Accordingly, ICF-079 proposes to remove the inconsistency between clauses 4.4 and 4.5 of the MDFF Specification. This removal should harmonise the different interpretations as to how the MDFF Specification NEM 12 should operate, which in turn will reduce costs, avoid delays to importing data and minimise disagreements with service providers on how data should be provided.

2.5 Embedded Network settlement anomalies

In its draft determination 'Unlocking CER benefits through flexible trading', the AEMC acknowledges AEMO's concern about settlement and gaming anomalies during system outages for SGA connections within embedded networks. AEMO has identified the opportunity for an SGA connection within an embedded network to be used to gain value from what AEMO considers to be an unintended application of retrospective NMI activation and deactivation in the settlements process.

AEMO proposes limiting the ability of ENMs to retrospectively activate and de-activate NMIs and MDPs to retrospectively activate and de-activate datastreams in embedded networks.

NER requirements

AEMO is responsible for the establishment and maintenance of retail electricity market procedures specified in NER Chapter 7, except for procedures established and maintained under NER 7.17.

The procedures authorised by AEMO under NER Chapter 7 must be established and maintained by AEMO in accordance with the NER consultation procedures.

3.1 The national electricity objective

Within the specific requirements of the NER applicable to the Proposal, AEMO will seek to make a determination that is consistent with the national electricity objective (**NEO**) and, where considering options, to select the one best aligned with the NEO.

The NEO is expressed in section 7 of the National Electricity Law as:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system; and
- (c) the achievement of targets set by a participating jurisdiction—
 - (i) for reducing Australia's greenhouse gas emissions; or
 - (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

Accelerating Smart Meter Deployment

4.1 Legacy Meter Replacement Plan

The AEMC has proposed a regulatory change that requires networks to phase out their legacy meters from 2025 to 2030. Specifically, the objective of the LMRP is for retailers and Metering Coordinators to replace all existing type 5 and type 6 meters with type 4 meters by 30 June 2030. The LMRP applies to small customers in Queensland, New South Wales, Australian Capital Territory and South Australia which have a type 5 or type 6 meter.⁴

The ASMD Draft Rule requires DNSPs to consult with retailers, Metering Coordinators and the AER to communicate the schedule of meters that will be replaced under the LRMP.

The timeframe is as follows.

No later than 30 September 2024

- DNSPs to:
 - Provide their draft LMRP to affected retailers and Metering Coordinators.
 - Provide a schedule of legacy meters and NMIs to be replaced in each interim period (financial year) to retailers and Metering Coordinators.
 - Invite feedback on the draft LMRP.

No later than 31 January 2025

- DNSPs to submit to the AER the LMRP to meet the LMRP guiding principles.

No later than 29 June 2025

- DNSPs to record the LMRP meter replacement scheduled into MSATS.

From 1 July 2025

- Metering Coordinators install smart meters for customers.

The ASMD Draft Rule requires the approved LMRPs to be recorded in MSATS. The ASMD Draft Rule provides flexibility in AEMO's procedures to specify the information that must be recorded in MSATS for an approved LMRP.

4.1.1 Description and effect of proposal

As part of pre-consultation with the MSR-WG, the MSR-WG workshopped several different options for the delivery of approved LMRPs to affected stakeholders, including using MSATS to record when a legacy meter is to be replaced as part of an LMRP. The MSR-WG preference was the population of a singular field by the DNSP against the NMI, to identify the period the NMI was due to be replaced. The existing MSATS functionality of the Blind Update Tool (**BUT**) or Change Requests (**CRs**) is available for the DNSP to populate the field.

AEMO's proposal aligns with the MSR-WG's preferred model of DNSPs populating a single LMRP field, identifying the period the meter is scheduled to be replaced. The ASMD Draft Rule requires AEMO to

⁴ By June 2030 2025 approximately 4 million NMIs (6 million meters) are expected to be replaced in the relevant jurisdictions.

update the relevant market procedures by 30 May 2025, enabling DNSPs to record the LMRP schedule in MSATS. AEMO proposes that the MSATS system is enabled to allow DNSPs to load their LMRP from May 2025, to be completed no later than 29 June 2025.

Figure 1 illustrates the end-to-end process flow and the planning, enabling and delivery phase of the LMRP process, in a cross functional diagram.

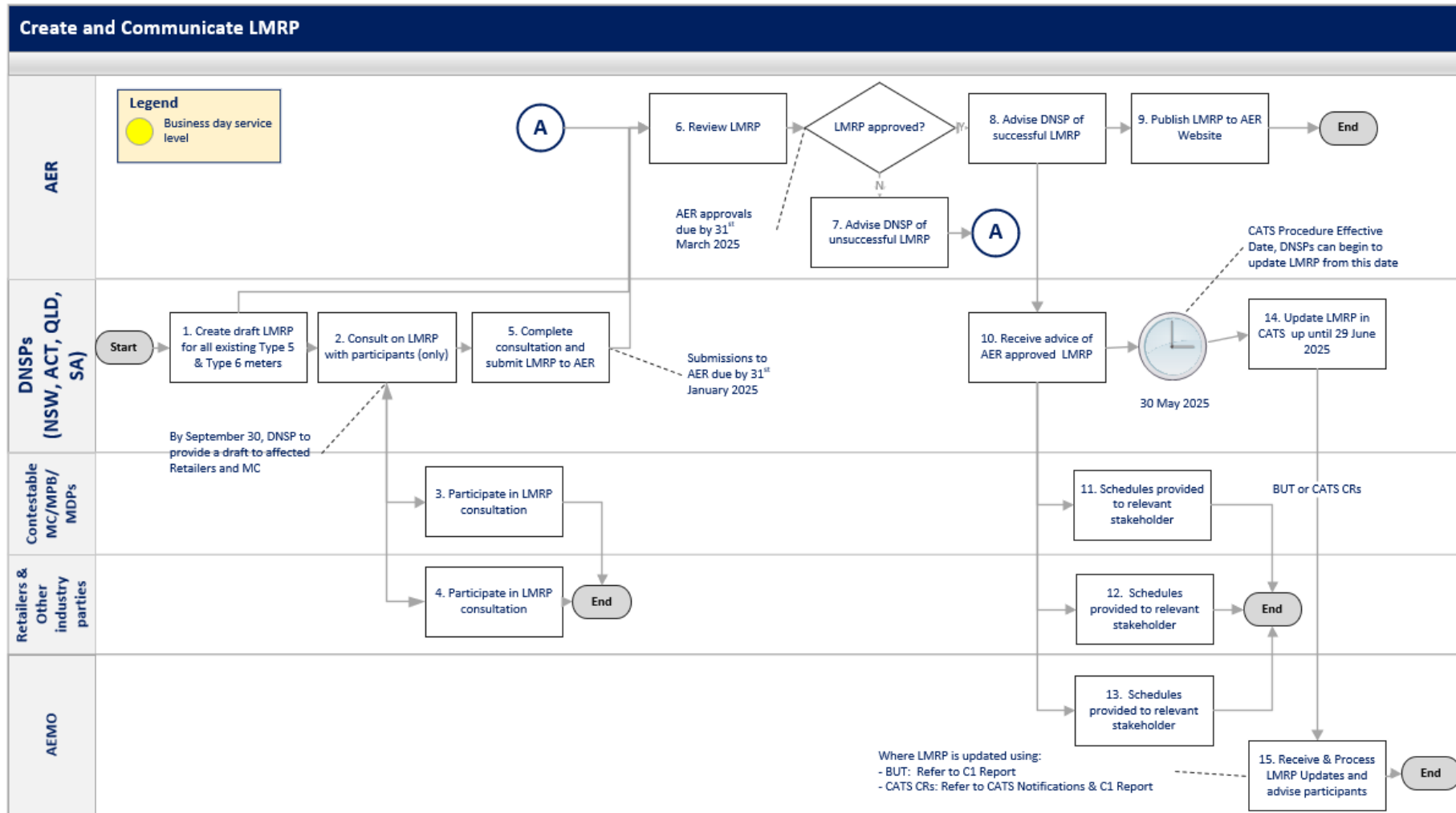


Figure 1

Process Flow Description: Create and Communicate LMRP

| Step ID | Description |
|--|---|
| 1. Create draft LMRP for all existing type 5 and type 6 metering installations | The DNSP is required to create a draft LMRP to align with the objectives of the LMRP. |
| 2. Consult on LMRP with participants (only) | By 30 September 2024, the DNSP is required to initially consult on the draft LMRP with retailers and MCs only, specifying the legacy meters and corresponding NMIs to be replaced in each interim period. |
| 3. Engage with participant in LMRP consultation | The Contestable MC receives and consults with the DNSP on the draft LMRP proposal. The process ends after consultation. |
| 4. Engage with participant in LMRP consultation | The retailer receives and consults with the DNSP on the draft LMRP proposal. The process ends after consultation. |
| 5. Complete consultation and submit LMRP to AER | By 31 January 2025, the DNSP is required to submit the LMRP proposal to the AER. |
| 6. Review LMRP | The AER reviews the LMRP, whose submission must include: <ul style="list-style-type: none"> • The volumes of meters and corresponding NMIs to be replaced. • How the LMRP has been grouped (for example postcodes). • How the LMRP is consistent with the LMRP objective and principles. • The engagement with relevant stakeholders of the draft LMRP and how the DNSP sought to address those concerns. |
| 7. Decide | The AER decides if the LMRP complies with the LMRP requirements. |
| 8. Advise DNSP of unsuccessful LMRP | The AER advises the DNSP if the LMRP is not approved. The DNSP must resubmit the LMRP within 15 business days of being requested to do so. |
| 9. Advise DNSP of successful LMRP | The AER advises the DNSP that the LMRP is approved. |
| 10. Publish LMRP to AER website | If the LMRP is approved, the AER publishes a copy of the approved LMRP on its website within 10 business days of approving the LMRP. The AER process ends. |
| 11. Receive advice of AER approved LMRP | The DNSP receives advice of the approved LMRP and provides the meter replacement schedules to the relevant stakeholders. |

| Step ID | Description |
|--|---|
| 12. Provide schedules to relevant stakeholders | The MC receives the meter replacement schedules. |
| 13. Provide schedules to relevant stakeholders | The retailer receives the meter replacement schedules. |
| 14. Provide schedules to relevant stakeholders | AEMO receives the meter replacement schedules. |
| 15. Update LRMP in CATS to 29 June 2025 | AEMO proposes to update the relevant Procedures to have an effective date May 2025, to allow the DNSPs to start loading their LMRPs from this date to 29 June 2025. AEMO proposes the LRMP can be loaded via the BUT or via CRs. |
| 16. Receive and process LRMP updates and advise participants | Relevant participants receive the LRMP where: BUT: C1 report. CR: C1 report and CATS notifications. |

Technical Solution Description

AEMO's proposed solution description is as follows.

- NMIs with legacy meters (Basic and MRIM) to be populated by the LNSP in MSATS by 29 June 2025, including:
 - Applicable 'Active', 'Greenfield' and 'De-energised' NMIs.
 - NMIs with existing exemptions that have legacy meters.
- A new NMI standing data attribute to be created to record the LMRP date.
- LNSPs to populate the LMRP date (e.g. YYYY or Q#-YYYY or DD-MMM-YYYY).
- LNSPs to update the LMRP date in standing data using the BUT or existing CATS CRs.
- Where the LMRP date is set via:
 - BUT, all entitled roles can request the LMRP date against the NMI via the CATS C1 report with a maximum 400k NMIs per day – while the current maximum transaction throughput is set at 400k per day, any increase beyond this limit will need coordination and agreement with the participants to determine a mutually acceptable new threshold.
 - CR, all entitled roles are notified of the LMRP date against NMI via CATS Notifications or can request the LMRP date against the NMI via the CATS C1, C4, and C7 reports.
- LMRP standing data set to NULL upon completion of a meter exchange from BASIC / MRIM to COMMS* / MRAM.

At the MSR-WG on 23 and 24 April 2024, industry representatives requested that the LMRP field be populated only with the BUT, arguing including the option of using CRs introduces potential administrative risk. AEMO has kept the option of using CRs to change a LMRP as part of this Consultation Paper. During the Consultation, AEMO will consider industry feedback regarding the removal of this option.

Questions - LMRP

1. What is your preferred format (e.g. YYYY or Q#-YYYY or DD-MMM-YYYY) to meet the requirement of the ASMD Draft Rule for the LNSP?
2. Are the proposed tools (BUT and CRs) adequate to update the LMRP field?
3. Is AEMO coordination required for DNSPs to load LMRP into MSATS from May 2025 to 29 June 2025?
4. Are standing data quality reports required to be created for participants to meet their procedural obligations for LMRP? If so, what are the components of these reports?
5. Are there other considerations or approaches which could be taken to meet the requirements of the ASMD Draft Rule?

4.2 Site Defects

Site defects are a barrier to the installation of smart meters. The ASMD Draft Rule recommends a formal site defect notification and record-keeping process to encourage customers to remediate site defects.

The new process aims to:

- Notify customers of a defect.
- Encourage customers to remediate the defect.
- Provide industry clear information that a site has a defect and a site defect notification tracking process.

The ASMD Draft Rule prescribes a new process for Metering Coordinators and retailers to record the defect, and to record the customer notifications to confirm if the defect has been remediated. The ASMD Draft Rule requires that MSATS include the site defect process and that this process be an ongoing arrangement beyond the acceleration period for legacy meters.

The new process would require that:

- A Metering Provider identifies a defect at site preventing a meter exchange and leaves a defect notice with the customer.
- The Metering Provider notifies the Metering Coordinator of the defect.
- The Metering Coordinator notifies the retailer of the defect and updates MSATS to record a defect at the NMI.
- Within 5 days of being notified of a defect, the retailer sends a notice to the customer informing the customer of the site defect and requesting the customer to remediate the site. MSATS is to record the date the first notice is issued.
- If the retailer has not received confirmation from the customer of remediation of the defect, the retailer issues a second notice, no less than 40 business days and no greater than 45 business days after the first notice. MSATS is to record the date the second notice is issued.
- If the retailer has not received confirmation after 40 business days from the customer of remediation of the defect after the second notice, the retailer uses reasonable endeavours to confirm with the customer whether the site defect has been rectified.
- If the customer confirms remediation at any point in the process, the retailer progresses the meter exchange within 15 business days. If the site defect has not been rectified, or if the customer has not been able to be contacted, the process ends until the customer confirms remediation.

AEMO notes that the ASMD Draft Rule differs from the AEMC Metering Review Final Report in the obligations in respect of the type of data that must be recorded:

- **Defect Type:** The AEMC Metering Review Final Report recommended the Metering Coordinator record the type of defect at site as well as if a defect exists (yes or no). The ASMD Draft Rule has removed the requirement for the Metering Coordinator to record the nature of the defect (defect type). AEMO has removed this requirement from the proposed solution.
- **Defect Flag:** The end-to-end process flow of the AEMC Metering Review Final Report (Figure D.1) shows the MC and retailer raise and lower a defect flag. The ASMD Draft Rule removes this requirement and proposes only the Metering Coordinator record if a defect is recorded at site. The retailer obligations in the ASMD Draft Rule refer only to the site defect notifications and the status of those notifications.

The MSR-WG has proposed an additional data element of 'Original MC' is recorded when a Metering Coordinator identifies a defect at site. The MSR-WG considers this additional data element will provide an avenue for the FRMP to contact the Metering Coordinator about the nature of the defect at site via business-to-business or off-market processes. The process flows illustrated in this Consultation Paper have applied the process described in the ASMD Draft Rule. Nonetheless, as part of responses of options to identify and track defects, participants may include other preferred data elements that can be recorded to facilitate participants to identify and remediate defects.

4.2.1 Description and effect of proposal

The ASMD Draft Rule requires that AEMO, by no later than May 30, 2025, is to update the MSATS procedures.

This update must specify:

- The information that a Metering Coordinator should record while identifying a defect to replace a legacy meter.
- That only the current FRMP will have access to this data.
- The information that a FRMP must record while notifying customers to remediate a site defect.

To enable industry discussion about the business and system impacts of the defect process, AEMO has created a series of cross-functional flow diagrams to propose an approach of recording and tracking site defects.

There are three diagrams to track and remediate site defects, based on the process described in the ASMD Draft Rule.

Elements of the process flows were formed during pre-consultation with the MSR-WG.

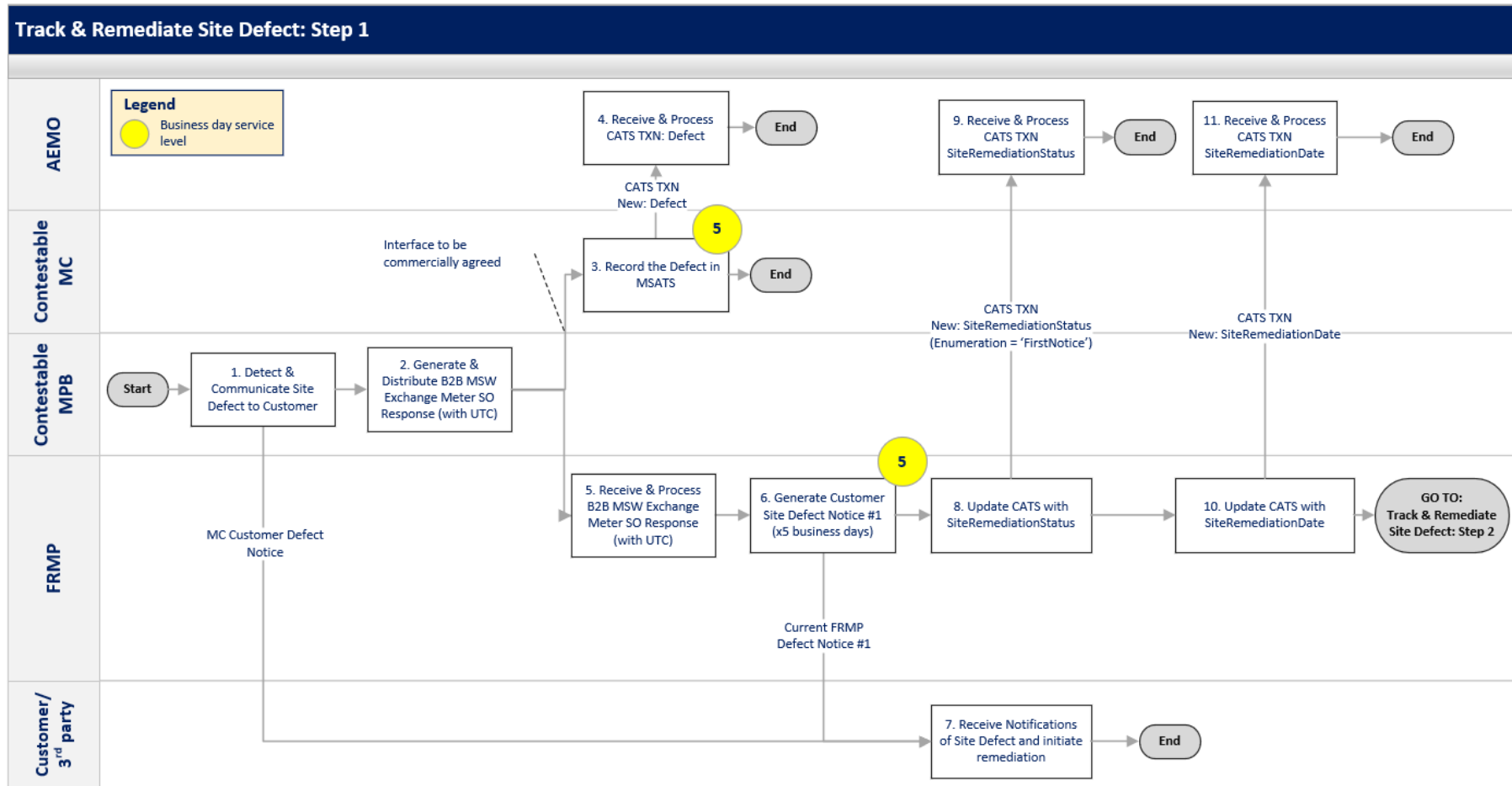


Figure 2

Process Flow Description: Track and Remediate Site Defect: Step 1

| Step ID | Description |
|--|---|
| 1. Detect and communicate site defect to customer | The MPB detects a site defect stopping the exchange of a legacy meter. The MPB leaves notification with the customer of the defect. |
| 2. Generate and distribute B2B MSW Exchange Meter SO Response (with UTC) | The MPB completes the service order via B2B to the retailer, with an unable to complete response. |
| 3. Record the defect in MSATS | The MC records the defect in MSATS. AEMO propose this is done within 5 business days of the MC receiving notification of the defect from the MP. |
| 4. Receive and process CATS TXN: Defect | AEMO receives, processes and updates MSATS. The process ends. |
| 5. Receive and process B2B MSW Exchange Meter SO Response (with UTC) | The retailer receives unable to complete notification from the metering provider. |
| 6. Generate customer site defect notice #1 (5 business days) | Within 5 business days of being notified via CATS of the site defect, the retailer sends a notice to the customer informing the customer of the defect and requesting the customer to remediate the site. |
| 7. Receive notification of site defect and initiate remediation | The customer receives the request from the retailer to remediate the site. The process ends. |
| 8. Update CATS with SiteRemediationStatus | The retailer updates CATS within 5 business days with a new Change Request code; the enumeration is 'FirstNotice' SiteRemediationStatus field. |
| 9. Receive and process CATS TXN SiteRemediationStatus | AEMO process 'FirstNotice' in the SiteRemediationStatus field. The process ends. |
| 10. Update CATS with SiteRemediationDate | The retailer updates the date the customer site defect notice #1 was sent. |
| 11. Receive and process CATS TXN SiteRemediationDate | AEMO processes the date of the SiteRemediationDate field. The process ends. |

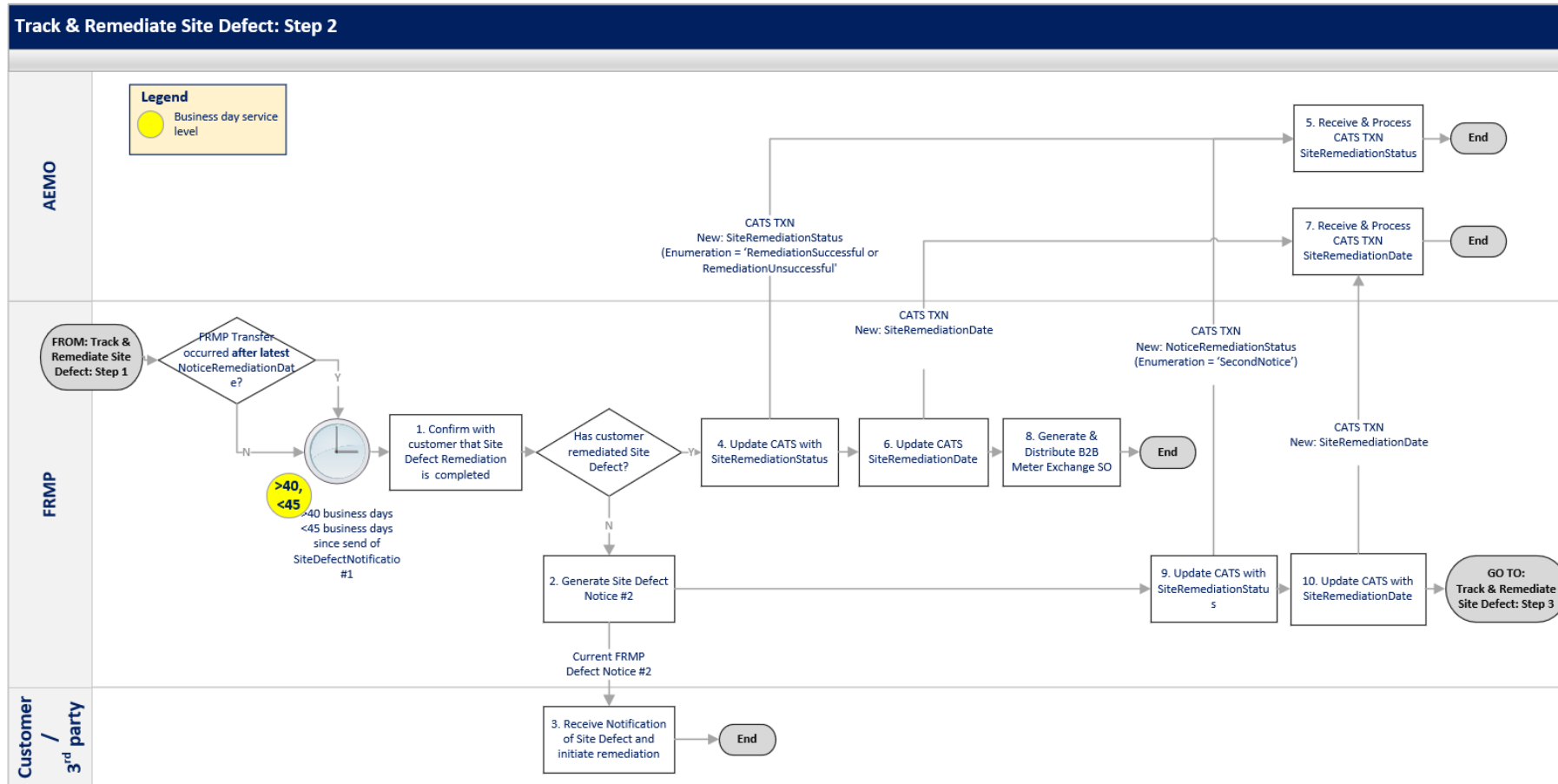


Figure 3

Process Flow Description: Track and Remediate Site Defect: Step 2

- If the FRMP has churned after the latest notification date, begin the process no less than 40 business days and no greater than 45 business after the last notification date.
- If the FRMP has not churned after the latest notification date, begin the process no less than 40 business days and no greater than 45 business after the last notification date.

| Step ID | Description |
|--|--|
| 1. Confirm with customer that site defect remediation is completed | The retailer confirms if the customer if the site has been remediated. |
| 2. Generate customer site defect notice #2 | If the retailer has not confirmed site remediation with the customer, the retailer generates customer site defect notice #2. |
| 3. Receive notification of site defect and initiate remediation | The customer receives the second request from the retailer to remediate the site. The process ends. |
| 4. Update CATS with SiteRemediationStatus | If the customer has confirmed the site has been remediated, the retailer updates the SiteRemediationStatus enumeration to RemediationSuccessful |
| 5. Receive and process CATS TXN SiteRemediationStatus | MSATS updates SiteRemediationStatus enumeration to RemediationSuccessful Or MSATS updates SiteRemediationStatus enumeration to SecondNotice. The process ends. |
| 6. Update CATS SiteRemediationDate | The retailer updates the date the customer confirmed with the retailer the site was remediated. |
| 7. Receive and process CATS TXN SiteRemediationDate | MSATS is updated with SiteRemediationDate via a Successful Remediation Or MSATS is updated with SiteRemediationDate via a Second Notice enumeration. The process ends. |
| 8. Generate and distribute B2B Meter Exchange SO | Upon confirmation with the customer the site has been remediated, the retailer creates a service order for a meter exchange. The process ends. |
| 9. Update CATS with SiteRemediationStatus | If the customer has not remediated the site or if the retailer has not confirmed the site has been remediated, the retailer updates SiteRemediationStatus enumeration to SecondNotice. |



| Step ID | Description |
|---|--|
| 10. Update CATS with SiteRemediationDate | The retailer updates the date the customer site defect notice #2 was sent. |
| 11. Receive and process CATS TXN SiteRemediationDate | AEMO process the date of the SiteRemediationDate field. The process ends. |

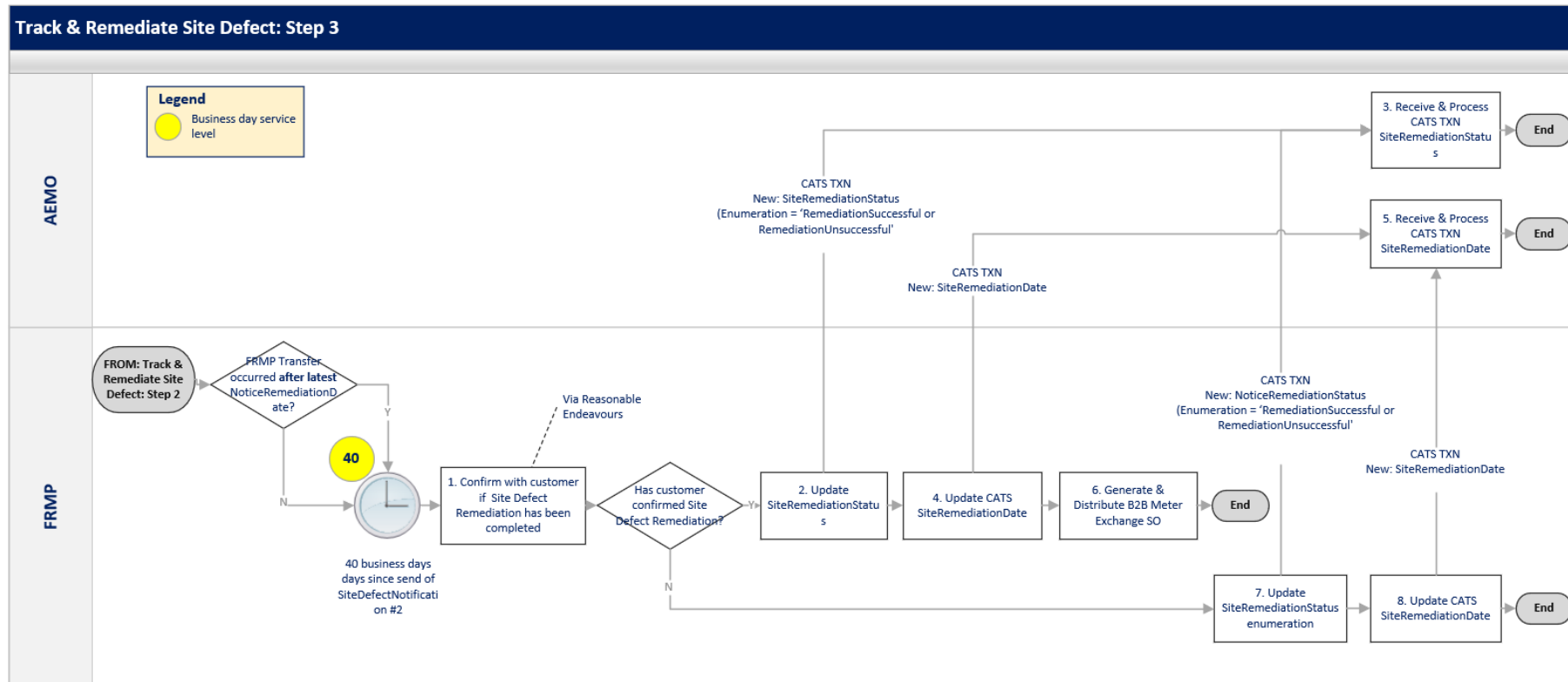


Figure 4

Process Flow Description: Track and Remediate Site Defect: Step 3

- If the FRMP has churned after the latest notification date, begin the process 40 business days after the last notification date.
- If the FRMP has not churned after the latest notification date, begin the process 40 business days after the last notification date.

| Step ID | Description |
|--|---|
| 1. Confirm with customer that site defect remediation is completed | The retailer confirms if the customer at the site has been remediated using reasonable endeavours. |
| 2. Update CATS with SiteRemediationStatus | If the retailer has confirmed site remediation with the customer, the retailer applies RemediationUnsuccessful. |
| 3. Receive and process CATS TXN SiteRemediationStatus | MSATS updates SiteRemediationStatus enumeration to Successful Or MSATS updates SiteRemediationStatus enumeration to RemediationUnsuccessful. The process ends. |
| 4. Update CATS with SiteRemediationDate | The retailer updates the date the customer confirmed with the retailer the site was remediated. |
| 5. Receive and process CATS TXN SiteRemediationDate | MSATS is updated with SiteRemediationDate via a Successful enumeration Or MSATS is updated with SiteRemediationDate via an Unsuccessful enumeration. The process ends. |
| 6. Generate and distribute B2B Meter Exchange SO | Upon confirmation with the customer the site has been remediated, the retailer creates a service order for a meter exchange. The process ends. |
| 7. Receive and process CATS TXN SiteRemediationStatus enumeration | If the customer has not remediated the site or if the retailer has not confirmed the site has been remediated, the retailer updates the SiteRemediationStatus enumeration to SecondNotice. |
| 8. Update CATS with SiteRemediationDate | The retailer updates the date the customer confirmed the defect was not remediated or where the customer could not confirm with the customer that the site was remediated. The process ends. |

Technical Solution Description

- Create a new Defect Flag standing data attribute to support step 3 in process flow 1, providing the MC with the ability to record a defect in MSATS:
 - Format of Defect Flag attribute (e.g. Y or NULL).
 - MCs update Defect Flag standing data via a new CATS 50XX CR.
 - All entitled roles are notified of the Defect Flag against NMI via CATS Notification and can request C1 report.
 - Communication of Defect Flag against the NMI through the MSATS standing data framework to an entitled role (NMID, C4, C7).
- Create two new standing data attributes to support steps 8 in Process Flow 1, steps 4, 6, 9 and 10 in Process Flow 2 and steps 2, 4, 7 and 8 in Process Flow 3:
 - Site Remediation Status: Tracks the notification status to the customer and the outcome of site defect remediation efforts.
 - Retailers can update this attribute via a new CATS 50XX CR.
 - Possible Values:
 1. FirstNotice: Specifies the date of the initial notification sent by the FRMP about the site defect.
 2. SecondNotice: Specifies the date the second notification was sent by the FRMP regarding a site defect.
 3. RemediationSuccessful: The FRMP has been advised that the defect has been remediated
 4. RemediationUnsuccessful: Indicates that the site defect has not been resolved in the 40 days from the date of the SecondNotice.
 - Site Remediation Status Date: The date the notice was either issued to the customer or the date the customer informed the Retailer that the site defect had been rectified.
 - Retailers can update this attribute via a new CATS 50XX CR.
 - All entitled roles are notified of Site Remediation Status details against NMI via the CATS Notification and can request C1 report.
 - Communication of Site Remediation Status details against the NMI through the MSATS standing data framework to an entitled role (NMID, C4, C7).

AEMO proposes three options to manage how the defect field, site remediation status field and site remediation date field are nullified, when a smart meter replaces a legacy meter which had a defect. The options presented are for the purposes of industry considering their obligations for meeting reporting requirements.

Option 1:

For 3004/3005 or 3090/3091 only, where a legacy meter has been replaced on-site, the Defect Flag, Site Remediation Status and Date will be set to Null by AEMO.

Option 2:

A specific CR will be created that allows the MP/C to set Defect Flag to Null. When this is submitted, the Site Remediation Status and Date will be set to Null by AEMO.

Option 3:

Where a legacy meter has been replaced:

- The MP/MC sets the Defect Flag to Null.
- The FRMP sets the Site Remediation Status and Date to Null.

Participants are requested to comment on the preferred options among Options 1-3, to meet their reporting requirements.

| Questions - Defects |
|--|
| 1. Do you agree with the proposed Defect flag allowing an MC to record a defect in MSATS? |
| 2. Do you agree with the proposed approach of creating two new standing data attributes of Site Remediation Status and Site Remediation Status Date to track site defects? |
| 3. Do you agree with the proposed enumerations which indicate the steps in the Site Remediation Status process? |
| 4. Are standing data quality reports required to be created for participants to meet their procedural obligations for defects? If so, what are the components of these reports? |
| 5. Which option is preferred to manage now the defect field, site remediation status field and site remediation date field is nullified when a smart meter replaces a legacy meter which had a defect? Why is this option preferred? |
| 6. Do you believe an alternative option/approach would better achieve the desired objectives? If yes, please provide your reasoning and details of your alternative approach |

Table 1 names the procedure or other document and the type of change expected for LMRP and Defects.

| Procedure | Change Type |
|--|---|
| Glossary and Framework | New definitions |
| CATS Procedure | <ul style="list-style-type: none"> • New Change Requests • New obligations for DNSPs • New obligations for FRMPs • New obligations for MC • Changes to the Blind Update Tool |
| Standing Data for MSATS document | Changes to accommodate LMRP attribute and Defect attributes |
| Guide to the Role of the Metering Coordinator | Include a new responsibility for the MC to update MSATS when advised of a defect at a metering installation with a legacy meter |

Table 1

Retailer of Last Resort

AEMO has proposed to amend the RoLR Procedure to remove the following reports:

| Report (recipient) | Title | Summary |
|-------------------------------|---------------------------------|---|
| RoLR_002 (MDP) | RoLR/FRMP Summary Report Type B | A summary report by MDP of second tier NMI's where the suspended retailer is the FRMP. Each MDP receives the count of NMI's for which it is the current MDP. |
| RoLR_003 (LNSP) | RoLR/FRMP Summary Report Type C | A summary report by LNSP of second tier NMI's where the suspended retailer is the FRMP. Each LNSP receives the count of NMI's for which it is the current LNSP. |
| RoLR_004 (RoLR as new FRMP) | RoLR/FRMP Summary Report Type D | A summary report by RoLR as the new FRMP of NMI's where the suspended retailer is the FRMP. Each RoLR receives the count of NMI's for which it is the current RoLR (i.e. the NMI's for which it can expect to become the current FRMP). |
| RoLR_005 (suspended retailer) | RoLR/FRMP Summary Report Type D | A summary report by RoLR as the new FRMP of NMI's where the suspended retailer is the FRMP. The FRMP (which is the suspended retailer) receives the count of NMI's for each RoLR (i.e. the NMI's for which the RoLR(s) can expect to become the current FRMP). |
| RoLR_006 (MPB) | RoLR/FRMP Summary Report Type E | A summary report by MPB of all second tier NMI's where the suspended retailer is the FRMP. |
| RoLR_007 (Jurisdiction) | RoLR/LR Summary Report Type A | A summary report by jurisdiction of all first tier and second tier NMI's where the suspended retailer is the LR. Each jurisdiction receives the count of NMI's from its jurisdiction. |
| RoLR_008 (MDP) | RoLR/LR Summary Report Type B | A summary report by MDP of all first tier and second tier NMI's where the suspended retailer is the LR. Each MDP receives the count of NMI's for which it is the current MDP. |

| Report (recipient) | Title | Summary |
|----------------------------------|--|--|
| RoLR_009 (LNSP) | RoLR/LR Summary Report Type C | A summary report by LNSP of all first tier and second tier NMIs where the suspended retailer is the LR. Each LNSP receives the count of NMIs for which it is the current LNSP. |
| RoLR_010 (RoLR) | RoLR/LR Summary Report Type D | A summary report by new LR (RoLR as the new LR) of all first tier and second tier NMIs where the suspended retailer is the LR. Each jurisdiction nominated replacement LR receives the count of NMIs for which it can expect to become the current LR. |
| RoLR_011 (suspended retailer) | RoLR/LR Summary Report Type D | A summary report by new LR (RoLR as the new LR) of all first tier and second tier NMIs where the suspended retailer is the LR. The current LR (which is the suspended retailer) receives the count of NMIs each jurisdiction nominated replacement LR that can expect to become the current LR. |
| RoLR_012 (MPB) | RoLR/LR Summary Report Type E | A summary report by MPB of all first tier and second tier NMIs where the suspended retailer is the LR. |
| RoLR_014 (relevant participants) | RoLR/LR NMI List - SR is LR | NMI list by MSATS participant of all first tier and second tier NMIs where the suspended retailer is the current LR. |
| RoLR_025 (AEMO) | Check for Second Tier NMIs with a FRMP or FRMP and RP relationship to the SR | The report is to validate that no FRMP, or RP roles are still active for the suspended retailer. A list of any second tier NMIs where the FRMP and RP is the Suspended Retailer, in MSATS, for any period on or after the RoLR Effective Date. (Similar to report 006). |

At the end of 2023, AEMO asked the ERCF to comment on the removal of these reports from the procedure. No IT change would need to be made by AEMO to support the removal of these reports.

Some participants recommended AEMO redevelop the delivery method for RoLR reports. The current process is for RoLR reports to be sent via a password protected email. This introduces issues for participants (and AEMO) to manage contacts and remember passwords, particularly when there is an extended time between RoLR events.

AEMO is considering changing the delivery process such that ROLR reports would be distributed to the Participant outbox and formatted as an aseXML file containing a CSV payload. This approach would eliminate the need for RoLR specific contacts and passwords. AEMO will separately discuss this option (and possible alternatives) with participants via the ERCF/B2BWWG forums.

5.1 Description and effect of proposal

The Proposal is to amend the RoLR Procedure to remove the requirement for AEMO to publish the reports as listed above.

5.2 Proposed effective date

AEMO proposes to make the changes effective from publication of the final determination.

Questions

1. Do you agree with the removal of the RoLR reports as proposed? If not, why?

Issues and Change Forms

6.1 ICF-077 Auto population of the LCCD based on NMI status

From 1 November 2023, all Current FRMPs have obligations to maintain the LCCD field within MSATS, in accordance with the CATS Procedures. The LCCD field has been introduced by AEMO to better support the intent of the CDR Rule. Specifically, the LCCD field enables customers to access data which spans multiple retailers at the same NMI.

For newly-created NMIs, the Current FRMP must populate the LCCD. The LCCD is easily identifiable. Accordingly, AEMO could automatically populate the LCCD as part of the NMI update process, thereby removing the requirement for every retailer to build the same system and process logic to populate those NMIs.

In assessing ICF-077, the following factors were considered:

- Over 300,000 new NMIs are connected annually, necessitating updates as they transition from 'Greenfield' to 'Active'.
- Retailers must independently update the LCCD for new NMIs, leading to industry-wide redundancy.
- The requirement to update the LCCD field involves significant transactional volume and manual processing, particularly impacting smaller retailers.

6.1.1 Description and effect of proposal

ICF-077 proposes that AEMO will auto-populate the LCCD field as part of the NMI update process, resulting in the following benefits:

- Reduced number of processes that retailers must manage, reduced service costs and reduced information timeframes.
- Reduced requirements of participants, reduced transactional burdens, and reduced needs for participants to routinely check the relevant information.
- Increased accuracy and compliance.

AEMO considers that auto populating the LCCD field would result in the following procedure and system changes:

B2M Procedure Changes:

- CATS Procedure update to add a new obligation on AEMO to auto populate the LCCD field when a NMI is activated from Greenfield status to Active status.

MSATS System Changes:

- Auto-populate the LCCD when a NMI status changes from Greenfield to Active:
 - For series 5050/1 CRs.
 - For series 5060/1 CRs.
 - Apply the Actual Change Date (**ACD**) of the CR as the LCCD for direct transitions from Greenfield to Active.
- Streamlined Notification Process:
 - Automatically send the updated LCCD to all relevant parties entitled to a CATS Notification.
- Targeted Application:
 - The automation applies only to NMIs moving from Greenfield directly to Active.
- No schema change is identified.

Questions

1. Do you agree that the proposed changes, to the CATS Procedure and MSATS system, will achieve the desired objective? If not, why?

6.2 ICF-078 Alignment of Addressing in B2M Procedures to AS4590.1:2017

ICF-078 proposes to align the address standard in B2M Procedures with the AS4590.1:2017 standard, superseding the current NEM addressing, which is based on the AS4590-1999 standard.

Currently, this alignment is being reviewed more broadly by both Gas and Electricity (B2B and B2M) retail markets.

The AS4590-1999 standard has the following shortcomings:

- Truncation of longer address fields, risking capturing incomplete and inaccurate address data in NMI Standing Data.
- Increased manual corrections and data discrepancies, leading to operational inefficiencies.
- Impaired integration for new market entrants that have moved to the latest standards.
- Restrictions to the adoption of future technological advancements.

AEMO's audit of the current NEM address standard against the AS4590.1:2017 standard identified the following discrepancies:

- Category 1 - NEM Only - Some NEM addressing elements sit outside of AS standards.
- Category 2 - Minor Discrepancies - Instances of either no discrepancy or minor changes in field names, where the core concepts, meanings, character lengths, data types, and usage rules remain consistent with NEM standards.
- Category 3 - Methodology Variances - Different methods used to assemble individual address elements. Despite these variances, the final structure of the addresses aligns well, with no significant impact on the result.
- Category 4 - Field Length Discrepancies - Changes in the field length of address elements within AS4590.1:2017. Such modifications may lead to truncated address information during data exchanges between systems following NEM and AS4590.1:2017 standards.
- Category 5 - Enumerated Value Inconsistencies - Discrepancies in enumerated values for address elements could introduce data constraints. This may result in the non-acceptance of AS4590.1:2017-compliant addresses in the NEM B2M system.

The Removal of ICF_070 Increase Building Name Field in MSATS

AEMO will not proceed with the changes which were contemplated in ICF_070 Increase Building Name Field in MSATS, as consulted upon in the Integrating Energy Storage Systems into the NEM - Retail Electricity Market Procedures Consultation (**IESS Consultation**).

This decision reflects the additional addressing element inconsistencies which participants and AEMO identified subsequent to the end of the IESS Consultation. AEMO, with the ERCF's support, has completed a comprehensive review of the NEM addressing elements as part of ICF_078 Alignment of Addressing in B2M Procedures to AS4590.1:2017.

AEMO and the ERCF agree that bundling the proposed changes in ICF_070 and ICF_078 will lead to a more efficient and effective outcome for stakeholders. For example, participants will avoid the need to implement multiple aseXML schema changes in quick succession.

6.2.1 Description and effect of proposal

The alignment to AS4590.1:2017 will:

- Ensure accurate, complete address data, leading to better service delivery and customer trust.
- Harmonize data standards between B2B and B2M, reducing operational errors and the potential for data discrepancies, leading to cost savings.

When considering recommended changes, AEMO followed the following principles:

- Optimise field length discrepancies where the AS4590.1:2017 maximum field lengths have increased and not decreased from the current B2M definition.
- Keep field names and types unchanged to minimise system changes. This stability is crucial for implementing the latest aseXML schema without affecting the timeline for any required updates to Gas procedures.
- Limit changes to Procedure definitions to those necessary, preserving the original interpretation and application of field usage. This approach prevents misunderstandings and maintains procedural clarity.

- Update generic references to AS4590 to a specific version reference (e.g., AS4590 > AS4590.1:2017) only when discrepancies identified by ICF_078 necessitate the field be changed.
- Address newly added enumerated codes from the AS4590.1:2017 standard, ensuring aseXML remains current. For discrepancies in abbreviations (e.g., "Avenue" as "AVE" in AS4590 vs. "AV" in aseXML), publish a mapping rather than altering the aseXML, which in turn would require the mass data cleansing of existing standing data.

AEMO considered the following two options to align the B2M Procedures to AS4590.1:2017.

Option 1: Complete Alignment to AS4590.1:2017

- Remediate all discrepancies between AS4590.1:2017 and B2M Procedures, aseXML schema, and market systems definitions of addressing.
- Commit to replicating all future changes to AS4590.1:2017 within B2M Procedures, aseXML schema, and market systems definitions.

Option 2: Establish an Energy Addressing Standard Linked to AS4590.1:2017

- Publish a Guide to an Energy Addressing Standard (**Energy Addressing Guide**), mapping Energy Addressing elements to their AS4590.1:2017 equivalents, including enumeration mappings and roadmaps to why and when fields are to be remediated.
- Remediate only material discrepancies that impact the market's ability to service a connection point.
- Evaluate future changes to AS4590.1:2017 for their impact, with adjustments made to the Energy Addressing Guide, as necessary.

AEMO assessed the above two options with the ERCF Subgroup. The majority of members supported Option 2.

AEMO proposes to align the B2M and B2B Procedures with AS4590.1:2017 through a two-phase consultation process, as follows:

Phase 1: May - November 2024

- Objective: Identify and address current misalignments in the B2M and B2B Procedures.
- Scope:
 - Focus on addressing element misalignments with AS4590.1:2017.
 - Consider misalignments between shared B2M and B2B elements.
 - Engage with stakeholders to determine and agree on elements or enumerations to be remediated.
 - Update B2M and B2B Procedures and Guides with agreed changes.
 - Remove applicable Australian Standards references in the various Procedures in preparation for the introduction of the Energy Addressing Guide

Phase 2: Post-May 2024

- Objective: Create the Energy Addressing Guide for addressing, organisation and person field elements across NEM B2B, B2M, and Gas.

- Scope:
 - Develop the Energy Addressing Guide to be at the same level as the Standing Data for MSATS document, which is not a procedure as such.
 - Transition to the energy addressing standards through consultations for each fuel type and market.
 - Establish a change management process, including the consideration of future AS4590.1:2017 updates, within the Energy Addressing Guide.

AEMO proposes the following changes to the B2M Procedures and aseXML Schema:

- Category 4 - Field Length Discrepancies:

| NEM Addressing Field Name | Recommended B2M Procedural Change | Schema Change |
|---------------------------|--|--|
| BuildingOrPropertyName | <p>Change to the Standing Data for MSATS > Section 7.2. > Table 13:</p> <ul style="list-style-type: none"> • Data Element Name: BuildingOrPropertyName • Description: “Defines the primary building or property name per Australian Standard AS4590.1:2017 5.8 Address site name. <p>The official place name or culturally accepted common usage name for an address site, including the name of a building, homestead, building complex agricultural property – for scenarios where the address is similar to “Rose Cottage, 9 Garden Walk, Happy Valley Retirement Village, 75 Davis Steet, NORWOOD SA 5067 Building 4A-4B Smith St”. For example, BuildingOrPropertyName = HAPPY VALLEY RETIREMENT VILLAGE BuildingOrPropertyName2 = ROSE COTTAGE”</p> <p>Change to the Standing Data for MSATS > Section 7.3. > Table 14:</p> <ul style="list-style-type: none"> • Data Element Name: BuildingOrPropertyName • Basic Example: BLAMEY RESEARCH INSTITUTE • Interval Example: HAPPY VALLEY RETIREMENT VILLAGE | <p>Add the MaxLength Value for AustralianBuildingOrPropertyName from 30 to 50 in ClientInformation_r4n.xsd. To adopt this change, participants must update the LATEST version of the B2M schema.</p> |
| BuildingOrPropertyName2 | <p>ADD to the Standing Data for MSATS > Section 7.1. > Table 12:</p> <ul style="list-style-type: none"> • Data Element Name: BuildingOrPropertyName2 • Description: “Defines the secondary building or property name within a complex site as per Australian Standard AS4590.1:2017 5.6.5.4 Secondary complex (or utility) name. <p>The name given to an entire building or area within an address site that has its own separate address - for scenarios where the address is similar to “Rose Cottage, 9 Garden Walk, Happy Valley Retirement Village, 75 Davis Steet, NORWOOD SA 5067 Building 4A-4B Smith St”. For example,</p> | <p>Add BuildingOrPropertyName2 to the B2M AseXML Schema with similar field properties to BuildingOrPropertyName.</p> |

| NEM Addressing Field Name | Recommended B2M Procedural Change | Schema Change |
|---------------------------|--|---|
| | <p>BuildingOrPropertyName2 = ROSE COTTAGE, BuildingOrPropertyName = HAPPY VALLEY RETIREMENT VILLAGE”</p> <ul style="list-style-type: none"> • Standing Data Required: REQUIRED • Party to Provide: LNSP <p>Add to the Standing Data for MSATS > Section 7.2. > Table 13.</p> <ul style="list-style-type: none"> • Browser Field Name: Secondary Building / Property • aseXML Data Element Name: BuildingOrPropertyName2 • aseXML Path: ElectricityStandingData/MasterData/Address/AustralianAddress/StructuredAddress/BuildingOrPropertyName2 • Browser Format: VARCHAR2(50) • aseXML Data Type: xsd:string maxLen = 50 <p>Add to the Standing Data for MSATS > Section 7.3. > Table 14.</p> <ul style="list-style-type: none"> • Data Element Name: BuildingOrPropertyName2 • Browser Field Name: Secondary Building / Property • Basic Example: BIOLOGY BUILDING B • Interval Example: ROSE COTTAGE | |
| FloorOrLevelType | <p>Change to the Standing Data for MSATS > Section 7.2. > Table 13:</p> <ul style="list-style-type: none"> • Browser Field Name: Floor/Level Type • Browser Format: VARCHAR2(2) > VARCHAR2(4) | <p>Change the MaxLength Value for AustralianFloorOrLevelType from 2 to 4 in Enumerations.xsd. To adopt this change, Participants must update their version of Enumerations.xsd. No change to the LATEST version of either the B2M schema is required.</p> |
| StreetName | <p>Change to the Standing Data for > Section 7.1. > Table 12:</p> <ul style="list-style-type: none"> • Data Element Name: StreetName • Description: “Defines the street name per Australian Standard AS4590.1:2017 5.6.5.1 Complex road name and 5.10.1 Road name. The combination of Street Name, Street Type and Street Suffix may occur up to two times. This field may only contain letters, numbers, hyphens ('-') and spaces.” <p>Change to the Standing Data for MSATS > Section 7.2. > Table 13.</p> <ul style="list-style-type: none"> • Browser Field Name: Street Name • Browser Format: VARCHAR2(30) > VARCHAR2(45) • aseXML Data Type: xsd:string pattern: [\p{L}\p{N}\s\-\']{1,45} | <p>Change the MaxLength Value for AustralianStreetName from 30 to 45 in ClientInformation_r4n.xsd. To adopt this change, Participants must update to the LATEST version of the B2M schema.</p> |

• Category 5 - Enumerated Value Inconsistencies:

| NEM Addressing Field Name | Recommended B2M Procedural Change | Schema Change | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-----------------------------------|--|------|-----------------------------|---------------------|--------|------|-----|----------|------|------|-------|------|-----|--------------|------|------|--------|------|-----|------|------|----|-------|------|----|------|------|---|-----------|------|----|
| FloorOrLevelType | No change is required. | Add the following enumerations to Enumerations.xsd: <ul style="list-style-type: none"> • Lower Level – LL • Penthouse – PTHS • Platform – PLF • Podium – PDM To adopt this change, Participants must update their version of Enumerations.xsd. No change to the LATEST version of either the B2M schema is required. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FlatOrUnitType | No change is required. | Add to the comments in the schema to describe the name mapping from AS4590.1:2017 to the aseXML as described below: <table border="1" data-bbox="879 824 1417 1227"> <thead> <tr> <th>Name</th> <th>AS4590.1:2017 Abbreviations</th> <th>aseXML Abbreviation</th> </tr> </thead> <tbody> <tr><td>Duplex</td><td>DUPL</td><td>DUP</td></tr> <tr><td>Factory</td><td>FCTY</td><td>F</td></tr> <tr><td>Flat</td><td>FLAT</td><td>FLA</td></tr> <tr><td>Marine Berth</td><td>MBTH</td><td>MB</td></tr> <tr><td>Office</td><td>OFFC</td><td>OFF</td></tr> <tr><td>Room</td><td>ROOM</td><td>RM</td></tr> <tr><td>Stall</td><td>STLL</td><td>ST</td></tr> <tr><td>Unit</td><td>UNIT</td><td>U</td></tr> <tr><td>Warehouse</td><td>WHSE</td><td>WE</td></tr> </tbody> </table> | Name | AS4590.1:2017 Abbreviations | aseXML Abbreviation | Duplex | DUPL | DUP | Factory | FCTY | F | Flat | FLAT | FLA | Marine Berth | MBTH | MB | Office | OFFC | OFF | Room | ROOM | RM | Stall | STLL | ST | Unit | UNIT | U | Warehouse | WHSE | WE |
| Name | AS4590.1:2017 Abbreviations | aseXML Abbreviation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duplex | DUPL | DUP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Factory | FCTY | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flat | FLAT | FLA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Marine Berth | MBTH | MB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Office | OFFC | OFF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Room | ROOM | RM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stall | STLL | ST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit | UNIT | U | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Warehouse | WHSE | WE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| StreetType | No change is required. | Add the following enumeration to Enumerations.xsd: <ul style="list-style-type: none"> • FIRETRAIL – FTRL To adopt this change, Participants must update their version of Enumerations.xsd. No change to the LATEST version of the B2M schema is required. ADD to the comments in the schema to describe the name mapping from AS4590.1:2017 to the aseXML as described below: <table border="1" data-bbox="879 1547 1378 1789"> <thead> <tr> <th>Name</th> <th>AS4590.1:2017 Abbreviations</th> <th>aseXML Abbreviation</th> </tr> </thead> <tbody> <tr><td>AVENUE</td><td>AV</td><td>AVE</td></tr> <tr><td>CRESCENT</td><td>CR</td><td>CRSE</td></tr> <tr><td>GLADE</td><td>GLDE</td><td>GLD</td></tr> <tr><td>PARKWAY</td><td>PWY</td><td>PKWY</td></tr> </tbody> </table> | Name | AS4590.1:2017 Abbreviations | aseXML Abbreviation | AVENUE | AV | AVE | CRESCENT | CR | CRSE | GLADE | GLDE | GLD | PARKWAY | PWY | PKWY | | | | | | | | | | | | | | | |
| Name | AS4590.1:2017 Abbreviations | aseXML Abbreviation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AVENUE | AV | AVE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRESCENT | CR | CRSE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GLADE | GLDE | GLD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PARKWAY | PWY | PKWY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Questions

1. Do you agree with the proposed changes, will they achieve the desired objective? If not, why?

6.3 ICF-079 NEM 12 MDFF Inconsistencies

The MDFF Specification NEM 12 has an inconsistent obligation relating to the provision of 400 block data for actual reads. Specifically, AEMO has identified the inconsistency between clauses 4.4 and 4.5 of the MDFF Specification.

This inconsistency has led to different interpretations amongst participants as to how a NEM 12 should be formatted. Consequently, some parties have data rejected, requiring them to make software changes in their systems to accommodate the alternate interpretations of the MDFF.

Accordingly, ICF-079 proposes to remove the inconsistency between clauses 4.4 and 4.5 of the MDFF Specification.

6.3.1 Description and effect of proposal

The removal of the inconsistency will:

- Minimise the different interpretations as to the operation of the MDFF Specification NEM 12.
- Reduce costs by avoiding unnecessary participant software changes.
- Avoid delays to importing data.
- Reduce disagreements between participants as to the appropriate format.

The proposed changes to the MDFF Specification can be found in the attached draft change marked version 2.6 of the document MDFF Specification.

Questions

1. Do you agree that the proposed changes to the Meter Data File Format Specification NEM12 & NEM13, will achieve the desired objective? If not, why?

Embedded Network settlement anomalies

AEMO has identified the opportunity for an SGA connection within an embedded network to be used to gain value from what AEMO considers to be an unintended application of retrospective NMI activation and deactivation in the settlements process. This can occur sometime after the “trading week”, once prices and energy flow volumes are known, utilising processes designed to support error corrections. This is at odds with all other persons’ participation in the ‘live’ spot market. In simple terms, market participants associated with SGA connections within embedded networks are able to decide whether to sell their energy “gross” into the spot market, or use it to offset the customer’s load after spot prices have been observed and energy volumes are known, including up to the second revision in the settlement process (i.e. up to 30 weeks following the settlement week).

AEMO considers that this issue could be resolved by limiting the ability for NMIs in embedded networks to be activated or de-activated retrospectively.

This matter has been raised for the attention of the AEMC via the Unlocking CER Benefits Through Flexible Trading rule change consultation, who commented in their Draft Determination as follows:

“The Commission agrees with AEMO’s analysis of this issue and supports its view that changes to procedures can address this issue. For example, AEMO procedures could prohibit retrospective NMI activation and deactivation for the purposes of flexible trading.”

Accordingly, AEMO proposes that changes are made to procedures to limit the ability of ENMs to activate and de-activate NMIs in order that these actions can only be performed prospectively. AEMO is also considering changes which would limit the ability of MDPs to activate and de-activate datastreams for connection points in embedded networks so that these can only be performed prospectively. AEMO is seeking feedback from interested parties on this matter.

Questions

1. Do you agree with the proposed changes to limit:
 - the ability of ENMs to activate and de-activate NMI(s) retrospectively
 - the ability of MDPs to activate and de-activate datastreams in embedded networks retrospectivelyIf not, why?

Summary of issues for consultation

Submissions may be made on any matter relating to the Proposal in this Consultation Paper. AEMO would welcome comment and feedback on the following matters:

1. The implementation of the ASMD Rule.
2. The AEMO review of the RoLR processes.
3. The three ICFs raised by the ERCF.
4. Embedded Network settlement anomalies

Appendix A. Glossary

| Term or acronym | Meaning |
|-----------------|--|
| AS4590 | Australian standard for interchange of client information |
| ASMD | Accelerated Smart Meter Deployment |
| B2B | Business-to-business |
| B2M | Business-to-market |
| BUT | Blind Update Tool |
| CATS | Consumer Administration and Transfer Solution, a part of MSATS. |
| C1 | Data Replication Resynchronisation Report |
| C4 | NMI Master Report |
| C7 | New Participant Data Access Report |
| CP | Connection Point |
| CR | Change request |
| DNSP | Distribution network service provider |
| ERCF | Electricity Retail Consultative Forum |
| FRMP | Financially Responsible Market Participant |
| ICF | Issue / Change Form |
| LCCD | Last Consumer Change Date |
| LNSP | Local Network Service Provider |
| MDFF | Meter Data File Format |
| MDP | Meter Data Provider |
| MC | Metering Coordinator |
| MSATS | Market Settlements and Transfer Solution |
| MSR | Metering Services Review |
| NEM | National Electricity Market |
| NEM12 | The file format for interval metering data |
| NEM13 | The file format for accumulated metering data |
| NEL | National Electricity Law |
| NER | The National Electricity Rules made under Part 7 of the National Electricity Law |
| NMI | National Metering Identifier |
| RoLR | Retailer of Last Resort |