

B2B Working Group

14 March 2024

NOTES

Please note that this meeting is being recorded for note taking purposes



AEMO Competition Law Meeting Protocol

- AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO, all participants agree to adhere to the CCA at all times and to comply with appropriate protocols where required to do so.
- AEMO has developed meeting protocols to support compliance with the CCA in working groups and other forums with energy stakeholders
- The AEMO Competition Law Meeting Protocol can be viewed and downloaded from AEMO's website
 - https://aemo.com.au/-/media/files/stakeholder_consultation/working_groups/aemo-competition-law-meeting-protocol/aemo-competition-law-meeting-protocol---october-2022.pdf?la=en

Agenda

	Topic
1	Welcome, Housekeeping & Agenda
2	Actions Log
3	IEC May 2024 Consultation Preparation <ul style="list-style-type: none">• Draft IEC meeting slides• MSR• ICFs
4	Unlocking CER benefits through Flexible Trading
5	B2M Update
6	‘What’s on the B2B horizon?’
7	Forward Agenda
8	General Business
Appendix	2024 IEC Meeting Roster, ICF Gates, ERCF ICF Details, B2M Addressing Audit



Actions Log

Blaine Miner (AEMO)

Actions

Action	Topic	Description	Status	Responsible	Comments
080224_01	ICF Register	AEMO to provide the B2B-WG detailed field, field length and enumeration analysis	Open	AEMO	
080224_02	ICF Register	B2B-WG to determined proposed field, field length and enumerations changes for consultation purposes	Open	B2B-WG	
080224_03	ICF Register	Members to raise any ICF B015/24 content issues by Friday 1 March 2024. If no issues are raised, the ICF will be treated as if it has entered Gate 1	Closed	B2B-WG	
080224_04	ICF Register	Dino Ou (Intellihub) to update the current version of B014/23 to take into consideration feedback provided during the B2B-WG meeting	Closed	Dino Ou	Completed.
080224_05	ICF Register	The term 'non-regulated' to be defined in the B2B Procedures	Open	B2B-WG	Proposed definitions sent to members for feedback on Tues 19 March
080224_06	ICF Register	Members to consider Dino's points re RoLR_013 in his email dated 12 Jan 2024	Closed	B2B-WG	
080224_07	Metering Services Review	AEMO to ensure that all MSR-WG members are invited to future B2B MSR related meetings	Closed	AEMO	Completed.
080224_08	Metering Services Review	AEMO to organise for an IEC meeting to occur with the B2B-WG in the week beginning 15 April 2024 to discuss the recommended positions and Change Pack content	Closed	AEMO	Based on advice from Meghan, IEC engagement proposed to occur via circular
080224_09	Metering Services Review	AEMO to confirm if ICF(s) are required to support IEC change processes regarding the AEMC's MSR Rule Change	Closed	AEMO	An ICF is not required under the IEC's B2B Change Process, section 4.2.
080224_10	'What's on the B2B horizon?'	AEMO to circulate the email from Adrian Honey (TasNetworks) re the Energy Charter #BT Life Support Customers Rule Change Feb 2024 Update	Closed	AEMO	Email circulated by Blaine Miner Thursday 8 Feb 2024.
080224_11	General Business	Graeme Ferguson to email additional information associated to the Mobile phone detail quality issues raised by Ausgrid to the B2B-WG	Closed	Graeme Ferguson	Completed.
080224_12	General Business	Members to provide feedback to Graeme Ferguson re the Mobile phone detail quality issues raised by Ausgrid	Closed	B2B-WG	

Notes

- Blaine Miner (AEMO) spoke to the Actions Log slide, noting that actions 080224_01 and 080224_02 would be discussed as part of the 'IEC May 2024 Consultation Preparation' agenda item
- Blaine sent an email to the WG members post the meeting, Tues 19 March 2024, to request feedback regarding the proposed definition of an 'non-regulated' business
 - **Update:** Based on feedback received from members as of Wed 20 March 2024, the preferred wording is:
 - 'A Non-regulated business refers to a business or service undertaken that is not subject to economic oversight by the relevant regulator.'



IEC May 2024 Consultation Preparation

Blaine Miner (AEMO)

B2B v3.9 Consultation

Agenda Item 8

Update on B2B-WG activities

B2B-WG Update Paper

Recommendation

It is recommended that the IEC notes the ongoing work being conducted by the B2B-WG.

B2B-WG

Proposed B2B v3.9 Consultation

Recommended Inclusions:

AEMC Metering Services Review (MSR) Package 1 Topics

Legacy Meter Replacement Plans (LMRP), Defects, 'One-in-all-in'

IEC Issue and Change Forms (ICFs):

B002/22 - B2B & B2M field & field length alignment (IEC endorsed)

B004/22 - Alignment of B2B field lengths to the Australian Standards (IEC endorsed)

B006/22 - PersonName definition clarification (IEC endorsed)

B007/22 - Incorrect FormReference and FormNumber categorisation (**Seeking IEC endorsement**)

B011/23 - Amending the definition of Unknown Load ExceptionCode (IEC endorsed)

B014/23 - Managing in-flight service orders during a RoLR event (**Seeking IEC endorsement**)

AEMC Metering Services Review (MSR)

- The Australian Energy Market Commission (AEMC or Commission) has reviewed the regulatory framework for metering services having regard to previous reforms introducing competition in metering, and the future requirements of metering services in a transitioning energy system.
- The AEMC Final Report has proposed a new regulatory framework to achieve universal penetration of smart meters in the National Electricity Market by 2030.

B2B v3.9 MSR Procedure Consultation Topics

Topic Area	Short Description	Potential Options	Potential B2B Impacts
Legacy Meter Replacement Plans (LMRP)	The Final Report did not define the mechanism of how the DNSP should supply the retailer or metering parties the LMRP.	<ol style="list-style-type: none"> 1. New LMRP MSATS field (B2M) 2. B2B One Way Notifications 3. File exchange (e.g. csv via secure email) 	<ol style="list-style-type: none"> 1. The proposed change is to include a new enumeration to clearly separate LMRP work from other metering work. 2. Amend the MFIN B2B OWN to enable the communication of the LMRP target date 3. B2B OWN Procedures would be updated to reflect the format and content of the .csv files that would be provided by the DNSP including the minimum update frequency
Defects	Site defects are a barrier to the installation of smart meters. The Final Report recommends a new process to implement a customer notification process and record-keeping process.	<ul style="list-style-type: none"> • AEMC Final Report <ul style="list-style-type: none"> • Defect flags and customer notifications in MSATS • MSR-WG simplified process <ul style="list-style-type: none"> • 2 new fields in MSATS (Defect Type and Originating MC) 	<ul style="list-style-type: none"> • A notification from the retailer to the metering coordinator of sites that have had defect remediation. • Changes to outline the type of defect as part of the unable to complete reason (UTC) from the Metering Provider to the Retailer.

B2B v3.9 MSR Procedure Consultation Topics

Topic Area	Short Description	Potential Options	Potential B2B Impacts
One-in-all-in	Shared fuse installations are sites where there is an isolation point for more than one NMI, typically found in multi-occupancy dwellings. The Final Report recommends a new regulatory process, which is a 'one-in-all-in' approach to replace legacy meters.	<ul style="list-style-type: none"> AEMC Final Report 	<ul style="list-style-type: none"> A New Supply Service Works (SSW) Service Order subtype or new Miscellaneous Service Order relating to Temporary Isolation-Group Supply (TIGS) scoping; Changes to the Meter Fault and Issue Notification (MFIN); New type of SSW TIGS which includes a common job number from the DNSP to the Retailers; Modifications to Metering Service Work (MSW) – new Reg classification to indicate job is part of a one-in-all-in, common job number for isolation and other relevant isolation details May require new B2B OWN depending on requirements for managing Defects found at multi-occ sites.
Transactional Changes	Additional enumerations supporting various options		<ul style="list-style-type: none"> 2 new Regulatory Classifications of 'LMRP' and 'One-in-all-in' in the B2B Service Order Process (Table 13 – Transaction Data) A new Field for 'TIGS ID' in the Meter Fault and Issue Notification (MFIN) A new Reason Code of 'Temporary Isolation – One In All In' Additional Service Order Completion Codes to allow for clarity of processes to respond to 'Not Completed' or 'Partially Completed' Service Orders Descriptions against each ExceptionCode enumeration to describe the common scenario and usage of that exception code

Previously Endorsed IEC Issue and Change Forms

ICF	Short Description	Proposed B2B Changes
B002/22 - B2B & B2M field & field length alignment	Unwanted inconsistent fields and field lengths have been identified between the Business-to-Market (B2M) and the Business-to-Business (B2B) schemas. Due to these inconsistencies, information may not be shared, or may be truncated.	Recommended field, field length and enumeration changes TBC by the end of March 2024
B004/22 - Alignment of B2B field lengths to the Australian Standards	The Business to Business (B2B) Technical Specification references the 1999 version of the Australian Standard (AS) for Interchange of Client Information (AS 4590). However, the gas and electricity schemas per se only reference the Australian Standard, assuming the latest version is in use.	Recommended field, field length and enumeration changes TBC by the end of March 2024
B006/22 - PersonName definition clarification	<p>There are currently perceived contradictions associated to the PERSONNAME definition in the B2B Technical Delivery Specification Procedure.</p> <p>The first paragraph allows for the field to be Blank, and the second paragraph provides the condition for an empty string to be populated.</p>	B2B Technical Delivery Specification Procedure to be amended to clarify that the field cannot be 'Blank'.
B011/23 - Amending the definition of Unknown Load ExceptionCode	The current definition of 'Unknown Load Exception Code' places conditional criteria such as, the customer is not present, which is irrelevant for remote re-energisations and hence restricts its usage.	<p>The definition of Unknown Load to:</p> <ul style="list-style-type: none"> • Be more generic so that it can be utilised in all instances where load is detected, and safety protocols will not enable the site to be re-energised. • Communicate that there was an attempt to energise

Recommended IEC Issue and Change Forms

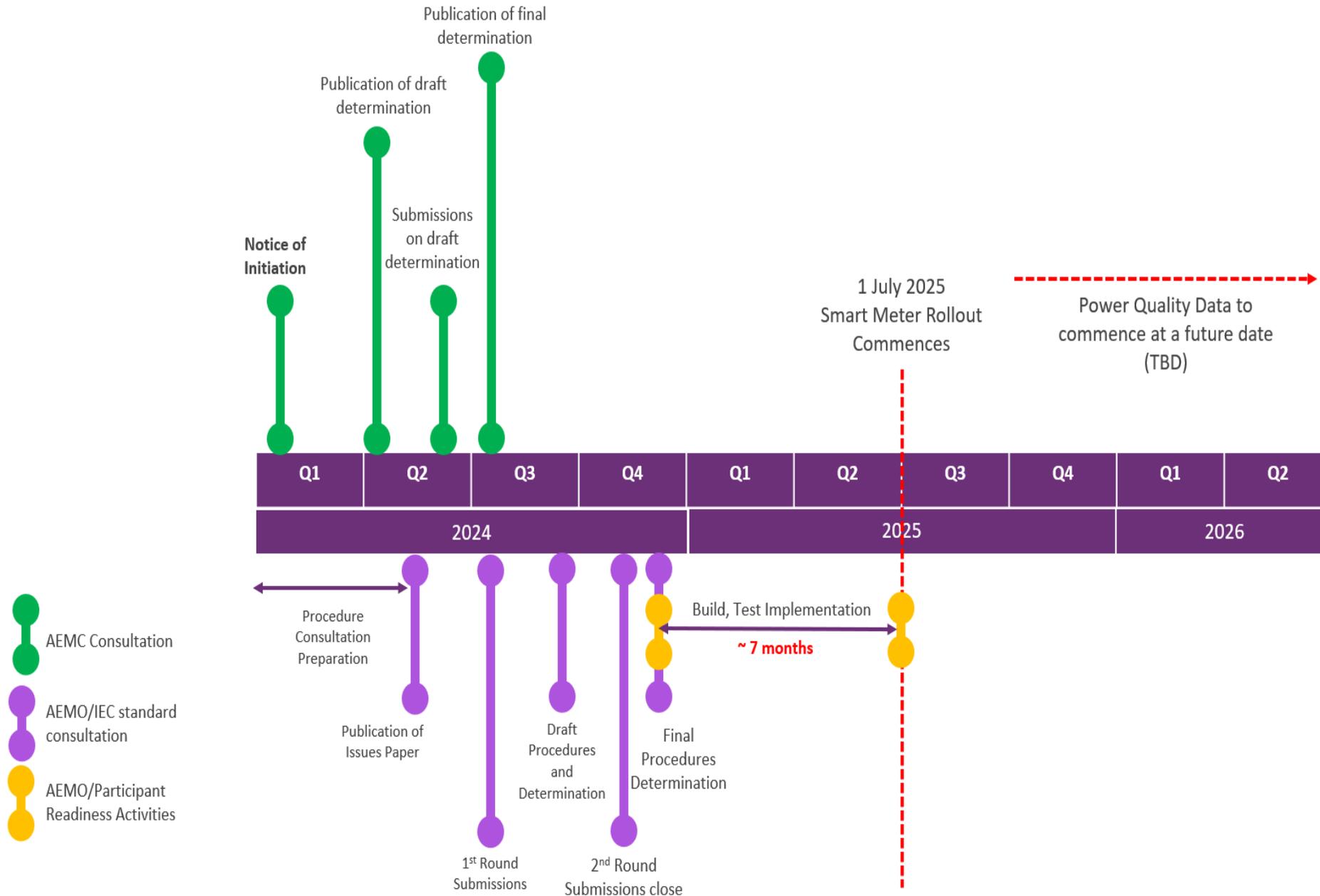
ICF	Short Description	Proposed B2B Changes
B007/22 - Incorrect FormReference and FormNumber categorisation	The Transaction Table (Table 13) in the B2B Service Order Process shows that a Safety Certificate may be Required (Category R) for re-energisation but for other paperwork shows that the form reference and form number is flagged as Not Required (Category N) for a re-energisation.	Form Reference and Form Number categorisation be changed from 'Not Required' (N) to 'Not Required / Required' (N/R) in the Transaction Table (table 13) of the B2B Service Order Procedure for a 'Reenergisation' service order.
B014/23 - Managing in-flight service orders during a RoLR event	An agreed and clearly defined industry process for managing inflight service orders when a ROLR event is declared.	Add a new section, and associated amendments, to Part B of the NEM ROLR Processes Procedure to define the agreed industry process.

Indicative AEMC and IEC Consultation Timings

(as of 14 March 2024)

Consultation steps	Indicative Dates	Business Day Allowance
AEMC Rule Consultation Initiation	Thursday, 14 March 2024	
AEMC Draft Rule Determination	Thursday, 4 April 2024	
IEC Procedure Consultation Initial Notice	Wednesday, 29 May 2024	
AEMC Draft Rule Determination Submissions Close	Thursday, 30 May 2024	
AEMC Final Rule Determination	Thursday, 11 July 2024	
IEC First Stage Submissions Close	Thursday, 11 July 2024	30
IEC Draft Determination	Thursday, 12 September 2024	45
IEC Draft Determination Submissions Close	Friday, 11 October 2024	20
IEC Final Determination	Friday, 22 November 2024	30

Indicative Metering Services Review Timeline



Indicative Consultation Milestone Timings

(as of 14 March 2024)

Task	Responsibility	Support	Dependencies	Indicative End Date
Present Information Paper to the IEC	Graeme Ferguson	B2B-WG/ AEMO		Tuesday, 19 March 2024
MSR-WG	MSR-WG	AEMO	AEMC Draft Determination and Rule	Tues/Wed, 23-24 April 2024
Circulate final recommendations to the IEC	B2B-WG	AEMO	AEMC Draft Determination and Rule	Friday, 26 April 2024
Receive IEC feedback	IEC	IEC Secretariat	B2B-WG recommendations	Wednesday, 1 May 2024
Prepare Consultation documents				
Prepare Issues Paper	AEMO	B2B-WG	IEC endorsed positions	Friday, 3 May 2024
Prepare Track change procedures	B2B-WG		IEC endorsed positions	Friday, 3 May 2024
Prepare Notice of First Stage Consultation	AEMO		IEC endorsed positions	Friday, 3 May 2024
Prepare Response Tables	AEMO		IEC endorsed positions	Friday, 3 May 2024
Review Consultation documents				
B2B-WG	B2B-WG	AEMO	Draft Change Pack	Friday, 10 May 2024
AEMO and Legal	AEMO	B2B-WG	B2B-WG reviewed Change Pack	Friday, 17 May 2024
Approve Consultation documents	IEC	B2B-WG	Completed Change Pack	Friday, 24 May 2024
Publish Consultation documents	AEMO		IEC approved Change Pack	Wednesday, 29 May 2024
Send out Stakeholder Notices	AEMO		IEC approved Change Pack	Wednesday, 29 May 2024

Next Steps

- B2B-WG to assess the AEMC MSR Draft Determination and Rule once published
- MSR-WG face-to-face meeting scheduled for 23-24 April 2024 in Melbourne
- B2B-WG to circulate its consultation recommendations to the IEC via circular by Friday, 26 April 2024
- IEC feedback received by Wednesday, 1 May 2024
- B2B-WG to complete the required Change Pack, and circulate to the IEC for approval, by Friday, 17 May 2024
- IEC to approve the proposed Change Pack for publishing by Friday, 24 May 2024
- AEMO to publish the Change Pack by Wednesday, 29 May 2024



Metering Services Review

Justin Stute (AEMO)

Actions

- Assessors
 - Assessors to consider feedback provided by the WG regarding their topic areas and circulate updated assessments by COB next Thursday 14 March 2024, using the templates provided
 - Should an assessor(s) recommend that a new OWN transaction should be created e.g. to support Defects or LMRP option 3 processes, the provision of an initial cost/benefit analysis should also be provided
- Working Group
 - Updated assessments to be reviewed by WG members, and feedback provided, prior to and/or during the virtual meeting scheduled for Wed 20 March
 - WG members to provide feedback regarding the proposed B2M Defect Type enumerations specified on slides 24 and 25 (refer attached)
 - Feedback should consider:
 - The proposed guidelines and exclusions on slide 24
 - If the proposed Defect Type field should only be used to support the accelerated smart meter rollout or if it should be used to support Industry on an ongoing basis e.g. defects associated to existing smart meters
 - The proposed enumerated values, including description and Jurisdiction application
 - Industry issues
 - Proponents to consider if existing Industry issues should be raised via a formal ICF e.g. issues regarding CSDNs etc.

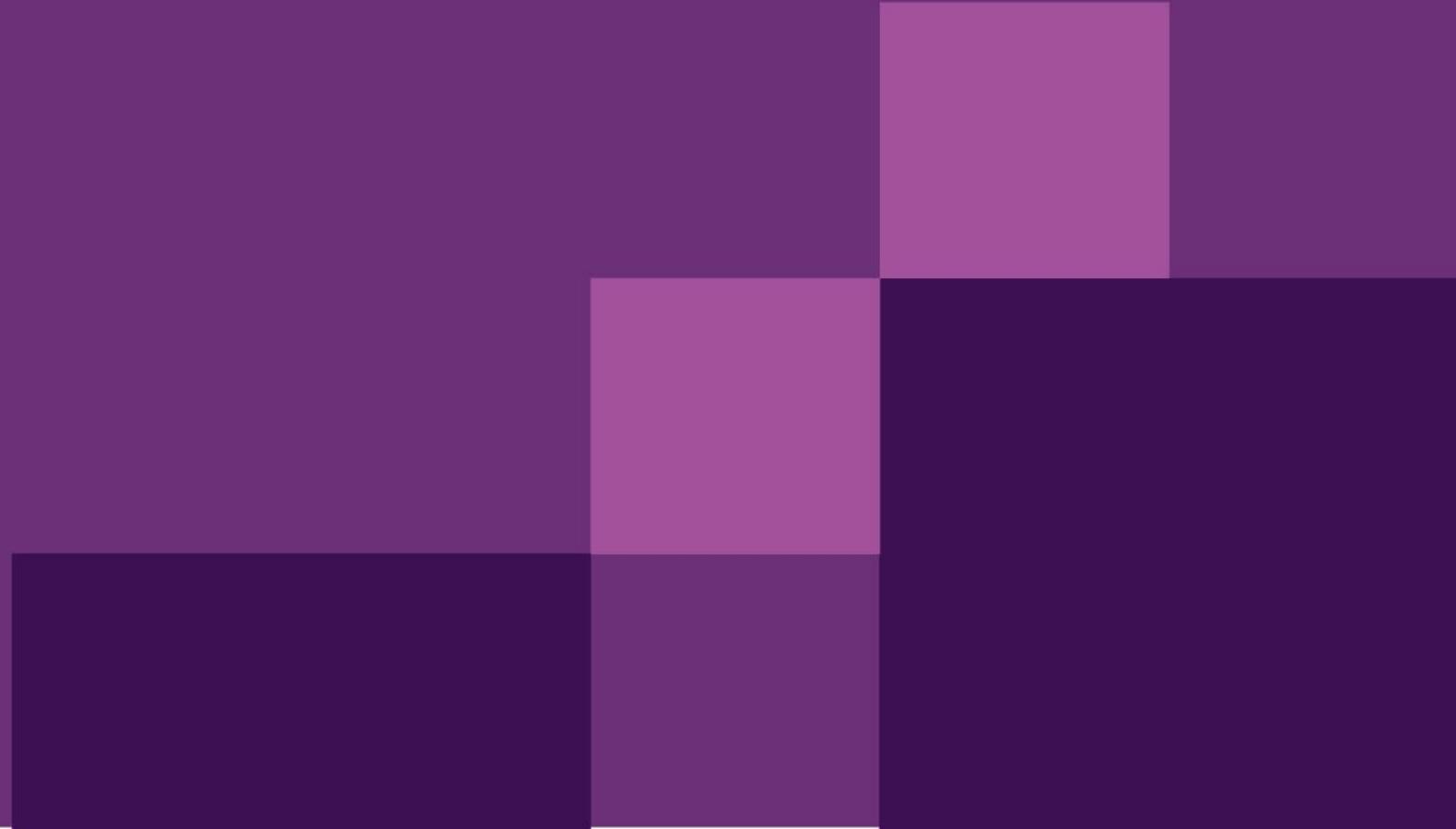
Upcoming meetings/placeholders

- Virtual Workshops
 - Wed 20 March
 - Wed 27 March
 - Thurs 4 April



ICFs

Blaine Miner (AEMO)



ICF Summary

Gates	# of ICFs	ICF Titles
0 – ICF Preparation	3	B005/22 - Clarification of UMS Data in Inventory Table B009/23 - UMS Inventory OWN B015/23 - B2B Stop to mirror B2M functionality
1 - B2B WG Initial Assessment	1	B010/23 - Extreme Weather Event
2 - B2B WG Detailed Assessment	2	B007/22 - Discrepancy between B2B SO Process and B2B Guide (V3.7) B014/23 - Managing in-flight service orders during a RoLR event
3 - IEC Initial Assessment	0	
4 - IEC Change Pack creation	4	B002/22 - Alignment of B2B field lengths to B2M Procedures/schema B004/22 - B2B/B2M field lengths – Address elements B006/22 - PERSONNAME definition spec correction B011/23 - Definition of Unknown Load Exception Code
5 - Formal Consultation	0	

B002/22 - Alignment of B2B field lengths to B2M Procedures/schema

B004/22 - B2B/B2M field lengths – Address elements

B2B Document	Change Types	Fields Affected	Comments
CSDN Process	Removal of AS references	DeliveryPointIdentifier	Section 5.2
Service Order Process	No changes required		Only reference to AS, Maximum demand (in kW) in accordance with Australian Standard AS3000
Meter Data Process	No changes required		No references to Australian Standards
OWN Process	No changes required		Only reference to AS, Meter Family Failure (Used when a meter family has been determined to no longer meet rule requirements/Australian Standards and must be replaced.)
Technical Delivery Specification	Removal of AS references	Several	Refer to Sheet 1 for details (29 references in total to AS4590)
	Change in field lengths	Building or Property Name Location Description House Number Street Name	- 'Address Site Name' and has a field length of 50 (not 30) - Field length now 50 (not 30) - Field length now 6 (not 5) - Field length now 45 (not 30)
	Update to enumerations	Flat or Unit Type Floor or Level Type Site Address State Person Name Type (Telephone) Number	Refer to Sheet 1 for details
	New field replacing existing fields	Post Delivery Number Prefix Post Post Delivery Number Suffix Delivery Number Value Locality Site Address State	- Now defined as Postal Delivery Number – length 11 – 3 alpha, 5 numeric, 3 alpha - Now defined as Road Suffix Code
	Update Field Format	House Number	VARCHAR not Numeric, may include an alphabetic prefix and suffix - eg A1234 or 1234A
	Field Removed	House Number Suffix	No longer used by AS4590

B2M Discrepancies

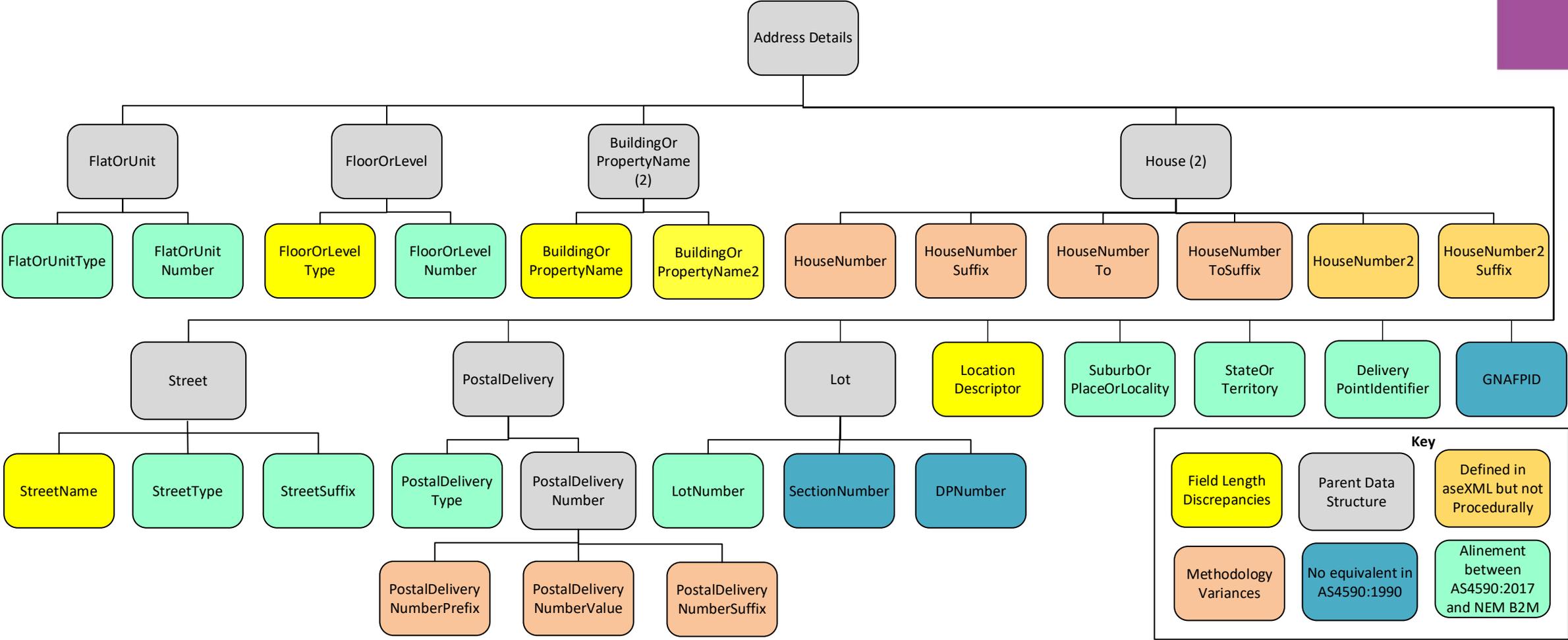


Diagram 5 NEM B2M address – Field Length Discrepancies

Notes

- Blaine Miner (AEMO) spoke to the B2B v3.9 Consultation slides
- Blaine provided updated IEC 'B2B-WG Update' slides to the B2B-WG post the meeting on Thurs 14 March 2024, based on feedback provided during this meeting, for their final feedback
 - Final slides (excluding formatting) have been inserted into these notes, slides 9-19
- Helen Vassos (PlusES) suggested that a stakeholder workshop should be considered post the publishing of the Initial Stage consultation documents
- **Action:**
 - AEMO to send out a placeholder regarding a more holistic B2M and B2B May 2024 consultation workshop
 - Members suggested a 4hr virtual meeting would be most appropriate
 - Indicative timing: Early June (Thurs or Friday 6 or 7 June?), noting that submissions due date to the AEMC Draft is 30 May 2024, depending on IEC feedback and Industry Calendar availability
 - Potential approach: By topic area instead of B2M vs B2B consultations. Each topic area would however consider B2M and B2B proposals as part of the workshop and attempt to demonstrate, where appropriate, as-is vs future state processes
- Note, clause 7.17.4(j) of the NER states:
 - The Information Exchange Committee must comply with the Rules consultation procedures in relation to the B2B Proposal, and in doing so must consult with B2B Parties, relevant B2B Change Parties, AEMO and such other persons who identify themselves to the Information Exchange Committee as interested in the B2B Procedures. The Information Exchange Committee must include, with the first document it publishes under the Rules consultation procedures, a copy of the **B2B Procedures Change Pack**.
 - The B2B Procedures Change Pack, a document consisting of:
 - (c) 'draft B2B Procedures (incorporating proposed changes in mark up, where appropriate)

Notes

- The following ICFs have been endorsed by the IEC for change pack inclusion
 - B002/22 - Alignment of B2B field lengths to B2M Procedures/schema
 - B004/22 - B2B/B2M field lengths – Address elements
 - B006/22 - PERSONNAME definition spec correction
 - B007/22 - Discrepancy between B2B SO Process and B2B Guide (V3.7) (Endorsed by the IEC at its meeting on 19 March 2024)
 - B011/23 - Definition of Unknown Load Exception Code
 - B014/23 - Managing in-flight service orders during a RoLR event (Endorsed by the IEC at its meeting on 19 March 2024)
- B002/22 and B004/22 requires further consideration in determining the specific change proposal for the Initial Stage of the IEC consultation
 - AEMO will be circulating a combined view of the identified misalignments, on the B2B and B2M side with AS4590, shortly for final feedback
 - Proposed changes to the Electricity market will be provided to the GRCF for its consideration and feedback
 - The proposed transition to an ‘Energy Standards’ will be further considered during 2024
 - The Energy Standards is expected to:
 - Specify the existing field, field lengths and enumerations supporting the Electricity (B2M and B2B) and Gas markets
 - Specify the governance, external triggers (e.g. ‘mandatory’ changes to the Australian Standards) and the change process supporting the Energy Standards
 - Ideally the Energy Standards document will be established and effective in the Electricity market, through formal consultation, from May 2025

Unlocking CER benefits through Flexible Trading

The following slides contain excerpts from the AEMC's Draft rule determination - Market Commission Unlocking CER Benefits rule change 29 February 2024.

They are being provided to stimulate consideration by the B2B-WG in identifying potential B2B Procedural impacts only.

Key Timings

Table 1: Timetable for the rule change and points of stakeholder consultation

Stage	Timeline
Commission publishes Draft Determination and more preferable draft rules	29 February 2024
Stakeholder submissions due	11 April 2024
Stakeholder consultation	March - April 2024
Commission publishes Final Determination and more preferable final rules	July 2024
Proposed implementation date for the rules	2 February 2026

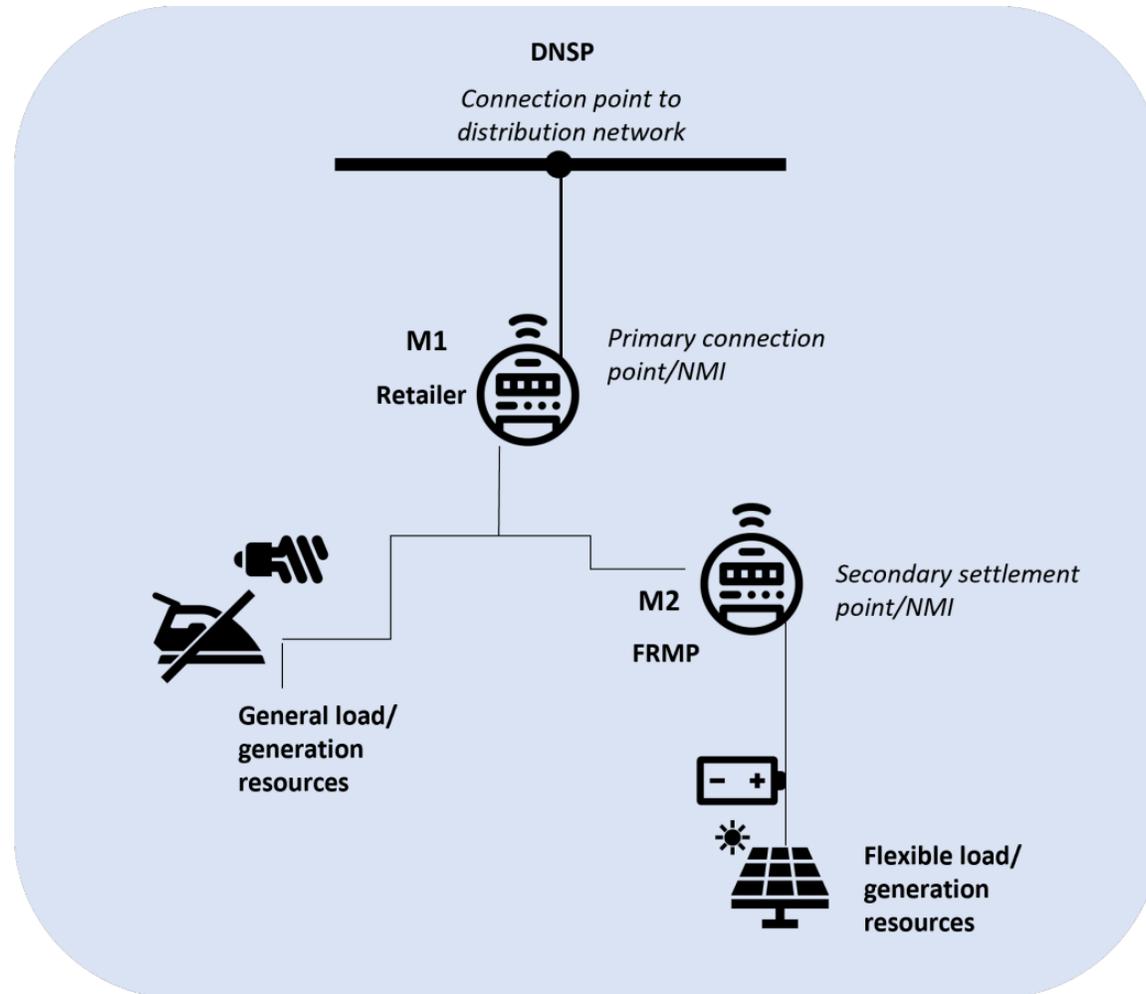
AEMO is proposing to present a High-Level Implementation Design in April 2024

Key features of the proposed framework

- The proposed framework for flexible trading would enable large customers to establish secondary settlement points and engage multiple energy service providers to manage flexible resources at these points. The key features of this framework are:
 - It would be voluntary.
 - It would enable a large customer to establish secondary settlement points and engage multiple FRMPs at their premises (s3.2.1).
 - The relationship between FRMPs would be governed by existing regulatory arrangements and contractual arrangements (s3.2.2).
 - DNSPs would be responsible for establishing and maintaining secondary NMIs (s 3.3.1)
 - It would leverage existing subtractive settlement arrangements to minimise implementation costs (s 3.4.1), and
 - Distribution network tariffs would be levied to the primary FRMP (s 3.3.3).

Key features of the proposed framework

Figure 3.1: Flexible trading with multiple energy service providers at large customer premises



Source: AEMC

Minimal eligibility requirements

- The draft rules provide the following eligibility requirements that would apply for large customers to establish secondary NMIs and have multiple FRMPs. For a customer to have secondary NMIs:
 - **There must be only one customer at the connection point.** This differs from the embedded network framework, where several customers may be connected to child connection points behind a single parent connection point. A business customer with several connection points may choose to aggregate their load across the different connection points to meet the threshold of a large customer in order to participate in flexible trading. That is, a business customer who meets the threshold could then engage multiple energy service providers and establish secondary settlement points(s) at these connection points.
 - **The secondary NMI needs to be established downstream of a transmission or distribution network connection point.** These requirements would be provided as amendments to chapters 2, 7 and 10 of the NER (see draft rules Ch 2 (2.3.4), Ch 7 (7.2.6), and Ch 10- definitions of market connection point, secondary settlement point). For a large customer to engage multiple FRMPs at one premises:
 - **The customer must meet the definition of a large customer as per the NERL or jurisdictional legislation.** Under the NERL, a larger customer is a business customer that consumes above the upper consumption thresholds defined in the NERL regulation as 100MWh per year. [NERL section 5(3) and National Energy Retail Regulations section 7 (b)].
 - **The possibility of a large customer falling below the consumption threshold for a large customer (as to become a small customer) would be managed through a new clause 2.3.2 in the NER.**
 - **The secondary FRMP must be registered as a Customer or an Integrated Resource Provider (in its capacity as a Market Customer or an SGA and must classify the secondary settlement point as one of its market connection points.⁵⁵**
- These requirements would be provided as amendments to chapters 2 and 10 of the NER (see draft rules, Chapter 2 - s2.1B.1, s2.1B.2, 2.2.2, 2.2.8, 2.3.2; Chapter 10 - definitions for scheduled generating unit, scheduled bidirectional unit or scheduled network service). Existing roles and responsibilities of FRMPs provided in the NER and NERR would apply to secondary FRMPs. For example, the requirement for FRMPs to obtain retailer authorisation would apply to secondary FRMPs (e.g. where secondary FRMPs are on-selling energy to the customer).

Disconnection for non-payment

- If the primary retailer disconnects, existing arrangements for large customer disconnections would apply.
- In a scenario where there is a second settlement point behind the primary connection point and the primary connection point is disconnected, the customer would also lose supply at the secondary NMI and de-energisation would occur at both points.
- Similarly, the existing approach to re-energisation would apply, in that **each retailer must apply for re-energisation** (that is, the secondary settlement point would not automatically be re-energised when the primary connection point is re-energised). As noted above, obligations to notify about disconnection could be included in contractual arrangements between the customer and FRMPs.
- **For the purposes of settlement, AEMO metrology procedures would specify that when metering data providers (MDPs) ‘flag’ to AEMO when there is a disconnection or network outage at the connection point, AEMO can then use that flag when processing the metering data for the secondary settlement points (and revert the value to zero).** This will then flow through to existing arrangements for settlement under Chapter 3 of the NER. The Commission considers that retailers at primary connection points and the customer (and therefore secondary FRMP) would be able to agree terms relating to the treatment of any energy flows at times of a supply outage on the network without the assistance of additional market processes. This approach acknowledges that large customers have unique arrangements and complex contractual arrangements governing matters with and between their retailers. These requirements would be provided as amendments to Div 5 of the NERR (s104, 106A, s111, s113, 116, 119).

Assets and Secondary NMI Establishment

- 3.2.3 Switching of assets across FRMPs
- The Commission notes that there are risks to primary retailers posed by switching of resources between the primary and secondary NMIs. Switching could undermine the hedging positions of retailers and, thereby, their ability to offer customers hedged products. We also note some jurisdictions impose restrictions on switching between points in service installation rules, and that customers and FRMPs will take these rules into account when choosing arrangements that best suit their business model. Given this, **the Commission considers that the choice to switch and any risks posed by customer switching could be managed by contractual arrangements between the customer and FRMPs, and we do not propose to regulate this activity in the NER.**
- 3.3.1 DNSPs would be responsible for establishing and maintaining secondary NMIs
- The Commission has determined that **the role of establishing and maintaining NMIs should sit with the DNSPs**, consistent with arrangements for establishing and maintaining NMIs at the primary connection point. The Commission's draft rule provides that these responsibilities and processes would extend to secondary settlement points. These responsibilities include:
 - creating a NMI for a secondary settlement point at small customer premises (at the request of the customer or the customer's retailer)
 - linking the NMI at the secondary settlement point to the NMI at the primary connection point (that identifies the main metering installation at the premises), and
 - maintaining NMI standing data at secondary settlement points.

Settlement and metering arrangements

- 3.4.1 Settlement and metering arrangements
- The draft rules provide that **subtractive settlement arrangements would apply between the primary connection point and secondary settlement point(s) at large customer premises**. This would minimise the need for upgrade to systems currently used by market participants and AEMO.
- This approach also **reflects well-established arrangements used by market participants under the embedded network framework**, thereby reducing transaction and system change costs. **DNISP billing would remain unaffected by the approach in the draft rules**, as they would continue to bill the retailer at the primary connection point based on total usage at the premises.
- These arrangements would be provided for in amendments to AEMO procedures. The Commission notes that we considered alternative approaches and **do not propose to introduce other metering arrangements for settlement, such as multi-element or parallel metering**.
- New meter type 9 could be used at primary connection point and secondary settlement point at large customer premises
- The draft rules provide that **large customers could use the new meter type 9 at the primary connection point and secondary settlement point**. This would enable large customers to use technology with in-built measurement capability at these points, such as EV chargers. The main benefits for large customers associated with this change would be reduced metering costs (it would avoid the need to install a separate meter alongside the technology). **Customers could still choose to use a type 4 meter at these points if they prefer**. The arrangements for the proposed meter type 9 are described in detail at Chapter five.

Arrangements when the secondary NMI becomes inactive

- **The draft rules and AEMO procedures would determine arrangements for when secondary NMIs become inactive.** Where appropriate, these leverage existing arrangements used under the embedded network framework.
- **Secondary FRMPs could choose to cease being a FRMP by declaring the NMI to be inactive** AEMO procedures would provide that where a secondary FRMP chooses to cease being a FRMP by declaring the NMI to be inactive, the inactive NMI would automatically revert to the primary.
- **As per existing arrangements for inactive NMIs, data would still be collected and all metering roles would stay in place, but would not be “turned on.”** If the customer doesn’t use the secondary settlement point/NMI, the roles remains inactive. If the customer opts back in, the metering roles become active again. This approach is well understood and used under the embedded network framework. These requirements would be provided in AEMO procedures and in amendments to Chapter 2 of the NER (see draft rules, Ch 2- s2.10.1) and in AEMO procedures.
- **Onus on the second FRMP to deactivate NMI where a large customer changes status to a small customer**
- Some stakeholders noted that there are situations where large customers fall below the threshold for this status and need to be classified as small customers. If the large customer was using the draft framework for flexible trading and **its status changed to a small customer**, the draft rules and AEMO procedures would provide that **the onus is on the secondary FRMP to deactivate the NMI at the secondary settlement point**. This approach would reduce burden on AEMO and metering service providers and allocate the responsibility to the party with an existing contractual relationship with the customer. These requirements would be provided as amendments to chapter 2 of the NER (see draft rules, Ch 2- s2.3.2) and in AEMO procedures.

AEMC Implementation considerations

- 3.5 Implementation considerations
- As noted throughout this chapter, a range of changes will be required to implement the framework in the draft rules. Key changes required to implement this draft framework include:
 - Updates to AEMO's MSATS system, primarily related to the proposed secondary NMIs.
 - Changes to retailer billing systems to account for the existence of secondary settlement points.
 - Updates to DNSP systems to enable establishment and maintenance of secondary NMIs.
 - Updates to AEMO procedures, primarily MSATS Procedures, Metrology Procedures, and Service Level Procedures*, and
 - Updates to AER guidelines related to embedded network arrangements, including the Network Exemption Guidelines and Retail Exemption Guidelines.
- See further information about implementation considerations at Chapter seven. The costs associated with changes that would have the greatest impact are detailed in Chapter six and in Energeia's draft report.

*Indicative assessment is a substantial impact to Retail and Metering procedures

Subtractive settlement arrangements

- Subtractive settlement arrangements would apply
- As with large customer premises with secondary settlement points (Section 3.3), subtractive settlement arrangements would apply between the primary connection point and secondary settlement point(s) at small customer premises.
- The Commission considers that this approach would minimise the need for upgrades to systems currently used by market participants and AEMO. This approach also reflects well-established arrangements used by market participants under the embedded network framework, thereby reducing transaction and system change costs. These arrangements would be provided for in amendments to AEMO procedures.

Technical arrangements for Small Customers

- 4.2.3 Technical arrangements for secondary settlement points - **secondary metering arrangements for small customers**
- **New meter type 8 would be able to be used at the secondary settlement point**
- The draft rules provide that the new meter type (type 8, described in detail in Chapter five) could be used at secondary settlement points at small customer premises. **This would enable small customers to use technology with in-built measurement capability at secondary settlement points**, such as behind the meter batteries or EV chargers.
- As indicated in Section 5.2.3, type 8 meters would need to obtain pattern approval from the National Measurement Institute to give industry and consumers alike confidence in the meter accuracy. However, to introduce flexibility for these metering arrangements and lower metering costs, the draft rules would require AEMO procedures to set out the meter specifications and minimum service specifications for type 8 meters (instead of having the NER define those specifications).
- By reducing metering costs associated with the CER device, the Commission considers that this will make it easier for small customers to use their CER flexibly and access new value streams. These benefits are described in more detail at Section 6.2.2. These arrangements would be provided for in amendments to NER Chapter 7 for the purpose of creating a new meter type and specifying which meter type can be used for second settlement points (see Appendix E - Summary of draft rules, E.3.6).

Market Arrangements

- **The Commission has determined to introduce two meter types in the NER** as shown in Figure 5.1 to accommodate differences in accuracy (as outlined below in Section 5.2.3) and type 8 and type 9 meters can be used in more circumstances than the proposed MEFM.¹²⁴ These arrangements would be provided for in amendments to Chapter 7 of the NER. Figure 5.1 shows that:
- **Type 8 meters would have the following characteristics:**
 - Permitted for use at second settlement points in small customer premises e.g. EV charger at a second settlement point.
 - In-built measurement devices and external measurement devices would be considered a meter for the purposes of this meter type (if they meet requirements set out in the NER, including pattern approval by the National Measurement Institute).
 - Accuracy limit of plus or minus 2 percent.
 - Volume limit of 750 MWh¹²⁵ per annum at the connection point (to use their in-built functions for measuring energy flow, data storage, remote communications, and time as metered data for settlement in MSATS).

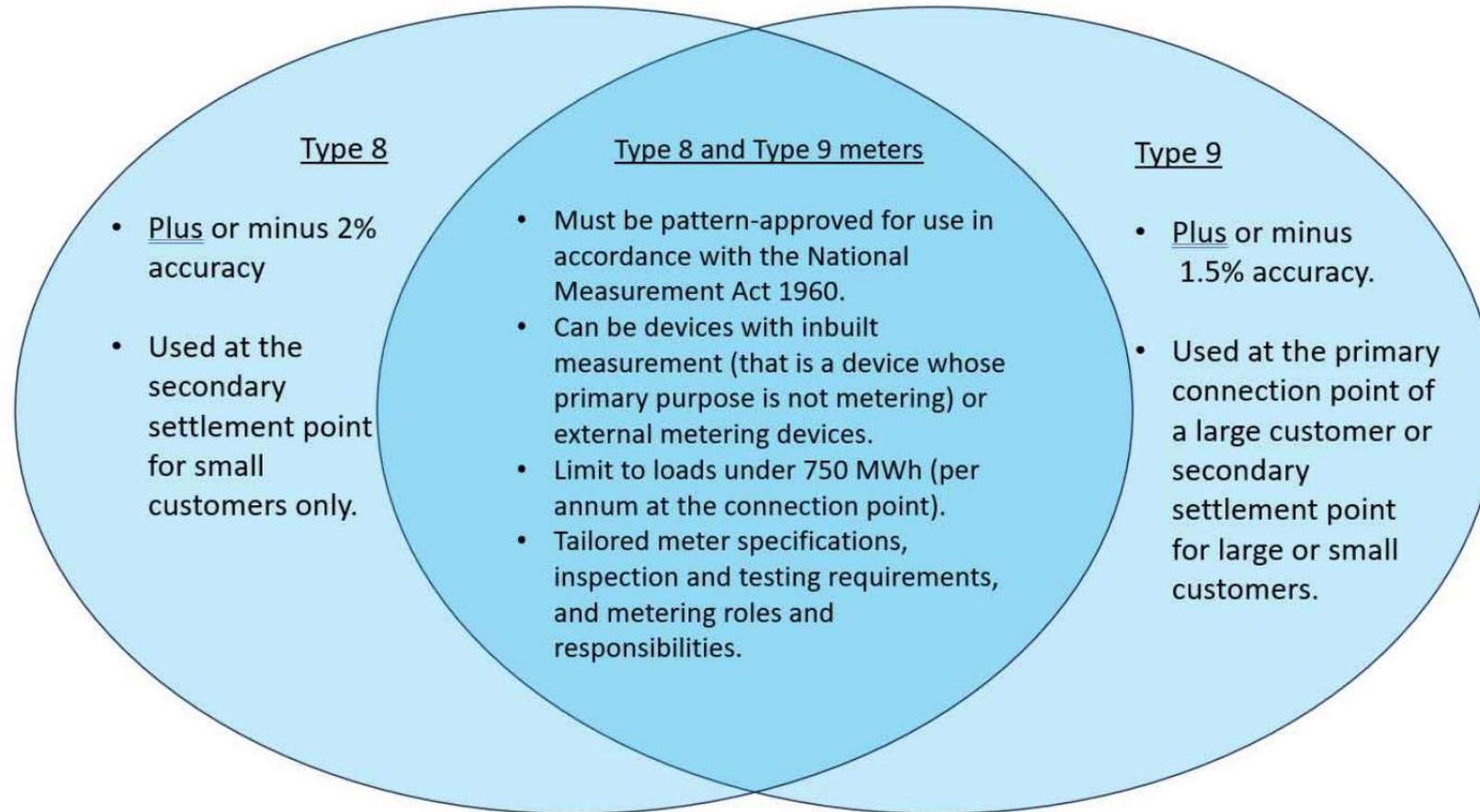
Market Arrangements

- **Type 9 meters would have the following characteristics:**

- Permitted for primary connection points other than at small customer premises (e.g. public lighting, street furniture and kerbside charging) and large customer secondary settlement points.
- In-built measurement devices and external measurement devices would be considered a meter for the purposes of this meter type (if they meet requirements set out in the NER, including pattern approval by the National Measurement Institute).
- For example, meters may be used for flows that are not considered ‘minor,’ such as NBN cabinets and EV chargers. 125 This is consistent with the annual volume limit for a Type 4 meter. 126 We note that some stakeholders suggested that other small loads such as parking sensors and CCTV cameras could be included in the new metering arrangements. The Commission notes that devices that meet the meter specifications, are pattern approved and function in accordance with Chapter 7 could indeed be considered a type 9 meter for settlement purposes. 40 0 Australian Energy Draft rule determination Market Commission Unlocking CER Benefits rule change 29 February 2024
- Accuracy limit of plus or minus 1.5 percent.
- Volume limit of 750MWh per annum at the connection point (to use their in-built functions for measuring energy flow, data storage, remote communications, and time as metered data for settlement in MSATS).

Market Arrangements

Figure 5.1: Type 8 and Type 9 similarities



Source: AEMC

Market functionality (roles and responsibilities)

- 5.2.2 Market functionality (roles and responsibilities)
- **The draft rule proposes changes to the accreditation requirements for MPs and MDPs.** In its rule change request, AEMO proposed establishing new accreditation categories for MPs and MDPs for the provision of services within private metering arrangements and minor energy flow metering installations. This included providing a mechanism for the MP to enable the assessment and application of an equivalently accessible display as contemplated by NER clause 7.8.2(a). AEMO also stated that DNSPs should not be excluded from acting in the role of MC, MDP and MP for street furniture minor energy flow metering installations given these assets are often maintained by DNSPs and housed within DNSP infrastructure. During consultation, stakeholders noted the following:
 - Many MPs sub-contract other parties for the installation of meters.
 - Some electric vehicle supply equipment installers have relationships with providers of MP and MDP services, but few of them are accredited to provide this service themselves.
 - The MP role is important to ensure that meters are installed correctly and that data is being transmitted to AEMO appropriately.
 - The MC has the ultimate responsibility for the metering installation, including inspection and testing.
- However, the MC may not have the same skills and expertise that an MP has.
 - MDPs have their own systems which may not operate with the new in-built measurement technology.
 - Requiring an MP to oversee the installation of lights with measurement capability may not be necessary given the measurement technology is in-built and can be monitored remotely through a Central Management System (CMS).
 - The cost of metering services, including having an MDP and MP, may be more than initial meter installation costs and could impact the cost benefits of measuring energy flows in street lights.

Market functionality (roles and responsibilities)

- Minor changes to the MP responsibilities
- The draft rule includes amendments to NER clauses 7.3.2 and S7.2.2(a) to reflect that customers may provide type 8 metering installations such as EV chargers themselves (including legacy devices), in which case the Metering Provider will be responsible for commissioning and maintaining the installation, but not providing or installing it.

7.8.1 Metering installation requirements

- (d) Installation of a type 8 metering installation for a secondary settlement point may be carried out by any person qualified under applicable law to install the relevant metering installation.
- (e) The Metering Coordinator at a connection point must ensure that there is not a type 8 metering installation at the connection point unless it is a secondary settlement point within the premises of a small customer.

Contestability for type 8 and type 9 meters

- The MC, MDP, and MP roles are contestable for type 8 and type 9 meters
- The draft rule provides for type 8 and type 9 meters to have some different arrangements for metering roles and responsibilities compared to other meter types (notably when compared to Type 4 or Type 7). Under Type 7 or non-contested unmetered loads, DNSPs act as the MC and undertake calculations to determine the electricity usage for settlement purposes. As noted, a number of submissions supporting the MC role being contestable, noting that many stakeholders agreed it may be most practical for DNSPs to do the role. Energy Queensland Limited noted that it is “important for DNSPs to have the option to perform the MC, MP, MDP functions, but we would not support a mandatory obligation to do so.” Some DNSPs noted that they are trying to move away from providing metering services and as such, allowing other providers to function in the MC role may assist in circumstances where the DNSP does not wish to take on the MC role for Type 9 meters (notably for street lights). Based on stakeholder feedback and the Commission’s assessment criteria, the Commission has determined to make the MP, MC, and MDP roles contestable for type 8 and type 9 metering installations (including smart street lighting). **DNSPs could offer this service through their ringfenced contestable service provider.** This approach would enable street lighting customers, namely councils, to benefit from the new meter type without the DNSP needing to provide MC services. Where DNSPs wish to serve in the role of MC for type 9 metering installation (notably street lights) the Commission is advised that DNSPs can apply to the AER for a ring-fencing exemption.

Contestability for type 8 and type 9 meters

- **The draft rule proposes that the responsibility for setting metering specifications, inspection and testing requirements (under an asset management plan), and procedures for meter installation and maintenance is placed with AEMO.** The draft rule, however, includes a minimum standard for type 8 and type 9 meters, including for these meters to be pattern-approved. Likewise, requirements for electronic data transfer facilities and facilities for storing interval energy data under clause 7.8.2 of the NER have been extended to type 8 and type 9 meters in the draft rule. The draft rule would require AEMO to set out the minimum service specifications in their procedures for type 8 and type 9 meters. AEMO must have regard to the principle that a service provided by a type 8 or 9 metering installation must:
 - comply with any applicable requirements of the NMA
 - provide for the recording of sufficient historical data consistent with current requirements of the NER
 - provide for the remote retrieval of metering data
 - provide for interval energy data to be prepared and recorded in intervals which correspond to a trading interval.
- The Commission expects AEMO will also take into account international standards, consumer and manufacturer cost impacts, and flexibility for the inclusion of new and emerging technologies. We anticipate this approach will make it easier for minimum service specifications to respond to advancements in measurement capability in technology over time. Furthermore, this allows for further consultation with original equipment

Alternative inspection and testing requirements

- AEMO's rule change request proposed that minor energy flow metering installations be subject to less onerous inspection and testing requirements than other meter types.
- Specifically, AEMO proposed that Chapter 7 be amended to clarify the ability of MCs to propose bespoke arrangements for the testing and inspection of existing, new, and emerging metering devices, technologies, and systems.
- Stakeholders supported tailored inspection and testing requirements citing costs, practicality, and the likely variation between CER devices with in-built measurement capability.
- For street lights, the IPWEA noted that physical inspection requirements would be particularly impractical and, thus, should be rejected. Rather, 'inspection of performance should more appropriately take place via the central management.'
- The draft rule allows the MC for type 8 and type 9 meters to propose alternative testing and inspection arrangements to AEMO for approval through an asset management strategy.
- If the relevant MC does not have an asset management strategy approved by AEMO, it must comply with the testing and inspection requirements for type 8 and 9 meters outlined in Schedule 7.6 of the NER.

Key Energeia Findings and Estimates

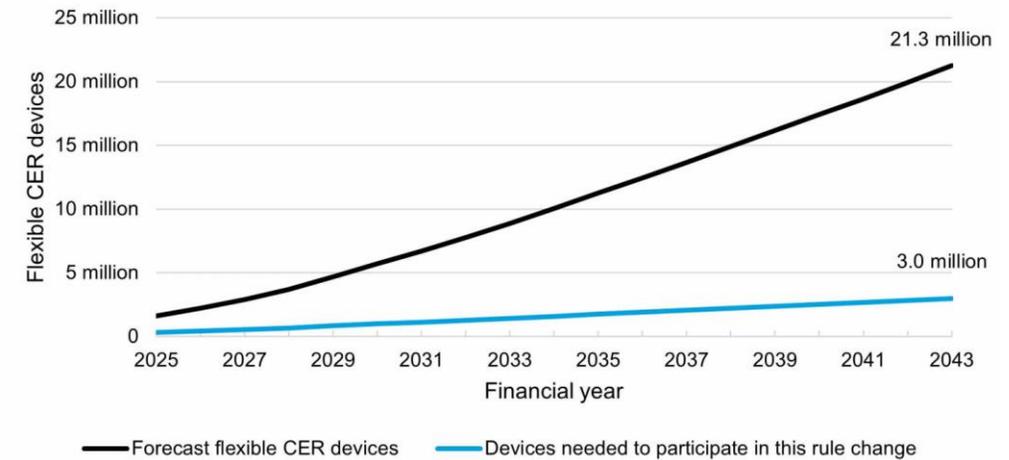
Table 6.3: Energeia draft findings - costs of implementation - draft rules for flexible trading at large customer premises and optimising CER at residential premises.

Action	Who bears the cost	Annualised cost per device
Updating AEMO systems	All customers	\$0.49
Updating retailer/metering coordinator systems	All customers	\$0.49
Updating network systems	All customers	Negligible
NMI allocation	Shared by retailer and CER device owner	\$8.42
Device certification	CER device owner	Negligible
Device system changes	CER device owner	Negligible

Source: Benefit Analysis of Load-Flexibility from Consumer Energy Resources - Draft Report, 29 Feb 2024, p 20.

Note: We have only included the portion of device certification costs and device system changes incurred by market participants, in this case the purchasers of CER devices. Manufacturers and installers bear any remaining costs. Additionally, Energeia found the costs of system changes to networks are negligible as they can already apply sub-metering arrangements to multi-element meters.

Figure 6.3: Break even estimates for flexible CER devices needed to participate in the rule changes



Source: Benefit Analysis of Load-Flexibility from Consumer Energy Resources - Draft Report, 29 Feb 2024, p 39.

Notes

- Blaine Miner (AEMO) spoke to the Unlocking CER benefits through Flexible Trading slides
- Blaine mentioned that he had included these slides into the pack to assist the WG with its initial consideration of some of the key aspects being proposed in the AEMC's Draft Determination and Rule
- Areas of discussion included:
 - The proposed effective date of 2 February 2026
 - Key features of the proposed framework, including:
 - DNSPs being responsible for establishing and maintaining secondary NMIs (s 3.3.1), not a role, or system logic, LNSPs currently perform
 - There must be only one customer at the connection point.
 - Each retailer having to apply for re-energisation (that is, the secondary settlement point would not automatically be re-energised when the primary connection point is re-energised)
 - Secondary FRMPs could choose to cease being a FRMP by declaring the NMI to be inactive
 - Inactive NMIs, data would still be collected and all metering roles would stay in place, but would not be "turned on."
 - Question: Who pays for the MDP and MP services while the secondary NMI is inactive?
 - The AEMC's assertion on the size of the impact to Industry
 - The introduction and application of 2 new metering types (Type 8 and 9 meters)
 - The references to Small Customers in the Draft Report
 - Members ensuring that they read the AEMC Draft Report and the Draft Rule in partnership to fully appreciate what is being proposed in identifying potential impacts



B2M Update

Blaine Miner (AEMO)

B2M Update

(Provided for B2BWG visibility, questions and consideration)

Forum/Consultation	Description	Update
ERCF	<ul style="list-style-type: none"> Primary B2M change channel where interested parties can collaboratively participate in the enhancement of the Retail Electricity Market Procedures Framework 	<ul style="list-style-type: none"> 12 Open ICFs (3 awaiting implementation (refer to the Appendix further details)) ICF inclusions for the May 2024 REMP consultation being determined

Notes

- Blaine Miner (AEMO) spoke to the B2M Update slide
- No additional actions or comments were noted



‘What’s on the B2B horizon?’

Blaine Miner (AEMO)

Industry Consultation Update

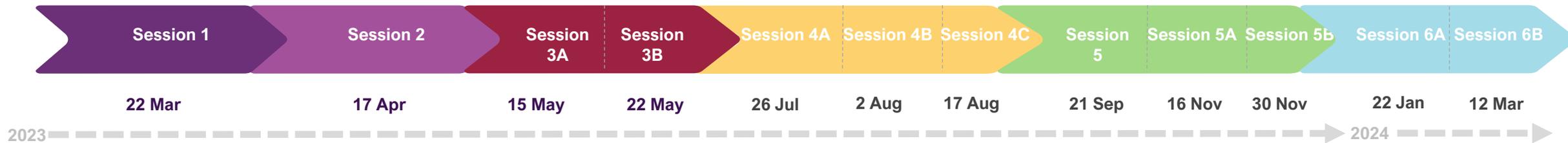
Preparation of business case continues.

- AEMO has received thirteen stakeholder contributions to the costing exercise however two of those did not have sufficient information to be included in the cost extrapolation
- November industry workshops scheduled, allowing additional time and focus on cost and approach for AEMO and industry, reflecting the high level of interest in the topic.

Published information and materials:

- Focus Group webpage: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/nem-reform-foundational-and-strategic-initiatives-focus-group>
- Any queries can be directed to NEMReform@aemo.com.au

Timing is indicative. Additional engagement with Executive forum and PCF members under consideration.



Session	Introduction	Discovery	Target State	Transition Strategy	Cost & Method	Business Case
Agenda	<ul style="list-style-type: none"> • Introduce initiatives • Outline workshop plan 	<ul style="list-style-type: none"> • Pain points and benefits • Survey 	<ul style="list-style-type: none"> • Concept walkthrough • Survey 	<ul style="list-style-type: none"> • Transition Strategy • Impacts & Benefits • Survey 	<ul style="list-style-type: none"> • Industry and AEMO costs • Assumptions, options and methodology 	<ul style="list-style-type: none"> • Walkthrough of draft business case • Assessment and completion

‘What’s coming on the horizon’

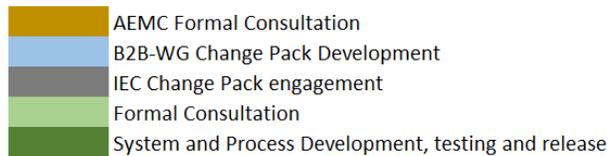
Topic	Timing	Next Milestone	Comments
IDX (Information Data Exchange)	Immediate	Conclusions and Business Case	<ul style="list-style-type: none"> Refer to previous slides
IDAM (Identity and Access Mgt)	Immediate	Conclusions and Business Case	<ul style="list-style-type: none"> Refer to previous slides
Portal Consolidation (PC)	Immediate	Conclusions and Business Case	<ul style="list-style-type: none"> Refer to previous slides
Review of the regulatory framework for metering services	Immediate	AEMC Draft Report and Rule	<ul style="list-style-type: none"> Refer to the ‘MSR-WG Update’ agenda item
Unlocking CER benefits through Flexible Trading	Immediate	AEMC Draft Report and Rule	<ul style="list-style-type: none"> https://www.aemc.gov.au/rule-changes/unlocking-CER-benefits-through-flexible-trading Indicative Consultation Timings: <ul style="list-style-type: none"> Draft determination 29 February 2024 Stakeholder submissions due 11 April 2024 Final determination or final rule July 2024 Proposed implementation date 2 February 2026
Potential Life Support Rule Change	Short/Medium term	Stakeholder meeting scheduled for 22 April 2024	<ul style="list-style-type: none"> #BetterTogether Life Support Customers Initiative - The Energy Charter
Electric Vehicle Supply Equipment Standing Data	Medium/ Longer term	Current Reform Status – ‘Rules Development’ Q1 to Q4 2024 (As per V3 of the NEM Reform Roadmap)	<ul style="list-style-type: none"> The ESB is seeking stakeholder feedback on the rationale and options for capturing ‘standing data’ for new EVSE installations presented within the consultation paper. Ensure that agencies and market participants have sufficient visibility of emerging electric vehicle supply equipment (EVSE) for effective planning and management of the system

Indicative Timelines

(As of 7 March 2024)



Topic	2023	2024				2025				
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
NEM Reforms										
Metering Services Review										
AEMC Formal Consultation		AEMC Formal Consultation								
B2B Activities		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
Flexible Trading										
AEMC Formal Consultation	AEMC Formal Consultation									
B2B Activities				B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation		System and Process Development, testing and release		
IDX/IDAM/PC										
B2B Activities	TBC									
Life Support Rule Change										
AEMC Formal Consultation	TBC									
B2B Activities	TBC									
Electric Vehicle Supply Equipment Standing Data (TBC)										
AEMC Formal Consultation	TBC									
B2B Activities	TBC									
ICFs										
B002/22 - Alignment of B2B field lengths to B2M Procedures/schema		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
B004/22 - B2B/B2M field lengths – Address elements		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
B006/22 - PERSONNAME definition spec correction		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
B007/22 - Incorrect FormReference and FormNumber categorisation		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
B011/23 - Definition of Unknown Load Exception Code		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			
B014/23 - Managing in-flight service orders during a RoLR event		B2B-WG Change Pack Development	IEC Change Pack engagement	Formal Consultation			System and Process Development, testing and release			



** Please note, the IEC's preferred approach to implementing New Rules is a traditional 'waterfall' approach i.e. AEMC Final Determination and Rules are published prior to any required IEC consultations commencing

Notes

- Blaine Miner (AEMO) spoke to the 'What's on the B2B horizon?' slides
- Blaine noted that the IDX/IDAM/PC Business Case sessions had now been completed
 - Next steps TBC



Forward Agenda

Blaine Miner (AEMO)

Forward Agenda

Month	Proposed Agenda	Meeting Type
12 April 2024 (meeting has been rescheduled from 11 April to allow for FTA submission requirements)	<ul style="list-style-type: none">- Standing agenda items:<ul style="list-style-type: none">- Action Log, ICF Register Update, B2M Update, 'What's on the B2B horizon?'- IEC Consultation planning and preparation- IEC meeting debrief- Unlocking CER benefits through Flexible Trading Draft Rule- B2B Guide improvement review update	Virtual
9 May 2024	<ul style="list-style-type: none">- Standing agenda items:<ul style="list-style-type: none">- Action Log, ICF Register Update, B2M Update, 'What's on the B2B horizon?'- IEC Consultation planning and preparation- Unlocking CER benefits through Flexible Trading Draft Rule- B2B Guide improvement review update	Virtual

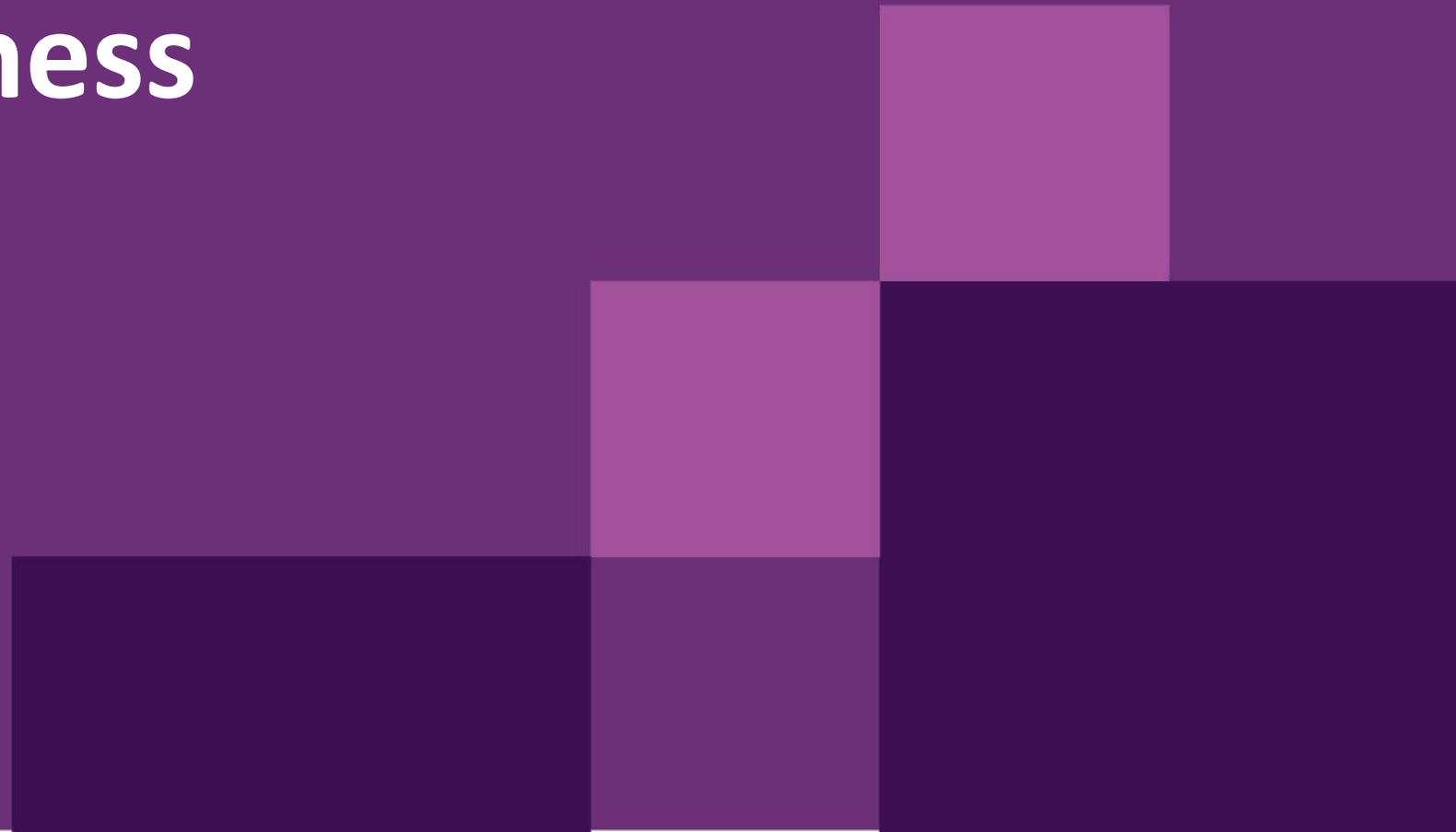
Notes

- Blaine Miner (AEMO) spoke to the Forward Agenda slide
- Blaine raised the potential benefit of the April meeting being a face-to-face meeting, to more effectively prepare for IEC engagement re the upcoming IEC consultation post the MSR Draft Determination/Rule being published by the IEC
 - The B2B-WG agreed that a face-to-face should occur on 23/24 (Tues/Wed) April 2024 in Melbourne at AEMO's Offices
 - The face-to-face is to start at 9am local time on Tues 23 April and end at 2pm local time on Wed 24 April
- At the MSR-WG on Wed 20 March, the B2B-WG agreed to reschedule the April meeting to the 12th of April, to allow members to support their organisations Unlocking CER benefits through Flexible Trading submissions



General Business

Blaine Miner (AEMO)



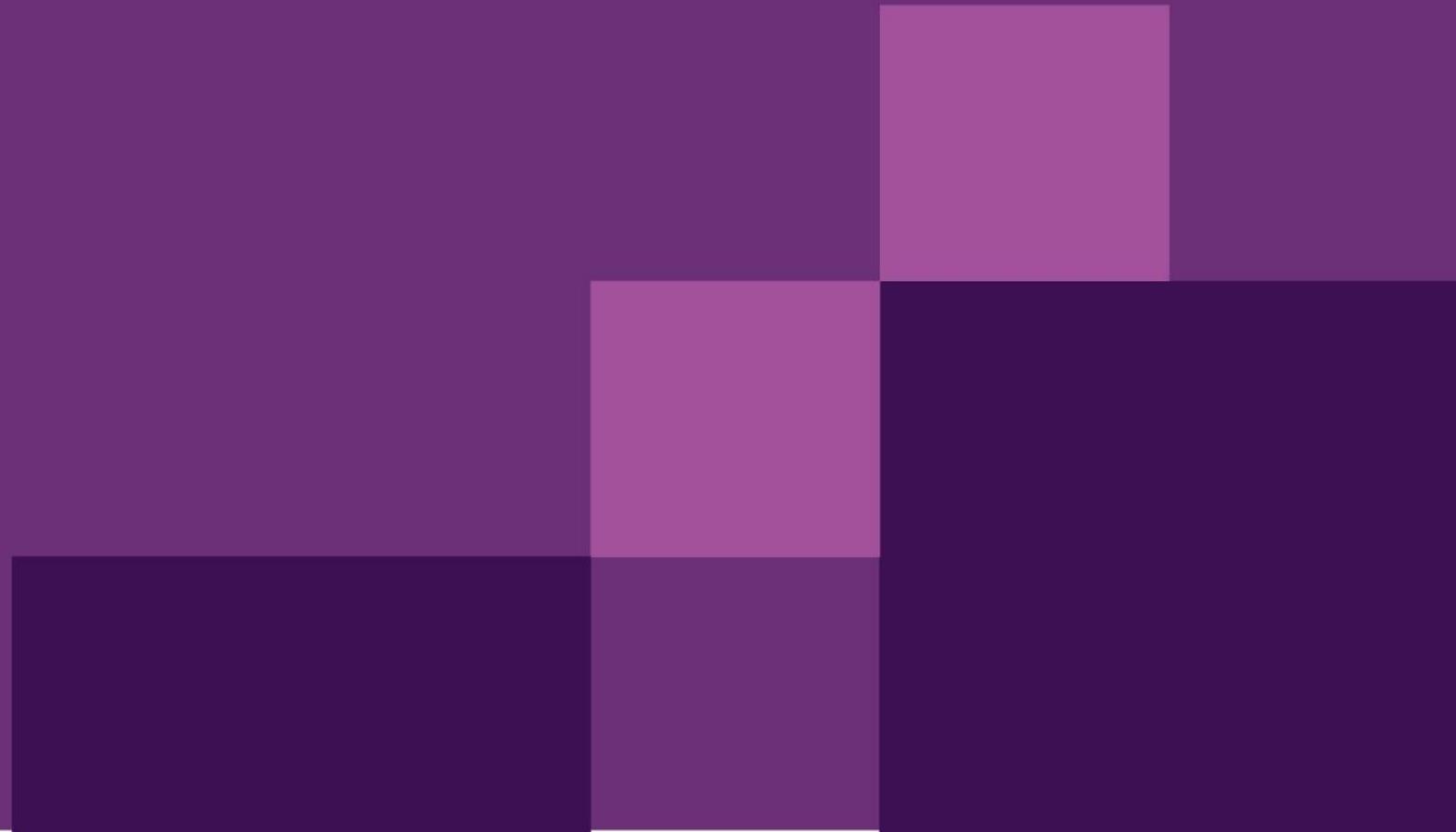
Other Business

- Mobile phone detail quality issues (raised by Ausgrid via Graeme Ferguson)
 - As DNSPs move towards using SMS and Email for communicating important information relating to both Planned and Unplanned outages, the reliance on Retailers to collect, validate and supply mobile phone and email data is increasingly important.
 - Ausgrid also uses these data points for communicating with Life Support Customers to adhere to National Electricity Retail Rules notification requirements, contacting customers about their electrical defects (Safety) and other supply related matters.
 - Ausgrid recently reviewed the deliverability of SMS notifications and identified that approximately 5% of these notifications failed and were undeliverable.
 - Issues raised by Ausgrid:
 - No requirement in the Procedures to validate phone numbers and email addresses
 - Contact Information does not always relate to the Outage Contact Person
 - Formatting issues of phone numbers
 - Notes:
 - Section 5.1 of the Customer and Site Details Notification Process, CustomerDetailsRequest Data, currently allows for a 'Reason' of 'Data Quality Issue'.
 - Under section 5.1 'Data Quality Issue' means that although the data may be technically correct, it may not be fit for purpose (e.g. phone number is 9999999). The DNSP/MC/MPB must provide which specific data they are querying in the SpecialNotes field.". SpecialNotes then goes on to say 'Any additional information the Recipient wishes to convey to the Initiator. Mandatory if Reason is "Other" or "Data Quality Issue"'.
 - LNSPs have observed that if a LNSP sends a CDR even with the data quality reason code it appears that the response from the retailer is automated to send through the details they have.
- Any other business items?
- Next monthly meeting scheduled for 11 April 2024

Notes

- Graeme Ferguson (Essential Energy) stated that he would engage B2B-WG members via email re Mobile phone detail quality issues feedback and next steps

Appendix



2024 IEC Meeting Roster

Meeting	Sector	B2B Rep	Indicative agenda
19 March 2024	Network	Graeme Ferguson (Essential)	<ul style="list-style-type: none"> IDAM, IDX, PC NEM Reform committees/forums B2B-WG Update/Information Paper
3 June 2024 (face-to-face)	Retailer	Sean Jennings (Red/Lumo)	<ul style="list-style-type: none"> IDAM, IDX, PC NEM Reform committees/forums B2B-WG Update/Information Paper Unlocking CER benefits through Flexible Trading
9 Sept 2024	Metering	Dino Ou (Intellihub)	<ul style="list-style-type: none"> IDAM, IDX, PC NEM Reform committees/forums B2B-WG Update/Information Paper Unlocking CER benefits through Flexible Trading
2 Dec 2024 (face-to-face)	All sectors	All members	<ul style="list-style-type: none"> Year that was, Year to be Draft Annual Report 2024 Draft IEC Budget 2025-26

MEMBERS:

Mr Kee Wong (Chair)
 Mr Robert Lo Giudice (Retailer Representative)
 Mr Paul Greenwood (Metering Representative)
 Mr Luke Jenner (Distributor Representative)
 Ms Jill Cainey (Consumer Representative)
 Mr Peter Van Loon (Discretionary Member - Retailer)
 Mr Marco Bogaers (Discretionary Member - Embedded Networks)
 Meghan Bibby (AEMO, IEC Secretariat)

Sector	B2B WG Rep	Organisation	IEC Meeting
Retail	Mark Riley	AGL	Dec 2022
	Aakash Sembey	Origin	Feb 2023
	Sean Jennings	Red/Lumo	June 2024
	Gavin Wise	Alinta	
	Jo Sullivan	EA	
Metering	Dino Ou	Intellihub	Sept 2024
	Helen Vassos	PLUS ES	
	Paul Greenwood	Vector	IEC member
	Wayne Farrell	Yurika	Aug 2023
Network	Justin Betlehem	AusNet	
	Graeme Ferguson	Essential	March 2024
	Robert Mitchell	EQL	
	David Woods	SAPN	
	Adrian Honey	TasNetworks	

ICF Gates

Gate	Entry Criteria	Exit Criteria	Outcome
0 – ICF Preparation	<ul style="list-style-type: none"> Issue or change identified 	<ul style="list-style-type: none"> Entry criteria for Gate 1 achieved 	<ul style="list-style-type: none"> ICF circulated to the B2B WG members for Initial Assessment purposes
1 - B2B WG Initial Assessment	<ul style="list-style-type: none"> Mandatory ICF sections populated to the required standard ICF reviewed by a B2B WG member prior to submission Proposed solution provided, where available 	<ul style="list-style-type: none"> ICF populated to the required standard Additional information has been requested and received Options analysis has been completed 	<ul style="list-style-type: none"> B2B WG informs the Proponent of the outcome of Gate 1
2 - B2B WG Detailed Assessment	<ul style="list-style-type: none"> ICF fully populated to the required standard Options analysis has been completed 	<ul style="list-style-type: none"> Recommendation to the IEC determined IEC Paper has been prepared Inclusion into the next IEC Agenda has been confirmed 	<ul style="list-style-type: none"> B2B WG informs the Proponent of the outcome of Gate 2
3 - IEC Initial Assessment	<ul style="list-style-type: none"> ICF populated to the required standard IEC paper completed and circulated 	<ul style="list-style-type: none"> Additional information has been requested and provided, where applicable IEC decision confirmed 	<ul style="list-style-type: none"> IEC informs the Proponent of the outcome of Gate 3
4 - IEC Change Pack creation	<ul style="list-style-type: none"> IEC decision to progress to Gate 4 	<ul style="list-style-type: none"> Change Pack prepared Inclusion of the ICF into the IEC Agenda has been confirmed 	<ul style="list-style-type: none"> IEC Change Pack ready for consultation
5 - Formal Consultation	<ul style="list-style-type: none"> Change Pack completed to IEC standards 	<ul style="list-style-type: none"> IEC publishes Final Determination 	<ul style="list-style-type: none"> ICF ready for implementation

B2M ICF Summary

Assessment Stage	# of ICFs	ICF Titles
Initial assessment	0	
Detailed analysis	8	ICF 017 - Updating the existing ADWNAN_INTERVAL report for LNSPs ICF 067 - Reviewing and updating file examples in the MDFF Specification document. ICF 076 - Magnitude of generation and consumption at a NMI MSATS fields ICF 077 - Auto population of the LCCD based on NMI status ICF 078 - Alignment of Addressing in B2M Procedures to AS4590.1.2017 ICF 079 - NEM 12 MDFF Inconsistencies ICF 080 - SDQ Information Availability ICF 081 - New ADWNAN_INTERVAL report for MDPs and LNSPs
On Hold	1	ICF 056 - Clarification of End Date in Inventory Table (being considered by the B2B-WG)
Awaiting Consultation	0	
Awaiting Implementation	3	ICF 054 - Substitution Type Review ICF 072 - NSLP Longer-term Methodology ICF 073 - Metrology Part A – Summation Metering Changes

ICF Register Update

(Detailed analysis)

Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
ADWNAN Reporting changes	Assignment of Interval ADWNANs to MDP in AEMO Performance Reports	Jane Hutson (EQL)	017	Sept 2019	Final feedback being requested prior to Industry requirements being finalised
Reviewing and updating file examples in the MDFF Specification document.	The MDFF document includes example files. Some of these files have not been updated to incorporate changes in the industry including 5MS and Global Settlements. AEMO Metering to review and update where required the examples in Appendix H of the MDFF Specification.	Dino Ou (IntelliHub)	067	Aug 2022	Awaiting additional clarification as to which specific examples require updating.

ICF Register Update

(Detailed analysis)

Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
Magnitude of generation and consumption at a NMI MSATS fields	Participants cannot easily identify and determine the magnitude of export/consumption and import/generation as part of their onboarding processes.	Mark Riley (AGL)	076	July 2023	Industry perspective, re potential May 2024 REMP inclusion, to be determined at the ERCF meeting on 25 March 2024
Auto population of the LCCD based on NMI status	Auto population of the LCCD field by AEMO when the NMI Status gets updated from 'Greenfield' to 'Active'	Mark Riley (AGL)	077	August 2023	Industry perspective, re potential May 2024 REMP inclusion, to be determined at the ERCF meeting on 25 March 2024
Alignment of Addressing in B2M Procedures to AS4590.1.2017	To align B2M procedures' address standards with AS4590.1:2017, replacing the superseded AS4590-1999.	AEMO	078	Oct 2023	Industry perspective, re potential May 2024 REMP inclusion, to be determined at the ERCF meeting on 25 March 2024
NEM 12 MDFF Inconsistencies	The NEM 12 MDFF has a inconsistent obligation relating to the provision of 400 block data for Actual reads.	Mark Riley (AGL)	079	November 2023	Industry perspective, re potential May 2024 REMP inclusion, to be determined at the ERCF meeting on 25 March 2024

ICF Register Update

(Detailed analysis)

Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
SDQ Information Availability	All externally facing Retail and Metering report details and specifications e.g. Cx, RMxx, etc. should be formally documented and published to the AEMO website for stakeholder access	CitiPower Powercor United Energy	080	December 2023	Analysis continuing at the ERCF-SG. Not a NER consultable item.
New ADWNAN_INTERVAL report for MDPs	Create a new RM29 data report ADWNAN_INTERVAL_DAILY_AGG delving into data stream level details. The value and scope of this report is to be examined and determined. <ul style="list-style-type: none"> Electronic meter creep threshold to be included in the new report. 	AEMO	081	January 2024	Analysis continuing at the ERCF-SG. Not a NER consultable item.

ICF Register Update

(On hold)

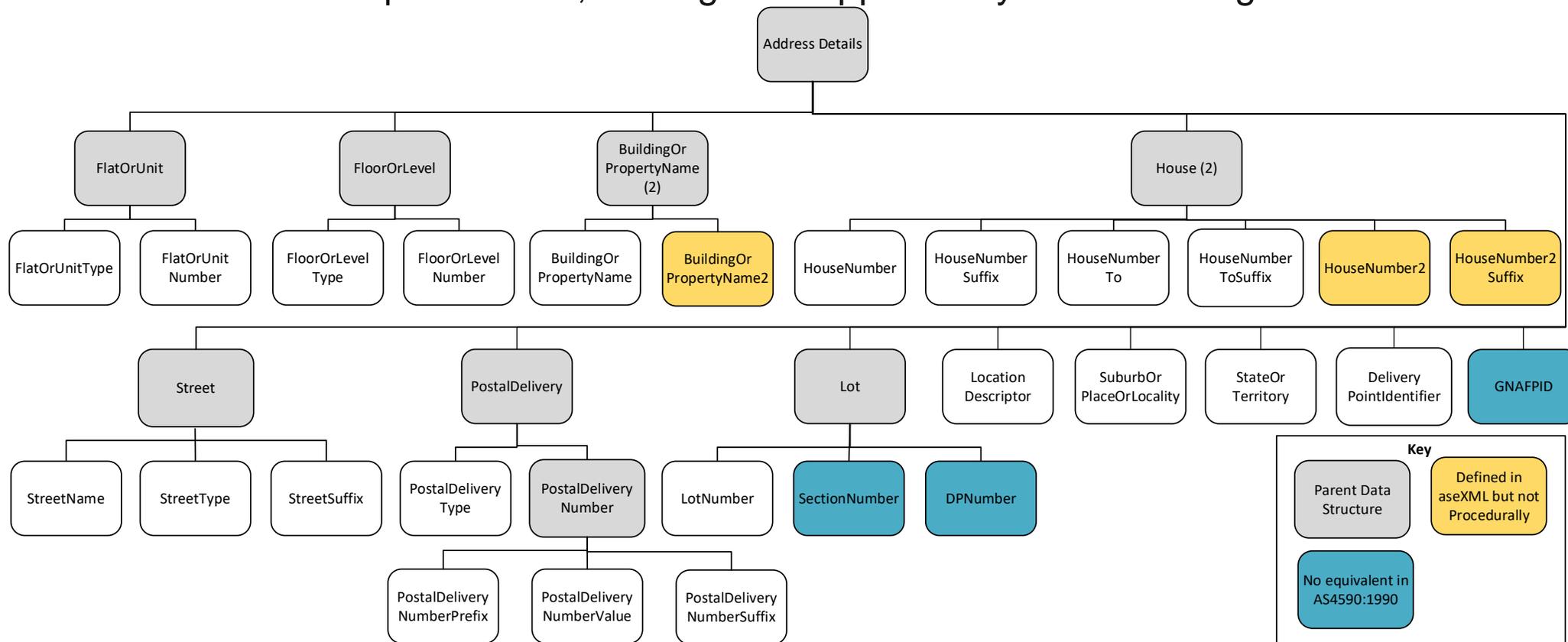
Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
Clarification of End Date in Inventory Table	Some MDPs are using NCONUML Inventory Table End Date to identify when the metering data is last calculated, updating it each month. Proposal is to clarify the end-date be when there is a change to consumption or abolishment. If not, the End Date should be reflected as 31.12.9999.	Mark Riley (AGL)	056	Jan 2022	On hold, pending discussions at the B2B WG

Alignment of Addressing to AS4590.1.2017

- The audit highlights several areas of discrepancy and alignment between the NEM and AS4590.1:2017
 1. NEM Only - Some NEM addressing elements sit outside of AS standards.
 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.
 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.
 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.
 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.

Category 1 - NEM Only Addressing

- SectionNumber, Deposited Plan (DP) number and GNAFID exist within the NEM B2M address structures but are outside AS standards.
- It should also be noted that some address structures defined in the aseXML schema have not been formalised in procedures, limiting their applicability in addressing.



Category 2 - Minor Discrepancies

- Between NEM Addressing and AS4590:1.2017, there have been numerous changes to the field names of address elements.
- Despite these changes in nomenclature, the following fields in NEM and AS4590.1:2017 are synonymous, maintaining the same meanings, character lengths, data types, and usage rules.

NEM Address Field Name	AS 4590.1:2017 Address Field Name
Flat Or Unit Type	Sub-dwelling unit type code
Flat Or Unit Number	Sub-dwelling unit number
FloorOrLevelNumber	Level number
StreetType	Road type code
StreetSuffix	Road suffix code
PostalDeliveryType	Postal delivery type code
Lot Number	Lot number
SuburbOrPlaceOrLocality	Locality name
StateOrTerritory	Australian State/Territory code
PostCode	Australian postcode
DeliveryPointIdentifier	Delivery point identifier

Table 1: NEM Addressing – Minor Discrepancies

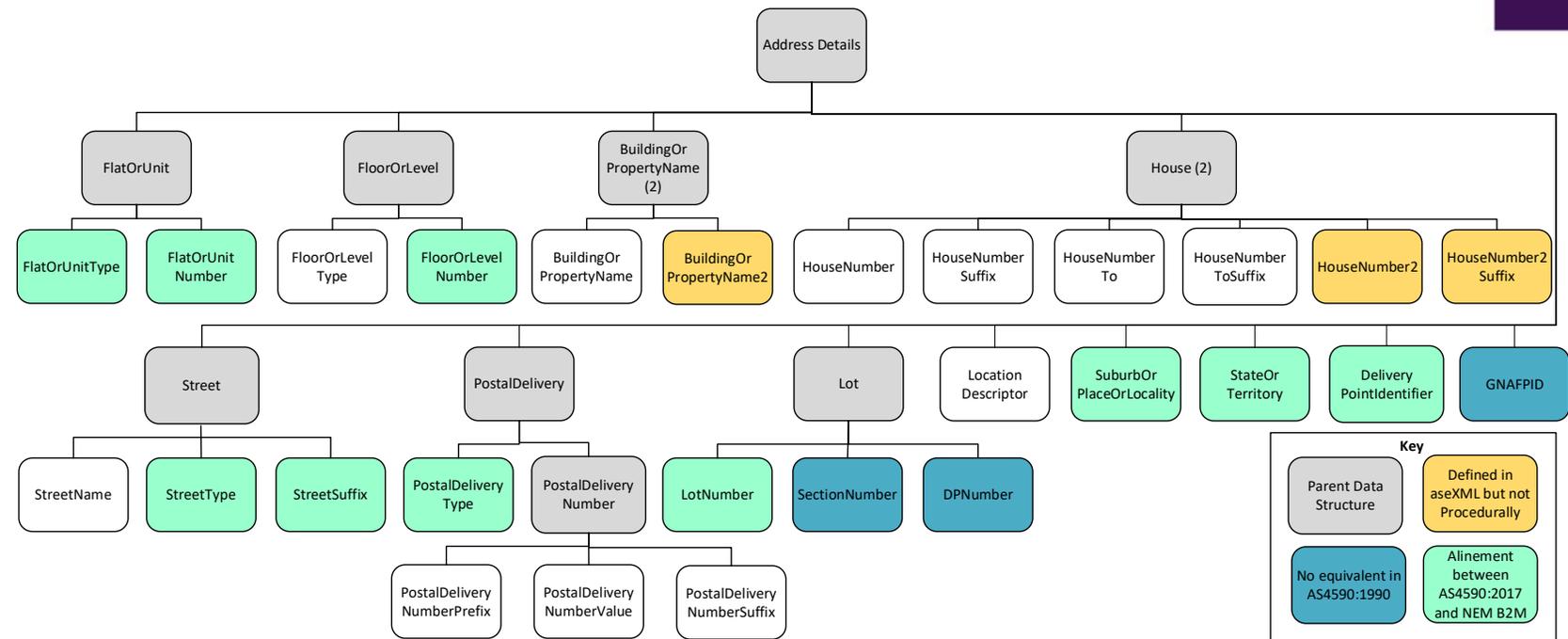


Diagram 2: NEM Addressing – Minor Discrepancies

Category 3 - Methodology Variances

- Between NEM Addressing and AS4590:1.2017, there has been a methodology change to how the following elements are used to construct an address:
 - House Number and Suffix in NEM Addressing are separate fields; under AS4590:1.2017, they are expressed within a single field.
 - Postal Delivery Number Prefix, Value, and Suffix in NEM Addressing are separate fields; under AS4590:1.2017, they are expressed within a single field.
- Despite the different methods used to assemble individual address elements for 'House Number/Suffix' and 'Postal Delivery Number Prefix/Value/suffix', the final structure of the addresses aligns well, with no significant impact on the result.

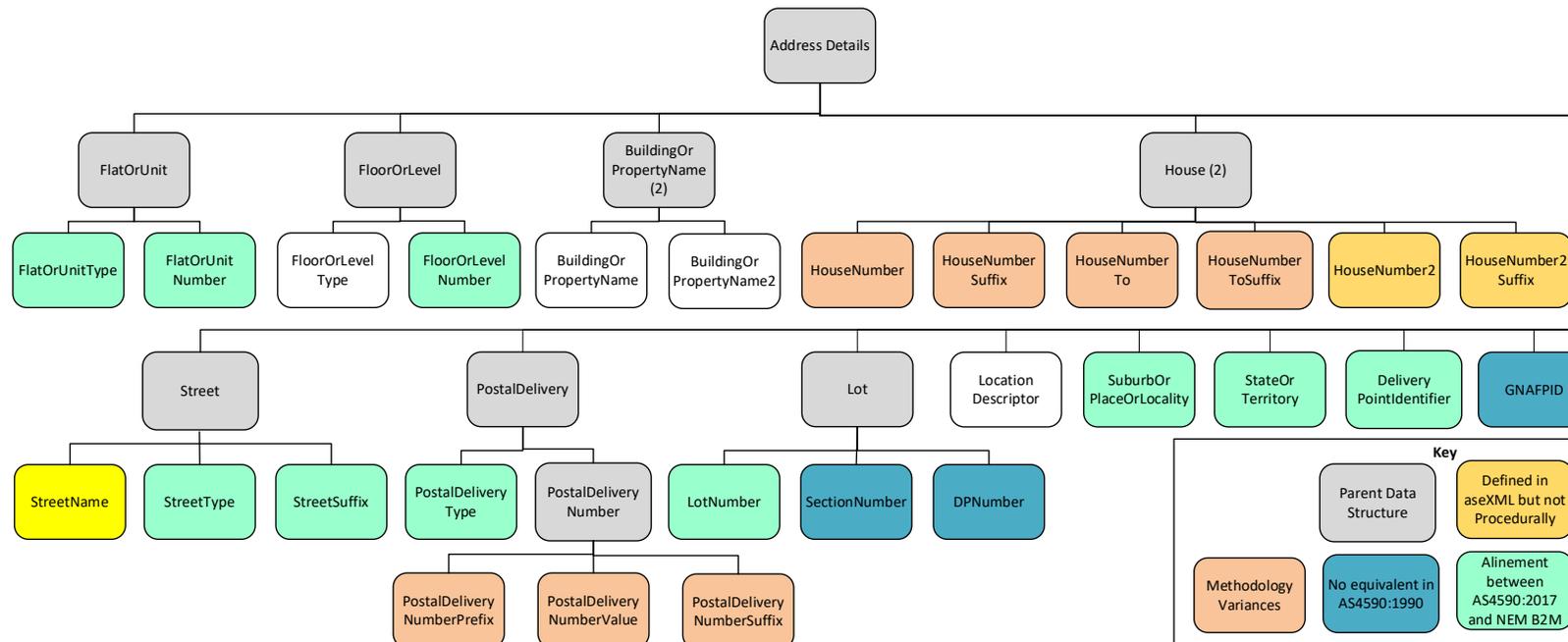


Diagram 3:NEM Addressing – Methodology Variance

Category 3 - Methodology Variances

- The following example illustrates, using the address '20a – 24b Genetics Lane North', how, despite a methodology variance, the outcome is identical.
- Despite the differences in field designations and separations, both standards capture the exact address details.
- The outcome is a consistent representation of the same physical address, demonstrating the compatibility of both systems in capturing address information despite methodological variances

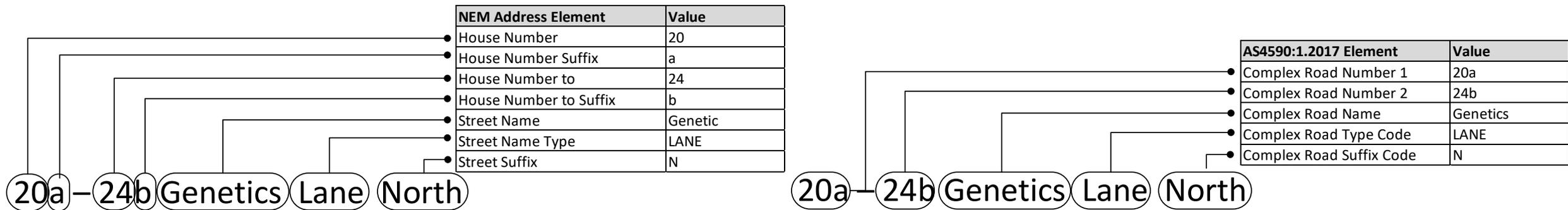


Diagram 4: NEM and AS4590:1.17 Methodology Variance Example

Category 4 - Field Length Discrepancies

- Between NEM Addressing and AS4590:1.2017, there have been five increases in field length.
- Discrepancies in field lengths can lead to data truncation, inconsistency, and integration challenges, compromising data integrity, system interoperability, and compliance efficiency.
- Addressing these discrepancies is essential for ensuring reliable and uniform data management across different NEM and AS 4590.1:2017 compliant processes.

NEM Addressing Field Name	AS 4590.1:2017 Address Field Name	AEMO NEM Audit Comments	AEMO AS4590:1.2017 Audit Comments
FloorOrLevelType	Level type code	FloorOrLevelType as defined in Enumerations file is max 2 characters.	Level type code is 4 char.
BuildingOrPropertyName	Address site name	<ul style="list-style-type: none"> • BuildingOrPropertyName in the MSATS standing data is defined as 30 char x2 • BuildingOrPropertyName in aseXML ClientInformation_r4x.xsd is defined as 30 char x2 • BuildingOrPropertyName in aseXML ElectricityMasterStandingData_r43 is defined as BuildingOrPropertyName and BuildingOrPropertyName2 30 char • buildingname in the MSATS database is defined as 30 char x1. 	Address site name and Secondary complex (or utility) names are defined as 50 char.
BuildingOrPropertyName	Secondary complex (or utility) name	aseXML defines this as 200.	
LocationDescriptor	Location description	MSATS Standing Data defined this field as 30.	Location description is 50 char.
StreetName	Road name	StreetName as defined in ClientInformation_r4x.xsd is max 30 characters	Road name is max 45 characters

Table 2: NEM address – Field Length Discrepancies

Category 4 - Field Length Discrepancies

- While not strictly part of NEM Addressing, Latitude and Longitude are stored against metering standing data.
- While 'Standing Data for MSATS' does not link Latitude and Longitude to AS4590, the Australian Standard does define Latitude and Longitude as well as directions on their usage.
- AEMO notes that NEM Latitude and Longitude to 7 decimal places while AS4590:2017 does so to 9 decimal places.
- NEM's seven decimal places provide a precision of up to 11 millimetres, whereas AS4590:2017's nine decimal places can pinpoint a location to approximately 1 millimetre.

Category 5 - Enumerated Value Discrepancies

- AEMO looked for discrepancies where an enumeration existed in AS4590.1:2017 but not in aseXML, as this would lead to schema invalid files for AS-compliant codes.
- Discrepancies were found for Street Type, Flat or Unit Type, Floor Or Level Type.

Street Type			
Name	AS4590.1:2017 Abbreviations	aseXML Abbreviation	Comment
FIRETRAIL	FTRL		New in AS4590.1:2017
AVENUE	AV	AVE	Removed in version 6.0 of the enumerations.xsd "deletions because of duplicate Australian street types."
CRESCENT	CR	CRSE	
GLADE	GLDE	GLD	
PARKWAY	PWY	PKWY	

Table 3: NEM address – Street Type Enums Discrepancies

Floor Or Level Type			
Name	AS4590.1:2017 Abbreviations	aseXML Abbreviation	Comment
Lower Level	LL		New in AS4590.1:2017
Penthouse	PTHS		New in AS4590:2006
Platform	PLF		New in AS4590:2006
Podium	PDM		New in AS4590:2006

Table 5: NEM address – Floor or Level Type Enums Discrepancies

Flat Or Unit Type			
Name	AS4590.1:2017 Abbreviations	aseXML Abbreviation	Comment
Duplex	DUPL	DUP	Removed in version 6.0 of the enumerations.xsd "deletions because of duplicate Australian flat or unit types."
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	

Table 4: NEM address – Flat or Unit Type Enums Discrepancies

B2M Discrepancies

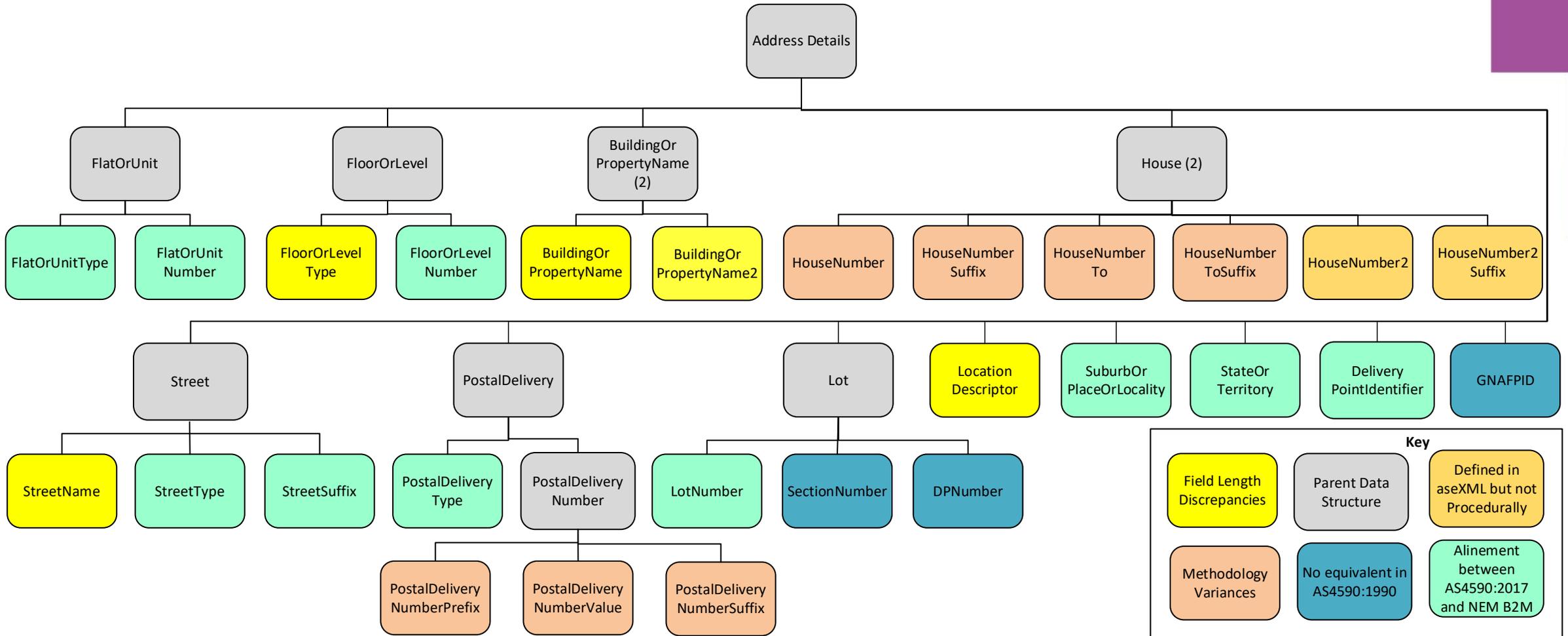


Diagram 5 NEM B2M address – Field Length Discrepancies



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