## 2022 Implementation Forum

### Tuesday 30<sup>th</sup> August 2022

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# 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 regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

### Participants in AEMO discussions must:

- 1. Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- 2. Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- 3. Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

- 1. Which customers they will supply or market to
- 2. The price or other terms at which Participants will supply
- 3. Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
- 4. Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
- 5. Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.





## Agenda

Chris Fleming





## Agenda

#	Time	Topic	Presenter
1	10:00 – 10:05	Welcome and Agenda	Chris Fleming
2	10:05 – 10:10	Actions	Chris Fleming
3	10:10 - 10:20	November Milestone update	Chris Fleming
4	10:20 - 10:30	May 23 Release - Update	Meghan Bibby
5	10:30 – 10:40	MSDR / B2B delivery Update	Jim Agelopoulos
6	10:40 – 10:50	MSDR Focus Group Update	Blaine Miner
7	10:50 – 11:00	November Implementation approach	Chris Fleming
8	11:00 – 11:20	Industry Test Update	Tui Grant
9	11:20 – 11:35	Industry Risk and Issues review	Chris Fleming
10	Forward Plan and Other Business  11:35 – 11:45  - Tranche 2 meter Rollout  - NEM 2025 engagement approach		Greg Minney
11	11:45 – 12:50	Questions	Chris Fleming
12	12:00	Meeting Close	Chris Fleming



## Actions

Chris Fleming







ID	Status	Action	Comment
5.1	Closed	Enumeration Lists	AEMO to confirm how the enumeration list details will be published and provide update to the Implementation Forum. 26/7: Action 5.1 Enumeration lists are available via the Market Net Portal – this is the responsibility of the ERCF. As not everyone has access to the Market Net this is to be discussed at the next ERCF meeting and added to the industry risk log (R40).
5.2	Closed	Code Groups	AEMO to confirm if the code groups and descriptions within MSATS are available through the C1 report. 26/7: AEMO is planning to make codes / descriptions available on the C1 in May 2023 noting this requires a schema change
8.1	Open	Risks and Issues	AEMO to consider inclusion of Industry risk to reflect B2M and B2B alignment 26/7 Risk R41 raised identifying the increased risk of misalignment – Action to be closed
8.2	Closed	Risks and Issues	AEMO to distribute details of Industry Risk R12 for Participant input. 26/7 details have been distributed, action closed
8.3	Closed	Risks and Issues	Participants to reflect on the impacts and mitigations in place to risk R12 and provide suggested ratings and updated mitigation approaches. 26/7 Responses received on the impacts and mitigations in place to risk R12 and provide suggested ratings and updated mitigation approaches from 2-3 participants – action closed



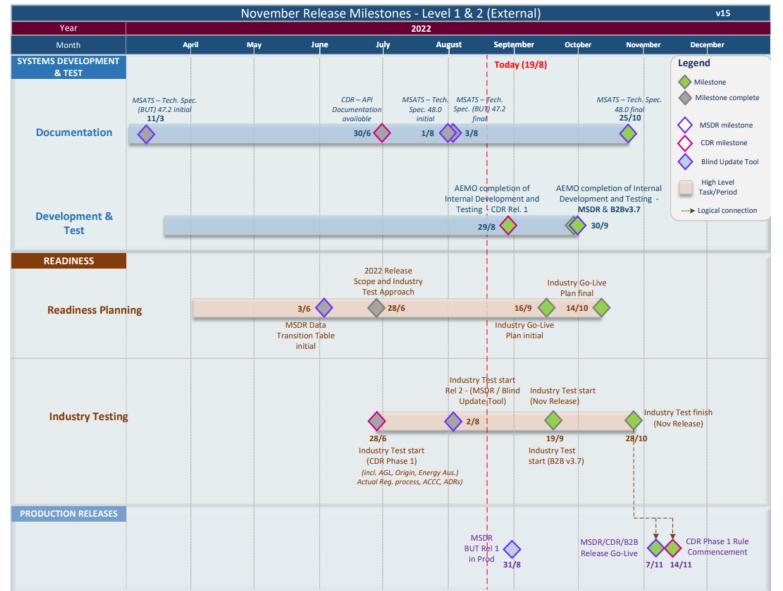
## November 22 Milestones

Chris Fleming





### Nov 22 - Program Updates



Bulk Update Tool (BUT) has been released in Pre-Prod and the BUT Industry Test is in Progress. On schedule for the BUT Production release (for SIPF only) on 31/8.

AEMO development (MSDR, CDR Phase 1, B2Bv3.7) remains on track.

Retailers have commenced CDR Industry Testing. CATS CDR APIs have been released to Pre-Prod and eMDM APIs are on track for release to Pre-Prod on 30/8.

The final version of MSATS Tech Spec v47.2 has been released and the initial version of the MSATS Tech Spec v48.0 has been released for review.

MSDR Focus Group – LNSPs have provided proposed SIPF timings and volumes. ~9.65 million updates are scheduled for the month of September.

ITFG and Q&A sessions are continuing. No functional issues from Industry testing are outstanding. Working through issues with C1 report volumes.

Industry Testing will commence pre-release on 19/9 and the release will be deployed into pre-prod on 27/9.



## 2023 Release Planning

Meghan / Greg



## 2023 Release 1 – Major Initiatives



Initiative	Scope	Comment
Meter Exemptions (MSDR)	<ul> <li>Automation of AEMO Exemption process</li> <li>Availability of Enumerations via C1 reports</li> <li>1 May 2023: MCPI Compliance Holiday Ends</li> </ul>	Component of MSDR scope
CDR Phase 2	Complex Account Query Introduction of Last Consumer Change Date in MSATS	Applies to 3 major retailers  AEMO extended the timeframe for the publication of draft report to allow for the third workshop on 27 July 2022 run by the DSB. Note that MSATS change will apply to all retailers.
SAPS	Introduction of Stand Alone Power Systems (SAPS)	AEMO extended the date for publication of the second draft determination and procedures for the Standalone Power Systems (SAPS) – Identifying a SAPS NMI in MSATS. Second workshop occurred on 2nd August 2022. Second Draft Report to be published 25 August 2022. Submissions due 22 September (additional time allowed to consider changes). Final report due by 3 November 2022.
B2Bv3.8	<ul> <li>Coincident Service Orders using a Single Notified Party</li> <li>Shared Fuse One Way Notification</li> </ul>	Final report published 5 <sup>th</sup> July 2022. New B2B schema to introduce Shared Fuse One Way Notification.

## 2023 Release 1 – Major Initiatives cont.



Initiative	Scope	Comment
5 Minute Load Profile (ICF060)	Review of methodology outlined in AEMO's Metrology Procedures Part B due to 'Spikes' in settlement volumes within a 30-minute period	AEMO presenting their analysis, options assessment and proposed next steps to the subgroup on Wed 24 Aug. Formal consultation expected to commence late Sept/early Oct 2022. Targeting a May 2023 effective/release date, this timing is dependent on consultation feedback and the complexity of the final solution.
IESS (Phase 1)	<ul> <li>31 March 2023: the 'interim' release which will enable:</li> <li>Aggregators of small generating and storage units to provide ancillary services</li> <li>Hybrid systems to use aggregated dispatch conformance</li> </ul>	NEM 2025 initiative with interim implementation scheduled 31 March 2023. Dispatch Information Paper published on 21 July 2022.

### 2023 Release 1 – Minor Initiatives



Initiative	Scope	Comment
ECRF Changes	<ul> <li>ICF_032: Child NMI standing data quality - TNI and DLF: Create a process that will automatically update the Embedded Network Codes Table in MSATS when a DLF or TNI changes at the Parent. When the Embedded Network Codes Table is updated the changed information will be provided to the participants via the daily replication report (C1). Once the ENM has been advised of these changes they can then apply these changes to the Child NMI where applicable.</li> <li>ICF_047: Updating Network Tariff for a Greenfield NMI: A configuration change to validation in MSATS on the CR3101 to allow the CR3101 to update the NTC for a Greenfield NMI rather than the system reject the CR.</li> <li>ICF064: 'House Number To Suffix' is a part of the Australian structured address standards.</li> <li>ICF065: Extend the current 130 business day limitation on NMID3 requests.</li> <li>ICF066: New 'CT Ratio Available' field values requested.</li> </ul>	Some ICFs still require consultation but are included for information as they are targeted for the 2023 Release 1.

NB. Implementation Dates included in the Scope column are the regulatory dates – Software deployment dates are being determined as part of Release Planning



## MSDR Delivery Update

Jim Agelopoulos



## MSDR Delivery update



Deliverable	Content	Status	Draft	Final
			Release	Release
	PACKAGE 1 – Blind Update Tool (MSATS Release 47.2)			
MSATS Technical Specification (v47.2)  Describes the projects and enhancements planned by AEMO from a participant perspective includes the related changes to participants' IT systems		Final published	11-Mar-22 (Updated monthly if required)	02-Aug-22
Guide to CSV Data Format Standard*	Updated with new fields required for the Blind Update Tool (BUT).	Draft published	06-Jun-22	02-Aug-22 16-Sep-22
Guide to MSATS Web Portal*  Updated with:  Using the Blind Update Tool (BUT) interface  How to construct payloads for the web and API interfaces.  Blind Update Tool (BUT) validation matrix			17-Jun-22	02-Aug-22
Blind Update Tool API Reference*	Updated with Blind Update Tool APIs	Final published	17-Jun-22	02-Aug-22
Enumeration publication	A list of enumerations with Code groups and descriptions.  Note: Proposed ENUMs have been published in the PreProd Markets portal. Final publication to the Production Markets Portal pending approval.	Draft published	02-Aug-22	02-Aug-22 26-Aug-22
	PACKAGE 2 – MSDR core changes & B2B v3.7 (MSATS Release 48.0	))		
MSATS Technical Specification (v48.0)	Describes the projects and enhancements planned by AEMO from a participant perspective and includes the related changes to participants' IT systems	Draft published	25-Jul-22 (Updated monthly if required)	04-Oct-22 27-Sep-22
Technical Guide to MSATS	Technical Guide to MSATS  Updated to include information about the Blind Update Tool (BUT) and Snapshot report  Note: Details documented in published MSATS Tech Spec 47.2 & MSATS Tech Spec 48.0		16-Sep-22	02-Aug-22 27-Sep-22
Guide to MSATS reports	Updated with changes to MSATS C1 report and information about the Snapshot report  Note: Details documented in published MSATS Tech Spec 47.2 & MSATS Tech Spec 48.0	Under Development	16-Sep-22	04-Oct-22 27-Sep-22
B2M Mapping to aseXML	New guide detailing the mapping between the MSATS B2M procedures and the aseXML schema	Under Development	02-Aug-22 16-Sep-22	02-Aug-22 27-Sep-22
Validation Module Matrix	Version 2.1 of the Validation Module Matrix to reflect the field validation requirements of B2B v3.7  Note: Details documented in published MSATS Tech Spec 48.0	Draft published	02-Aug-22	04-Oct-22 27-Sep-22

<sup>\*</sup> Link to item detailed in Section 1.9 of the MSATS Technical Specification (v47.2)



## MSDR Focus Group

Blaine Miner







- The MSDR Focus Group met on Monday 22 August 2022
- Agenda included:
  - General Update
    - MSATS Technical Specification publications (47.2 & 48.0)
    - BUT Testing Update
    - New version of the MSDR Data Transition Table (v2.0) distributed to the MSDRFG on Monday 15 August
      - Changes: Removal of BUT for Post Code, Locality and State
  - Blind Scripts Update
    - Final feedback has been incorporated into the Blind Scripts Update mappings
    - Approach regarding the pseudo-code has been provided i.e., mapping of current value to target value.
    - Mappings to be published as separate CSV files
  - Transition Planning and Scheduling
    - MCPI/SIPF
      - All LNSPs have provided AEMO their initial daily update plans
      - · When amalgamating the LNSP plans, significant daily 'spikes' were observed
      - AEMO is now working with LNSPs to attempt to 'flatten out' the daily spikes in order to assist receiving parties request and process associated C1 reports
    - MSDR
      - Key considerations:
        - Timing of initial AEMO update plan request to LNSPs and MPs
        - Timing of Blind Script update execution in Production e.g., 'x' weeks after Nov release
        - Timing of BUT use for MSDR purposes e.g., post confirmation of the successful execution of the blind script updates
    - Enumerated values
      - AEMO has requested all responsible parties to ensure that all required changes to the current/proposed enumerated values are sent to <a href="mailto:ERCF@aemo.com.au">ERCF@aemo.com.au</a> asap, in order to allow sufficient time for ERCF engagement and for AEMO to publish an updated version of the Standing Data for MSATS, if required, prior to 7 Nov 2022
      - Note, the ERCF is currently considering alternative options re the efficient and effective management and communication of enumerations
- Next meeting scheduled for Monday 19 September 2022



## Implementation Approach

**Chris Fleming** 







### MSDR

- November Implementation
  - 7/11 to 21/11 will be a 2-week stabilisation window. BUT will be configured so that only the SIPF can be updated at this time
  - From 21/11 AEMO will run the blind update scripts. There will be a standard outage window with notifications at the beginning and end of the outage
  - Participants are asked to run their blind update scripts as soon as possible after the scripts are complete
  - On 27/11 the BUT will be reconfigured to enable updates to the remaining attributes
  - From 28/11 full BUT functionality available for Participants to update their standing data
    - Participants will be able to make updates based on changes identified in the C1 report

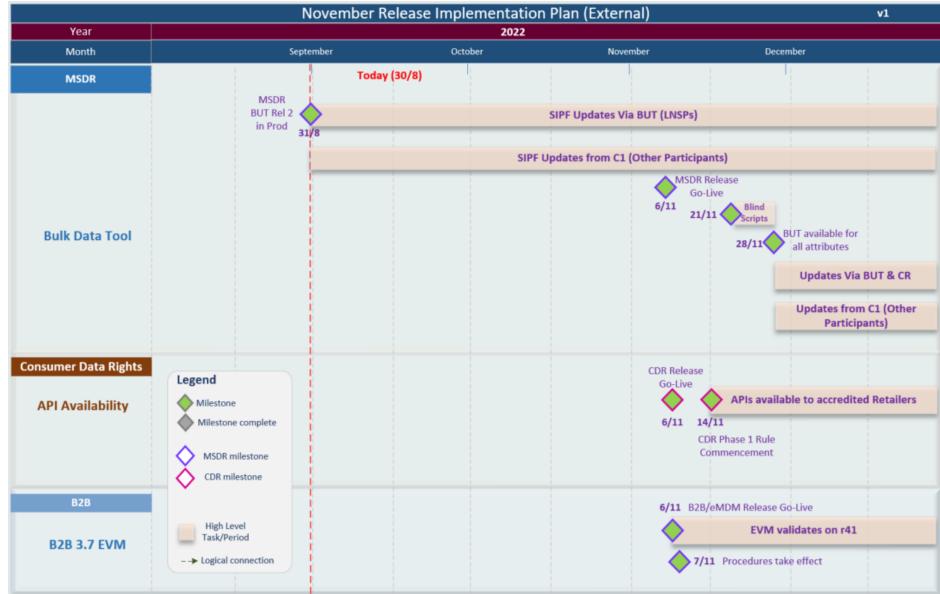
### CDR Phase 1

- API production release will be deployed for 7/11
- CDR Phase 1 ruling comes into effect on 14/11. APIs become available to accredited retailers from this point

### B2B 3.7

- B2B 3.7 release also be deployed for 7/11
- EVM validates to r41











- 7th November Timing
  - Actual go live timing will be on Sunday 6<sup>th</sup>
  - Proposed outage window is 10am to 2pm
  - Go-live includes the deployment of MSATS 48.0, B2B 3.7 and CDR APIs changes

### Impact

- Users will not be able to access MSATS during the outage period
- Meter data processing and RM reports will not be available during the outage period
- User Rights Management (URM) will continue to operate however, the administration screens will not be accessible
- MSATS B2B Transactions and B2B MSATS Screens will be unavailable during this outage
- NMI Discovery will not be available during the outage period
- Detailed Implementation Plan to be released to this forum in the coming weeks and there will be a detailed walkthrough of the plan in the next Implementation Forum



## Industry Testing Update

Tui Grant







- Participant testing has verified the processing of up to 100k records
- 12 issues identified during industry testing related to documentation and deployment
- 1 issue related to use of the BUT tool via MSATS screens still in progress, but the tool can be used successfully via the market portal.
- C1 reports were observed as slow in the preproduction environment, analysis has identified this is a result of the volumes of changes made via the blind update tool. To allow testing to continue the C1 has been restricted to 5,000 records per file (down from the production setting of 30,000) ... AEMO's analysis and conclusion are described on the following slides

### C1 setting of MAXIMUMROWS for PROD



### The Situation:

- Where a BUT update has occurred, the C1 report is the means for Industry to synchronise their local copies of standing data to MSATS.
- MAXIMUMROW count is the MSATS variable used to limit the size of an individual C1 report file. Where the C1 results go
  over this count, the results are available on request in a subsequent file by specifying the sequence number of the last row
  in the C1.
- The current globally set MAXIMUMROW count for PROD is 30,000 rows.

### **Complication:**

- During Industry Testing in the PRE-PROD environment, Participants reported delays in receiving C1 ReportResponses.
- The Outbound batch handler responsible for publishing queued C1 ReportResponses to the Participant outbox failed to process the queued files.
- AEMO identified that the presence of a handful of large C1 ReportResponses was causing the Outbound batch handler to fail.
- To support Industry test, the MAXIMUMROW count for PRE-PROD was changed from 30,000 to 5,000 rows.
- Participants have valid concerns that spreading the number of C1 rows over a more significant number of files that must be processed sequentially will broadly impact their operational systems in Production.





### **Question:**

For the PROD release, what value of MAXIMUMROW minimises the risk to AEMOs Outbound file delivery while supporting Participants' goal to minimise the number of C1s required to ingest BUT updates?

### **AEMO** analysis of large files in PRE-PROD:

- The large files each contained, as per the functional requirement, a maximum of 30,000 rows.
- For CATS NMI DATA C1 ReportResponses, the variability in filesize reflected the proportion of NMIs:
  - where Procedurally non-mandatory aseXML elements are present.
  - with Structured Address vs Unstructured Address.
- The file size was determined to reflect the large number of BUT changes, not due to any defect introduced by the MSATS 47.2 release.

### **AEMO** analysis of the performance of the Outbound Batch Handler in PRE-PROD:

- Constraints in PRE-PROD infrastructure have been identified.
- PRE-PROD Outbound Batch Handler has 512 MB memory allocated vs 1024 MB in PROD.
- This is likely the cause of the reported PRE-PROD delays in receiving C1 ReportResponses.

### **AEMO Conclusion:**

- AEMO shall maintain the existing C1 MAXIMUMROW configuration of 30,000 rows for the PROD release and monitor Outbound Batch Handler performance in hyper care.
- The same memory allocation in PROD shall be applied to the lower environments and PRE-PROD for testing.
- Setting of MAXIMUMROW to be reviewed as the SharedIsolationPointFlag updates progress.

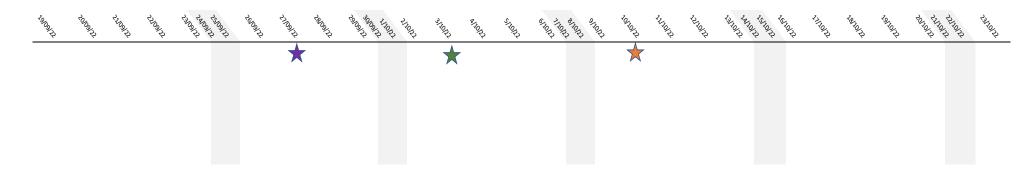


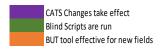
## Industry Testing - MSDR November Release

### Approach:

Testing intends to mimic the planned execution sequence of the MSDR go live which will be staggered over a number of weeks post go live.

- Set up and verification of inflight CATS changes
- Verification of blind script changes
- Release of BUT functionality for the agreed additional fields.





# Industry Risks and Issues Review – November 2022

**Greg Minney** 



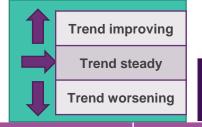






- Review of trends and Risk ratings against key Industry risk and verification of mitigation strategies with November emphasis
- New industry risks noted from previous review
- Re-rating of November risks for Participant review
- Implementation Forum Members to provide any additional feedback on risks to GSMSDR@aemo.com.au

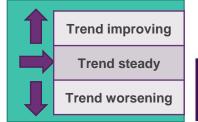
### **November Industry Risks**





ID	Description	Inherent Rating	Controls/Comments	Residual Rating	
R4	Risk of AEMO cutover failure There is a risk that AEMO systems will not go-live as scheduled with the planned cutover window resulting in an impact to participants' processes and market operations	Likelihood: Possible Consequence: Major Rating: Significant	<ul> <li>No Standing data conversion required at cutover reduces impact</li> <li>Cutover Planning to provide expected timings and manage impacts on production operations</li> <li>Industry Go-Live Plans to be developed to establish production operation timings and review post execution</li> </ul>	Likelihood: Unlikely Consequence: Major Rating: Medium	
R8	Late changes to the schema or procedural documents may result in rework and put regulatory timeline at risk	Likelihood: Unlikely Consequence: Moderate Rating: Medium	<ul> <li>R42 schema has undergone extensive consultation through the ASWG and an open industry consultation. It is not expected that there will be additional changes post the final version being issued for the May release</li> <li>Procedure consultations took place in 2019 and a consolidation process is due for completion on 31-Jan-21</li> <li>MSDR focus group has considered compliance windows in association with procedural requirements</li> </ul>	Likelihood: Unlikely Consequence: Minor Rating: Low	1
R9	Inconsistencies between schema and procedural documents may cause confusion, delays and rework and put regulatory timeline at risk	Likelihood: Unlikely Consequence: Minor Rating: Low	MSDR implementation timeframes support procedure changes with compliance windows identified	Likelihood: Unlikely Consequence: Minor Rating: Low	
R10	BUT Production availability for participant use Production availability of BUT update capability must provide for sufficient opportunity for participant testing prior to release to address potential impacts to participant operations and May 1 GS / MCPI delivery	Likelihood: Possible Consequence: Minor Rating Low	<ul> <li>Proposed availability date for BUT / SIPF updates confirmed as 31/8</li> <li>AEMO program to support Industry Test period, including issue resolution, prior to production release</li> <li>Agreed milestones provide 1 month of industry test prior production deployment</li> </ul>	Likelihood: Possible Consequence: Minor Rating Low	

### **November Industry Risks**





ID	Description	Inherent Rating	Controls/Comments	Residual Rating	
R12	Market Update Volumes in 2022/ 1st Half 2023 impact participant processing capacity Volume of market updates for Tranche 2 meters, RTC updates, Net to Register CR updates, MSDR standing data updates combined with lack of visibility to consolidated timings for each activity may result in participant inabilities to support total volume of change	Likelihood: Possible Consequence: Major Rating: Significant	<ul> <li>Consolidated Tranche 2 rollout plans are being circulated with rollout / update scheduled to complete by December 2022 Consolidated 5 Minute RTC Volumes are shifting out towards the end of the year. Sept 630,00, Oct 516,000, Nov 277,000 respective updates</li> <li>Data transition (via BUT) for MSDR fields will occur post Nov 7 release with timings by participant being developed</li> <li>MSDR Focus group to co-ordinate development of participant data transition timings / plan to establish timings</li> <li>Procedures support phased transition through 2023 (2025 for GPS Co-ordinates) for data population activities</li> <li>Consideration to limit BUT tool usage to 12-18 months to limit participant necessity to continue C1 / snapshot reports</li> </ul>	Likelihood: Possible Consequence: Medium Rating Medium	
R13	Ongoing level of Regulatory change impacts to participant capacity to implement. Volume and size of legislated (and planned) reform initiatives may exceed participant resourcing capacity resulting in delays and issues at rule implementation	Likelihood: Possible Consequence: Major Rating: Significant	<ul> <li>Regulatory Roadmap produced in consultation with industry representatives</li> <li>AEMO to adopt co-ordinated implementation program across Electricity reforms</li> </ul>	Likelihood: Unlikely Consequence: Minor Rating: Low	1
R40	Not all participants have access to aseXML Enumerations via Market Net	Likelihood: Unlikely Consequence: Minor Rating: Low	This has been raised with the ERCF who are responsible for publishing the enumeration lists. Will monitor outcome from ERCF	Likelihood: Unlikely Consequence: Minor Rating: Low	
R41	Risk that ongoing changes result in the B2M and B2B procedures become misaligned	Likelihood: Unlikely Consequence: Moderate Rating: Medium	AEMO to consider B2M / B2B mapping alignment	Likelihood: Unlikely Consequence: Minor Rating: Low	75



Forward Planning & Other Business

**Greg Minney** 



## NEM2025 Stakeholder Engagement Approach



- Co-ordination of the NEM2025 roadmap implementation spans multiple initiatives and implementation timeframes
- Participant impacts will vary dependent on initiative impact and timeframe for implementation
- AEMO will reintroduce a Program Consultative Forum (PCF) and Executive Forum to provide overarching engagement across reform agenda
- Implementation Forum will continue to focus on detail implementation requirements including testing, technical implementation
- Consideration to establishment of Procedures WG for co-ordinated consultation
- Nominations received through NEM2025@aemo.com.au





### **Program Consultative Forum**

### Objective:

 To collaborate with participants and intending participants on matters relating to the planning, coordination and implementation of the NEM2025 Program.

#### Cadence:

Monthly

#### Forum kick-off:

· Mid to Late September

### Membership

Invite nominations from industry stakeholders

#### First meeting agenda:

- Roadmap and program mobilisation
- PCF ToR
- PCF priorities and forward plan

### **Executive Forum**

### Objective:

 To provide a channel to facilitate engagement between AEMO and executivelevel representatives from market bodies, market participants and consumer groups on matters relating to the implementation of the NEM2025 Program.

#### Candence:

Six monthly

#### Forum kick-off:

October

### Membership:

Invite nominations from stakeholders

### First meeting agenda:

- Future State Architecture (FSA) briefing
- Program mobilisation

#### **Relationship to RDC:**

- RDC is responsible for Roadmap and strategic issues i.e. planning phase
- PCF is responsible for implementation co-ordination
- EF is a forum for executive engagement and will cover both planning and implementation at exec level



## Participant Consideration for Forum Membership

### PCF

- Project Director or Senior Business Sponsor role with broad reform implementation focus
- Understand that some Participants may not group all reforms under single program
- Implementation focus rather than regulatory engagement

### Implementation Forum:

- Project Manager / release business owner
- Consideration of initiative readiness and implementation progress
- Expect membership to vary for some participants based on initiative impacts





 Tranche 2 rollout plans - AEMO aims to provide updated consolidated plans and progress 7<sup>th</sup> September

## September Implementation Forum Indicative Topics

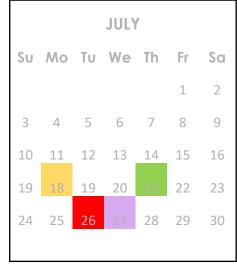


- Focus on Industry Test and November Implementation Planning
- May 23 release update
- BUT release 1 review







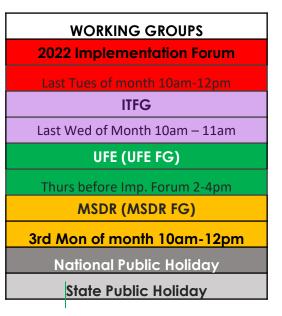


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## Questions

