May 2022 Readiness Working Group #3

Friday, 28 January 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

Greg Minney

Agenda

#	Time	Topic	Presenter
1	10:00 – 10:05	Welcome and Agenda	Greg Minney
2	10:05 – 10:10	Actions	Greg Minney
3	10:10 - 10:20	May Program Update	Greg Minney
4	10:20 – 10:30	MCPI/MSDR Update	Blaine Miner
5	10:30 – 10:40	Approach to GS Transition	Paul Lyttle
6	10:40 – 10:50	Industry Test Focus Group Update	Tui Grant
7	10:50 – 11:10	R42 Schema for May and November	Simon Tu
8	11:10 – 11:30	Industry Go-Live and Contingency approach for GS	Greg Minney
9	11:30 – 11:35	UFE Focus Group Update (UFE FG)	Greg Minney
10	11:40 – 11:50	Industry Risk and Issues – Assessment on participant raised risks and overall assessment	Greg Minney
11	11:50 – 11:55	Forward Plan and Other Business	Greg Minney
12	11:55 - 12:00	Questions	Greg Minney
13	12:00	Meeting Close	Greg Minney

Actions

Greg Minney

Actions

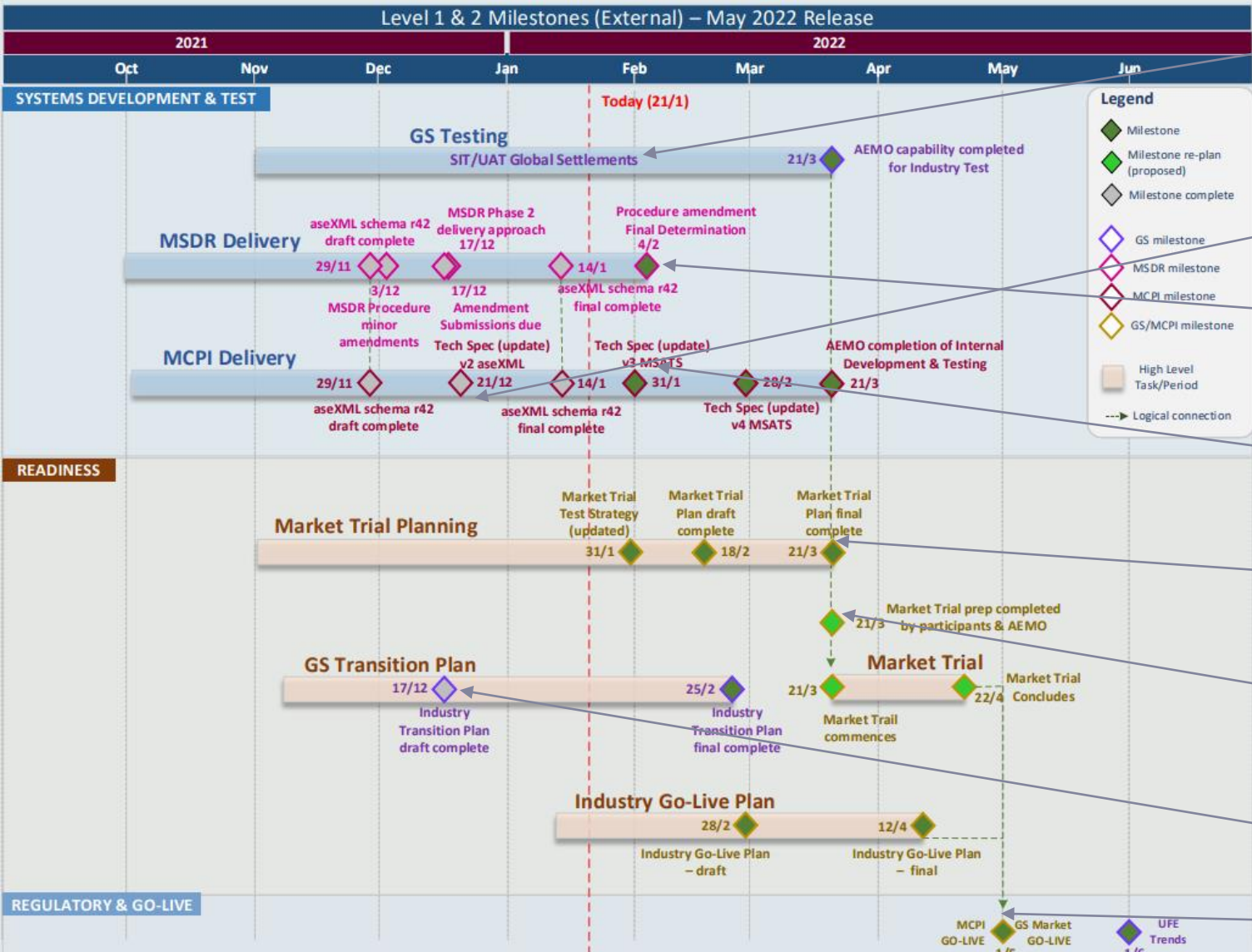| ID	Status	Action	Comment
1.3.1	Closed	AEMO will share the r42 schema approach to industry via May 2022 webpages on its website.	AEMO maintains a webpage for the aseXML Schema. https://aemo.com.au/en/energy-systems/market-it-systems/asexml-standards/asexml-schemas
1.4.1	Closed	ICF inclusions and exclusions to be included in this meeting notes document.	Circulated with RWG meeting notes
1.4.2	Closed	A further update of r42 schema changes to be provided to industry when the draft is approved by the ASWG.	Update was circulated to RWG on 29 Nov 21
1.4.3	Closed	AEMO to provide an update on technical questions around the changes for 1 May as part of May 2022 Readiness Working Group #2 on 14 December 2021.	Update to be provided on the MSDR project during this session plus approach for MSDR FG
1.4.4	Closed	AEMO to provide a single document on scope for 1 May 2022.	Will distribute Functionality Deployment Matrix which will be the key delivery scope document.
1.4.5	Closed	AEMO is in the process of replanning as part of the split of MSDR delivery between 1 May 2022 and 7 November 2022. Dates for market trials ahead of 7 November 2022 will be provided when replanning activities are complete.	Industry test will be documented as part of the delivery approach for MSDR due on 17 Dec 21
1.5.1	Closed	RWG to notify AEMO of changes to membership lists as a result of discontinuing the TFG.	Further changes can be made at anytime by contacting GSMSDR@aemo.com.au
1.5.2	Closed	RWG to give feedback on dates and scope for May 2022 market trials, currently planned to run from 28 March 2022 to 22 April 2022.	To be discussed at IT FG on 8 Dec

Actions

ID	Status	Action	Comment
2.5.1	Closed	Information concerning the settlement of embedded network child/parent NMIs to be made accessible to participants via an FAQ document or similar.	AEMO circulated links for participants to the GS Information Sheet and GS Final Determination (refer to section 6.2 – Embedded Networks) on the AEMC's website with session notes, summary included for UFE Focus group
2.5.2	Closed	AEMO to confirm that isolated jurisdictions will be subject to LR and FRMP updates, and to provide timings for same.	Ergon advised the RWG that the Isolated Jurisdictions will have the LR participant updated.
2.5.3	Closed	AEMO to include an agenda item concerning Grid Profiles in global settlement and UFE in the next UFE Focus Group, currently scheduled for 31 January 2022.	Included as agenda item for upcoming UFE FG #3.
2.8.1	Closed	Information on risk ratings to be dispatched to industry with session notes.	Circulated with session notes.
2.8.2	Closed	Risk of MSATS rejecting CR files due to absent fields and/or using dormant fields to be assessed and added to May 2022 risk register.	Added to risk log for Industry review
2.8.3	Closed	AEMO to confirm if MSATS rejections of CR files can be included as a test scenario in Market Trials.	Participants will be able to test CR processing based on their schema preferences as Industry test scenarios Covered in Industry Testing update
2.8.4	Closed	Risk of going live with UFE data and calculations that have not been confirmed to be accurate to be added to May 2022 risk register.	Added to risk log for Industry review
2.9.1	Closed	Shared isolation point fuse and May aspects of MSDR/MCPI to be included in agenda for MSDR Focus Group #1, currently scheduled for 24 January 2022.	Added to agenda

May 2022 Release Timeline

May 2022 Milestone List (1/3)

ID	Description	Workstream	Date	Owner	Update
L2-MS/MC-01	Draft aseXML Schema r42 (includes MSDR and MCPI) presented to ASWG	MSDR / MCPI	29 Nov 21	AEMO	Complete
L2-MS-02	MSDR Procedure minor amendments process commences	MSDR	03-Dec-21	AEMO	Complete
L2-MS/MC-03	Final aseXML Schema r42	MSDR / MCPI	14-Jan-22	AEMO / ASWG	r42 schema approved 14th Jan, with no change from draft. Publication date 20 Jan
L2-RE40	Industry Transition Plan - GS (Draft update)	GS	17-Dec-21	AEMO	Complete – Submissions received
L2-MS09	MSDR Procedure minor amendments submissions due	MSDR	17-Dec-21	Participants	Complete
L2-MS05	MSDR Phase 2 delivery approach	MSDR	17-Dec-21	AEMO	Initial Draft released 17th December
L2-MC04	Tech Spec update v2 – MCPI CR Processing - aseXML edits	MCPI	21Dec-21	AEMO	MCPI aseXML updates
New	Tech Spec update v3 – MCPI CR Processing - MSATS Config Changes	MCPI	31Jan -22	AEMO	On Track
New	Tech Spec update v4 – MCPI CR Processing - MSATS Code Changes	MCPI	28 Feb-22	AEMO	
L2-RE37	May Release Industry Test Strategy	GS / MCPI	28-Jan-21	AEMO / Participants	Incorporated feedback from ITWG re scope and approach to finalise
L2-MS10	MSDR Procedure amendment Final Determination	MSDR	04-Feb-21	AEMO	Complete Published 21st Jan

May 2022 Milestone List (2/3)

ID	Description	Workstream	Date	Owner	Update
~~L2-MC06~~	~~User Guides Updates (CR processing)~~	~~MSDR~~	~~(TBC)~~	~~AEMO~~	Will not be issued for MCPI / May release, all changes incorporated into release for MSDR/ Nov
L2-RE38	Market Trial Plan - Draft	GS / MCPI	18-Feb-22	AEMO/ Participants	In line with Test Approach – will be based on agreed timings
L2-RE41	Industry Transition Plan -GS (Final)	GS	28-Feb-22	AEMO	
L2-RE42	AEMO capability completed for Market Trial / Industry Test	GS / MCPI	21-Mar-22	AEMO	
TBC	MCPI/MSDR Data Transition Plan	MCPI/ MSDR	TBC	AEMO	As per MSDR Development Approach
L2-MC07	AEMO completion of Internal Development and testing	MCPI	21-Mar-22	AEMO	
L2-RE39	Market Trial Plan - Final	GS / MCPI	21-Mar-22	AEMO/ Participants	
L2-RE26/27	Market Trial Preparation completed	GS / MCPI	21-Mar-22	AEMO/ Participants	Earlier Commencement of Market Trial
L1-18	Market Trial Commencement	GS / MCPI	21-Mar-22	AEMO / Participants	Commence with "inflight" setup activities, cutover / GS Transition from 26th March
L2-RE21	May Release Go-Live Plan - Final	GS / MCPI	12-Apr-22	AEMO	

May 2022 Milestone List (3/3)

ID	Description	Workstream	Date	Owner	Update
L1-20	Market Trial Completion	GS / MCPI	22-Apr-22	AEMO/ Participants	
L1-5	GS and MCPI Go Live	GS / MCPI	01-May-22	AEMO/ Participants	
L1-23	Trends in UFE Report	GS	01-Jun-22	AEMO	
L1-24	Guidelines for UFE Reporting Framework	GS	01-Mar- 23	AEMO	

MCPI/MSDR Update

- First meeting of the MSDR Focus Group occurred on Monday 24 Jan
  - The meeting was well attended
  - Discussion included:
    - A brief background to MCPI & MSDR
    - The purpose and scope of the MSDR Focus Group
    - A procedure consultations update, including the minor amendment process
    - Key Milestones
    - Schema update
    - An introduction to the Data Transition Plan
      - MCPI - Shared isolation point flag (effective date 1 May 2022) - 12mth 'compliance holiday'
      - MSDR - Add, amend and remove fields from MSATS (effective date 7 November 2022) - 12mth 'compliance holiday' excluding GPS coordinates (36mths)
      - Discussed proposed field update methods for each field
        - Methods include:
          - Change Requests
          - Large volumes of blind updates data provided via a purpose-built tool (BUT), based on eligibility
          - AEMO scripted blind updates based on agreed rules
      - Aiming to have the initial Data Transition Plan published by 28 February
- Next meeting scheduled for Monday 21 February

Approach to Global Settlements Transition

Paul Lyttle

Summary of GS Transition Plan

- Updated draft plan was distributed 17th December
  - Summary of transition approach as previously communicated
  - Plan included any feedback from initial draft
  - No fundamental changes were expected to the plan

- Comments and clarifications have been received from Participants
  - Thanks to all that reviewed the plan and those that sent feedback.
  - Responses have been sent to participants for all individual feedback.
  - Previous feedback is included in section 6 of the plan.

- Previously advised high level approach is included on the 2 slides following the summary of participant comment

Global Settlement Plan Feedback

- Below is a summary of responses from participants relating to the GS Plan

Section	Comment	Response
3.1	FRMP updates are Normally transferred via the CR1xxx change request not via BCT	You are correct, however MSATS provides a Function that allows AEMO to use the Bulk Change Tool when a significant number of changes need to occur on a specific date
3.0 Schedule #21	Reconciliation report date of 7 May appears to be incorrect why does this not start after previous step on 4 May	The Indicated date of the 7 May is the end date of delivery of reconciliation files, reconciliation can commence once files are available to participants
3.2.1	Request to separate reconciliation files into 1Million rows to support excel capacity	AEMO will be providing a single CSV report, participants can separate the file into any row limit prior to processing.
3.2.1	Clarification of Backdated NMI process was due to be delivered in 2021	Correct, we apologise for the delay, we have had constraint issues with our environment and have not been able to validate the process, once a database is available we will test the processes and advise participants.
3.2.4	When in February will the list of NMIs be provided	The files will be a list of NMIs identified at the time to identify possible abnormalities. Validation should not be onerous on participants. When would participants like these list to be provided. Note new Connection Points may be established prior to GS go live.
3.2.4	To assist with possible FRMP enquiries relating to Boundary supplies can LNSPs get a copy of the NMI List where the FRMP is going to change	Although LNSPs should already have the data as it is all available in MSATS, AEMO can provide a copy of the Boundary NMIs.
3.4.3	Please advise the CR number that will be used for FRMP updates	The BCT change request will sent notifications with a CR code of BC01
3.4.3	Understanding of FRMP updated and affect on Participants	The only NMIs that will have the FRMP updated to GLOPOOL are one of the 13 Distribution Local Retailers. Other Tier 2 FRMPs will not be affected.
3.4.2	Specific NMI clarification: Section 2.2 states: Updating LR Participant IDs for distribution connection points. However the LR rules (3.4.2) do not consider the LNSP participant ID	AEMO uses the LR to determine to connectivity to the transmission and distribution networks Transmission connections will have a LR = POOL% Distribution connections will have a LR = Distribution Local Retailer Additional investigation into the nominated NMI will confirm if the rules are correct, any abnormalities can be validated however the list of FRMP change NMIs will be send to the responsible FRMP.

Global Settlement Plan Feedback

- Below is a summary of responses from participants relating to the GS Plan

Section	Comment	Response
General	Suggest that you add page numbers for easier referencing	Page numbers added to document
General	Suggest that you add table numbers for easier referencing	Table and diagram numbers added to document
3.0	Step 13 in the table providing detailed steps suggest that participants should stop raising a Create NMI CR on 30/04/2022, however in section 3.3.3 it suggest that this should stop '… from end of day 29 April 2022'.	Step 13 in the Transition Plan Timeline table has been updated to reflect the dates detailed in section 4.3.3
3.2.2	Reconciliation Report Format – Could you please provide clarification whether the Reconciliation Report mentioned in this section will include all the Participant IDs changes, LR and FRMP, or not? The provided example only illustrates changes in the LR role. Otherwise, please advise on alternative reconciliation mechanism.	I have updated section 4.2.2 to explicitly indicate that the reconciliation report will include changes for LR and FRMP participant Ids. Also the FRMP participant id changes will provide notifications as part of the BCT update process.
3.3.3	It is still unclear/open to interpretation re. how the pending NMI Create CRs will be handled on 30 April 2022. Recommend more detail for participants to understand 1. What we can expect if a participant has a pending NMI Create CR on 30 April? i.e. All pending NMI Create CRs will be actioned ('completed' or 'rejected') on 30 April 2022, regardless of the date the CR is raised and regardless of the 1 business day objection process. 2. Whether AEMO allows a LR update with an effective date of 29 April?	The expectation is all NMI Creations will have passed the 1 day objection period and be completed within MSATS in the batch for the 30 April 2022. This allows for the LR change process to be completed with no inflight creation change requests. The intention is to have all NMI creations upto and including a date of 29/4/2022 to be processed.

Global Settlement Plan Feedback

- Below is a summary of responses from participants relating to the GS Plan

Section	Comment	Response
3.4.1	Residual NMI Create CRs process is unclear, recommend additional detail – If a NMI Create CR is sent during the NMI Creation freeze period, what action can each participant expect? i.e. All CR200X and CR25XX received during the 'freeze period' will be rejected?	The request is for participants to place a hold on the NMI Creation CRs. The expectation is the NMI creation will be rejected if the LR <> GLOPOOL.
3.4.2	We suggest that NMI status of 'X' be included in the criteria defined in 2b for the following reasons: 1. Although a NMI with X status should not revert back to A, it does happen due to human error. Therefore updating the LR for a NMI with X status will support these error correction scenarios 2. CR6400/6401 (change LR) will be removed from 1 May 2022, therefore participants are unable to nominate the GLOPOOL id for an error correction scenario for a NMI with X status 3. It will provide a consistent approach and view for all market NMIs regardless of NMI status 4. We note that AEMO's performance testing included NMIs with X status (section 5.1), therefore we expect that including these NMIs will not impact on performance	The removal of "X" (extinct) NMIs, has been specifically excluded due to the following reasons 1. As indicated it is possible to revert a NMI for 'X' but this is not a supported process and goes against procedures. 2. The LR Change request has been removed as participants should not require the need to update the LR post GS Rule change. 3. Other participants have previously advised that changing the LR on an extinct NMI will impact there systems and therefore AEMO experts have validated that the update of 'X' (extinct) NMIs should not be completed. 4. The initial testing was performed to identify the MSATS capacity to support the quantity of changes. Additional system integrations where not completed in the initial test.
3.4.3	FRMP Update Process (ID#16) - Considering previous experience with the BCT tool, it is our understanding that it is possible to get a BCT output file so similar to the example reconciliation report output, could an example BCT output be included in this document.	I have validated that the BCT process does not create a reconciliation report, any previous reports that may have been provided have been a system extract. For the GLOPOOL update this will be replaced by the reconciliation report.

Global Settlement Plan Feedback

- Below is a summary of responses from participants relating to the GS Plan

Section	Comment	Response
3.5.2	No information provided about how AEMO expect any post updates to occur in the event they are required as part of any reconciliation activities. Recommend advice is added to provide participants guidance.	AEMO is not expecting any post processing due to reconciliation activities. Participant changes will reflect the settings currently used in the settlement process (e.g. LR Participant Id for distribution connection points and FRMP participant id for Bulk and Cross Boundary Connection Points)
3.5.2	On a different note and in reference to the Participant change approach: it is our appreciation that the second option presented, to use the reconciliation files as an input, will place MDPs in a risky situation because until the GLOPOOL LR changes are effected in their systems, scheduled NEM12 meter data files will continue to be delivered to the current LR participant differing the stabilisation of the meter data delivery process past the 1/May deadline. While the second option has the potential of having a more accurate outcome it is also true it would increase the risk profile of the GS Transition change. Has there been any considerations in this regard?	Thanks for your comments on the reconciliation process. AEMO does not have the ability to mandate the process for participants updating their system. Participants must ensure that they are complying with the GS Rule change and therefore determine the best transition approach for their business.
4.1	Initial Local Retailer update testing – Could you please provide more specific information relating to LR update testing conducted in November 2020 e.g. exact timings, any failures (if so what were they), learnings etc. Noting timings within the document are estimated and testing performed in a 'lower' environment, it would help participants better plan if baseline timings / performance and failures were known	The initial process in November 2020 was to identify the capabilities of the Bulk Change Process, this was performed on a standalone MSATS system, immediately prior to a refresh. Timing would not reflect an integrated system, we encountered no failures. The key learning from the test was he system had the capability to perform the 11 million changes which had never been tested before. Timings will be are still be identified for the transition plan.

Global Settlement Plan Feedback

- Below is a summary of responses from participants relating to the GS Plan

Section	Comment	Response
New	For completion and traceability purpose, could the document have a section with reference to the Market Trial Test Strategy?	The transition plan relates to the end state solution, however the process will be followed for Market Trials. A high level timeline will be provided for Market trials, however this document relates to the GS Rule change transition.
New	We are seeking for reassurance that both role changes, LR and FRMP, will be available in AEMO Pre-Prod and that the Market Trial Test Strategy (yet to be issued) will adequately address the participant feedback.	I can advise it is AEMOs intention to update the relevant LR nd FRMP NMI roles to GLOPOOL for the Market Trials.

Global Settlement Process

What does the Global Settlement Rule change mean to participants

- Every connection point that generates, consumes or transfers energy within the NEM will be registered and provide reads
- AEMO will settle the NEM to each NMIs reads for each FRMP
  - This means the Local Retailer (LR) will no longer be responsible for energy registered for their Local Area

How does AEMO intend to support the change

- AEMO will create a new Participant Id of "GLOPOOL"
- The GLOPOOL participant id will be assigned to each Connection Point with a direct connection to each Local Area
  - This Includes:
    - Updating the LR participant id for all distribution direct connected NMIs
    - Updating the FRMP participant id for all boundary load NMIs
    - Updating the FRMP and LR Participant ids for all cross boundary NMIs
  - What is excludes from the updates:
    - Any NMIs that are directly connected to the transmission network, these will have a LR participant ID of '%POOL'
    - Any Embedded Network Child NMIs, these will have a value in the embedded network child field
- The update of the LR Participant Code to GLOPOOL effectively changes all Tier1 NMIs (FRMP = LR) to Tier2 NMIs (FRMP <> LR)

Participant change approach

AEMOs approach for updating to the GLOPOOL participant id was released as a in Feb 2021.
- An updated version will be released on 17 December 2021
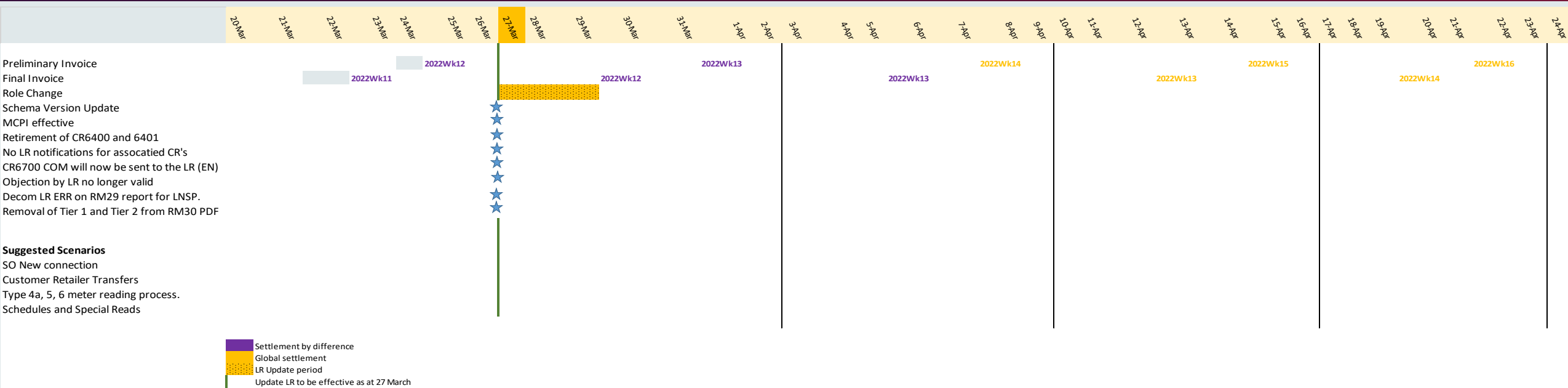- A Final Version is scheduled for release in Feb 2022

Update Approach
- Pre update:
  - Request participants to stop raising NMI Create change requests
- On 2 May 2022 AEMO will update the LR for all NMIs directly connected to a Distribution Network with a start date of 1 May 2022
  - No market notifications will be set to Participants.
- On completion of the LR role change the relevant FRMP changes will be processed with a start date of 1 May 2022
  - Notifications will be provided for the FRMP role change.
- Post Update:
  - Advise participants NMI Creations can resume.
- A reconciliation report will be produced for each Participant Id, who had registered to receive the reconciliation file
  - Details of registration process will be provided at a later date
  - Reconciliation files will be provided to Participant Ids within 3 days of the completion of the update process.
- Participants to determine the best option for them to update their internal systems.
  - Perform a system update of their system and reconcile using the file.
  - Update their systems using the reconciliation file as an input
  - Process system updates using another method.

Industry Test Focus Group Update

Tui Grant

May Release – Test Approach – Option 1

Gantt chart timeline spanning 20-Mar to 24-Apr with 27-Mar highlighted.

Task	
Preliminary Invoice	2022Wk12, 2022Wk13, 2022Wk14, 2022Wk15, 2022Wk16
Final Invoice	2022Wk11, 2022Wk12, 2022Wk13, 2022Wk13, 2022Wk14
Role Change	
Schema Version Update	
MCPI effective	
Retirement of CR6400 and 6401	
No LR notifications for assocatied CR's	
CR6700 COM will now be sent to the LR (EN)	
Objection by LR no longer valid	
Decom LR ERR on RM29 report for LNSP.	
Removal of Tier 1 and Tier 2 from RM30 PDF	

Suggested Scenarios
SO New connection
Customer Retailer Transfers
Type 4a, 5, 6 meter reading process.
Schedules and Special Reads

Legend:
- Settlement by difference
- Global settlement
- LR Update period
- Update LR to be effective as at 27 March

Approach to Market Trial / Industry testing for May release – incorporating GS and MCPI

Settlement Runs for Settlement by Difference and GS (Option 1)

- Prelim and final each week based on above schedule using 100% estimated data.
- Production of all associated reports
- Metering data generated to ensure complete data set – will not match production values
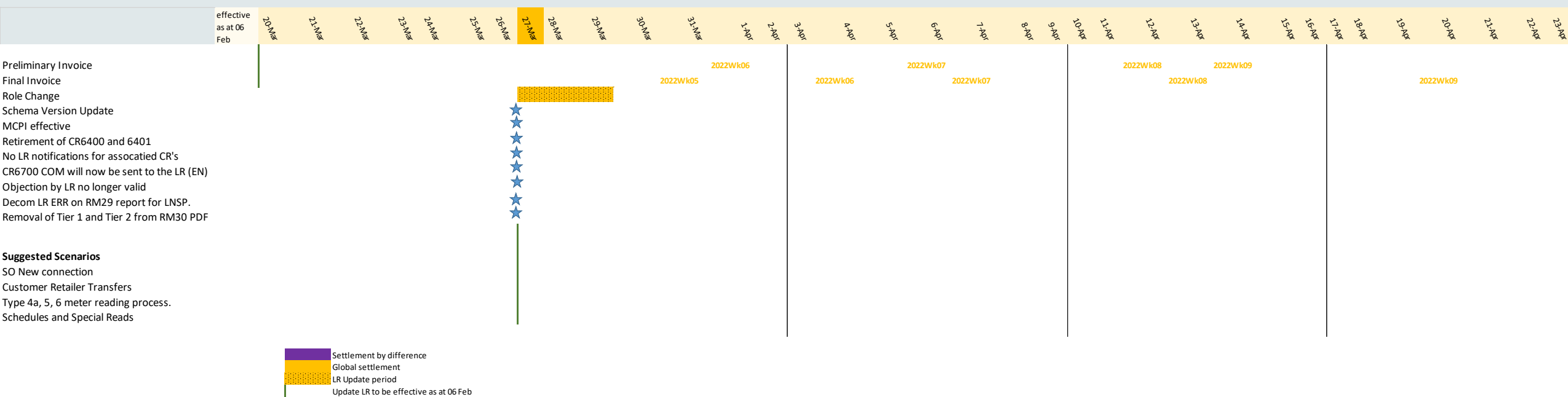
GS transition (including reconciliation reports) run from 26/3 with timing on distribution to be confirmed

Schema, MCPI and GS CR changes available for bi-lateral and individual Industry test from 27th March (following software release)
Suggested scenarios for bi-lateral testing to be scheduled by participants

Practitest available to support participant test recording, progress reporting and issue logging

May Release – Test Approach – Option 2

Row labels:
- Preliminary Invoice
- Final Invoice
- Role Change
- Schema Version Update
- MCPI effective
- Retirement of CR6400 and 6401
- No LR notifications for assocatied CR's
- CR6700 COM will now be sent to the LR (EN)
- Objection by LR no longer valid
- Decom LR ERR on RM29 report for LNSP.
- Removal of Tier 1 and Tier 2 from RM30 PDF

Suggested Scenarios
- SO New connection
- Customer Retailer Transfers
- Type 4a, 5, 6 meter reading process.
- Schedules and Special Reads

Legend:
- Settlement by difference
- Global settlement
- LR Update period
- Update LR to be effective as at 06 Feb

Approach to Market Trial / Industry testing for May release – incorporating GS and MCPI

Settlement Runs for Settlement by Difference and GS (Option 2)

- Prelim and final each week based on above schedule all using production reads which will exist until the 20th February
- Production of all associated reports
- Metering data generated to ensure complete data set – will not match production values

GS transition (including reconciliation reports) run from 26/3 with timing on distribution to be confirmed

Schema, MCPI and GS CR changes available for bi-lateral and individual Industry test from 27th March (following software release)

Suggested scenarios for bi-lateral testing to be scheduled by participants

Practitest available to support participant test recording, progress reporting and issue logging

ITWG/ Market Trial Planning

- ITWG #2 conducted 21st Jan.
  - Testing Scenarios and approach
  - ITWG to provide position on scenarios for LR effective date in Market Trial
    - Scenario 1 – LR effective at 26th March, supports testing of settlement transitions to GS, but limits number of GS invoices that can be produced and requires use of estimated data
    - Scenario 2 – Backdate LR effective date to 6 Feb – allows use of production metering data for settlement runs with more GS invoices produced but no Settle by difference.
    - Positions requested by 15 Feb for consideration at next ITWG

- Market Trial registrations open:
  - Level of reregister participants to determine extent of planned and co-ordinated scenarios
- Pre-prod data refresh planned for 21st February (Retail), 7th Feb (Wholesale)
  - Participant test data alignment

r42 Schema

Simon Tu

aseXML_r42 summary

- r42 schema is available now.

- r42 contains:
  - 25 new elements
  - 3 amended elements

- Scheduled for r42 implementation:
  - Pre-production: Sunday27th March 2022.
  - Production: Sunday 01 May 2022.

- 01 May 2022
  - SharedIsolationPointFlag will be the only r42 to be effective for CR processing, CATS Notifications, NMI discoverable data and CATS Reports.
  - Upgrade to r42 CATS/NMID if your Participant ID sets/maintains or wants to view the new Shared Isolation Point Flag against a NMI.
  - For participants on the SUPERSEDED (r39_p1) CATS/NMID, MSATS removes the Shared Isolation Point Flag element.

- 07 Nov 2022
  - Remaining 24 new r42 elements and 3 amended elements will become effective for CR processing, CATS Notifications, NMI discoverable data and CATS Reports

- Please ensure your receiving schema version is correctly set through the MSATS Browser at least **one week** before cutover

aseXML schema

- aseXML is a standard developed by Australian energy industries to facilitate the exchange of information between energy industry participants using XML.

- A single aseXML schema supports the Gas and Electricity markets.

- To minimise the impact to market systems, each iteration of the schema targets a market with separate releases for either Business to Business (B2B) or Business to Market (B2M) transactions.

- The aseXML Standards Working Group (ASWG) is responsible for the development and maintenance of the aseXML standard.

- When defining an aseXML schema element, elements can be declared as mandatory and to support a finite set of values, called enumerations.

  - If an element has been defined as mandatory, where the element is not populated, an aseXML file will be schema invalid.

  - If an element has set enumerations, any value populated for that element that does not exactly match the enumeration will be schema invalid.

aseXML schema and MSDR

- The *Standing Data for MSATS Procedure* changes for MSDR have been identified as two consultations:
    - Phase 1: New and Amended fields. *Standing Data for MSATS Procedure v4.93*
    - Phase 2: Removal of fields. *Standing Data for MSATS Procedure v5.2*
- A single aseXML release, aseXML_r42, shall support the MSDR Phase 1 consultation.
- The aseXML schema release r42 affects the B2M electricity aseXML schema only.
- There are no changes to the B2B electricity aseXML schema for this Release.
    - The current B2B aseXML schema is r41 for MTRD, SORD, MRSR, CUST, SITE, OWNP, OWNX, NPNX, and PTPE B2B transactions.
- Draft aseXML_r42 published for consultation 29 Nov 2021
- ASWG approved aseXML_r42 14 Jan 2022
- The schema and release notes, along with sample files, can be downloaded from the AEMO website – for quick access, click here.
- r42 schema key dates
    - Pre-production: Sunday 27th March 2022
    - Production: Sunday 01 May 2022

aseXML_r42 for New Fields

- 25 new aseXML_r42 elements have been added.

Element	aseXML Data Type
CurrentTransformerLocation	xsd:string maxLen = 50
CurrentTransformerType	xsd:string maxLen = 20
CurrentTransformerRatioAvailable	xsd:string maxLen = 50
CurrentTransformerRatioConnected	xsd:string maxLen = 50
CurrentTransformerAccuracyClass	xsd:string maxLen = 20
CurrentTransformerTest	xsd:string maxLen = 20
CurrentTransformerTestDate	xsd:date
GPSCoordinatesLat	xsd:decimal minIncl = 0 maxIncl = 99.9999999 totdig = 2 fracdig = 7
GPSCoordinatesLong	xsd:decimal minIncl = 0 maxIncl = 999.9999999 totdig = 3 fracdig = 7
VoltageTransformerLocation	xsd:string maxLen = 50
VoltageTransformerType	xsd:string maxLen = 50
VoltageTransformerRatio	xsd:string maxLen = 50

Element	aseXML Data Type
VoltageTransformerAccuracyClass	xsd:string maxLen = 20
VoltageTransformerTest	xsd:string maxLen = 20
VoltageTransformerTestDate	xsd:date
SharedIsolationPointFlag	xsd:string maxLen = 1
MeterMalfunctionExemptionNumber	xsd:string maxLen = 8
MeterMalfunctionExemptionExpiryDate	xsd:date
ConnectionConfiguration	xsd:string maxLen = 2
GNAFPID	xsd:string maxLen = 20
SectionNumber	xsd:string maxLen = 20
DPNumber	xsd:string maxLen = 20
HouseNumberTo	xsd:nonNegativeInteger maxIncl = 99999
HouseNumberToSuffix*	xsd:string pattern: [\p{L}\p{N}]{1}
TestResult**	xsd:string maxLen = 4

* The ASWG identified HouseNumberToSuffix as a element to be added to align with the HouseNumberTo concept

** The field change of TestResultAccuracy to TestResult, is treated as a retirement of the TestResultAccuracy & the inclusion of a new TestResult element.

- While their corresponding CATS Standing Data fields may have been defined as mandatory and/or to have enumerations under the *Standing Data for MSATS Procedure v4.93*, these attributes are not defined against the aseXML_r42 schema elements.
- AEMO will instead enforce Procedural obligations through MSATS application logic to be executed during Change Request processing.

aseXML_r42 for Amended Fields

- 3 aseXML_r42 elements have been amended to extend their length.

Element	aseXML Data Type r39_p1	aseXML Data Type r42
Hazard	xsd:string maxLen = 12	xsd:string maxLen = 100
Location	xsd:string maxLen = 50	xsd:string maxLen = 200
LocationDescriptor	xsd:string pattern: [\p{L}\p{N}\p{P}\s]{1,30}	xsd:string pattern: [\p{L}\p{N}\p{P}\s]{1,200})

- Where participants now have a Procedurally defined obligation to treat a field as mandatory and/or to supply a set enumeration, this will be enforced by MSATS application logic not the aseXML schema.

aseXML_r42 and MSATS 47.1

- aseXML_r42 shall be implemented as part of the MSATS 47.1 release for the MCPI Rule Commencement on the 01 May 2022.
- The MSATS 47.1 release shall implement the following MSATS application changes to support the MCPI Shared Isolation Point Flag CATS Standing Data field:

AEMO Functional Matrix ID	AEMO GS and MCPI Programme: Function
R36	Shared Isolation Point Flag defined as a new data item for NMI Standing Data at the NMI level and linked to the aseXML_r42 SharedIsolationPointFlag element.
R37	Ability to maintain Shared Isolation Point Flag using 2000 and 5000 series Change Requests.
R38	2000 and 5000 series Change Requests to include validation, processing and notification of Shared Isolation Point Flag.
R39	Ability to query Shared Isolation Point Flag using existing services: a. NMI Discovery b. MSATS Browser c. CATS Reports (C1, C4, C7) d. MSATS Snapshot

- While the other 24 new aseXML elements will be defined under the MSATS 47.1 released aseXML_r42 schema, the MSATS application changes to support these elements will not be implemented until the proposed MSDR Commencement on 07 Nov 2022.
- Until that date, the new aseXML elements are 'silent', ignored if they are submitted in a CATS Change Request and absent from CATS Notifications, NMI discoverable data and CATS Reports generated by AEMO.

aseXML_r42 and MSATS 47.1

- While the Hazard, Location, and LocationDescriptor aseXML elements will have their definition changed to reflected an increased maximum length under the MSATS 47.1 released aseXML_r42 schema, the MSATS application changes to support this will not be implemented until the proposed MSDR Commencement on the 07 Nov 2022.

- TestResultAccuracy shall not be transformed to TestResult

- Until that date:
  - For a submitted CATS Change Request, where the Hazard, Location, and LocationDescriptor aseXML element values are longer then 12, 50 and 30 characters, the values will be trimmed when being ingested and loaded by MSATS into CATS Standing Data for that NMI.
  - For CATS Notifications, NMI discoverable data and CATS Reports generated by AEMO these aseXML values will have a maximum length of 12, 50 and 30 characters respectively.
  - TestResultAccuracy must be used as TestResult remains 'silent'

Transition to aseXML_r42

- All participants that set and maintain the SharedIsolationPointFlag will need to migrate to aseXML_r42:

Event	Change Reason Code	Initiating Role	Description
Create NMI	2000	New LNSP	Create NMI
	2001	New LNSP	
	2520	New ENM	Create NMI, MDM Datastream & Metering Installation Details – Child NMI
	2521	New ENM	
	2020	New ENM	Create NMI Details – Child
	2021	New ENM	
	2500	New LNSP	Create NMI, NMI Datastream & metering installation details
	2501	New LNSP	
Maintain NMI	5050	Current LNSP	Change NMI Details
	5051	Current LNSP	
	5001	Current LNSP	Backdate NMI Start Date
	5021	Current ENM	
	5060	Current ENM	Change NMI Details – Child
	5061	Current ENM	

- All participants that wish to view the SharedIsolationPointFlag against a NMI while undertaking CATS Notifications, NMI discovery or CATS Reports will need to migrate to aseXML_r42.

Transition to aseXML_r42

- AEMO supports both the latest and immediately superseded versions of the B2M aseXML schema.
  - Only one past (superseded) version is supported, so participants need to keep up-to-date with aseXML schema changes.

  - AEMO allows a period of time for participants to transition to the Current schema version so they can schedule their own update without forcing a compromise between their peers and AEMO to agree a single transition time

- Participants can transition to r42 by ensuring their receiving schema version is correctly set through the MSATS Browser at least **one week** before cutover.

- For help with schema transitions, see **Guide to Transition of aseXML**.

Prior to MSATS 47.1 cutover			During cutover	After MSATS 47.1 cutover		
MSATS Browser setting		Outbound Schema Version		MSATS Browser setting		Outbound Schema Version
CATS	LATEST	r39_p1	AEMO transitions participants on the Latest setting to r42 so they are always compliant.	CATS	LATEST	r42
NMID	LATEST	r39_p1		NMID	LATEST	r42
MDMT	LATEST	r39_p1		MDMT	LATEST	r42
CATS	CURRENT	r39_p1	Participants on the Current setting r39_p1 remain on r39_p1, with setting changed to Superseded. Participants can choose when to transition to the new Current/Latest setting.	CATS	SUPERSEDED	r39_p1
NMID	CURRENT	r39_p1		NMID	SUPERSEDED	r39_p1
MDMT	CURRENT	r39_p1		MDMT	SUPERSEDED	r39_p1
CATS	SUPERSEDED	r35	AEMO transitions participants on the Superseded version r35 to the new Superseded version r39_p1. r35 and earlier versions are unsupported all responses will be returned in version r39_p1.	CATS	SUPERSEDED	r39_p1
NMID	SUPERSEDED	r35		NMID	SUPERSEDED	r39_p1
MDMT	SUPERSEDED	r35		MDMT	SUPERSEDED	r39_p1

Industry Go-Live and Contingency approach for GS

Greg Minney

"Principles" for GS-Go Live and Rule Commencement

GS rule will come into effect on 1 May 2022

- AEMO will settle market under a global settlement approach rather than Settlement by Difference , which incorporates settlement of UFE to all FRMPs

GS Soft Start period (from 1/10/21) to provide transparency to FRMPs of level of UFE for which they will become financially responsible

- Based on AEMO reporting UFE as if calculated under GS regime
- With the extra data required for this calculation being provided by the responsible participants from 1/10/21
  - Includes tier 1 basic metering data, non-contestable unmetered loads, further cross boundary meters

From AEMO Go-Live Criteria / readiness perspective the readiness criteria includes:

- AEMO systems / business must be ready to perform global settlement, and support industry verification of settlement values
- AEMO to provide assurance and demonstrate that UFE is calculated in accordance with the rules and in accordance with data inputs - i.e. correctly calculated
- AEMO business ready to meet obligations for UFE Management (trend reporting, establishment of Guidelines)

Participant data delivery is an individual participant compliance issue not a rule commencement criteria:

- Majority of required data to support the calculation of UFE is currently being supplied by responsible participants
- Minor outstanding delivery includes some x-boundary metering for participants in the Victorian jurisdiction, some tier 1metering data in ACT
- All delivery planned for completion well prior to 1 May

As such there is no benchmark "acceptable" level of UFE that is necessary prior to GS Rule Commencement

- Rule anticipates ongoing process to address levels of UFE
- Acknowledge a number of market operation and data quality issues are currently impacting reported UFE volumes along with overall settlement values

Approach to Readiness Requirements

Requirement	Approach	Requirements Addressed
AEMO systems / business must be ready to perform global settlement, and support industry verification of settlement values	UAT, SIT UFE Reporting from Soft Start	UFE reporting from 1/10/21 Ready for Market Trial 21/3/22
AEMO to provide assurance and demonstrate that UFE is calculated in accordance with the rules and in accordance with data inputs, and support industry verification	Settlements Certification process Internal AEMO testing and verification Market Trial Outcomes UFE Reporting from Soft Start	Certification completed UFE reporting from 1/10/21 Market Trial complete 22/4/22
AEMO business ready to meet obligations for UFE Management (trend reporting, establishment of Guidelines)	Appropriate resourcing in place, approach and plan established, Trends in UFE Report Due	First Report 1/6/22
Continuous improvement process established with participants for UFE issue identification and resolution	UFE Working Group	Ongoing

Contingency Approach

- Rule change process to change the go-live date is not a practical approach and does not reflect the Industry risk profile
    - Rule change lead-times would require a rule change request to be submitted before Market Trial are complete
    - Precautionary rule change approach (as adopted for 5MS) is not appropriate for GS commencement – creates significant overhead and market uncertainty, for a lower risk event to manage

- Recommended approach is to 'fix-forward', with objective of ensuring all UFE and settlements calculations are rules compliant in the event issues are identified during final testing

- Should a significant unexpected issue arise that prevents correct calculations as at 1 May, then contingency approach is to:
    - Utilise the Settlements Preliminary/Final and Revisions process to true-up any exceptions incorporating metering data delivery quality as per current process
    - Request a LONA from the AER in the event there is a non-compliance risk

UFE Focus Group Update

Greg Minney

UFE Focus Group Update

- 3rd UFE Focus Group to be held 31st Jan

- Agenda
  - Key Issues for Industry
    - 5MLP impacts

    - Progress on Areas since Go Live
    - Participant lead population activities – Status and impacts
    - Local area Reviews: updates
  - Participant Requested items
    - Embedded network treatments- summary of rule position
    - Completion of Local Area analysis to identify major issues
    - Impact of and treatment of Grid Profiles

- Next meeting scheduled for 25th Feb
  - RWG / UFE Focus Group members to forward key agenda items

Status of Global Settlement data updates

Below is a list of Participant related changes – Scheduled for UFE soft start 1/10/2021

- Create NMIs and activate datastreams, this includes:
  - Non Contestable Unmetered Loads – NCONUML   (102,018 registered)
  - Tier 1 Basic NMIs and Datastreams   (230 currently with NO registered datastreams)
  - Cross Boundary connection points – XBOUNDRY (39 complete, 7 need standing data update, 51 Still to be registered)

- Standing Data Updates
  - Update Boundary loads from WHOLESAL to BULK (932 complete, approx. 271 need standing data update + 8 under investigation)
  - Update WHOLESAL NMIs connected to a distribution network to DWHOLSAL   (6 under investigation)
  - Update GENERATR NMIs to NREG where the FRMP Participant ID ends in "SGA"   (323 Active, 1 Inactive, 8 Greenfield)

- 5 Minute Meter Data
  - Update the Read Type Code all 5 minute capable meters to have a 4th character of 'A' or 'D'
  - Deliver 5 Minute reads for all of the following connection types:
    - COMMS1
    - COMMS2   155 with incorrect RTC code.
    - COMMS3
    - COMMS4 where the NMI Class Code is GENERATOR or NREG
    - COMMS4C where the NMI Class Code is GENERATOR or NREG   11 with incorrect RTC code.
    - COMMS4D where the NMI Class Code is GENERATOR or NREG

Numbers provided as at 21 January 2022
All essential meters are providing 5 minute reads – monitoring continues

Approach to the risk review

- Addition of 3 Industry risks from previous RWG- Assessment presented for confirmation

- Review of trends against key Industry risk and verification of mitigation strategies

- Risks raised relating to Nov 22 go-live will be managed through the MSDR FG to ensure that the RWG focuses on the May release

Readiness Risks

ID	Description	Inherent Rating	Controls/Comments	Residual Rating	Proposed Trend
R1	**Small participant readiness** Small participants are not adequately engaged due to resource limitations, resulting in small participants not having the ability or the information to execute their programs.	Likelihood: Possible Consequence: Minor Rating: Medium	• AEMO completed a number of rounds of small participant mailouts • Relevant FRMPs will have started to see UFE as a line item on their bill and should be aware of the changes • Rule commencement does not require a critical mass of participant readiness	Likelihood: Unlikely Consequence: Minor Rating: Low	→
R2	**Resources Constraints over summer period** There is a risk that there will be resource constraints over the summer period, particularly given the impact of covid and the intensity of 5MS, Customer Switching & WDR commencements. This could impact participant delivery plans for 1 May 2022	Likelihood: Possible Consequence: Moderate Rating: Significant	• Participants to manage their resource schedule and implementation plans • Industry Test and Market Trials have been scheduled after the summer period where aligned resource delivery is required • Scope of MSDR delivery removed from May release	Likelihood: Unlikely Consequence: Moderate Rating: Medium	↓
R3	**The AEMO business and operations are not ready for GS and MCPI on 1 May 22** The AEMO business may not be ready to deliver the full extent of the 5MS deliverables by 5MS and GS rule commencement including business processes and resource training, results in failure of Go Live for 5MS and GS Program	Likelihood: Possible Consequence: Major Rating: Significant	• L1 and L2 milestones have been established. • Updated milestones pack is published monthly on the 5MS/GS webpages. • GS rule commencement is incremental to 5MS implementations, Business resources are in place supporting current settlement processes • AEMO to report monthly on progress, risks and issues through RWG.	Likelihood: Unlikely Consequence: Major Rating: Medium	→
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	• Cutover Planning including trial transitions to prove expected timings and manage impacts on production operations • Transition approaches to be tested with industry during Market Trial • Industry Go-Live Plans to be developed to establish production operation timings	Likelihood: Unlikely Consequence: Major Rating: Medium	→

aseXML Schema r42 May Risks

ID	Description	Inherent Rating	Controls/Comments	Residual Rating	
R6	**<u>Insufficient time for industry development for r42</u>** The industry consultation for r42 will push to beyond 10-Dec-21 and therefore into the end of year shutdown period. There is a (low) risk that the industry will not pick up the final r42 files in time for internal development and testing ahead of market trials.	Likelihood: Unlikely Consequence: Minor Rating: Low	• Functionality testing of new / changed fields beyond Shared Isolation Point Field not required prior November 7 release	Likelihood: Unlikely Consequence: Minor Rating: Low	↓
R7	There is a risk that the schema cannot be sufficiently tested in May-22 as participants won't be ready to test all fields in the schema as/if a sufficient number of participants by role (FRMP, DNSP, MDP) is not ready to engage in testing. Specific focus needs to also be on 'negative testing', i.e. AEMO to not update fields even if provided.	Likelihood: Unlikely Consequence: Minor Rating: Low	• The only field to be communicated for May-22 is the Shared Isolation Point Field. Other changes will not be activated in B2M process prior to 7th November	Likelihood: Unlikely Consequence: Minor Rating: Low	↓
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	• 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. • Procedure consultations took place in 2019 and a consolidation process is due for completion on 31-Jan-21.	Likelihood: Unlikely Consequence: Minor Rating: Low	↓
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	• Risk for May is low as only changes is the Shared Isolation Point Flag. • Risk for November may be higher.	Likelihood: Unlikely Consequence: Minor Rating: Low	↓
R10					

Issues

ID	Description	Actions
I1	Schema update to r42 at same time as data update for Global Settlements role field from "LR" to "GLOPOOL" for all NMIs adds to risk of Go-Live activities	AEMO to understand the dependencies for participants. Both changes are required for MCPI and GS delivery.

Next Steps

- Industry Risks and Issues Register will be updated and published on the website
- Key risks will be reviewed on a monthly basis with new risks and issues being added as they arise
- Risks related to the Nov-22 go-live will be discussed through the MSDR FG
- RWG to provide any additional feedback on risks to GSMSDR@aemo.com.au

Forward Planning & Other Business

Greg Minney

Indicative RWG Topic Schedule

Month	RWG
November	✓ Scope and governance confirmation ✓ Plan on a page/Milestone review ✓ Discuss key dependencies, risks and issues
December	✓ Confirmation of key risks, issues and dependencies ✓ Test Strategy and trial approach ✓ Approach to GS Transition ✓ Progress updates
January	• Review milestone progress • Review GS Transition Plan • Tech Spec Approach (For MCPI) • Nov-22 Plan
February	• Review milestone progress, risks and issues • Tech Spec Review / questions • Market Trial Preparation • Go- Live approach • Discuss key topics • Consider escalating items
March	• Review milestone and transition plan progress • Review risk and issues • Discuss the proposed Industry Go-Live Plan • Review and endorse Release Test Strategy/Plan
April	• Review milestone and transition plan progress • Receive Industry Testing Planning Update • Finalise Industry Go-Live Plan
May	Go Live

Indicative Focus Group Topic Schedule

Month	Industry Testing FG	UFE FG	MSDR FG
November	N/A	✓ Complete	N/A
December	✓ Market Trial scope and timing	✓ Complete	N/A
January	• Market Trial and Industry Test Approach	• Industry status on GS data population and provision • Local Area Assessments • Embedded Network treatment	• Scope and approach for MSDR FG
February	• Develop Test Strategy/Plan	• Industry status on GS data population and provision • Local Area Assessments • Engagement approach	• TBC
March	• Conduct participant testing	• Off market approaches	• TBC
April	• Complete participant testing		• TBC

Upcoming Meetings

JANUARY

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

WORKING GROUPS
Readiness (RWG)

FOCUS GROUPS
UFE (UFE FG)
Industry Testing (ITFG)
MSDR (MSDR FG)

OTHER
Q&A session
Industry Testing
National Public Holiday
State Public Holiday
AEMO Holiday Closure
*Relevant state has been marked in a comment for VIC, NSW, QLD & SA only.

Questions