



5MS & GS Program Consultative Forum #20

Thursday, 9 April 2020

This meeting is recorded for the purpose of minute taking.

Agenda

No	Time (AEST)	Agenda item	Presenter
1	10:00 – 10:05	Welcome and Apologies	Peter Carruthers
2	10:05 – 10:10	Meeting Notes and Actions	Anne-Marie McCague
3	10:10 – 10:20	Coronavirus (Covid-19) risk	Rowena Leung
4	10:20 – 10:30	Executive Forum Debrief	Peter Carruthers
5	10:30 – 10:40	Volume of Industry Change	Peter Carruthers
6	10:40 – 10:50	Cost recovery timeline	Peter Carruthers
7	10:50 – 11:00	Program Update	Rowena Leung
8	11:00 – 11:10	Readiness Workstream Update	Greg Minney
9	11:10 – 11:20	Systems Workstream Update	Graeme Windley
	Break 11:20 – 11:30am		
10	11:30 – 11:35	Reallocations Go Live	Graeme Windley
11	11:35 – 11:40	Staging Environment	Graeme Windley
12	11:40 – 11:50	Customer Switching	Lee Brown/Neil Batie
13	11:50 – 12:00	Forward Meeting Plan	Anne-Marie McCague
14	12:00 – 12:10	General Questions	Peter Carruthers
15	12:10	Meeting Close	Peter Carruthers

Welcome and apologies

Peter Carruthers

Meeting Notes and Actions

Peter Carruthers

Program Consultative Forum - Actions

Item	Topic	Action required	Owner	Update
19.5.1	Systems workstream	AEMO to confirm the location of the Reallocations Release Notes.	AEMO	Complete - emailed to members on 25 March 2020.
19.9.1	Industry Risks & Issues	AEMO to add the impact of Coronavirus to the Industry Risk and Issues Register.	AEMO	Complete – Coronavirus risk added to the Industry Risks and Issues Register.
19.9.2	Executive Forum	AEMO to add the Coronavirus risk to the next Executive Forum Agenda.	AEMO	Complete – Added to the Executive Forum #8 Agenda.

Coronavirus (Covid-19) Risk

Rowena Leung

Proposed Industry Deferral

- On 6-Apr-20 the Market Bodies (AEMO, AEMC and AER) wrote to the COAG Energy Council to advise them that, in light of the impact of Covid-19, it is proposed:
 - Industry be provided with a 12 month delay to five-minute settlement implementation
 - The AEMO program will progress internally as planned
 - AEMO will prepare a rule change required to give effect to this change and submit to the AEMC
- Next steps:
 - AEMO is currently drafting a rule change to be submitted to the AEMC as a matter of priority
 - AEMO will keep market participants informed through the usual 5MS channels

Coronavirus (Covid-19) Risk

- Risk was raised at March PCF in relation to the impact Covid-19 may have on Industry's and AEMO's 5MS and GS implementation programs
- Risk was discussed at Executive Forum in March and the following actions were taken:
 - Risk to be monitored through PCF
 - Question(s) to be added to the Industry Readiness Questionnaire in relation to the impacts of Covid-19 and the mitigation measures
- Purpose of today's discussion:
 - Review risk – description, rating, trend
 - AEMO update
 - Participants' experiences, mitigation measures and expected impacts
- AEMO will update Industry Risks and Issue Register and publish

Coronavirus (Covid-19) Risk

↑ Improving
↔ Stable
↓ Worsened

Risk No.	Title	Description	Trend	Mitigations	Residual Likelihood	Residual Consequence	Residual Risk Rating
New	Impact of Covid-19 resulting in participants and / or AEMO being unable to meet SMS Program timelines	There is a risk that the spread of Covid-19 may result in an increase of participants' employees needing to take leave or working from home resulting in a reduced rate of productivity or difficulty performing systems changes.	↓	<ul style="list-style-type: none"> Monitor risk through PCF and RWG. Add questions in relation to risk to Industry Readiness Questionnaire. 	Likely	Major	Critical

Executive Forum Debrief

Peter Carruthers

Executive Forum Debrief

- Exec Forum held 12 March
- Key discussions:
 - Covid-19 Risk
 - As discussed in section 3
 - Volume of industry change – slides submitted by Ausnet
 - Discussed in more detail in next section
 - AEMO cost recovery update
 - Discussed in section 6
 - Industry Readiness Reporting
 - Discussion took place on the definition of Critical Mass
 - This will be worked through in the RWG

Executive Forum - Actions

Item	Topic	Action required	Responsible	Status
EF 8				
Action 20.3.1	AEMO Core Business	AEMO to lead a piece of work on mapping and reviewing the current and upcoming industry changes and to set up a related consultation group.	TBA	To be assigned to consultation group lead.
Action 20.3.2	AEMO Core Business	Executive Forum members to nominate a contact for consultation via the SMS@aemo.com.au inbox by Thursday 19 March 2020.	24/03/2020	Complete - emailed to the EF 25/03/2020
Action 20.3.3	Executive Forum	AEMO to confirm the purpose of the consultation group to the Executive Forum.	16/03/2020	Complete - emailed to the EF 17/03/2020
Action 20.5.1	Readiness workstream	AEMO to look at the definition of 'Critical Mass' and how it is intended to be used.	14/04/2020	Assigned to RWG.
Action 20.5.2	Executive Forum	AEMO to write (make contact with) on behalf of the Executive Forum to those participants who haven't responded.	9/04/2020	In progress – updated provided in Readiness section.
Action 20.6.1	Industry Issues & Risks	AEMO to adjust R06 and R09 to be listed as an issue rather than a risk and create actions against them.	14/04/2020	Complete – updated Industry Risks and Issues Register to be published.
Action 20.6.2	Readiness workstream	AEMO to align target resolution dates with the industry regulatory change mapping timeline.	9/04/2020	To be discussed in section "Volume of Industry Change".
Action 20.6.3	Readiness workstream	AEMO to add the impact of Coronavirus (Covid-19) on participants to be added to the next Readiness Report.	14/04/2020	Readiness have drafted questions for the next Industry Readiness Survey #2.
Action 20.8.1	Program Timeline	AEMO to look at consolidating the cutover and transition dates to the overall timeline.	9/04/2020	Ongoing

Volume of Industry Change

Peter Carruthers

Issue: Volume of Industry Change

- As requested by the Executive Forum, the following risks have been escalated to an Issue.
 - R06: Interaction with other industry changes that have already been adopted through rule changes
 - R09: Impact to 5MS from other rule changes that are being considered have been escalated to an Issue.
- Next steps:
 - PCF to agree description, rating and target resolution date for issue.
 - AEMO to add to Industry Risk and Issues Register and publish updated register.

ID #	Title	Description	Rating	Actions	Target Resolution Date
I08	Volume of Industry Change	There are a number industry changes including rule changes that need to be implemented in the coming years. This is putting pressure on Industry resources and systems and creating risk on participants' 5MS implementation programs	Significant	AEMO to establish consultative group focusing on mapping industry change Issue to be managed through the consultative group.	TBC

Cost Recovery Timeline

Peter Carruthers

AEMO Costs – Cost Recovery Recap

- 'Declared NEM Project' mechanism for recovery of AEMO 5MS costs
 - Enables a bespoke approach to cost recovery which may be more appropriate than utilising existing AEMO fee recovery mechanisms
 - Requires a consultation process, which provides a formal opportunity for participants to have their views tabled and considered
- 2 Stage consultation process required under the Rules
 - Stage 1: The Project meets the criteria to be classified as a 'declared NEM Project' (sect 2.11).
 - Stage 2: The Participant fees, including the structure, start date and duration of recovery
- Stage 1 Consultation: Declared NEM Project – Classification
 - Must be a major reform, major change to AEMO role or major upgrade of IT systems
 - Consultation on Stage 1 was completed in November 2019
 - AEMO concluded that the 5MS/GS reforms meet the criteria to be a declared NEM Project

AEMO Costs – Stage 2 consultation approach and timeline

- Stage 2 Consultation – Declared NEM Project – Fee Approach
 - Sets out the fee recovery approach e.g. structure, start date, duration
 - Must consider 5 key principles: simplicity, recovery of CAPEX and OPEX, reflect the beneficiary, not unreasonably discriminate, ancillary service providers treatment
 - 2 step consultation process again required.
- Co-ordinated approach with AEMO July 2021 fee re-set process
 - 5MS declared NEM project consultation to run on the same timeline as the AEMO July 21 fee reset process
 - They will be run as separate consultations (i.e. separate consultation papers) but will be co-ordinated
 - It may be necessary to cross reference between the two papers, this will occur as required
 - An aligned timeline is expected to provide the most efficient response approach for participants.
- Key dates
 - Initial consultation paper published July 2020. Consultation open for ~8 weeks, responses due Sept 2020
 - Draft report published November 2020. Consultation open for ~8 weeks. (Dependent on feedback to initial consultation)
 - Final report published March 2021
 - Fee structure takes effect 1 July 2021
 - AEMO obliged to provide 3 months notice period before fees commence.

Program Update

Rowena Leung

Program update and current activities



AEMO program

- Overall Amber, pressures emerging in the development of Metering.
- The AEMO Internal Metering Solution milestone "Build complete" is at risk for the 30 June 2020.
- Re-planning exercise is in progress and is in its final stages.
- At this stage we see no change to the overall delivery dates which impact participants.



Systems

- SMS Reallocations successfully deployed in Production 01-04-2020, completed by a remote deployment team.
- Staging environment updated with Settlements Package 2 and combined Dispatch and Settlements Data Model Released 16 March 2020.



Readiness

- Industry Readiness Report Round 1. Participant Follow up in progress. Round 2 survey to be issued 14 April.
- Initial meter installation plans for T 1-3,4* configuration being consolidated.
- ITWG has commenced planning for Participant testing for MDM release.

Level 1 Milestones Change Report

Current as at 03-04-2020

Current L1 Milestone

ID	Stream	Milestone	Planned Date	Expected Date	%	Comments
L1-M6	Systems	AEMO Internal Systems Development – Build Complete	30 June 2020	See below	70%	Dispatch and Settlement on time. Metering solution development likely not to be fully complete by 30 June.

Issues impacting the delivery of milestone L1-M6

- Increase in complexity of the solution (under-estimation of effort in some areas)
- Technology issues which have impacted on productivity
- Security
- COVID-19

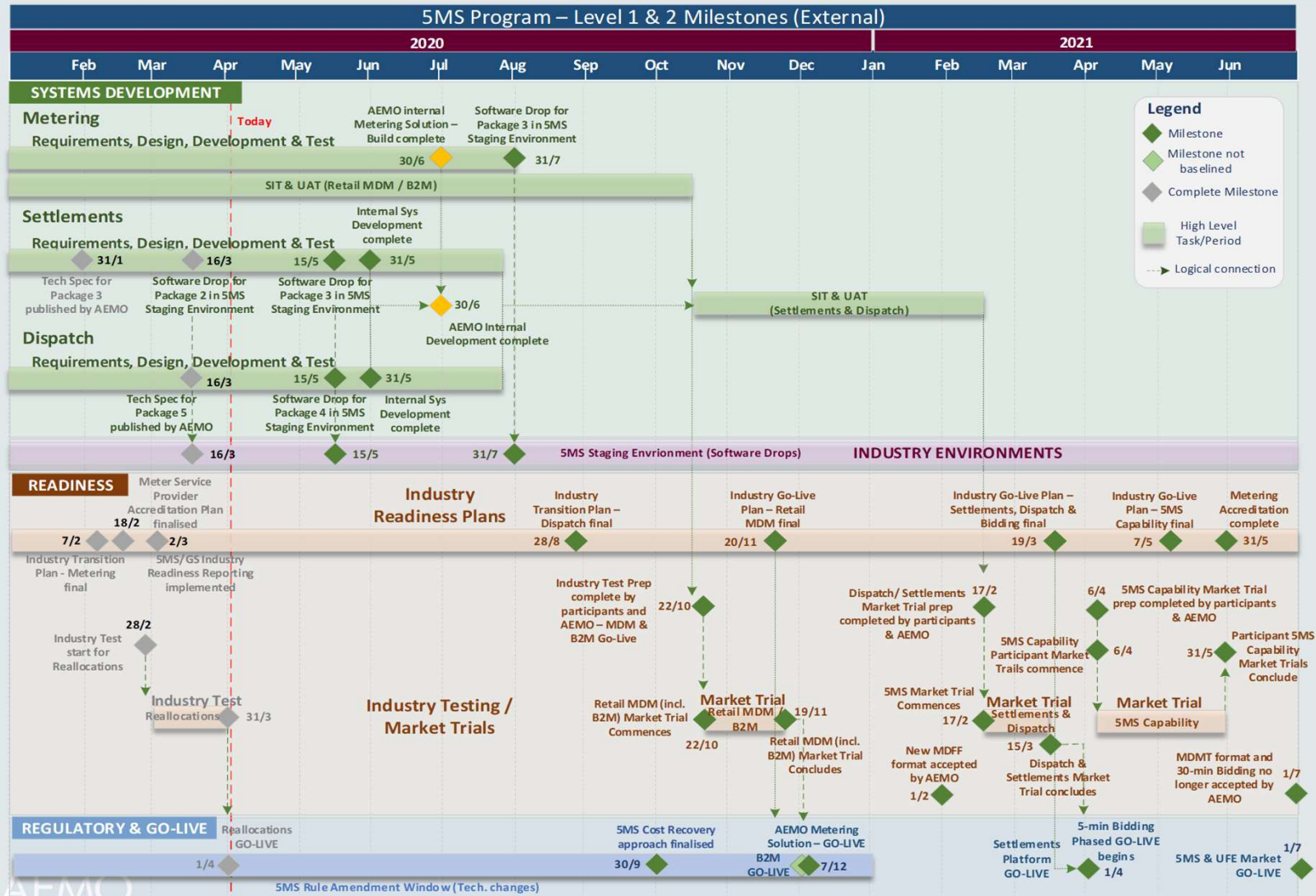
Mitigation & Consequence

- Functionality required for AEMO Metering solution go-live on 7 Dec 2020 will be prioritised and delivered on time by 30 June 2020.
- Functionality not essential for 7 Dec 2020 will be completed after 30 June 2020 – a new milestone will be added to track this.
- This strategy is intended to enable AEMO Metering Solution go-live to continue as scheduled on 7 Dec 2020, with a second internal AEMO drop in Feb 2020.
- On this basis, no impact to participants and no consequence to participant dates.
- Note: Re-planning currently being finalised to validate this, if there is change the PCF will be advised.

5MS Program Timeline (Jan '20 to Jul '21)

Level 1 and External Level 2 Milestones

Current as at 02-04-2020



Readiness Workstream Update

Greg Minney

Readiness papers - timelines

Readiness paper	RWG/ITWG/FG engagement	Draft paper	Consultation	Comments due	Final paper
Industry readiness contingency plan	Nov-2019	20-Dec	6 weeks	31-Jan-2020	14 April 2020
MSP accreditation update plan	Oct-2019	29-Nov	11 weeks	31-Jan-2020	21-Feb-2020
Bidding and dispatch transition plan	Jun-2020	10-Jul	3 weeks	31-Jul-2020	28-Aug-2020

Major strategy positions established, workstream focus now on implementation of those strategies

Workstream engagement

- Contingency Planning
 - Feedback received on 2nd round of consultation
 - No shift in draft positions from Industry feedback
 - RWG to consider critical mass and critical capability
 - Final paper to be issued 14 April 2020
- Metering Transition Plan
 - TFG to be conducted 6 April 2020
 - Focus of activity:
 - Increase clarity and understanding of activities in the MTP
 - Confirm those areas where:
 - AEMO support may be required by participants
 - Implementation approaches to activities need elaborating
 - Share plans and approaches across impacted participants
 - Support ongoing participant work programs

Workstream engagement

ITWG

- ITWG #4 conducted on 25 March 2020
- Focus on scope delivered in MDM release (including B2M via API), on the relationship with Metering Transition Plan and developing test scope for that test phase.
 - ITWG is establishing focus group to advance test plans
 - Nominations by 10 April 2020 via 5MS@aemo.com.au
 - Initial meeting 24 April 2020 via Webex
- Consideration of the capability included in Release 4, Dispatch and Settlement as basis for developing test scope was provided
- ITWG discussed potential for moving GS market trial forward – no participants supported shift of test phase from current planned dates

Metering Accreditation Update Plan

- Pre-accreditation meetings have commenced

Workstream engagement – Readiness Reporting

- Readiness Reporting Round 1 Q&A session conducted 30 March 2020
 - Clarifications on survey interpretation
 - Summary presentation of survey results
- Round 1 Follow up activities:
 - Engagement with key participants, including wholesale MP, who did not participant in round 1
 - Status clarification for MTP activities
 - N/A reported
 - On-track
 - Targeted retailer and generator follow up based on industry criticality
- Round 2 survey to be issued 14 April 2020
 - Inclusion of COVID-19 questions
 - Addition of MC classification for response
 - Refinement of results presentation and inclusion of trends

Readiness reporting	Survey released	Survey responses due	Distribute results	Discuss at RWG	Discuss at PCF	Discuss at EF
Round #1	05-Feb-20	14-Feb-20	2-Mar-20	11-Mar-20	05-Mar-20	Proposed 12-Mar-20
Round #2	14-Apr-20	23-Apr-20	07-May-20	14-May-20	02-Jun-20	Proposed 11-Jun-20
Round #3	07-Jul-20	16-Jul-20	30-Jul-20	13-Aug-20	03-Sep-20	Proposed 07-Sep-20
Round #4	01-Sep-20	10-Sep-20	24-Sep-20	08-Oct-20	05-Nov-20	19-Nov-20
Round #5	03-Nov-20	12-Nov-20	26-Nov-20	09-Dec-20	tbc	tbc

Current as at 02-04-2020

<div> <div></div> <div>Milestone complete</div> </div> <div> <div></div> <div>Milestone on track</div> </div> <div> <div></div> <div>Milestone at risk</div> </div> <div> <div></div> <div>Milestone not achieved</div> </div>	Key Milestones (Program)					
	ID	Milestone	Target Date	Expected Date	Owner	Status
	L2-RE01	Industry Working Group Established	15-Jul-2019	15-Jul-2019	AEMO	Complete
	L2-RE02	Market Readiness Strategy Industry Draft	30-Aug-2019	30-Aug-2019	AEMO	Complete
	L2-RE03	Market Readiness Strategy Finalised	29-Nov-2019	30-Oct-2019	AEMO	Complete
	L2-RE04	Industry Test Strategy Industry Draft Released	30-Sep-2019	30-Sep-2019	AEMO	Complete
	L2-RE05	Industry Test Strategy Finalised	29-Nov-2019	29-Nov-2019	AEMO	Complete
	L2-RE06	Transition and Go Live Strategy Industry Draft Released	30-Sep-2019	30-Sep-2019	AEMO	Complete
	L2-RE07	Transition and Go Live Strategy Finalised	29-Nov-2019	29-Nov-2019	AEMO	Complete
	L2-RE08	Market Trial Strategy Industry Draft	30-Sep-2019	30-Sep-2019	AEMO	Complete
	L2-RE09	Market Trial Strategy Finalised	29-Nov-2020	29-Nov-2019	AEMO	Complete
	L2-RE10	Metering Service Provider Accreditation Update Plan Industry Draft	29-Nov-2019	29-Nov-2019	AEMO	Complete
	L2-RE12	Industry Readiness Reporting Plan Industry Draft	31-Oct-2019	31-Oct-2019	AEMO	Complete
	L2-RE13	Industry Readiness Reporting Plan Finalised	13-Dec-2019	13-Dec-2019	AEMO	Complete
	L2-RE15	Industry Transition Plan – Metering final complete	07-Feb-2020	07-Feb-2020	AEMO	Complete
	L2-RE14	5MS / GS Industry Readiness Reporting Implemented	28-Feb-2020	02-Mar-2020	AEMO	Complete
	L2-S8	Industry Test start for Reallocations	01-Mar-2020	28-Feb-2020	AEMO	Complete





Level 2 Milestones – Readiness

Current as at 02-04-2020

Domain	Initiative	2019												2020												2021											
		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
Readiness																																					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Key Milestones (Program)

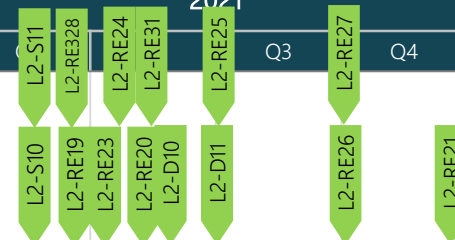
ID	Milestone	Target Date	Expected Date	Owner	Status
L2-RE11	Metering Service Provider Accreditation Plan Finalised	13-Mar-2020	18-Feb-2020	AEMO	Completed
L2-S12	Reallocations Go-Live	01-Apr-2020	01-Apr-2020	AEMO	Completed
L2-RE32	Industry Test for Reallocations Concludes	31-Mar-2020	31-Mar-2020	AEMO	Completed
L2-RE22	Industry Transition Plan – Dispatch final complete	28-Aug-2020	28-Aug-2020	AEMO	
L2-M11	Market Trial preparation completed by participants for MDM and B2M Go-Live	22-Oct-2020	22-Oct-2020	Participants	
L2-M12	Market Trial preparation completed by AEMO for MDM and B2M Go-Live	22-Oct-2020	22-Oct-2020	AEMO	
L2-RE29	Retail MDM (incl. B2M) Market Trial Commences	22-Oct-2020	22-Oct-2020	AEMO	
L2-RE30	Retail MDM (incl. B2M) Market Trial Concludes	19-Nov-2020	19-Nov-2020	AEMO	
L2-RE18	Industry Go-Live Plan Retail MDM finalised	20-Nov-2020	20-Nov-2020	AEMO	
L2-M24	B2M Go-Live	17-Mar-2020	07-Dec-2020	AEMO	
L2-M10	New MDFF format accepted by AEMO	01-Feb-2021	01-Feb-2021	AEMO	
L2-D7	Dispatch Market Trial preparation completed by participants	17-Feb-2021	17-Feb-2021	Participants	
L2-D8	Dispatch Market preparation completed by AEMO	17-Feb-2021	17-Feb-2021	AEMO	

-  Milestone complete
-  Milestone on track
-  Milestone at risk
-  Milestone not achieved

Level 2 Milestones – Readiness

Current as at 02-04-2020

Domain	Initiative	2019												2020												2021											
		Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4		
Readiness																																					
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec



Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Owner	Status
L2-S10	Settlements Market Trial preparation completed by participants	17-Feb-2021	17-Feb-2021	Participants	
L2-S11	Settlements Market Trial preparation completed by AEMO	17-Feb-2021	17-Feb-2021	AEMO	
L2-RE28	Dispatch and Settlements Market Trial concludes	15-Mar-2021	15-Mar-2021	AEMO	
L2-RE19	Industry Go-Live Plan Settlements, Dispatch & Bidding finalised	19-Mar-2021	19-Mar-2021	AEMO	
L2-RE23	5MS Capability Market Trial preparation completed by participants	06-Apr-2021	06-Apr-2021	Participants	
L2-RE24	5MS Capability Market Trial preparation completed by AEMO	06-Apr-2021	06-Apr-2021	AEMO	
L2-RE31	5MS Capability Market Trial commences	06-Apr-2021	06-Apr-2021	AEMO	
L2-RE20	Industry Go-Live Plan – 5MS Capability final complete	07-May-2021	07-May-2021	AEMO	
L2-D10	5MS Capability Market Trial concludes	31-May-2021	31-May-2021	AEMO	
L2-D11	30-min Bidding no longer accepted by AEMO	01-Jul-2021	01-Jul-2021	AEMO	
L2-RE25	MDMT format no longer accepted by AEMO for interval meters	01-Jul-2021	01-Jul-2021	AEMO	
L2-RE26	GS Market Trial preparation completed by participants	01-Oct-2021	01-Oct-2021	Participants	
L2-RE27	GS Market Trial preparation completed by AEMO	01-Oct-2021	01-Oct-2021	AEMO	
L2-RE21	Industry Go-Live Plan – GS Capability final complete	21-Dec-2021	21-Dec-2021	AEMO	

- Milestone complete
- Milestone on track
- Milestone at risk
- Milestone not achieved

Systems Workstream Update

Graeme Windley

SWG #20 Update

Rejection of Metering Data sent by an MDP not in a MDP Role

- Original proposed solution within the new MDM implementation is for AEMO to accept B2M MTRDs for NEM Settlements, effectively a system solution to Market non-compliance scenarios.
- AEMO current position is to revert to the Procedure.
- Discussed at Transition Focus Group 06-April-2020 and next steps are being followed up as a matter of priority.

Participant ID Update for GS

- To support the Global Settlement (GS) changes all Distribution Network Connection Points will have their Local Retailer (LR) participant id updated to "GLOPOOL".
- AEMO's solution is to update the required LR and FRMP code without sending Market Notifications. Market Participants will be required to update their own systems at GS go live.

Stream updates

- Timelines – B2M via API and Metering solution Pre Production and Go-Live dates adjusted, now 07-Dec-2020.
- Data Model for Settlements– Delivered with Staging environment deployment.

Systems Workstream – Dispatch & Operations

Current as at 03-04-2020

5 MINUTE SETTLEMENT SYSTEMS TRACKING	TIMING									
	Internal HLIA	Focus/Group	SWG Engagement	External HLIA	Draft Tech Spec	Final Tech Spec	User Guides	5MS Staging	Preprod	Production
DISPATCH and OPERATIONS										
PACKAGE 1 - Bidding FTP and API										
Transition	Aug-18	Oct-18	Aug-18	Nov-18	Dec-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Mar-21
Bidding Data Model	Aug-18	-	Sep-18	Mar-19	Dec-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Mar-21
Bidding Format	Aug-18	-	Sep-18	Nov-18	Dec-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Mar-21
PACKAGE 2 - Bidding Web UI										
Bidding Web UI and APIs	Aug-18	Nov-18	Dec-18	Jan-19	Mar-19	31-Jul-19	16-Dec-19	29-Nov-19	Nov-20	Mar-21
PACKAGE 3 - Dispatch, Pre-dispatch and PASA										
Dispatch	Aug-18	-	Oct-18	Nov-18	Oct-18	2-Apr-19	-	29-Nov-19	Nov-20	Mar-21
Predispatch P30/7DAY	Aug-18	-	Oct-18	Nov-18	Oct-18	2-Apr-19	-	29-Nov-19	Nov-20	Mar-21
Predispatch P5	Nov-18	Oct-18	Nov-18	TBC	TBC	TBC	-	TBC	Nov-20	May-21
ST and PD PASA	Aug-18	-	Oct-18	Nov-18	Oct-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Mar-21
PACKAGE 4 - Pricing and Miscellaneous										
Trading Price / Price Revision	Aug-18	-	Feb-19	Nov-18	Mar-19	31-Jul-19	-	15-May-20	Nov-20	May-21
Administered Pricing and CPT	Aug-18	-	Feb-19	Dec-18	Mar-19	31-Jul-19	-	15-May-20	Nov-20	May-21
Suspension Pricing	Sep-18	-	Feb-19	Dec-18	Mar-19	31-Jul-19	-	15-May-20	Nov-20	May-21
Negative Residue Management	Sep-18	-	Feb-19	Dec-18	Jun-19	31-Jul-19	-	15-May-20	Nov-20	May-21
RERT	Oct-18	-	-	-	-	-	-	-	-	-
PACKAGE 5 - Full Data Model										
Full Data Model	Sep-18	Ongoing	Ongoing	Apr-19	Ongoing	31-Jan-20	16-Mar-20	29-Nov-19	Nov-20	May-21





Level 2 Milestones - Dispatch

Current as at 03-04-2020

Domain	Initiative	2019				2020				2021			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Dispatch			L2-D1	L2-D2 L2-D12	L2-D3	L2-D13	L2-D5 L2-D4						
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Status
L2-D1	Final technical specifications for Package 1 published by AEMO	2-Apr-2019	2-Apr-2019	Complete
L2-D2	Final technical specifications for Package 2 published by AEMO	31-Jul-2019	31-Jul-2019	Complete
L2-D12	Final technical specifications for Package 4 published by AEMO	31-Jul-2019	31-Jul-2019	Complete
L2-D3	Software drop for Packages 1,2 & 3 in 5MS Staging Environment	29-Nov-2019	29-Nov-2019	Complete
L2-D13	Final technical specifications for Package 5 published by AEMO	31-Jan-2020	16-Mar-2020	Complete
L2-D5	Software drop for Package 4 in 5MS Staging Environment	15-May-2020	15-May-2020	
L2-D4	Development completed (internal)	31-May-2020	31-May-2020	

-  Milestone complete
-  Milestone on track
-  Milestone at risk
-  Milestone not achieved

Systems Workstream - Metering

Current as at 03-04-2020

5 MINUTE SETTLEMENT SYSTEMS TRACKING	TIMING									
	Internal HLIA	Focus/Group	SWG Engagement	External HLIA	Draft Tech Spec	Final Tech Spec	User Guides	SMS Staging	Preprod	Production
METERING										
PACKAGE 1 - Metering Data & Metrology										
MDFF • MDFF Specification NEM12 NEM13 v20	Aug-18	Oct-18	Oct-18	Nov-18	Jan-19	Apr-19	-	1-Dec-19	22-Oct-20	01-Feb-21
PACKAGE 2 - MSATS & SLPs										
Transition • MSATS Technical Specification	Aug-18	Sep-18	Aug-18	Nov-18	31-May-19	30-Sep-19	-	-	-	-
Meter Data - MDFF and MDMF • MDM File Format and Load Process (User Guide) • MSATS Technical Specification	Aug-18	Oct-18	Sep-18	Nov-18	31-May-19	30-Sep-19	-	1-Dec-19	22-Oct-20	01-Feb-21
PACKAGE 3 - Miscellaneous										
B2M via API • MSATS Technical Specification	Oct-18	-	Apr-19	9-May-19	31-May-19	30-Sep-19	31-Jul-20 (TBC)	N/A	22-Oct-20	07-Dec-20
MSATS Browser (LVI) changes • MSATS Technical Specification	Aug-18	-	May-19	9-May-19	28-Jun-19	30-Sep-19	31-Jul-20	31-Jul-20	22-Oct-20	07-Dec-20
MSATS Report changes • MSATS Procedures MDM Procedure • MDM File Format and Load Process (User Guide) • MSATS Technical Specification General Process & Document Clean-up	Oct-18	-	Apr-19	Apr-19	28-Jun-19	30-Sep-19	-	31-Jul-20	22-Oct-20	07-Dec-20

1. Pre-Production date(s) aligned with "L2-M12 Industry test preparation completed by AEMO for MDM and B2M Go-Live" milestone tracked via Readiness Stream.

2. Production date(s) aligned with "L1-19 AEMO Metering Solution - Go-Live" milestone tracked via Readiness Stream.





Level 2 Milestones – Metering

Current as at 03-04-2020

Domain	Initiative	2019					2020					2021													
		Q1			Q2		Q3	L2-M4	Q4		Q1			Q2		Q3	Q4								
Metering																									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Status
L2-M1	AEMO internal metering solution – solution design complete (internal)	31-May-2019	17-Jun-2019	Complete
L2-M2	Final technical specifications for Package 1 published by AEMO	30-Jun-2019	30-Apr-2019	Complete
L2-M3	Final technical specifications for Package 2 published by AEMO	30-Sep-2019	30-Sep-2019	Complete
L2-M4	Final technical specifications for Package 3 published by AEMO	30-Sep-2019	30-Sep-2019	Complete
L2-M5	Software drop for Packages 1 & 2 in 5MS Staging Environment	01-Dec-2019	01-Dec-2019	Complete
L2-M7	AEMO internal metering solution – build complete (internal)	30-Jun-2020	30-Jun-2020	Date now under pressure. Replanning exercise required with potential to adjust.
L2-M8	Software drop for Package 3 in 5MS Staging Environment	31-Jul-2020	31-Jul-2020	On Track

-  Milestone complete
-  Milestone on track
-  Milestone at risk
-  Milestone not achieved

Systems Workstream - Settlements

Current as at 03-04-2020

5 MINUTE SETTLEMENT SYSTEMS TRACKING	TIMING									
	Internal HLIA	Focus/Group	SWG Engagement	External HLIA	Draft Tech Spec	Final Tech Spec	User Guides	SMS Staging	Preprod	Production
SETTLEMENTS										
PACKAGE 1 - Reallocations										
Reallocations	Dec-18	Nov-18	Dec-18	Mar-19	31-Jul-19	15 Oct 19	1-Nov-19	1-Nov-19	1-Mar-20	1-Apr-20
PACKAGE 2 - Settlements and Billing										
Settlements	Oct-18	Nov-18	Dec-18	Mar-19	30-Aug-19	20 Dec 19	-	16 Mar 20	Nov-20	May-21
Billing	Oct-18	Nov-18	Dec-18	Mar-19	30-Aug-19	20 Dec 19	-	16 Mar 20	Nov-20	May-21
PACKAGE 3 - Prudentials and Estimation										
Prudentials	Sep-18	Nov-18	Dec-18	Mar-19	31-Oct-19	31 Jan 20	15 May 20	15 May 20	Nov-20	May-21
Estimation	Oct-18	Nov-18	Dec-18	Mar-19	31-Oct-19	31 Jan 20	-	15 May 20	Nov-20	May-21
Full Data Model	Refer DISPATCH									





Level 2 Milestones – Settlements

Current as at 03-04-2020

Domain	Initiative	2019				2020				2021			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Settlements					L2-S1 L2-S2	L2-S3	L2-S4	L2-S6	L2-S7 L2-S5				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Key Milestones (Program)

ID	Milestone	Target Date	Expected Date	Status
L2-S1	Final technical specifications for Package 1 published by AEMO	15-Oct-2019	15-Oct-2019	Complete
L2-S2	Software drop for Package 1	01-Nov-2019	01-Nov-2019	Complete
L2-S3	Final technical specifications for Package 2 published by AEMO	15-Dec-2019	16-Dec-2019	Complete
L2-S4	Final technical specifications for Package 3 published by AEMO	31-Jan-2020	31-Jan-2020	Complete
L2-S6	Software drop for Package 2 in 5MS Staging Environment	16-Mar-2020	16-Mar-2020	Complete
L2-S7	Software drop for Package 3 in 5MS Staging Environment	15-May-2020	15-May-2020	
L2-S5	Development completed (internal)	31-May-2020	31-May-2020	

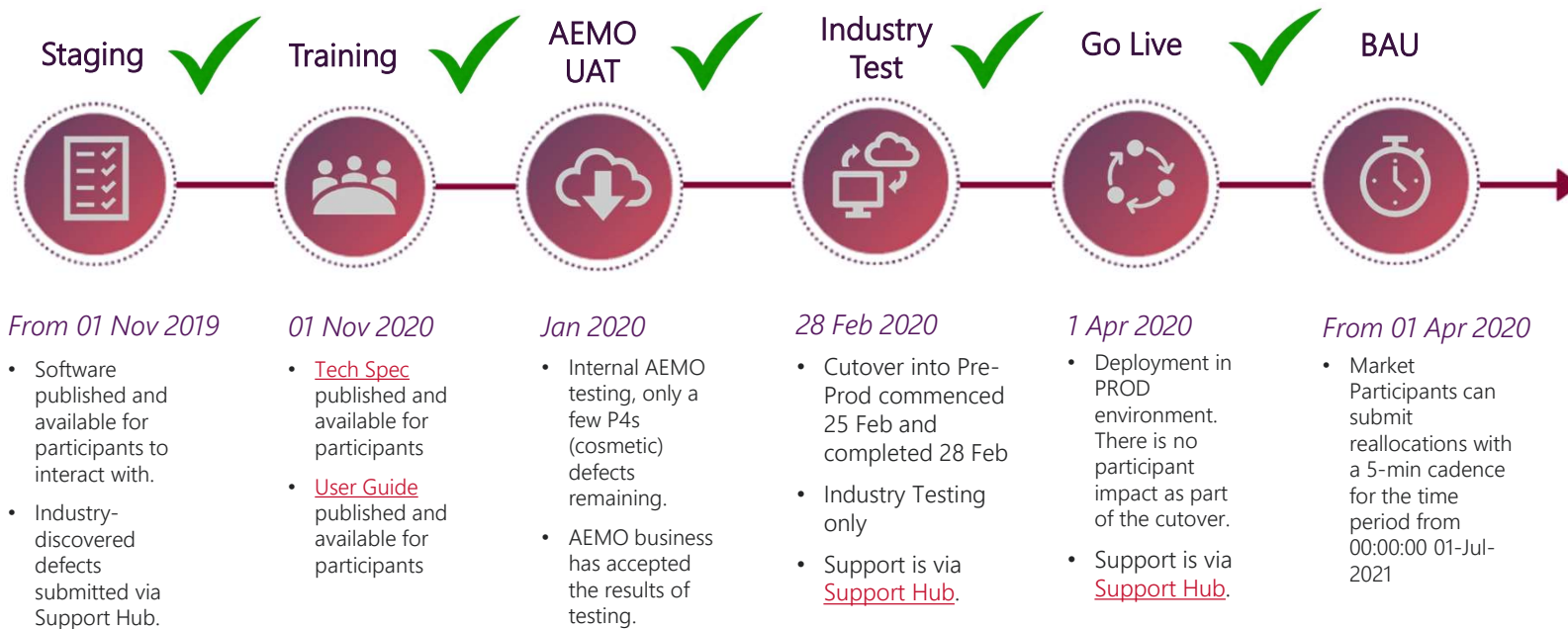
-  Milestone complete
-  Milestone on track
-  Milestone at risk
-  Milestone not achieved

Break

Reallocations Go Live

Graeme Windley

5MS Release 1: Reallocations



5MS Release 1: Reallocations

- PROD Cutover completed 1 April 2020.
- Issues & Resolutions:
 - Identified a DB scripting error arising from Tuesday's DB changes to add two new columns in the database. Once the script was run the issue was resolved in a timely manner without impacting Compliance for either AEMO or the participant.
 - A second issue arose when the Prudentials run failed to start following the Reallocation. The fix was then deployed in production at 2pm Wednesday 1 April 2020. No further issue during Thursday's BAU activity in production.
 - During PVT there was an API Service configuration error (Supplied Reallocation ID not Valid) due to the Reallocation system. Fixed immediately and the PVT test completed successfully.
 - On Thursday 2 April 2020, a participant identified a label error that was showing 'MWH' instead of '\$' in a preview reallocation pop-up. The actual values are correct but the heading has the wrong label. To be fixed in the next software deployment.

Staging Environment

Graeme Windley

5MS Staging Environment Update

Dispatch	Settlements	Metering
<u>DROP ONE – 29 November 2019</u> Submit 5-Min Bids, via new web interface, API and/or FTP Bidding Data Model changes as per technical specifications released July 2019 Case Loaders for PASA, Dispatch, 5-minute Pre-Dispatch & 30-minute Pre-Dispatch data	<u>DROP ONE – 1 November 2019</u> Reallocations: available at both 30 and 5-min intervals New Web UI Calendar selection Alerts	<u>DROP ONE – 1 December 2019</u> Test connection to Staging Test MDFF validations Validate data exchange
Status: Live Participant interaction: at least 6 participants accessing in Jan 2020. Issues: issues related to the tech specs, now addressed. API connectivity issues for some participants.	Status: Live Participant interaction: at least 6 participants accessing in Jan 2020. Issues: incorrect setup by participants of their user roles.	Status: Live Participant interaction: 2 participants accessing in Jan 2020. Issues: None identified.
<u>DROP TWO – 15 May 2020</u>	<u>DROP TWO – 16 Mar 2020</u>	<u>DROP TWO – 31 July 2020</u>
Status: On track	Status: See next slide	Status: On track (noting some functionality will be introduced earlier)

Staging Environment Update

- Settlements Package 3 be deployed in the 5MS Staging Environment 16 March 2020.
So far:
 - Successfully run 2019Wk24 Final
 - Successfully run 2019Wk25 Final
 - Produced Tax Invoices, RCTI's, Statements, and Reconciliation (*SR, etc*) reports for both runs
 - Produced Data Interchange files for both runs
 - Identified an integration issue between Settlements Direct and Invoicing
 - The invoicing engine has been updated and a new version tested + released into the Staging environment
 - Some ongoing work is still required on Settlements Direct to finalise the issue.
 - Until this issue is finalised, SR reports will not be available on the Settlements Direct portal without manual intervention
 - All other reports (Tax Invoice etc) are available on the Settlements Direct portal
- Multiple Q&A sessions held with market participants. Discussion & Questions heavy at the start and reduced later.
- Usage of Dispatch and Settlements functionality has increased.

Customer Switching

Lee Brown/Neil Batie

Customer Switching

- The Final Determination on Customer Switching in the NEM was published on 31 March 2020.
- Amended procedures were published alongside the determination, including:
 - MSATS CATS
 - MSATS WIGS
 - MDFF Specification (NEM 12 and NEM 13)
- Key Points to note:
 - AEMO elected not to provide an effective date for these changes.
 - The effects of COVID-19 will continue to be monitored.
 - Once determined, AEMO will communicate the effective date no less than eight months in advance.
- In addition to the changes to support the outcomes of the Customer Switching in the NEM consultation, the MSATS procedures have been redesigned such that:
 - Technical requirement specifications are moved into an independent technical document.
 - MSATS CATS and MSATS WIGS are simplified to contain business process, rights and obligations.

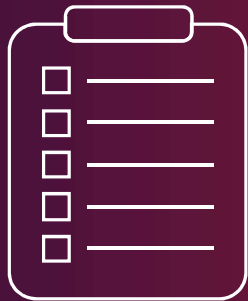
General Questions

Peter Carruthers

Forward Meeting Plan

Anne-Marie McCague

Survey Time!



- The 2020 Q1 5MS Stakeholder Engagement Survey was issued 30 March
 - Don't forget to respond!
- Survey was issued through SurveyMonkey
 - Please whitelist their domains and IP addresses
https://help.surveymonkey.com/articles/en_US/kb/What-are-the-IP-addresses-to-your-website-for-our-firewall-configurations
- Please check your Junk folder if you have not seen the survey.

Forward Meeting Agenda

May Agenda

- Readiness Reporting Round 2
- Critical Mass
- Covid-19 Risk
- L1-M6: AEMO Internal Systems Development – Build Complete

Next meeting: 5 May 2020

To add items to the agenda, please contact us at 5MS@aemo.com.au

Upcoming meetings

<https://aemo.com.au/initiatives/major-programs/nem-five-minute-settlement-program-and-global-settlement>

Current as 1 April 2020



APRIL

Su	Mo	Tu	We	Th	Fr	Sa
29	30	31	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	1	2

MAY

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	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	1	2	3	4	5	6

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
31	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	1	2	3	4

Forums/Working Groups
Executive (EF)
Program Consult. (PCF)
Procedures (PWG)
Systems (SWG)
Readiness (RWG)
Industry Testing (ITWG)

Focus Groups
Dispatch
Metering
Settlements
Transition
Industry Testing
Reconciliation
Contingency

Other
Information sessions
General Q&A session
National Public Holiday
State Public Holiday*

*Relevant state has been marked in a comment. WA, NT, TAS, ACT holidays have not been marked.

Meeting Close

Peter Carruthers

