



5MS & GS Systems Working Group #17

16 December 2019

Agenda

No	Time (AEDT)	Agenda item	Presenter
1	10:00 – 10:10	Welcome, introduction and apologies	Sammy Wainrit
2	10:10 – 10:25	Actions update	Sammy Wainrit
3	10:25 – 10:30	Procedures update	Emily Brodie
4	10:30 – 10:40	Retail stream update	Jim Agelopoulos
5	10:40 – 10:50	aseXML schema update	Simon Tu
6	10:50 – 10:55	Dispatch stream update	Ian Devaney
7	10:55 – 11:15	Dispatch Bidding data model & MNSP bid changes (file loader changes)	Tom Butterworth
Break 11:15 – 11:25			
8	11:25 – 11:30	Settlements stream update	Mark Hillaby
9	11:30 – 11:45	Settlements updates	Pierre Fromager
10	11:45 – 11:55	Readiness Working Group update	Greg Minney
11	11:55 – 12:00	Staging environment	Sammy Wainrit
12	12:00 – 12:45	Staging environment discussion	Sammy Wainrit
13	12:45 – 12:50	Forward meeting plan	Sammy Wainrit

Open actions

Item	Action required	Responsible	Action update	By
1.6	AEMO to provide assessment on bandwidth/networking impacts.	AEMO	Pending Design completed and AEMO is currently assessing implications	November 2019
12.12.1	AEMO to advise SWG of first Testing Focus Group when details available.	AEMO	Ongoing Details will be provided when TFG activities commence	Ongoing
14.3.1	Participants to provide feedback on the meter data date/time validation proposals	SWG Participants	clarification on what support will not be provided by AEMO? Specifically, what's not supported	SWG #17
14.5.1	Participants to provide feedback on the proposed CR19	SWG Participants	If no other feedback received, close this at SWG #17	16 December 2019
16.05.01	Feedback required by 2 weeks from Participants on MSATS 46.96 Participant role field change impact	SWG Participants	Feedback to be advised during meeting, then action closed.	SWG #17
16.06.01	Feedback required by 2 weeks from Participants on the IEC decision on 10MB file size and its impact to Participant systems	SWG Participants	Feedback to be advised during meeting, then action closed.	SWG #17
16.10.01	Request feedback within 2 weeks from Participants on Dispatch Packages 1, 2, & 3 content	SWG Participants	Feedback to be advised during meeting, then action closed.	SWG #17

5MS/GS procedures update

Emily Brodie

Metering procedures update

- Metering package #3 published Mon 18th November 
- ERCF
 - Meeting currently quarterly; then every two months in 2020
 - Met on 21 November
 - 5MS/GS ICFs: RWD5; customer details on inventory table
 - <https://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Retail-meetings/Electricity-Retail-Consultative-Forum>
- B2B
 - Meets monthly (IEC meets quarterly)
 - Met on Fri 29 November
 - Release v3.4 of B2B procedures commenced consultation. Considers:
 - MDFF file size 10MB
 - MDFF 1,000 transaction limit in file
 - non-contestable unmetered loads – use of existing B2B transactions for this family of NMI
 - <https://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Retail-meetings/B2B-Working-Group>

5MS/GS-related procedure issues

Procedure issue	Status
Proposed Procedural Change to MDFF Quality flag	AEMO is preparing an ICF for ERCF consideration
Proposal for RWD5	ICF considered at ERCF (21 Nov), to be progressed in 2020 with consideration of 5MS/GS metering transition activities
Sampling and verification processes	ICF submitted with accidental reference to 5MS but is unrelated to 5MS
Removal of end user details from inventory table	ICF considered at ERCF (21 Nov), to be progressed in 2020 with consideration of 5MS/GS metering transition activities
TNI 2 for cross-boundary meters	<p>SWG has been briefed on requirements.</p> <p>Procedure change not required, but procedure clarification desirable.</p> <p>AEMO is preparing an ICF for ERCF consideration, with a view to including in Standing data review consultation (Feb to June 2020)</p>

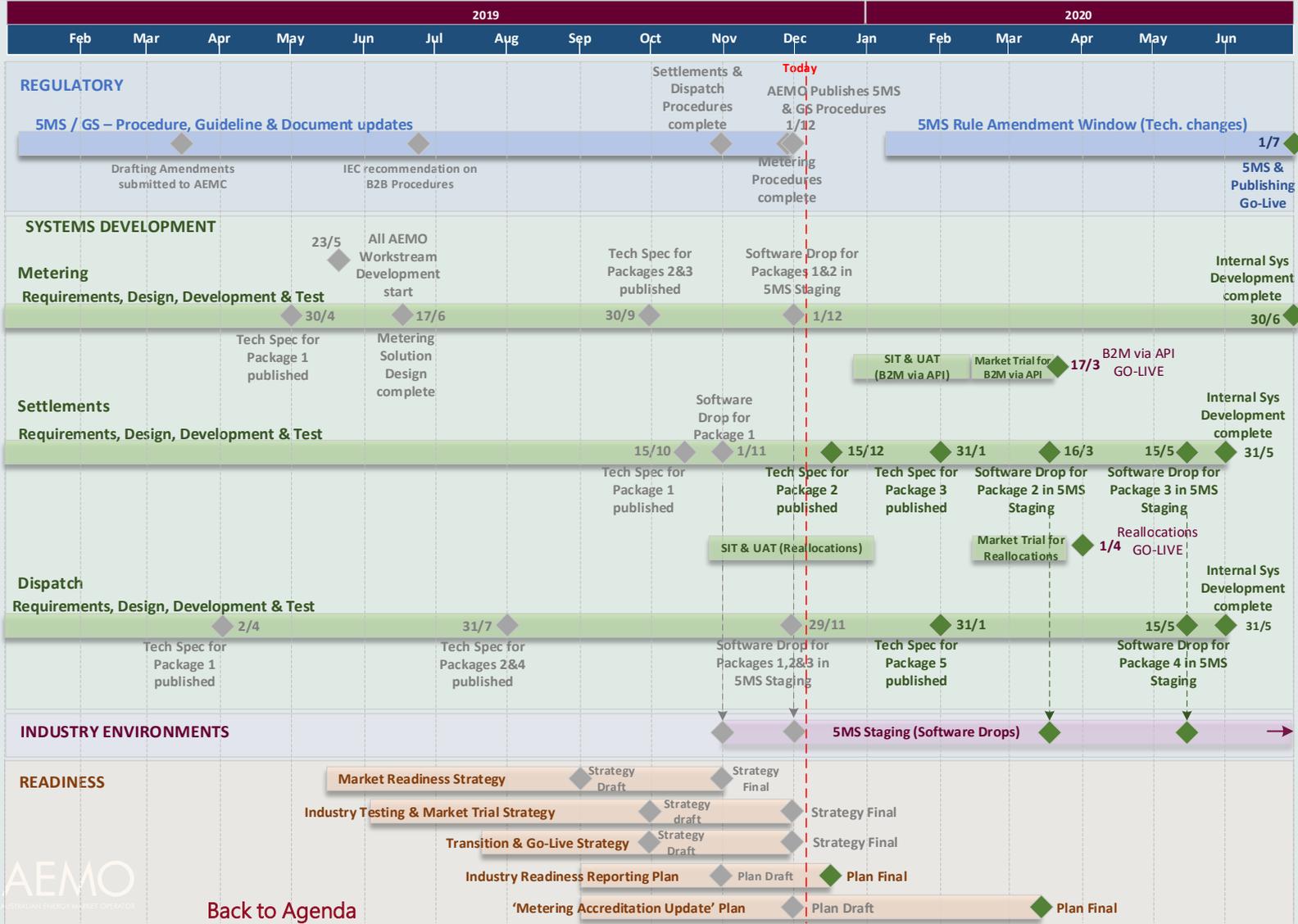
Level 1 and 2 Milestones – timeline

Sammy Wainrit

5MS Program Timeline (to July '20)

Level 1 and External Level 2 Milestones

Current as at 06 Dec 2019



[Back to Agenda](#)

Retail stream update

Jim Agelopoulos

Systems Workstream - Metering

Revised as at 09 Dec 2019

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	Sep-20	Nov-20
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	Sep-20	Nov-20
PACKAGE 3 - Miscellaneous										
B2M via API • MSATS Release Schedule & Technical Specification	Oct-18	-	Apr-19	9-May-19	31-May-19	30-Sep-19	17-Feb-20	N/A	17-Feb-20	17-Mar-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	Sep-20	Nov-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	Sep-20	Nov-20

Systems Workstream - Metering

Revised as at 09 Dec 2019

Key Milestones (Program)						
x	Milestone	Description	Target Date	Expected Date	Status	Comments
L2-M1	AEMO internal metering solution – solution design complete (internal)	Solution Design phase for new AEMO Meter Data Management (MDM) and Profiling Allocation Engine (PAE) complete.	31-May-2019	17-Jun-2019	Complete	
L2-M2	Final technical specifications for Package 1 published by AEMO	Technical Specification for changes to MDFF NEM12 NEM13 as a result of 5MS and GS available to Participants.	30-Jun-2019	30-Apr-2019	Complete	
L2-M3	Final technical specifications for Package 2 published by AEMO	Technical Specification for changes to Transition, Meter Data Load – MDFF as a result of 5MS and GS available to Participants.	30-Sep-2019	30-Sep-2019	Complete	
L2-M4	Final technical specifications for Package 3 published by AEMO	Technical Specification for introduction of B2M via API as well as changes to the MSATS Browser (LVI) and MSATS Report changes as a result of 5MS and GS available to Participants.	30-Sep-2019	30-Sep-2019	Complete	
L2-M5	Software drop for Packages 1 & 2 in 5MS Staging Environment	Software deployed into the 5MS Staging environment for Meter Data Load – MDFF available for Participant testing.	01-Dec-2019	01-Dec-2019	Complete	
L2-M6	Agreement on requirements for accreditation & Market Trial	Program agreement of the Accreditation requirements and process, and on market testing requirements and process.	31-Mar-2020	[31-Mar-2020]		Aligned with the MSP Accreditation Plan document
L2-M14	B2M via API Go-Live	Software deployed into MSATS Production environment that supports B2M API for CATS, NMID and MDMT transactions.	17-Mar-2020	[17-Mar-2020]		At Risk – Refer to Milestone Exception slide
L2-M7	AEMO internal metering solution – build complete (internal)	Build phase for new AEMO Meter Data Management (MDM) and Profiling Allocation Engine (PAE) complete	30-Jun-2020	30-Jun-2020		On Track
L2-M8	Software drop for Package 3 in 5MS Staging Environment	Software deployed into the 5MS Staging environment for B2M via API, MSATS Browser (LVI) and MSATS Report enhancements and available for Participant testing.	31-Jul-2020	31-Jul-2020		On Track
L2-M9	AEMO internal metering solution – go live complete (internal)	Go Live date for new AEMO Meter Data Management (MDM) and Profiling Allocation Engine (PAE) complete	31-Oct-2020	[31-Oct-2020]		On Track
L2-M10	New MDFF format accepted by AEMO	AEMO deploys MDFF capable software to PROD, and all Market Participants can begin submitting files in the new MDFF format.	01-Nov-2020	[01-Nov-2020]		Dependent upon readiness strategy
L2-M11	Market Trial preparation completed by Participants	All Market Participants who are required to submit five-minute meter reads are ready for market trials	30-Nov-2020	[30-Nov-2020]		Content and timing of Market Trials TBD
L2-M12	Market Trial preparation completed by AEMO	AEMO has deployed all relevant software to the 5MS pre-Production environment and is ready to deliver the agreed Market Trial scenarios	30-Nov-2020	[30-Nov-2020]		Content and timing of Market Trials TBD
L2-M13	Market Trials conclude	All relevant Market Participants have completed Market Trials to submit five-minute read data.	31-May-2021	[31-May-2021]		Content and timing of Market Trials TBD

Systems Workstream - Metering

Revised as at 15 Nov 2019

ID	Stream	Milestone	Planned Date	Expected Date	%	Comments
New L2-M14	Metering	B2M via API Go Live	17-Mar-20	17-Mar-20	20%	AEMO has experienced delays establishing the MarketNet link to AEMOs new API Gateway in conjunction with the legacy SMP e-Hub API Gateway. The 17 th of March remains an achievable target however we are highlighting this is currently at risk. Request participants impacted by a delay to this date contact the 5MS program via the mailbox to set up a discussion.

aseXML schema update

Simon Tu

aseXML Schema update

The system changes related to the aseXML schema updates for 5MS are currently being investigated by our technical team.

Refresher on changes:

- RM Reports
 - Addition of new report types
 - Updating the “Last Sequence Number” field to Optional
 - Addition of a X of Y messages
- NMI Data
 - Second TNI for Cross Boundary NMIs (AEMO update only)
 - Multi Use NMI details (i.e. Vic TUoS, System Load, etc.) *

** AEMO is investigating the benefit of adding Multi Use NMI details to the schema*

aseXML Schema schedule update

To minimise impact on Participants, 5MS intends to implement the changes in conjunction with the Customer Switching changes.

- Customer Switching are currently investigating technical changes to enable a delay to the schema change go live date.
- Scheduled aseXML schema release is expected to move to Q4 2020

aseXML Schema Changes – Schedule

Current Proposed schedule



Dispatch stream update

Ian Devaney

Systems Workstream – Dispatch and Operations

Current as at 06 Dec 2019

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
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 06 Dec 2019

Key Milestones (Program)						
ID	Milestone	Description	Target Date	Expected Date	Status	Comments
L2-D1	Final technical specifications for Package 1 published by AEMO	Technical Specification for changes to Dispatch, Pre-dispatch P30/7DAY, ST PASA, Bidding Data Model and Bidding Format as a result of 5MS and GS available to Participants.	2-Apr-2019	2-Apr-2019	Complete	
L2-D2	Final technical specifications for Package 2 published by AEMO	Technical Specification for changes to the Bidding Web UI and APIs as a result of 5MS and GS available to Participants.	31-Jul-2019	31-Jul-2019	Complete	
L2-D3	Software drop for Packages 1,2 & 3 in 5MS Staging Environment	Software deployed into the 5MS Staging environment for Dispatch, Predispach P30/7DAY, ST PASA, Bidding Data Model and Bidding Format, Bidding Web UI and APIs and Predispach P5.	29-Nov-2019	29-Nov-2019	Complete	
L2-D4	Development completed (internal)	Software deployed into the 5MS Staging environment for RERT, Trading Price / Price Revision, Administrated Pricing and CPT, Suspension Pricing, Negative Residue Management, data model for Dispatch	31-May-2020	31-May-2020	[Firm]	
L2-D5	Software drop for Package 4 in 5MS Staging Environment	All AEMO internal development work has completed for the Dispatch stream	15-May-2020	15-May-2020	[Firm]	
L2-D6	UAT completed (internal)	All AEMO internal UAT has completed for the Dispatch stream	30-Nov-2020	30-Nov-2020	[Firm]	
L2-D7	Market Trial preparation completed by Participants	All Market Participants who are required to submit 5MS bids and offers are ready for market trials	30-Nov-2020	[30-Nov-2020]	Provisional	Content and timing of Market Trials TBD
L2-D8	Market Trial preparation completed by AEMO	AEMO has software deployed to pre-production environment and is ready to deliver the agreed Market Trail scenarios	30-Nov-2020	[30-Nov-2020]	Provisional	Content and timing of Market Trials TBD
L2-D9	5-min bidding phased go live begins	Participants can begin submitting 5-min bids to the market	01-Apr-2021	[01-Apr-2021]	Provisional	
L2-D10	Market Trial concludes	Market Trial scenarios related to dispatch have been completed	31-May-2021	[31-May-2021]	Provisional	Content and timing of Market Trials TBD
L2-D11	30-min bidding no longer accepted by AEMO	All Wholesale Market Participants now submitting five-minute bids and offers to AEMO	01-Jul-2021	01-Jul-2021	Mandatory	
L2-D12	Final technical specifications for Package 4 published by AEMO	Technical Specification for changes to Pricing (and Miscellaneous) as a result of 5MS and GS available to Participants.	31-Jul-2019	31-Jul-2019	Complete	
L2-D13	Final technical specifications for Package 5 published by AEMO	Technical Specification for changes to the full data model as a result of 5MS and GS available to Participants.	31-Jan-2020	31-Jan-2020*	[Firm]	

Bidding data model & MNSP bid changes (file loader changes)

Tom Butterworth

MNSP bids

- The offer date for MNSP bids (`MNSP_DayOffer.OfferDate`) is changing from just storing the date to include the time as well.
- This already happens for other bid types such as 'Energy' and 'FCAS'.
- One known impact is that the bid version number which determined the latest version of the bid to use within a day, now only determines the latest version within a second. I.e. if two bids are presented within one second.
 - E.g. Version 1 and 2 are processed at 12:05:01 on a particular day.
 - Version 2 is used since it is the latest, even though the time is the same.

Seeking Participant feedback

AEMO (Dispatch) seeks feedback from Participants regarding the following:

1. We propose that bid submissions no longer make the reference field (“**referenceid**”) a mandatory field. Participants may use this for their reference but should not be forced to enter dummy data.
2. The 5MS rule change (3.13.4 (I1)) requires AEMO to publish “In addition to the spot price, a 30-minute price for a regional reference node”.
 1. It does not mention the ‘ancillary service price’ in this instance. AEMO is seeking confirmation that this is not necessary.
3. Submissions will be limited (‘throttled’) to one per second, to ensure primary key integrity (currently only unique to the nearest second).
 1. For Oracle databases, the bidding OfferDate field uses the ‘Date’ data type. Changing this to a ‘Timestamp’ datatype would alleviate the restriction (although ‘throttling’ would still be in place to prevent ‘flooding’).

Tech Spec Update

- The PeriodID is dropped from tables 'DispatchLoad' and 'DispatchRegionSum' (No change to RegionAPCIntervals)
- There is an inconsistency in the 5MS Bidding JSON schema in the Tech Spec version 1.0:
 - The fields RampRateUp and RampRateDown are used in sections 12.3 (Energy bids) and RampUpRate is used in section 12.5 (MNSP bids).
 - The correct names are RampUpRate and RampDownRate as is correctly declared in 12.7 (Bidding Schema)

Break (10 mins)

Settlements stream update

Mark Hillaby

Systems Workstream - Settlements

Current as at 06 Dec 2019

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									

Settlements updates

Pierre Fromager

5MS inbox Q&A

- Reallocation calendars: only the NEM region calendar is provided – No SFE or other external calendars (at this stage).
 - These were imported into the Staging environment for testing purposes (they have now been removed).
- Newly renamed 'Metering Estimation' (previously known as 'Settlement Estimation') was mentioned in the 'Prudential & Estimation' tech spec. There are NO material changes to estimation so it is not included in the tech spec: changes are in the code base to handle 5min data and the database platform - none affecting Participant interfaces.

Publication retention period

The retention period (in Settlements Direct) will be gradually extended to three years for the following publication categories:

- NEM Statements & Correspondence

- QldGas Statements & Correspondence

- SRA Statements & Correspondence

- STTM Statements & Correspondence

- VicGas Statements & Correspondence

Older files will not be back-populated so a gradual build-up of publication retention will take approximately 30 months to provide the full three-year retention.

Readiness Working Group update

Greg Minney

Readiness papers - timelines

Item	RWG/ITWG/FG engagement	Draft paper	Consultation	Comments due	Final paper
Industry test and market trial strategy	Jul-19	30-Sep	4 weeks	28-Oct	29-Nov
B2M API – Test plan (invitation only)	Dec-19	31-Dec-19	2 weeks	13-Jan-20	20-Jan-20
Transition and go-live strategy	Jul-19	30-Sep	4 weeks	28-Oct	29-Nov
Metering transition plan	Aug-19 onwards	29-Nov	3 weeks	20-Dec	7-Feb-20
Industry contingency plan	Nov-19	20-Dec	6 weeks	31-Jan-20	13-Mar-20
Industry readiness reporting plan	Sep-19	31-Oct	3 weeks	21-Nov	13-Dec
MSP accreditation update plan	Oct-19	29-Nov	11 weeks	31-Jan-20	21-Feb-20

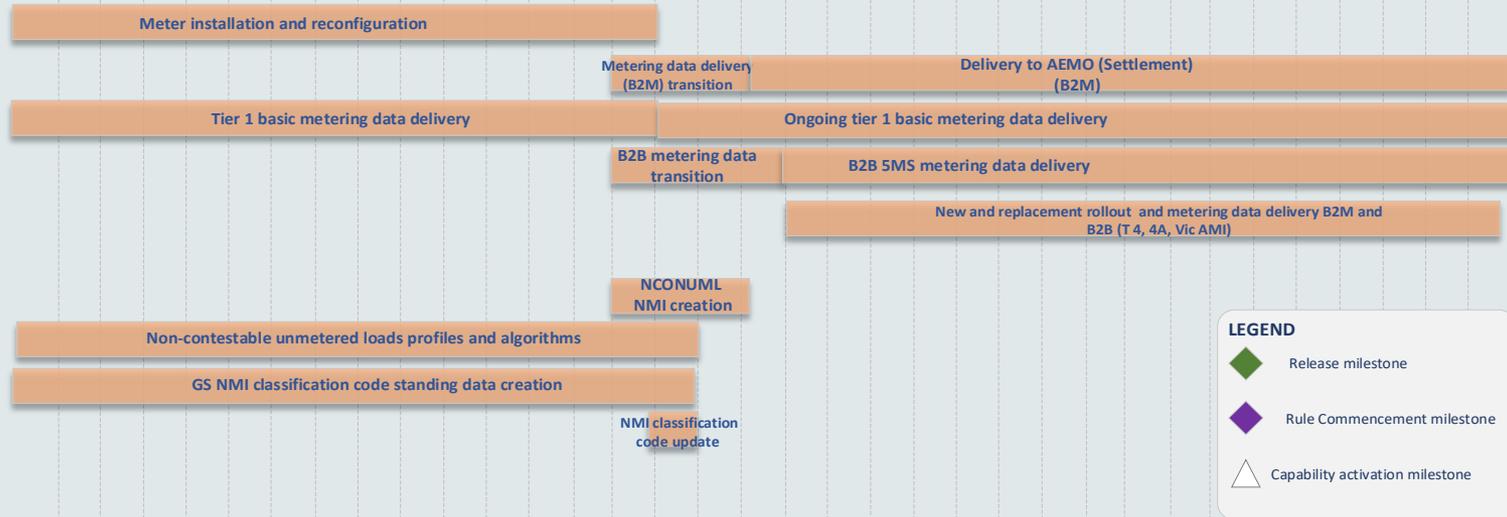
Workstream engagement

- Contingency Planning
 - Workshop #1 - 28 November 19
 - Establish industry contingency scenarios and linkages to Industry risks
 - Key scenarios agreed, Workshop #2 - 13 December 19 to progress trigger points, responses
 - Draft plan to be issued 20 December 19
- Readiness Reporting
 - Industry responses received from 12 Participants
 - Feedback includes:
 - Greater granularity of reporting and metering criteria
 - Presentation of aggregate data and weighting approach
 - Clarification of participation expectations
- MSP Accreditation Update Plan
 - Issued for consultation 29 November 19
 - Aim to align timeframes and scope of MSP accreditation updates to support transition approach
- Industry Test Focus Group
 - Nominations received
 - First meeting scheduled for 12 December 19
 - Development of detailed test scenarios and alignment with test strategy

Metering Transition - draft



Metering Transition Activity



LEGEND

- ◆ Release milestone
- ◆ Rule Commencement milestone
- △ Capability activation milestone

Metering Transition Plan

- Draft circulated 29 November 19
- The MTP “Categories” are:
 - Meter installation and reconfiguration
 - Metering data delivery (B2M & B2B)
 - MSATS standing data creation and maintenance
 - MSP accreditation updates
- Responsibilities and expected timeframes for metering activities to support transition to 5MS and GS
- Covers requirements for:
 - 5MS rule commencement
 - GS updates to support UFE calculation and rule commencement
 - New & replacement rollout completion
- Alignment with Participant capability and obligation to consume 5 minute metering data
- Comments due 20 December 19

Staging environment

Sammy Wainrit

Status of 5MS Staging Environment

- Reallocations has been available to Participants in this environment since the 1st of November.
- Dispatch Bids & Offers and Retail Metering MDFF have been available to Participants since 29 November and 02 December respectively.
- Support calls regarding this environment to date have been in relation to access from Participants' sites (which has required Participants IT departments to white list the site), user password resetting and requests for FTP and API access.

Reminder: informal 5MS Staging Environment test meetings

- Three informal (no agenda) 5MS Staging environment test meetings have been scheduled.
- This is an opportunity for anyone to dial in and speak to 5MS Test Team representatives regarding questions on testing in the Staging environment, staging, password reset, URLs etc .
- Invitations were sent out to the RWG membership list.
- Scheduled times (AEDT) are:
 - Tuesday 19 November at 11:00
 - Tuesday 03 December at 11:00
 - Tuesday 17 December at 11:00
- Approx. every 6 weeks there will be a planned outage to allow for data refresh of the WARE database. AEMO doesn't anticipate any test data to be lost as a result of this refresh. Communications will be sent out in advance of this.

5MS Staging Environment discussion

Sammy Wainrit

Discussion questions/topics

Forward meeting plan

Sammy Wainrit

Proposed upcoming SWG meeting content

Date	Meeting	Proposed content
Tue, 21 Jan 2020	SWG #18	<ul style="list-style-type: none">• Update on final Settlements Tech Spec• Update on data model for Dispatch & Settlements• Risks discussion
Mon 17 Feb 2020	SWG #19	<ul style="list-style-type: none">• Topics tba

Upcoming meetings

<https://aemo.com.au/Electricity-National-Electricity-Market-NEM/Five-Minute-Settlement>

2019

DECEMBER

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	1	2	3	4
5	6	7	8	9	10	11

2020

JANUARY

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	31	1
2	3	4	5	6	7	8

FEBRUARY

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	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
1	2	3	4	5	6	7

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	1	2	3	4
5	6	7	8	9	10	11

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

Focus Groups	
Dispatch	Metering
Settlements	Transition
Contingency	Reconciliation

Other
Information Sessions

National Public Holiday
State Public Holiday*

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

Current as at 06-12-2019



