



5MS & GS Program Consultative Forum #19

Thursday, 5 March 2020

This meeting is recorded for the purpose of minute taking.

Agenda

No	Time (AEDT)	Agenda item	Presenter
1	10:00 – 10:05	Welcome and Apologies	Graeme Windley
2	10:05 – 10:20	Meeting Notes and Actions	Anne-Marie McCague
3	10:20 – 10:30	Program Update	Graeme Windley
4	10:30 – 10:35	Change Request Update	Anne-Marie McCague
5	10:35 – 10:50	Systems Workstream Update	Jim Agelopoulos
6	10.50 – 11:00	Reallocations Go Live	Alex Alexander
7	11:00 – 11:15	Readiness Workstream Update	Greg Minney
Break 11:15 – 11:25am			
8	11:25 – 11:40	Industry Readiness Reporting	Greg Minney
9	11:40 – 11:50	General Questions	Graeme Windley
10	11:50 – 12:00	Forward Meeting Plan	Anne-Marie McCague
11	12:00	Meeting Close	Graeme Windley

Welcome and apologies

Graeme Windley

Meeting Notes and Actions

Anne-Marie McCague

Actions

Item	Topic	Action required	Owner	Update
18.4.1	Milestones Realignment	AEMO to confirm that the date for milestone Industry Test prep complete by participants and AEMO – MDM & B2M Go-Live should be 22 October 2020	AEMO	Closed - AEMO confirmed via email on 07/02/20 that the milestone date is 22 Oct 20. The Industry Test Plan will be updated.
18.4.2	Milestones Realignment	AEMO to add the split of GS functionality across two Market Trials to the ITWG agenda	AEMO	Closed.
18.4.3	Milestones Realignment	AEMO to consider adding all Participant Testing to Level 1 milestones	AEMO	Closed - updated milestone pack issued to PCF 7/02/20
18.4.4	Milestones Realignment	AEMO to update milestones based on initial PCF feedback and re-issue to PCF	AEMO	Closed - updated milestone pack issued to PCF 7/02/20
18.4.5	Milestones Realignment	PCF members to review changes to 5MS milestones and provide feedback via 5MS mailbox	PCF members	Closed
18.6.1	Readiness Workstream Update	AEMO to consider how the results of the 5MS solution certification will be presented to participants.	AEMO	Under consideration.
18.10.1	Industry Risks and Issues Review	AEMO to review R06 and R09 and consider the risk ratings.	AEMO	Closed - updated risk ratings in the Industry Risks and Issues Register
18.4.6	Milestones Realignment	AEMO to confirm the alignment of the dates for the GS Market Trial in the milestone realignment exercise and the Industry Test Plan	AEMO	Closed - AEMO confirmed via email on 07/02/20 that the milestone has been updated to align with the Industry Test Plan

Program Update

Graeme Windley

Program update and current activities



AEMO program

- Overall green.
- Realignment of key milestones post-Readiness work complete.
- L2-S8 Industry Test start for Reallocations complete with the deployment of the reallocations functionality into pre-PROD 26 Feb 2020.



Systems

- 5MS working with Customer Switching & Industry participants to define appropriate approach for both programs.
- The Settlements & Billing Tech Spec has been re-released to participants (14-Feb-2020). Communication on the Data Model within this pack.
- Internal retail, dispatch and settlements workstreams systems development on track to meet 30-Jun-2020 development completion date.



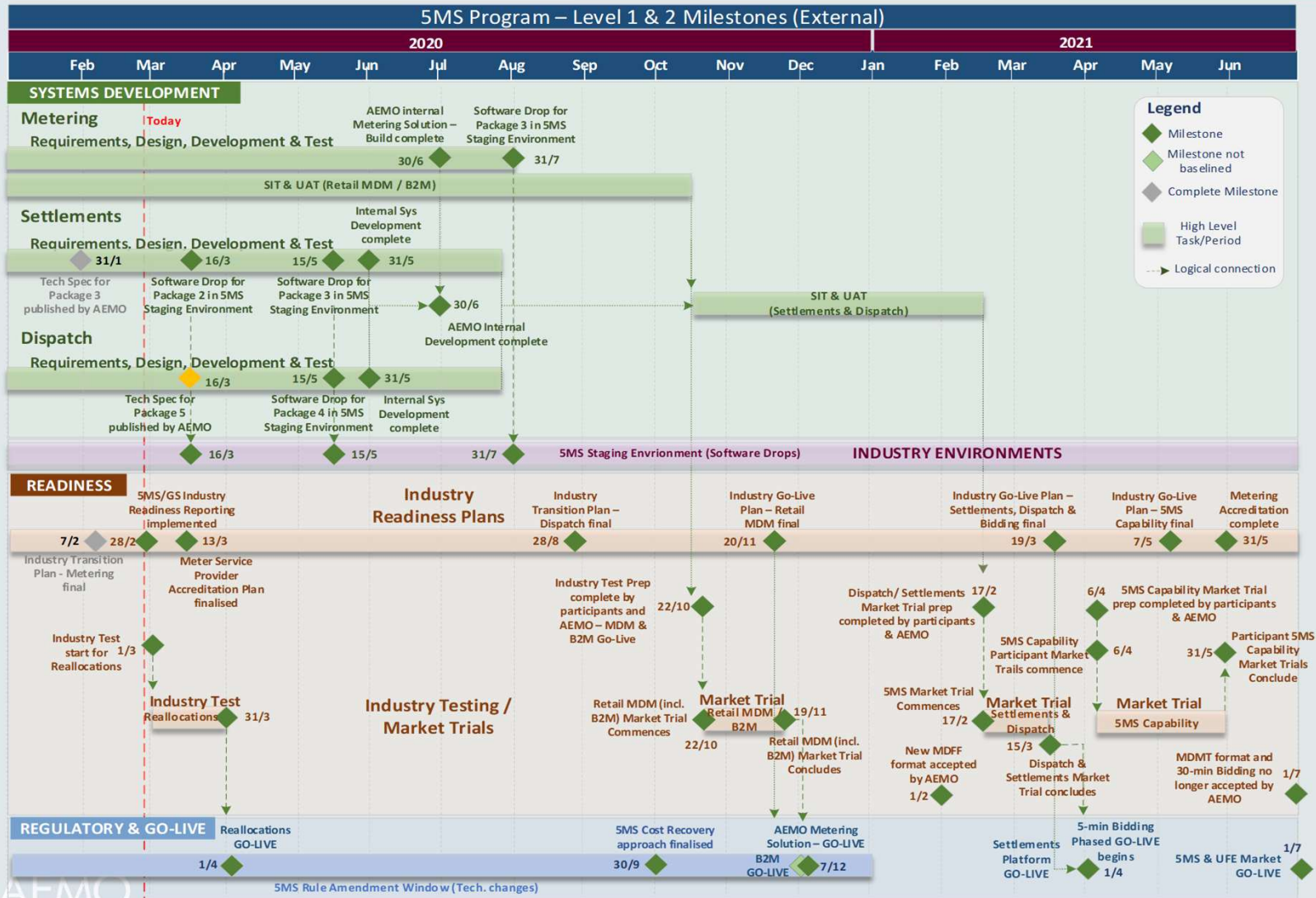
Readiness

- Metering Transition Plan was published on 7 Feb 2020 and the Metering Service Provider Accreditation Update Plan on 18 Feb 2020.
- The Industry Readiness Contingency Plan is due to be finalised on 13 March 2020.
- Initial Readiness Reporting – draft report to be circulated to RWG on 2 Mar 2020 for review and discussion.

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

Level 1 and External Level 2 Milestones

Current as at 28-02-2020



Level 2 Milestones Exceptions (External) Current as at 28-02-2020

ID	Stream	Milestone	Planned Date	Expected Date	%	Comments
L2-M14	Metering	B2M via API Go Live	17-Mar-2020	07-Dec-2020	70%	Communicated to the PCF and SWG as part of impact assessment. Feedback confirmed that this milestone could be rebaselined as 7 December 2020.
L2-D13	Dispatch	Final technical specifications for Package 5 published by AEMO	31-Jan-2020	16-Mar-2020		Delayed due to alignment with Settlements Staging deployment.

Change Request Update

Anne-Marie McCague

Change Requests Under Consideration

CR#	Title	Objective	Status
CR32	5MPD Price Sensitivities	Consider publishing 5-minute price sensitivities as part of 5-minute Predispatch (5MPD)	<ul style="list-style-type: none">Approved by 5MS Steering Committee 18 Feb 2020.

Systems Workstream Update

Jim Agelopoulos, Alex Alexander, Ian Devaney

SWG #19 Update

5MS Metering Procedures Updates

- Slides presented outlining 5MS/GS related Procedure Change Log. The slide pack is available [here](#).
- There **may** be a need for a Procedure change consultation for 5MS and GS metering procedures if issues emerge through Readiness and implementation activities.
 - Metrology Procedures would require a six month consultation commencing in 1 Oct 2020 and to be completed by 1 Apr 2021 for 1 Jul 2021 effective date.
- There **will** be a need to do a “wash-up” consolidation of procedural changes for 5MS/GS and other changes separate to 5MS/GS. “Wash-up” consolidation can occur with a short-form consultation as each separate change will have already been consulted on.
- AEMO and participants will monitor potential procedure changes via 5MS forums, B2B, ERCF and, importantly, via 5MS readiness reporting

aseXML schema changes

- Technical design and schema drafts for Customer Switching and 5MS have been completed. ASWG consultation process will continue over the next 2-3 months.
- Release schedule is dependant on Customer Switching Go-Live date which will be confirmed by 8 March 2020.

Retail Stream updates

- Timelines – B2M via API and Metering solution Pre Production and Go-Live dates adjusted.
- Tech Spec – File Format & Load Process re-opened due to ERCF and B2B IEC consultations.

SWG #19 Update (continued)

Settlement & Billing Technical Specification updates

- As detailed in the Technical Specification, session discussed Settlements Direct, which allows participants to access data, subscriptions, message delivery logs and calendars to the EMMS Wholesale Market System.
- Settlements Direct is a web-publishing application providing participants with access to reports and statements published by AEMO.

Data Model for Settlements and Dispatch

- Data Model – 4.30 released into Pre-Production for Reallocations release, testing continues on 5.0 to accommodate changes regarding Price, Settlements Data and Billing Run.
- Incremental Releases – Staging environment Participant Data Model (PDM) is a cut down version that will be released for Pre-Production (Nov 2020). We'll only utilise the Command Line Interface (CLI) installer.
- These are and will be available within the release folder under 5MS for Staging and the usual location for Pre-Production.
- Participants have been provided with instructions on how to upgrade or patch the revised data model should they wish to not reinstall.
- Details are available within the slides within above link.

Future Topics

- None received from participants.

5MS Staging Environment Update

Dispatch	Settlements	Metering
<p><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</p>	<p><u>DROP ONE – 1 November 2019</u> Reallocations: available at both 30 and 5-min intervals New Web UI Calendar selection Alerts</p>	<p><u>DROP ONE – 1 December 2019</u> Test connection to Staging Test MDFF validations Validate data exchange</p>
<p>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.</p>	<p>Status: Live Participant interaction: at least 6 participants accessing in Jan 2020. Issues: incorrect setup by participants of their user roles.</p>	<p>Status: Live Participant interaction: 2 participants accessing in Jan 2020. Issues: None identified.</p>
<p><u>DROP TWO – 15 May 2020</u></p>	<p><u>DROP TWO – 16 Mar 2020</u></p>	<p><u>DROP TWO – 31 July 2020</u></p>
<p>Status: On track</p>	<p>Status: See next slide</p>	<p>Status: On track (noting some functionality will be introduced earlier)</p>

Staging Environment Update

- Settlements Package 3 is due to be deployed in the 5MS Staging Environment 16 March 2020.
- The initial deployment will be configured for 30-minute settlement only, with transition to 5-minute trading intervals and global settlement to follow.
- The functions being made available are:
 - Prelim, Final, and Revision Settlements
 - Invoicing (Tax Invoice, RCTI, Adjustment Note, etc)
 - Reconciliation reports (SR, SS, etc)
 - Data Interchange
 - Settlements Direct (Production version, no API's)
- The environment will initially use a data snapshot from the EMMS Production system, taken in early February 2020. Integration with the Dispatch and Reallocations staging environment will not initially be on offer.
- 5-minute metering and UFE data will be artificially created for the staging environment.

Systems Workstream – Dispatch & Operations

Current as at 28-02-2020

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
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	Apr-21
Bidding Data Model	Aug-18	-	Sep-18	Mar-19	Dec-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Apr-21
Bidding Format	Aug-18	-	Sep-18	Nov-18	Dec-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Apr-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	Apr-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	Apr-21
Predispatch P30/7DAY	Aug-18	-	Oct-18	Nov-18	Oct-18	2-Apr-19	-	29-Nov-19	Nov-20	Apr-21
Predispatch P5	Nov-18	Oct-18	Nov-18	TBC	TBC	TBC	-	TBC	Nov-20	Apr-21
ST and PD PASA	Aug-18	-	Oct-18	Nov-18	Oct-18	2-Apr-19	31-Oct-19	29-Nov-19	Nov-20	Apr-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	Apr-21
Administered Pricing and CPT	Aug-18	-	Feb-19	Dec-18	Mar-19	31-Jul-19	-	15-May-20	Nov-20	Apr-21
Suspension Pricing	Sep-18	-	Feb-19	Dec-18	Mar-19	31-Jul-19	-	15-May-20	Nov-20	Apr-21
Negative Residue Management	Sep-18	-	Feb-19	Dec-18	Jun-19	31-Jul-19	-	15-May-20	Nov-20	Apr-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	Apr-21



Data Model Scripts will now be available on 16 March 2020 (aligned with Settlements Staging deployment)

16/03/2020





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Level 2 Milestones - Dispatch

Current as at 28-02-2020

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	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	Delayed due to alignment with Settlements Staging deployment
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

1. Production date aligned with Production milestone "L2-M10 New MDFF format accepted by AEMO" tracked via Readiness Stream.

2. B2M via API User Guide release date adjusted from 17-Feb-2020 to 31-Jul-2020

Systems Workstream - Metering

Current as at 28-02-2020

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	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

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

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

5. Pre-Production date(s) aligned with AEMO readiness milestone "L2-M12 Industry test preparation completed by AEMO for MDM and B2M Go-Live" tracked via Readiness Stream.
Note: This may be brought forward to align with Customer Switching MSATS PrePod release in Q3 (TBC)

6. Production date(s) aligned with "L1-19 AEMO Metering Solution - Go-Live" milestone tracked via Readiness Stream.
Note: This may be brought forward to align with Customer Switching MSATS Prod release early in Q4 (TBC)



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



Level 2 Milestones – Metering

Current as at 28-02-2020

Domain	Initiative	2019					2020					2021													
		Q1	Q2	Q3	L2-M4	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4											
Metering			L2-M2	L2-M1		L2-M3					L2-M7	L2-M8													
		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	On Track
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 28-02-2020

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
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	15-Dec-19	-	16-Mar-20	Nov-20	Apr-21
Billing	Oct-18	Nov-18	Dec-18	Mar-19	30-Aug-19	15-Dec-19	-	16-Mar-20	Nov-20	Apr-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	Apr-21
Estimation	Oct-18	Nov-18	Dec-18	Mar-19	31-Oct-19	31-Jan-20	-	15-May-20	Nov-20	Apr-21
Full Data Model	Refer DISPATCH									

Settlements Tech Spec update completed 14 February 2020

Reallocations pre prod in place User Guide update 3 March 2020





Level 2 Milestones – Settlements

Current as at 28-02-2020

Domain	Initiative	2019				2020				2021																									
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4																						
Settlements																																			
		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

Key Milestones (Program)

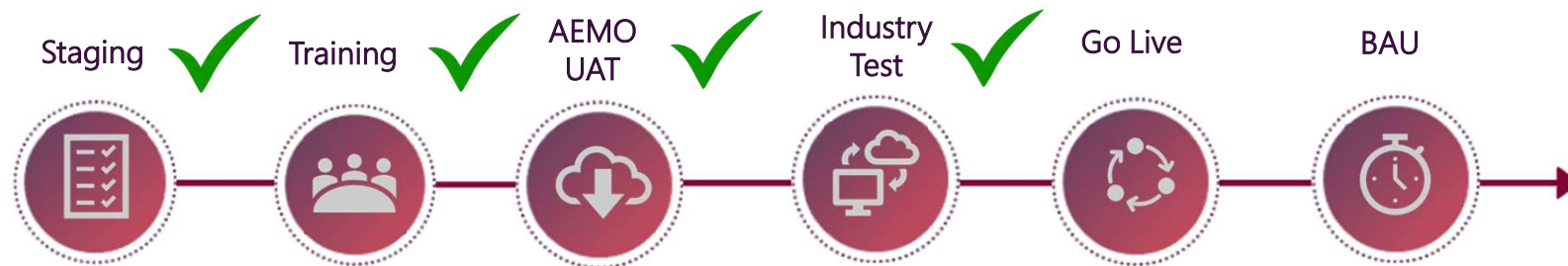
ID	Milestone	Target Date	Expected Date	Status
L2-S1	Final technical specifications for Package 1 published by AEMO	15-Oct-2019	15-Oct-2019	Complete
L2-S2	Software drop for Package 1	01-Nov-2019	01-Nov-2019	Complete
L2-S3	Final technical specifications for Package 2 published by AEMO	15-Dec-2019	16-Dec-2019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

Reallocations Go Live

Alex Alexander

5MS Release 1: Reallocations



From 01 Nov 2019

- Software published and available for participants to interact with.
- Industry-discovered defects submitted via Support Hub.

01 Nov 2020

- [Tech Spec](#) published and available for participants
- [User Guide](#) published and available for participants

Jan 2020

- Internal AEMO testing, only a few P4s (cosmetic) defects remaining.
- AEMO business has accepted the results of testing.

28 Feb 2020

- Cutover into Pre-Prod commenced 25 Feb and completed 28 Feb
- Industry Testing only
- Support is via [Support Hub](#).

1 Apr 2020

- Deployment in PROD environment. There is no participant impact as part of the cutover.
- Support is via [Support Hub](#).

From 01 Apr 2020

- Market Participants can submit reallocations with a 5-min cadence for the time period from 00:00:00 01-Jul-2021

Readiness Workstream 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
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	6-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

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

Workstream engagement

- Contingency Planning
 - Feedback received and being incorporated into final plan
 - Final plan includes provision for review and update of contingency scenarios, triggers as program proceeds
 - Areas for update:
 - Explicit referencing of BAU exception procedures identified as contingency responses
 - Expansion of definition of “Critical Mass” and how applied
 - Follow up with participants based on specific items raised
 - Aim for final release 6 March 2020, 1 week later than planned
- Metering Transition Plan
 - Final MTP issued 7 February 2020
 - Transition Focus Group reconvened to address approach to key activities, timing and clarifications on approach
 - TFG scheduled for 28 February 2020
 - Readiness reporting against the activities in MTP has commenced

Workstream engagement

ITWG

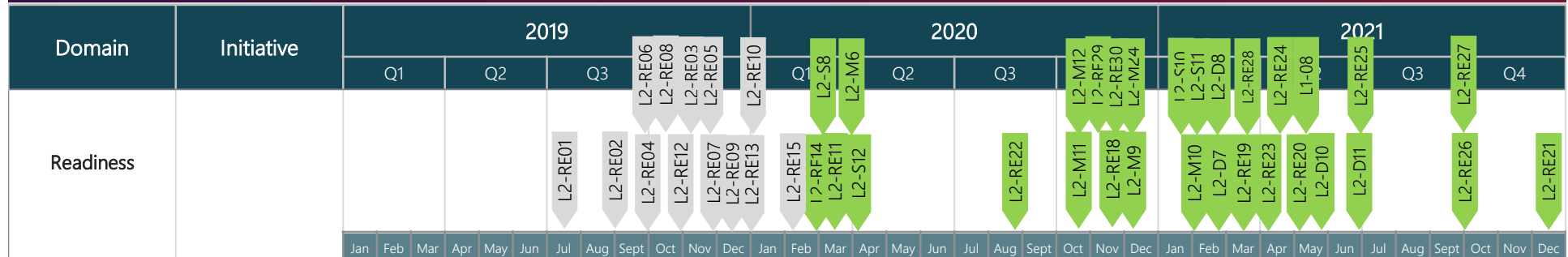
- ITWG #3 conducted on 26 February 2020
- Focus on scope delivered in MDM release and developing test scope for that test phase.
- ITWG #4 to address scope of testing for MDM release and capability delivered as component of Dispatch and Settlements platform
- ITWG discussed potential for moving GS market trial forward – no participants supported shift of test phase from current dates
- Test scope of MDM release will incorporate B2M API's, subject to confirmation of release date

Metering Accreditation Update Plan

- Final Plan issued 21 February 2020
- No major issues raised in draft plan
- Pre-accreditation questionnaires and initial meetings to be established

Level 2 Milestones – Readiness

Current as at 21-02-2020



Key Milestones (Program)

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





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	28-Feb-2020	AEMO	
L2-S8	Industry Test start for Reallocations	01-Mar-2020	26-Feb-2020	AEMO	

Level 2 Milestones – Readiness

Current as at 21-02-2020

Domain	Initiative	2019				2020				2021															
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4												
Readiness							L2-M6																		
						L2-RE11	L2-S12			L2-RE22				L2-M12	L2-RE29	L2-RE30	L2-M24	L2-D8							
		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	13-Mar-2020	AEMO	
L2-S12	Reallocations Go-Live	01-Apr-2020	01-Apr-2020	AEMO	
L2-RE32	Industry Test for Reallocations Concludes	31-Mar-2020	31-Mar-2020	AEMO	
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 21-02-2020

Domain	Initiative	2019												2020												2021											
		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

Break

Industry Readiness Reporting

Greg Minney


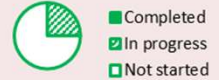

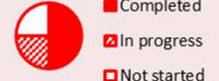

5MS & GS Industry Readiness Report 1

- 5MS / GS Industry Readiness reporting track industry readiness for 5MS and GS commencements. The first readiness assessment questionnaire was distributed on 5 February 2020, covering
 - Program establishment and overall progress
 - Progress against participant segment specific criteria
 - Progress against Activity detailed in the Metering Transition Plan
- The survey response covered 26 organisations. The Industry coverage providing reasonable assurance this provides a representative view of overall industry position. Follow up will be undertaken to increase coverage in key participant areas.

Table 1: Readiness reporting round 1 respondents info and industry coverage

	#Responses	% Industry coverage	Industry coverage methodology
Organisations	26	-	-
Total responses	55	-	-
Generator	8	80%	Generator respondents capacity / Total NEM capacity
Retailer	10	73%	Retailer respondents settlement vol. / 2019 NEM settlement vol.
MP	13	93%	MP respondents NMIs / Total NMIs
MDP	12	99%	MDP respondents NMIs / Total NMIs
DNBP	9	90%	Number of DNBP survey respondents / Total DNBP
TNSP	3	50%	Number of TNSPs survey respondents / Total TNSPs

How to interpret readiness reporting results

Criteria	Overview	Example questions	Response options	Results presentation	Legend
General Readiness Criteria	<ul style="list-style-type: none"> Criteria related to the level of program establishment of participant programs. 	<ul style="list-style-type: none"> For your organization's SMS and GS program: <ol style="list-style-type: none"> is project funding secured? Is the project plan established? 	<ul style="list-style-type: none"> Yes No 	<ul style="list-style-type: none"> All Yes and No responses are presented in a pie chart. All responses are unweighted. 	 <ul style="list-style-type: none"> Yes No
Specific Readiness Criteria	<ul style="list-style-type: none"> Criteria that tracks the implementation of specific market commencement requirements for each participant type. Hence, each participant type will have their own set of specific readiness criteria (e.g. generators ability to submit 5 min bids by 1 July 2021, retailers ability to receive and reconcile 5 minute data). 	<ul style="list-style-type: none"> What is your organization's progress and status towards the following readiness criteria? <ol style="list-style-type: none"> Receive and reconcile 5 minute settlements data Receive and reconcile UFE allocations data (from 6 Feb 2022) Support 5-min reallocations (if relevant) 	<ul style="list-style-type: none"> Participants (including AEMO) are asked to report their status towards fulfilling these requirements by market commencement (on track, at risk or late), and also report on progress in 25% increments. 	<ul style="list-style-type: none"> Participants status and progression towards specific criteria are illustrated through Harvey balls. Each quadrant of the Harvey ball represents 25% progress. Quadrants will progressively fill with solid colours as the criteria is completed. The Harvey Ball will be coloured red, amber or green based on if the criteria is on track, at risk or late. All responses are unweighted. 	<p>Status: On track Progress: 1 - 24%</p>  <p>Status: At risk Progress: 25 - 49%</p>  <p>Status: Late Progress: 50 - 74%</p> 
Metering Transition Plan Status (MTP)	<ul style="list-style-type: none"> Status monitoring of defined activities in the MTP. The MTP outlines the expected activities, responsibilities, timeframes, as well as other necessary elements required for completion of the 5MS and GS metering transition. 	<ul style="list-style-type: none"> For the following sub-categories defined in the MTP, is your organisation on track to complete the associated activities (MDP related only) by the defined transition end date? <ol style="list-style-type: none"> BULK / Wholesale Meters (S13) Type 1-3, subset of 4 (S14) Cross Boundary Meters (KNOWN) (S15) 	<ul style="list-style-type: none"> Participants are asked to provide their status towards completing activities by the transition end date for each defined sub-category in the MTP (Complete, On track (started), On track (not started), At risk, Late, n/a). Given that a sub-category has multiple activities supported by various participant types, respondents were only expected to provide status reporting for activities that were relevant to their participant type. 	<ul style="list-style-type: none"> All responses are presented in a pie chart. A separate pie chart will also illustrate the proportion of all responses with n/a responses omitted. All responses are unweighted. 	 <ul style="list-style-type: none"> Complete On track (started) On track (not started) At risk Late n/a

Readiness Reporting Round 1 – Results on a page

	AEMO	Generator	Retailer	DNSP	TNSP	MP	MDP	Total (not incl. AEMO)
Overall program delivery progress and status								
General criteria (Program establishment) - Consolidated readiness	-							
Specific criteria (Capability development) - Consolidated readiness	-					-	-	
Ability to support 5-minute reallocations	-			-	-	-	-	
Ability to receive and reconcile 5-minute settlements data	-					-	-	
Ability to receive and reconcile UFE allocations data	-	-		-	-	-	-	
Ability to submit 5-minute bids	-		-	-	-	-	-	
Metering Transition Plan status - consolidated	-	-	-					

Legend:

- Yes No
- Completed
- In progress
- Not started
-
- Complete
- On track (not started)
- At risk
- Late
- n/a

Readiness Reporting - commentary

Overall program status: **On track**
Overall progress: 1-24% complete

Participant programs across all segments established, with systems designs commenced and operational impact assessments conducted, with generally reported on track status

- Individual participants reporting at risk status on delivery
- 2 participants indicating development underway

Overall project establishment status: **On track**

Majority of programs are funded, with established project plans, project teams on boarded:

- 5 organisations are yet to secure funding with 2 at risk
- 4 organisations are yet to formalise project plans although only 1 has indicated this is at risk

All respondents report an intention to participate in Market trials.

The AEMO program is proceeding on track and in line with overall program milestones

Overall specific criteria status: **On track**

Progress against specific readiness capability reflects overall program reporting and in general is reported as on track

- A number of respondents (DNSP/ Retailers) are reporting impacts from other market change initiatives on programs
- 2 generators reporting schedule being at risk, with mitigations being applied

Readiness Reporting - commentary

Overall MTP Status: **On track**

- Progress on Metering Transition spans 4 participant groups with activity timeframes from present through Dec 2022.
- Activity is general reported as “underway, on track” and “not started, on track”.
- A number of participants have reported “N/A” on activities, follow-up will be performed to ensure this is accurate and not a misunderstanding of scope

Overall MTP Status Continued

- 2-3 key MP participants are not currently reporting progress, and will be engaged in the next period
- Activity where expected date as per the MTP has passed but is being reported as “underway, on track” will be investigated

Risks and Issues

- Respondents highlighted a number of issues for follow up and validation including:
- AEMO approach for settlement certification
 - Impact of other industry initiatives on participant delivery resourcing
 - Uncertainty on transition approaches for metering and Meter Standing Data
 - Further definition of response actions for participant failure to “be ready”

General Questions

Graeme Windley

Forward Meeting Plan

Anne-Marie McCague

Executive Forum – Proposed Agenda

1. Welcome and introductions
2. Minutes and actions from the previous meeting
3. Industry Readiness Reporting
4. Industry Risks and Issues – input from Ausnet
5. Cost Recovery Update
6. AEMO 5MS Program Update
7. Cutover and Transition Approach
8. Contingency
9. Industry Engagement Events
10. Forward Engagement (alignment with readiness reporting)

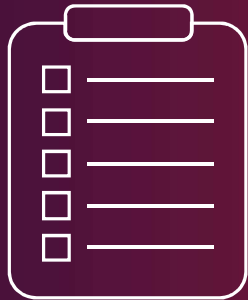
Proposed Future Events

- Vendor Sessions – 1 in 2020
- Information Sessions – 2 more bringing the total to 3 for 2020
- Monthly Open Q&A Sessions
- Q&A Sessions for staging releases
- Market Trial Communications
- Small Generation Aggregator – 1 session

Project Management Tools

Tool	Rate of Update
Industry Risks and Issues Register	Quarterly
Industry Action Log	Monthly
Document Change Log	As needed
Procedure Change Log	With the RWG slides, as needed
5MS Program Timeline	Monthly

Survey Time!



- Stakeholder Engagement Survey for Q1 2020 will be issued 30 March for response by 10 April.
- Survey will be 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
- Changes we have made since the last survey:
 - Reorganised the SWG agenda
 - Refreshed the Industry Action Log and put in place internal processes to manage actions
 - Implemented monthly Open Q&A sessions
 - Reviewed website content to provide more background information – rolling out over March to mid-April 2020

Forward Meeting Agenda

April Agenda

- TBC

Next meeting: 9 April 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 at 2/03/2020



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

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
3	4	5	6	7	8	9

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	26	27	28	29	30	
31	1	2	3	4	5	

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

Graeme Windley

