

Regulatory implementation roadmap update

Stakeholder forum
24 February 2021

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Background

- In April-May 2020, the market bodies undertook a process to prioritise the regulatory program, in response to COVID-19, and in recognition of the current regulatory burden
- As part of this process, AEMO developed a regulatory implementation roadmap (roadmap) focused on regulatory initiatives with material IT system implementation impacts, and other key/strategic reforms
- AEMO committed to maintaining the roadmap to support ongoing transparency, prioritisation and program management by all stakeholders
- AEMO published version 3 of the roadmap on 31 August 2020 and plans to publish version 4 of the roadmap in mid March 2021

Objectives of this forum

- The objective of the roadmap is to provide stakeholders and the market bodies with a portfolio view of regulatory initiatives – to support ongoing transparency, prioritisation and program management
- AEMO is progressing the development of a complementary detailed implementation schedule – to provide a more granular view of key phases and milestones for 2021 committed projects
- The objectives of this stakeholder forum are to:
 - Provide an update on implementation delays relating to the 5MS Retail platform workstream, and Metering Coordinator Planned Interruptions (MCPI) / MSATS standing data review (MSDR)
 - Provide an overview of key updates to the roadmap since version 3 was published in August 2020
 - Present an initial draft of the detailed 2021 implementation schedule, aligned to the roadmap
 - Review key implementation risks for 2021
 - Invite industry feedback and questions on the above

Updates and changes to the roadmap

Implementation delay – 5MS retail solution

- AEMO issued an industry notice to advise of a delay to the 5MS Retail Meter Data Management IT solution go-live, from 9 March 2021 to 31 May 2021
- AEMO consulted on two options, with industry support for the 31 May 2021 date, and a scheduled “check point” in early March
- The delay is not expected to impact the start of the 5MS market on 1 October 2021, or Global Settlements (GS) on 1 May 2022
- No delays are anticipated to the deployment of the Bidding/Dispatch platform (1 April 2021) or the 5MS Market Trials (5 July 2021)
- The date for the Settlements platform go-live will be impacted and move to approx. mid-May
- There are consequential implementation risks to Customer Switching (CS) and Wholesale Demand Response (WDR) initiatives that AEMO is actively monitoring and managing. (These are discussed in more detail below.)

Updates and changes to the roadmap

Implementation delay – MCPI / MSDR

- AEMO issued an industry notice to advise of a delay to the MCPI / MSDR effective date, from 14 March 2022 to 1 May 2022
- The delay is due to a conflict between the deployment and testing for GS in the lead up to go-live on 1 May 2022, and MSDR due to go-live on 14 March 2022
 - Without a delay, GS testing in early 2021 would take place using the previous version of MSATS, resulting in GS go-live using MSDR changes which had not been tested in the GS testing environment
- AEMO consulted the Electricity Retail Consultative Forum, and issued an industry notice on 18 December 2020 inviting submissions, which showed stakeholder support for the short delay
- Given no objections and support from a number of stakeholders, advanced notice, and minimal impacts on consumers, the AER and the AEMC have agreed to the delay, which avoids the need for a rule change process
- AEMO will however, commence re-consulting on the effective date for MSDR shortly

Updates and changes to the roadmap

Implementation delays

Key:	
■	Policy development/market design
■	Procedure/guideline development
■	Implementation - IT systems, processes
■	Rules development
■	Engineering Implementation
■	Indicative IT implementation
●	Committed Go-Live Date
▲	Proposed Go-Live
■	Indicative Go-Live
◆	Estimated Go-Live
+	Updated for version 4

Impacted Industry Sector	Reform Status	Reform Initiative	2020				2021				2022				2023				2024				2025						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
INITIATIVES WITH IT SYSTEM IMPLEMENTATION IMPACTS																													
Industry-wide	Committed	Five Minute Settlement (SMS) and Global Settlement																											
			+	SMS (IT platform) ● SMS (extern. ● GS (exter. ● AEMC final determination - go-live 1 October 2021 (SMS), 1 May 2022 (GS)																									
Industry-wide	Committed	Wholesale Demand Response Mechanism																											
				● AEMC final determination - go live 24 October 2021																									
Retail	Committed	Reducing Customer Switching Times																											
				● Updated to align with SMS go-live following stakeholder consultation in August 2020																									
Retail	Committed	Metering Coordinator Planned Interruptions (MCPI)																											
			+	● AEMC notice to delay until 1 May 2022, bundled with MSDR																									
Retail	Committed	MSATS Standing Data Review (MSDR)																											
			+	● v1; ● v2 (small); ● v1 AEMC reconsulting on delay until 1 May 2022, aligned with MCPI implementation																									
Retail	Committed	Electricity B2B changes																											
				● v3.5 (business enhancements, schema changes) and v3.6 (Life support procedural and WDR B2B guide changes only)																									
Gas	Committed	Gas B2B changes (life support)																											
				● IN003/20 (business enhancements, schema uplift)																									
Retail	In progress	Regulatory Arrangements for Stand Alone Power Systems (SAPS - Priority 1)																											
			+	● AEMC recommended implementation 12 months after law and rule changes made																									
Retail	Proposed - Review	Energy Consumer Data Right																											
				■ Implementation dictated by Treasury timings, assumed to be Q3 2022																									
Retail	In progress	Updating the Regulatory Frameworks for Embedded Networks																											
			+	◆ Implementation subject to the scope of the change																									
Retail	Proposed - Review	Review of Competition in Metering																											
			+	◆ (if required) ◆ IT implementation likely but not yet clear, dependent on review outcomes																									
Wholesale	Proposed - Review	ST PASA - Replacement project and methodology update																											
			+	◆ Estimated timing, subject to rule change process																									

Updates and changes to the roadmap

Other key updates – draft version 4

- No AEMC final determinations relevant to the roadmap have been made since version 3 was published
- Stand Alone Power Systems – legislation expected to be passed by SA Parliament in Q1 2021, and SA Minister expected to make rule changes as per AEMC's final review, which provides a one-year implementation period with indicative go-live in March 2022
- ESB's Post 2025 Directions Paper (published 5 January 2021) – consolidated reform agenda into four workstreams which leverage existing AEMC processes where feasible (as identified on the roadmap)
 - ESB market design recommendations expected mid-2021
- System Services rule changes – AEMC has updated timeframes for final determinations (which will progress some elements of the ESB's P2025 Essential System Services workstream)
- Energy Consumer Data Right – Competition and Consumer Act amendments in Dec 2020 transferred rules making function to Treasury
 - Consultation on draft rules delayed (originally Q4 2020); final rules estimated to be made mid-2021
 - Indicative go-live remains at end Q3 2022 (unchanged)

Updates and changes to the roadmap

Other key updates – draft version 4

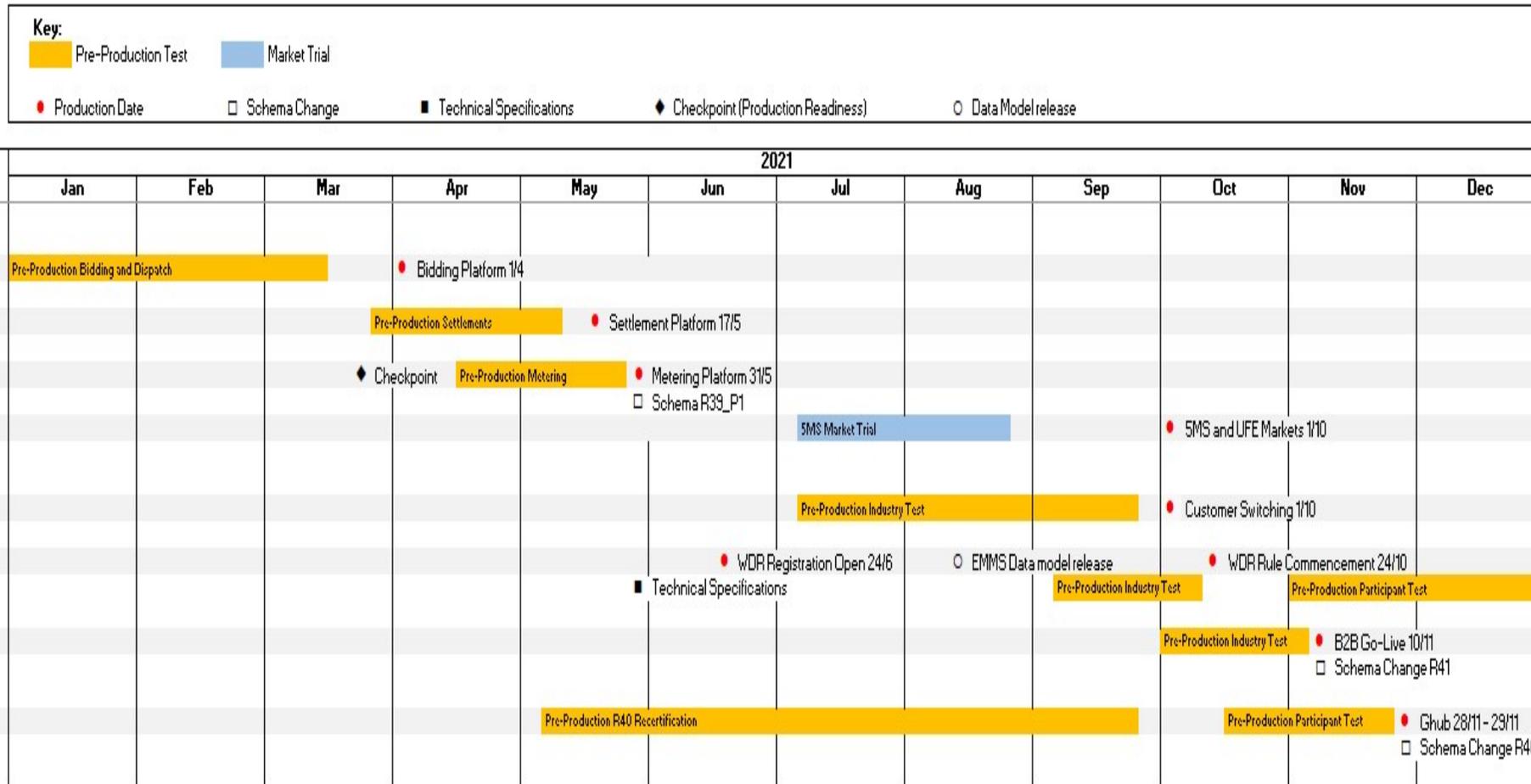
- Security Legislation Amendment (Critical Infrastructure) Bill 2020 – introduced to Parliament on 10 December to enhance the regulatory framework for security of critical infrastructure and systems of national significance, including cyber security
 - Energy specific requirements will be developed with industry through 2021 – no changes to roadmap, noting timing remains indicative
- Renewable Energy Zones – ESB completed Stage 1 (Planning) and submitted REZ planning rules to Energy Ministers for approval
 - Rules development phase extended to February 2021; and Stage 2 (Implementation) included on roadmap
- Included the NEM settlement under zero or negative demand conditions rule change (submitted 8 Feb 2021)
- Included a number of additional rule changes on the roadmap e.g. 3 x rule changes arising from the AEMC's black system event review, Connection of Dedicated Connection Assets, Generator Registrations and Connections
- Refer to Appendix for updated roadmap – draft version 4 and full log of changes

Detailed implementation schedule

- AEMO is progressing the development of a complementary detailed implementation schedule – to provide a more granular view of key phases and milestones for the following committed NEM and gas projects with go-live in 2021:
 - Five minute settlement and Global Settlement
 - Customer Switching
 - Wholesale Demand Response Mechanism
 - Electricity B2B Changes
 - Gas B2B Changes (life support)
- Dependencies between initiatives are not presented as part of this initial schedule; although will be considered for future iterations
- Stakeholder feedback is welcome.

Detailed implementation schedule

National Energy Market and Gas Markets Implementation Schedule



Notes: 5MS Staging available since December 2019

2021 implementation risks – 5MS and CS

Risk ID	Description	Inherent Rating	Residual Rating	Comments
R33 (NEW)	<p><u>Further delays to AEMO Retail Systems impact 5MS rule commencement critical path</u></p> <p>There is a risk that further delays beyond those identified put the critical path through market trial to 5MS rule commencement (01-Oct-21) at risk</p>	Critical	Significant	<ul style="list-style-type: none"> • Inherent Likelihood: Possible • Inherent Consequence: Extreme <p>Actions:</p> <ul style="list-style-type: none"> • To be monitored through reporting to PCF and AEMO readiness reporting • AEMO has: <ol style="list-style-type: none"> 1. identified resourcing dedicated to teams to address issues 2. put in place daily governance arrangements to allow for faster issues escalation and resolution 3. is escalating the technical issues with its technology partners • Checkpoints to be established with PCF to monitor effectiveness of mitigations <ul style="list-style-type: none"> • Residual Likelihood: Unlikely • Residual Consequence: Extreme

2021 implementation risks – 5MS and CS

Risk ID	Description	Inherent Rating	Residual Rating	Comments
R34 (NEW)	<p><u>Delay to AEMO 5MS Retail impacts participants readiness</u></p> <p>There is a risk that the delayed availability of the 5MS Retail solution impacts participants readiness programs resulting in delays in some participants programs.</p>	Critical	TBD	<ul style="list-style-type: none"> • Inherent Likelihood: Possible • Inherent Consequence: Major • Residual Likelihood: to be determined after feedback received • Residual Consequence: to be determined after feedback received <p>Actions:</p> <ul style="list-style-type: none"> • Mitigation measures to be identified should there be an impact • Risk rating to be reviewed post Readiness Round 6 results and timeline decision • Enhanced bilateral testing in 5MS Staging Environment being investigated

2021 implementation risks – WDR

Risk ID	Description	Inherent Rating	Residual Rating	Comments
W1	<p><u>Further delays to the AEMO 5MS Retail Solution impact the WDR June release.</u></p> <p>There is a risk that further delays in the AEMO 5MS Retail Solution result in a delay in the WDR project June release that supports the assessment of WDR registrations</p>	Significant	Medium	<p>Inherent Likelihood: Possible Inherent Consequence: Moderate</p> <p>Actions:</p> <ul style="list-style-type: none"> - Deferral of automated baseline eligibility assessment to October 2021 to decouple dependency on AEMO 5MS Retail solution for June. - Residual risk remains of release contention in June <p>Residual Likelihood: Unlikely Residual Consequence: Moderate</p>
W2	<p><u>Further delays to the AEMO 5MS Retail Solution impact the WDR rule commencement</u></p> <p>There is a risk that further delays in the AEMO 5MS Retail Solution result in a delay in the WDR rule commencement on 24-Oct-2021</p>	Significant	Medium	<p>Inherent Likelihood: Possible Inherent Consequence: Major</p> <p>Actions:</p> <ul style="list-style-type: none"> - 5MS Project mitigations - Options to further decouple the automated baselining processes from the software development in 5MS such that the work can progress in parallel. <p>Residual Likelihood: Unlikely Residual Consequence: Major</p>

Questions and feedback

Stakeholder questions and feedback are welcome

Wrap-up and next steps

- Any stakeholder feedback is requested by 3 March 2021 via email to StakeholderRelations@aemo.com.au
- AEMO will seek to address feedback as far as practicable; and will continue to make incremental improvements over time
- AEMO plans to publish the updated regulatory implementation roadmap (version 4) in mid March 2021
- As previously advised, AEMO proposes to update the roadmap two-three times per year – depending on the extent of updates and changes to the regulatory implementation program

Thank you.

Appendix

Updated regulatory roadmap and log of changes – draft version 4

To contribute join www.sli.do #Roadmap

Updated roadmap – draft version 4

Key:	
Yellow	Policy development/market design
Blue	Procedure/guideline development
Green	Implementation - IT systems, processes
Red grid	Indicative IT implementation
Light green	Engineering Implementation
Red dot	Committed Go-Live Date
Yellow triangle	Proposed Go-Live
Blue square	Indicative Go-Live
Pink diamond	Estimated Go-Live
+	Updated for version 4

Impacted Industry Sector	Reform Status	Reform Initiative		2020				2021				2022				2023				2024				2025				2026				
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
ESB INITIATIVES WITH IT SYSTEM IMPLEMENTATION IMPACTS																																
Industry-wide	Proposed - Review	Resource Adequacy Mechanisms and Ageing Thermal Generation (A)	}	+																												
Industry-wide	Proposed - Review	Essential System Services, Scheduling and Ahead Mechanisms (B)		+	High Level Design				Market Design				Indicative Execution Range: Legislation, Rules, Procedures, IT								Extended Execution Range											
Industry-wide	Proposed - Review	Demand Side Participation (C)		+																												
Industry-wide	Proposed - Review	Transmission and Access (D)		+																												
INITIATIVES WITH LIMITED IT SYSTEM IMPLEMENTATION IMPACTS																																
Wholesale	Committed	Mandatory Primary Frequency Response			Implementation timing shown is indicative and depends on individual generator circumstances, managed through the self-assessment process																											
Network	In progress	Technical Standards for Distributed Energy Resources	+		Indicative Execution Range: Procedures, IT																											
Industry-wide	Proposed - Pending	NEM Settlement in Zero and Negative Demand Conditions	+		Indicative Execution Range: Procedures, IT				Indicative implementation only, subject to rule change process																							
Network	In progress	Network Planning and Access for Distributed Energy Resources			Indicative Execution Range: Procedures, IT				Indicative implementation only, subject to rule change process																							
Network	In progress	Allowing DNSPs to Charge for Exports to the Network			Indicative Execution Range: Procedures, IT				Indicative implementation only, subject to rule change process																							
Network	In progress	Access, Pricing and Incentive Arrangements for Distributed Energy Resources			Indicative Execution Range: Procedures, IT				Indicative implementation only, subject to rule change process																							
Network	In progress	Connection of Dedicated Connection Assets	+		Indicative Execution Range: Procedures, IT																											
Network	In progress	Implementing a General Power System Risk Review	+		Indicative Execution Range: Procedures, IT																											
Industry-wide	In progress	Enhancing Operational Resilience to Indistinct Events	+		Indicative Execution Range: Procedures, IT																											
Wholesale	In progress	Prioritising arrangements for system security during Market Suspension	+		Indicative Execution Range: Procedures, IT																											
ESB INITIATIVES WITH LIMITED IT SYSTEM IMPLEMENTATION IMPACTS																																
Industry-wide	In progress	Renewable Energy Zones - Planning (Stage 1) (D)	+		Indicative Execution Range: Procedures, IT																											
Industry-wide	In progress	Renewable Energy Zones - Implementation (Stage 2) (D)	+		Indicative Execution Range: Procedures, IT																											
Wholesale	In progress	Visibility and Security of Dispatch (Stage 1) - Interim	+		Indicative Execution Range: Procedures, IT																											
Wholesale	Proposed - Review	Visibility and Security of Dispatch (Stage 2) - Interim	+		Indicative Execution Range: Procedures, IT				Indicative, subject to determining the materiality of the issues																							
Networks	Proposed - Pending	Governance of DER Technical Standards	+		Indicative Execution Range: Procedures, IT				Indicative timing, subject to rule change process																							
GAS INITIATIVES																																
Gas	Committed	DWGM simpler wholesale price	}		Implemented as a single AEMO project																											
Gas	Committed	DWGM improvement to AMDQ regime																														
Gas	In progress	Measures to Improve Transparency in the Gas Market		+		Indicative Execution Range: Procedures, IT				Subject to passage of legislation																						

Log of changes – draft version 4

- 5MS – IT platform implementation delayed from 9 March 2021 to 31 May 2021
- Metering Coordinator Planned Interruptions – implementation delay until 1 May 2022
- MSATS Standing Data Review - implementation delay until 1 May 2022
- Standalone Power Systems - Delayed indicative go-live date by 3 months to March 2022 given NEL amendments have not passed SA Parliament and assuming one year implementation. Updated status to in progress.
- Updating the Regulatory Frameworks for Embedded Networks - Extended rule development phase until March 2021
- Review of Competition in Metering - Updated policy development phase to Oct 2021 to align with consultation paper and extended rule development phase (if required)
- ST PASA replacement and methodology update - Updated rule development phase to March - December 2021 and updated estimated go-live date to Q3 2022
- Measures to Improve Transparency in the Gas Market - Delayed with Final Rules package to go to SA Parliament Q1 2021, go-live date Oct 2021

Log of changes – draft version 4

- System Services Rule Changes (7 rule changes) – updated rule development phase to reflect revised timing of AEMC processes and re-ordered initiatives to show inter-related initiatives. Specific details of 7 rule changes are set out in the log of changes tab.
- Consolidated the 7 ESB initiatives to 4 workstreams to align with ESB’s Directions Paper (published on 5 January 2021) and included notation to show relationship with AEMC processes. Specific details of consolidation into 4 workstreams are set out in the log of changes tab.

Log of changes – draft version 4

- Included the following regulatory initiatives on the roadmap –
 - Generator Registrations & Connections,
 - NEM Settlements under zero and negative demand conditions,
 - Connection to Dedicated Connection Assets,
 - Implementing a General Power System Risk Review,
 - Enhancing Operational Resilience to Indistinct Events,
 - Prioritising Arrangements for System Security during Market Suspension,
 - Renewable Energy Zones – Implementation (Stage 2),
 - Governance of DER Technical Standards.
- Removed 6 regulatory initiatives from the roadmap that have been completed. Specific details of deleted initiatives are set out in the log of changes tab.

Log of changes – draft version 4

- Other minor updates to roadmap include:
 - Integrating Energy Storage Systems - Updated status to 'in progress' as consultation has commenced
 - Economy wide Cyber Security Strategy and Systems of National Security (Cth) - Renamed initiative to Protecting Critical Infrastructure and Systems of National Significance, renamed technical design phase to detailed design phase
 - Renewable Energy Zones - Planning (Stage 1) - Stage 1 near completed, rules development process extended by 2 months awaiting Energy Ministers approval
 - Visibility and Security of Dispatch (Stage 1) - Interim - 3 month delay to rule change process, Final Determination expected 11 March 2021, status updated to 'in progress'
 - Visibility and Security of Dispatch (Stage 2) - Interim - Policy development phase extended by two months, status updated to 'proposed – review'
 - Minimum Mandatory DER Technical Standards - Interim - Renamed Technical Standards for Distributed Energy Resources, updated the rules development phase to align with draft determination, re-categorised as non-ESB initiative with limited IT system implementation impacts.