

AGENDA – POWER OF CHOICE - READINESS WORKING GROUP MEETING #5 and INDUSTRY TEST WORKING GROUP MEETING #2

DATE:	Tuesday 7 March 2017
TIME:	10.30 am – 12.30 pm AEDT
LOCATION:	Teleconference only
CONTACT:	poc@aemo.com.au
TELECONFERENCE:	TOLL FREE: 1300 654 386 CONFERENCE ID:716805
WEBINAR (SCREEN SHARING)	https://attendee.gotowebinar.com/register/1580188805680319489
INVITEES	POC-RWG members

POC-RWG members POC-ITWG members

ITEM	TOPIC	PAPERS	RESPONSIBLE	TIME
1.	Welcome and introduction	Item_01: RWG/ITWG meeting notes (13 Feb)	AEMO	10:30 – 10.40
2.	Market Readiness Update	Item_02: POC Readiness Update (Mar 2017)	AEMO	10:40 – 10.50
3.	Transition and Cutover	ltem_02: POC Readiness Update (Mar 2017)	AEMO	10:50 – 11:10
4.	Accreditation and Registration	Item_03: Industry Feedback	AEMO	11:10 – 11:30
5.	Industry Test Strategy	Item_03: Industry Feedback	AEMO	11:30 – 11:50
6.	Industry Test Plan for EN/MC	Item_03: Industry Feedback	AEMO	11:50 – 12:20
7.	Agree actions and next steps – Readiness		AEMO	12:20 – 12:30

Upcoming readiness meeting(s):

24 March 2017 - Participant Information Session: Work Package 2 changes, B2B Procedure changes, overview of accreditation and registration processes.

5 April 2017 – joint RWG/ITWG meeting.

POC READINESS WORKING GROUP (POC-RWG)

POC INDUSTRY TESTING WORKING GROUP (POC-ITWG)









The objective of this RWG/ITWG meeting is to:

- update industry participants all the status of market readiness activities, including the planning activities for accreditation and registration and industry testing.
- facilitate an initial discussion on transition and cutover:
 - o what are the key issues that we need to consider?
- discuss the feedback received to the initial drafts presented at the previous meeting.



Background

"Market readiness" refers to the successful planning and implementation of all necessary activities by AEMO and NEM participants required for a seamless transition to new procedural arrangements and B2B communications starting on the "go-live" date of 1 December 2017.

For further information, please refer to the <u>Market Readiness Strategy</u>

AEMO's readiness work stream is responsible for planning, coordinating and preparing the industry and AEMO for the start of the revised market arrangements.

Key readiness activities include:

- industry readiness reporting and monitoring
- facilitating participant information sessions
- accreditation and registration
- industry testing
- transition and cutover

Power of Choice (PoC) Program Overview – Readiness Work Stream

High Level Program V4.10 - 7 March 2017



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2. PROGRAM UPDATE



AEMO Procedures work stream:

- Final determination for WP2 consultation published on 28 February.
- Final versions published of the MC Registration Guide and accreditation checklists.
- Planning for WP3 ("As-built") is in progress.

B2B Procedures work stream:

- Final determination for B2B consultation to be published on 6 March.
- B2B Accreditation Guide expected to be ready by end of March.

Systems Development work stream:

 Focus group meeting on 15 March to walkthrough the draft SMP User Guide/ Technical Guide.



Monthly Readiness Reports – due 6 March

Participant Information Sessions – next session is 24 March and will cover WP2 Procedure changes, B2B Procedure changes and the industry accreditation and registration process.

Accreditation and Registration – final version expected on the industry plan to be published by 24 March (earlier if we can!).

Industry Testing – version 0.2 of the draft Industry Test Strategy expected to be circulated to the ITWG for review by the end of March.

Next RWG/ITWG meeting is 5 April



Industry transition and cutover refers to how AEMO and NEM participants' existing systems will be managed during the transition and cutover period for the POC Implementation Program, including:

- transition approach and timelines
- cutover processes and timelines;
- contingency planning activities;
- reporting and communication processes; and
- post "go-live" transition to business-as-usual operations

To ensure the effective and efficient implementation of POC changes, an <u>Industry Transition and Cutover Plan</u> should set out the sequence of tasks to support participants as they transfer to using to the new industry processes and solutions.

4. TRANSITION & CUTOVER (CONT.)



Guiding Principles

- Minimal disruption to customers;
- Minimise disruption to AEMO and market participants' systems and processes;
- Minimise the number of in-flight transactions as at the cutover date;
- AEMO and industry participants must fulfil all regulatory obligations and any commercial arrangements between parties;
- Transitional arrangements must be relevant and cost effective;
- All transactions/messages begin and end under same business rules/systems to the extent possible;

4. TRANSITION & CUTOVER



AEMO is taking a bottom-up approach to transition and cutover planning, with a focus on:

- identifying key transition and cutover issues
- analysing various B2B and B2M transaction types and volumes
- understanding the differences between new and old market transactions
- understanding systems and technical capabilities

Transaction and cutover planning discussions will take place at the RWG.

AEMO wants to use industry SME's and proposes this be on a skills-based assessment of specific needs identified in transition and cutover planning activities.

AEMO is targeting to release a discussion paper in April with further information on transaction and cutover details.

5. FEEDBACK: INDUSTRY ACCREDITATION& REGISTRATION PLAN



Feedback summary and responses:

- Final plan due 24 March 2017 (version 1 EN, MC, MP, MDP)
 - Currently finalising internal processes with new procedures/guides
- Dates for submitting plans shifted to end March 2017
 - Qualification procedure released on 28 Feb 2017
 - VIC government decision due end March 2017
- Clarified that all participants who wish to use the B2B e-hub must be accredited as B2B e-hub participants
 - B2B e-hub accreditation guideline due under the rules by 1 June 2017 AEMO targeting end March 2017
- Added milestones to confirm registration and accreditation statuses prior to go-live



Feedback summary and responses:

- Lack of detail:
 - o Detailed milestones for planning and execution
 - o Data and environments
 - o Defect management
 - o Test readiness and entry criteria
 - Test execution processes
 - Test reporting
- AEMO Test Manager now appointed, concentrating on:
 - Developing plan for ITWG interaction and planning milestones
 - Developing content data, environments, defect management etc.

5. FEEDBACK: INDUSTRY TEST STRATEGY

Feedback summary and responses (cont.):

- Phases:
 - Phase 1 optional B2M for EN/MC rule changes
 - Shifted out to commence from May (note that changes will be available in April)
 - Phase 2 awaiting details from technical team on release schedule due end March
 - Phase 3 constrained to commence in mid August due to overall timeframes
- Proposed scope additions:
 - o Regression testing
 - o Network billing
 - o Transition and cutover process testing
 - o Full volume testing
 - CATS transactions to phase 3

5. FEEDBACK: INDUSTRY TEST PLAN (EN/MC)



Feedback summary and responses:

- EN and MC refers to rule changes Embedded Networks and Competition in Metering
- Feedback similar to feedback on Industry Test Strategy regarding details, timeframes etc.
- Proposed scope additions:
 - o Regression testing
 - Four specific scenarios related to functionality for meter churn

QUESTIONS





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SLIDE 14

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Active Stream	Participant to have more than 1 HP SAAS QC log in	AEMO is currently assessing HP SAAS QC licencing options and will update industry accordingly.
2.	Energy Australia	 The document is too brief and is very limited in the Content. EA would like to see a more detailed document. For example: a) Defect approach (i.e. turnaround timeframe) Detailed test schedule, b) Test environment, c) Test Cycles and Cycle duration d) Clear exit criteria defined for each cycle, etc. This information is imperative so that we can scope our requirements for participating in industry testing. Not having a full picture compromises our (and industry's) ability to understand and identify issues that will hinder market operation post PoC implementation. 	 Strategy v0.1 was presented for industry feedback as a working draft – as per the Industry Test Working Group (ITWG) Terms of Reference (TOR), these details will be developed in collaboration with the ITWG. AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including: detailed scope detailed milestones for planning and execution (including cycle numbers and lengths) a data management strategy a defect management strategy test readiness, entry and exit criteria test reporting
3.	Energy Australia	Regarding data for test cycles. The data to be used for test cycles is not defined. Historically, the industry has selected a date, and used an industry snapshot as of that date. AEMO indicated that they may be performing data analysis to determine appropriate NMIs and data to use, as well as creating data-sets to use where appropriate (e.g., new connections). Whatever the solution, we need plenty of warning to be able to prepare the data.	 Data management will require significant planning by AEMO and the ITWG. AEMO will provide more information in the next draft of the plan on data management and looks forward to working with industry to develop the data management strategy. A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).

Table 1: Summary of Participant Feedback to POC Industry Test Strategy v0.1

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
4.	Energy Australia	Test environment requirements: EA needs to know, as soon as possible, if AEMO have plans for any full volume testing. (We might not be able to stand up an environment that can support full prod volume, but still it is good to have a direction on the requirements.)	AEMO will add full volume testing to the proposed scope of phase 3 (see 4, 14, 42).
5.	Energy Australia	Phase 1 timelines are too optimistic	Phase 1 notionally commences from April but runs until July – participants are requested to inform AEMO when they will be ready so AEMO can facilitate.
6.	Energy Australia	Shouldn't transition & cutover be mentioned as a scope item for testing?	Transition and cutover testing will be included as a proposed scope item – details will need to be determined as part of the transition and cutover planning (see 6, 18, 22, 50, 51, 76).
7.	Energy Australia	Is there a Certification required from participants for POC?	Any certification requirements will be defined in the B2B e-hub accreditation guidelines.
8.	Energy Australia	3.3.2 Scope Exclusion – Point 2. If an issue is found in a participant's back end system that is impacting Industry Test progress/completion, the issue needs to be logged in Industry Testing and reported in IT reports?	Section will be re-written to clarify that if an issue impacts industry testing progress then it should be logged in the Industry testing – with an estimated fix date so that any impacted participants know when testing will resume. However the details of the issue are not required.
9.	Energy Australia	Appendix B. Defect management Status. Is the defect expected to be in "Open" status if the Test of the fix is failed?	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).
10.	Select Solutions	3.2.6 - timeframe for the industry testing is too tight and does not allow enough time for any major issues to be rectified time may eat into the trial execution period.	As mentioned in the Strategy, AEMO and the ITWG will determine the relative lengths of the industry test phase and market trial phase as part of the test planning process. The start date of mid-August is defined by the overall POC project timeline (see 10, 12, 13, 22, 49).
11.	Select Solutions	6.1.1 - What does self-certification require?	If certification is required as part of the B2B e-hub accreditation guidelines then self-certification will require participants to self-test that they can fulfil those requirements (e.g. that they can correctly form and send a message).

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
12.	United Energy (UE)	 2.2 Key Milestones for the Industry Test Strategy To enable any B2B execution to commence in June there needs to be a clear picture on who will be ready to participate and with what component of the solution. This plan assumes all participants will be ready to commence June. The Scenarios under test need to be clearly articulated to show who will execute which component and when? Currently there is a timeline however without a clear scope in mind how can the phase durations be validated? There needs be a final cycle or window planned that will allow participants to re validate any tests that may have failed in previous cycles. This could be treated a 'Final Pass' prior to go live. 	B2B execution in June will depend on the B2B release schedule due by end of March. At this stage it is likely that this phase will include single party execution alone (e.g. connectivity, testing against responders). (See 12, 21, 53) As mentioned in the Strategy, AEMO and the ITWG will determine the relative lengths of the industry test phase and market trial phase as part of the test planning process. The start date of mid-August is defined by the overall POC project timeline (see 10, 12, 13, 22, 49).
13.	United Energy (UE)	 2.2 Figure 2: During the first ITWG meeting there was a clear indication by some of the participants that readiness to commence Phase 1 as per the strategy is unlikely. It would make sense to adjust the Phase scheduled dates to align with the readiness of each participant. This may allow for Phase 1 and 2 to shrink in size and allow more time during Market trial execution (Note: not sure if 2 cycles during the Market Trial will be sufficient). 	Participants are requested to inform AEMO when they will be ready to commence Phase 1 testing and the scheduled dates can then be aligned accordingly. However Phase 3 cannot start earlier than indicated as this timeline is defined by the overall POC project timelines (see 10, 12, 13, 22, 49).
14.	United Energy (UE)	3.3 Industry testing scope: There is no mention in the scope section around non-functional testing (performance, load etc). If the environment to be used is the pre-production environment then sufficient CPU should be available to cater for the increase in 'notifications' to the market through the faults processing, service order and churn functionalities. This may impact the performance of the environment during test.	AEMO will add non-functional testing to the proposed scope of phase 3 (see 4, 14, 42).

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
15.	United Energy (UE)	 5.2 Test Scenarios, test scripts and test data: There is suggestion in this section that HP ALM SaaS instance will be used for all test planning. The understanding is that there will be 1 licence available for each participant organisation. We question whether 1 license will be sufficient. With HP ALM SaaS, locking of user accounts is a common occurrence. Who will be the administrator and escalation point for HP QC? 	See 1 regarding licences. AEMO will be administrator and escalation point for HP QC.
16.	United Energy (UE)	5.3 Test Environments: Will there be data refreshes required between test phases? If so, what refresh requirements are expected of the participants?	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
17.	United Energy (UE)	 6.3 Defect Management: We recommend adding a defect status transition flow chart or mechanism that shows the way the defect management process will work. For example: UE uses HP ALM and there is customisation in place that is specifically used by UE. Each participant most likely use the Defect Management tool in their own way. Having visibility prior to test execution on the process to be followed will prevent any delays during test execution. What are the escalation paths? Ie: do escalated items get assigned to the Industry Test Manager? When are fixes to be released? Will all fixes be applied as soon as fixed or between Test Cycles – what is the release management process to be followed as part of this strategy? 	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
18.	United Energy (UE)	 The following are key concerns with regards to the strategy No appointment of an AEMO Industry Test Manager Cutover/transition testing window between participants is not currently planned It would make sense to include elements of regression testing for critical processes between market participants. It is not clear throughout the strategy. Test Data synchronisation and selection of appropriate data for each scenario needs to be clearly understood The Industry test strategy does not indicate if there will be a Test Readiness review prior to test phase commencement 	AEMO's Industry Test Manager has now been appointed and will commence in late February 2017. Transition and cutover testing will be included as a proposed scope item – details will need to be determined as part of the transition and cutover planning (see 6, 18, 22, 50, 51, 76). A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75). A Test Readiness review will be added to the test strategy (see 18, 19).
19.	Jemena	We would like to see the scope of testing be expanded to cover overall functionality changes in processes between market participants in addition to AEMO MSATS changes. In order to efficiently plan for testing, propose AEMO to collect when market participants are ready for testing on for each phase.	AEMO welcomes specific scope additions. A Test Readiness review will be added to the Strategy (see 18, 19).
20.	Jemena	 1.3.3 Scope of the Industry Test Strategy: We would recommend to include regression testing of the non-changed critical processes in scope for Industry Testing : Network Billing (Introduction of Exit Fee, Tariff Changes) Outbound Network Billing Outbound Dispute Notification Outbound Payment Invoice Inbound Disputes 	Regression testing and Network billing will be added to the proposed scope.
21.	Jemena	 2.1 Industry Testing Phases Phase 2: B2B - As released: It would be beneficial if Phase 2 can commence when all B2B development is completed. Otherwise "Phase 2: B2B - As released" – needs to be supported by the AEMO B2B Release plan. 	B2B execution in June will depend on the B2B release schedule due by end of March. At this stage it is likely that this phase will include single party execution alone (e.g. connectivity, testing against responders). (See 12, 21, 53)

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
22.	Jemena	2.Key Dates and Milestones:	Noted.
		We would recommend the following test cycle approach (including scope and duration):	Phase 1 and 2 can be shortened. However Phase 3 cannot commence earlier as this time is set by the overall POC project timeline.
		 Phase 1 EN/MC: Optional phase due to industry participants readiness & availability Phase 1 to be shortened due to minimal changes in CATS and MSATS configuration. Phase 2 B2B Mandatory connectivity testing to e-HUB. Mandatory schema validation testing. Optional functional testing. Phase 2 to be shortened and reallocate required extra 	As mentioned in the Strategy, AEMO and the ITWG will determine the relative lengths of the industry test phase and market trial phase as part of the test planning process. The start date of mid-August is defined by the overall POC project timeline (see 10, 12, 13, 22, 49).
		 weeks to Phase 3. Successful completion of mandatory items is entry criteria into Phase 3. 	
		• Phase 3 Full:	
		 Industry Testing: Mandatory phase for all Market Participants All transactions in POC scope must be tested by relevant participants Industry Testing covers schema validation and business rule validation (procedure compliance). Market Trial Mandatory phase for all Market Participants 3 test cycles are recommended each 3 weeks with 1 week in between. A total duration is 12 weeks. All key E2E processes must be tested by the relevant counterparties 	

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
		We would recommend add test cycle (Phase 4) that will test in-flight transactions in readiness for cutover.	
23.	Jemena	3. Scope and Objectives of Industry testing: Critical business processes in scope need to be listed	AEMO welcomes industry feedback on the proposed scope and critical business processes (see 2).
24.	Jemena	5.3 Test environments: Test environments data refresh approach need to be added.	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
25.	Jemena	6.1.2. Exit criteria: Severity 3 and 4 defects must have workarounds and therefore associated tests can be "completed with the workaround" and not treated as "Failed"	Noted. Will be updated in next draft.
26.	Jemena	APPENDIX A. Defect classification: We would recommend using only defect severities. It will be over complicated to use severities and priorities for Industry testing.	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).
27.	AusNet Services	Point 2.2 – Key Milestones – dates require further clarification and input from participants needs to be more fully defined.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including milestones (see 2).
28.	AusNet Services	 Point 4.2 – Test Management Tools. 1 licence/access per participant is insufficient for effective test participation. Anticipated licence requirements: 6. 	Noted. See 1.
29.	AusNet Services	Point 4.3.1 – Further and more detailed explanation required of the process to develop the preparation materials, including milestones/deliverables/working groups/dates/feedback/dispute resolution	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including milestones (see 2).
30.	AusNet Services	Point 3.3.2 – Testing of non-critical business processes: Unclear as to process to determine criticality.	AEMO welcomes industry feedback on the proposed scope and critical business processes (see 2).
31.	AusNet Services	Point 4.4 – Participant test registration – deadline for response is required.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including milestones (see 2).

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
32.	AusNet Services	Point 4.5.1 – Status Reporting – further details are required on standardisation of reporting, which vehicle for reporting will be use and date(s)/frequency.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including reporting (see 2).
33.	AusNet Services	Point 4.5.2 – Milestone Reports - Test Cycles are not defined. Refer Comment #1.6 for further requirements.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including reporting and test cycles (see 2).
34.	AusNet Services	Point 5.1 – Industry Test Plans - frequency of workshops, milestone dates and participant pairing are required.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the details required (see 2).
35.	AusNet Services	Point 5.2 – Test scenarios, scripts and data – Please provide upload templates for QC. Further information is required around extent of scripting to be held in QC.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the details required (see 2).
36.	AusNet Services	Point 5.3 – Test Environments: This is unclear, particularly in regard to environment alignment between participants. Additionally 'Production and PreProduction will have the identical configuration and releases of software' appears to be contradictory – PreProduction will be at Production +1 for the duration of testing until deployment.	Test environment section will be re-written to clarify.
37.	AusNet Services	Point 6.2 – Please provide the milestone calendar on which preparation activities will/must occur.	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including milestones (see 2).
38.	AusNet Services	Point 6.2 - Test execution information cannot be in real time unless more than 1 QC SaaS licence is provided to participants.	Noted. See 1.
39.	AusNet Services	Point 6.2.1 – Request Sub Statuses to further clarify the four statuses – these are potentially inadequate. Request a Defect Type of 'Clarification' where information is required from either AEMO or another Participant and the 'defect' is not yet confirmed as a defect.	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).

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40.	AusNet Services	Entire Defect Process contains a number of unclear areas (see 1.12 and 1.13 also). Strongly recommended to set up a sub-group to fully define the process across participants.	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).
41.	AusNet Services	Point 6.4 - Stand-up meetings are insufficiently detailed. Clarification around number of participants, duration of meeting, roster or schedule for participants (one combined stand-up will be unproductive), management, minutes and feedback, agenda and finally dispute resolution	AEMO will include in the next draft of the Strategy more details on the process and timeline for ITWG to develop the detail including stand-up meetings (see 2).
42.	AusNet Services	Point 7.3 - Volume testing is marked out of scope however it is referenced in this paragraph as an 'unscripted full volume component' – further detail is required.	AEMO will add full volume testing to the proposed scope of phase 3. (see 4, 14, 42)
43.	AusNet Services	Defect Management – recommend strongly a defect management guide – the classifications are unclear/inadequate. Severity should refer to impact (after go live), there needs to be an Urgency Status (impact on Testing itself) and Priority (order required for fix). A defect cannot have the same classification for both business and testing impact. Defect Statuses are also too few for such a complex cross-organisation test effort. See point 1.14.	A defect management strategy will be developed to clarify this point and others raised (see 9, 17, 26, 39, 40, 43).
44.	AusNet Services	The R35 schema (B2M) will be in place in the new MSATS preProd environment (Prod+1) on 22 nd March, which means that any MSATS testing that would require the old schemas (Prod) would need to be done prior to the change unless a separate instance is stood up.	Schema update is being managed through the BAU process for schema updates.
45.	AusNet Services	Please confirm that the MSATS responder will not be active during testing which means testing will have to be done participant to participant.	The MSATS B2B responder will be active during testing.
46.	AusNet Services	N-1 schema support will only be active going forward from 1 st December. Inflight transaction handling is not yet defined and is a key issue.	The Industry Transition and Cutover Plan will define inflight transaction handling.
47.	AusNet Services	There is currently no AEMO Test Manager.	AEMO's Industry Test Manager has now been appointed and will commence in late February 2017.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
48.	AusNet Services	The question of aligned environments/data/refreshes came up several times. We need to know what the AEMO expectation is, what date this expectation should be realised. Ausnet strongly recommends that a sub- working group on this topic cannot wait until 3 March (next ITWG meeting) to be discussed again, and then established some weeks later – it needs to be enacted now.	Noted. A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
49.	AusNet Services	The two test cycles currently indicated for Market is also deemed one too few – three cycles are recommended for a change of this magnitude. EN/MC testing should be reduced to 2 months and full testing should be increased to 3 months.	 Phase 1 and 2 can be shortened. However Phase 3 cannot commence earlier as this time is set by the overall POC project timeline. As mentioned in the Strategy, AEMO and the ITWG will determine the relative lengths of the industry test phase and market trial phase as part of the test planning process. The start date of mid-August is defined by the overall POC project timeline (see 10, 12, 13, 22, 49).
50.	AusNet Services	No specific Cutover/Dress Rehearsal/Deployment testing has been identified. Cycle 1 and Cycle 2 (Market Test, Sept- Nov) would be appropriate to do this. This should be a whole-of-industry coordinated test and will have a high degree of complexity/difficulty – one cutover test – which is one more than currently planned – is unlikely to be enough.	Transition and cutover testing will be included as a proposed scope item – details will need to be determined as part of the transition and cutover planning (see 6, 18, 22, 50, 51, 76).
51.	AusNet Services	It is unclear what the plan is around in-flight transactions and the testing of this.	Transition and cutover testing will be included as a proposed scope item – details will need to be determined as part of the transition and cutover planning (see 6, 18, 22, 50, 51, 76).
52.	AusNet Services	Risks/Issues: There is no specific Risk/Issue register for Testing. We would like to request establishment of this, and the escalation path and turnaround/acknowledgement procedures.	AEMO has established the POC Risk and Issue log and process (http://www.aemo.com.au/Electricity/National-Electricity- Market-NEM/Power-of-Choice/Program-Management) for industry and workstream-specific risks.

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53.	AusNet Services	The SWG has not yet released the IT calendar of what is being delivered and when.	The B2B release schedule is due by end of March (see 12, 21, 53).
54.	AusNet Services	Reference was made to issuing dummy participant IDs in order for us to log into the MSATs browser and request a send, timeline requested.	This was raised as a possibility for the EN/MC testing phase once participants have registered for testing if partnering participants are not available.
55.	AusNet Services	Queries were raised around support from AEMO during testing – weekends and out of hours being likely with the timeframes; Public Holiday support (States differ) also requested (Grand Final Day and Cup Day would be examples when Victorians won't be at work)	Noted – AEMO support details will be included in the Test Strategy when they are available.
56.	AusNet Services	Another statement presented was that Testing scope is being limited to Critical Business Processes, please provide an indication of when this will be determined and by whom.	The proposed scope statement that the testing scope being limited to critical business processes is a reflection of the compressed timeframes available for testing. However it is expected that participants will develop and agree on scenarios.
57.	AusNet Services	Connectivity Testing is referred but has no specific cycle or dates called out. Dates, context and structure is requested.	More details will be added once available - the B2B release schedule is due by end of March (see 12, 21, 53).
58.	AusNet Services	No Feedback form was provided.	AEMO does not generally use a feedback form for non- procedural consultations.
59.	Ergon Energy Retail	Phase 2 – (B2B incremental drops) What is the date of the PreProd data refresh? Will there only be one during testing?	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
60.	Ergon Energy Retail	Phase 3 – (Full Functionality) August 2017 How will participants be paired with other participants i.e. Ergon Retail customer base is only in Ergon Distribution network etc. Is it up to participants to find/allocate testing partners?	It is expected that participant pairing/grouping will be determined during ITWG working group meetings facilitated by AEMO for defined industry testing/market trial scenarios. Bilateral testing outside this would be arranged by individual participants. More details on this process will be added to the Strategy as it
			is developed by AEMO and the ITWG.
61.	Ergon Energy Retail	Phase 3 – (Full Functionality) August 2017 Could AEMO create one fictitious Parent/Child network for ERGONETP network to enable validation of both CATS and Pool Statement settlement?	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
62.		Phase 3 – (Full Functionality) August 2017	A Test Readiness review will be added to the Strategy.
	Ergon Energy Retail	 Provide a list of MCs that details: a) their Industry Testing readiness forecast start date b) their capacity to work with other participants' with regards to Metering Service Works responses and CATS messages 	
63.	CitiPower Powercor	We support early establishment of the Testing Working Group, even before a Test Lead is appointed, to assist with development of the Strategy and the supporting processes.	AEMO's Test Lead has now been appointed and will commence in late February. With the procedures being finalised in early March, and the System Working Group developing their release strategy during March we expect the Testing Working Group will now be able to commence detailed planning.
64.	CitiPower Powercor	In the updated Strategy document we suggest more information should be included to describe how participants will co-operate during each of the testing cycles and how this co-operation will be governed.	Noted – participant co-operation will be critical to successfully undertaking industry testing. More details on this process will be added to the Strategy as it is developed by AEMO and the ITWG.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
65.	CitiPower Powercor	Another consideration is alignment of data. In the past, we have experienced issues when participating in industry testing where data alignment between MSATS and various participants has resulted in unnecessary analysis of issues that have turned out to be as a result of alignment of data (for example, the status of a SO in the market vs our system). This generally comes about due to the date that data refreshes have occurred in different participants' applications. At this point in time it is more about recognition that this could be an issue and giving consideration to a mitigation strategy for alignment of data.	Noted – data management will require significant planning and likewise we have experienced issues in the past where data has caused delays in testing progress. We look forward to working with industry to develop the data management strategy (see 3, 16, 24, 48, 59, 61, 65).
66.	ActewAGL Distribution	Section 2.2 clarification on the pre-prod environment availability for 3 April. Is this the same MSATS environment that will be available for industry testing in August?	Please refer to the MSATS release schedule for details on the r35 B2M schema release for April (link below). There will be a pre-production MSAT release for the r36 B2B schema around August - details are expected to be released in late March. <u>https://www.aemo.com.au/-/media/Files/Electricity/NEM/IT- Systems-and-Change/2016/MSATS-4688-Release-Schedule</u> <u>December-2017.zip</u>
67.	ActewAGL Distribution	Section 2.2 - Can you confirm what the sandbox environment contains? Is it another instance of MSATS?	The sand box environment for phase 2 in July refers to the SMP hub functionality – web services (RESTful APIs), not to MSATS. Details on Phase 2 will be included when they are available from the system working group – expected by end of March.
68.	ActewAGL Distribution	Section 6.2 we may need multiple HP ALM licences per participant to be able to update in real time of execution.	Noted – see 1
69.	ActewAGL Distribution	Section 6.3.1 – point 1 – can we ensure that there is a field for participant / testing counterparties so this can be used as a search criteria or sorting field through industry testing.	This will be added to the Strategy.
70.	Metering Dynamics	Request for additional QC licences	Noted – see 1

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
71.	Metering Dynamics	Question on scrambling data used for testing	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
72.	Energex and Ergon	CATS transactions should be included in the full end to end Industry and Market Testing from August onwards to allow full end to end testing for the period.	CATs transaction will be added to the proposed scope for Phase 3.
73.	Energex and Ergon	Our Project has a strong preference for three cycles of market testing to ensure the project is in the best possible position for Go Live on 1st December 2017.	Noted. As mentioned in the Strategy, AEMO and the ITWG will determine the relative lengths of the industry test phase and market trial phase as part of the test planning process. The start date of mid-August is defined by the overall POC project timeline (see 10, 12, 13, 22, 49).
74.	Energex and Ergon	Test scenarios for MC/EN testing were of high quality. Our Project would like to have visibility of the AEMO Test Plans as they become available ensuring they are of the same quality.	All test plans for industry testing will be developed in conjunction with AEMO and the ITWG – so participants will have visibility.
75.	Energex and Ergon	It is imperative that data management and environment refresh plans are determined as soon as possible to enable all market participants to coordinate their individual activities.	A data management strategy will be developed to address this point and others raised (see 3, 16, 24, 48, 59, 61, 65, 71, 75).
76.	Energex and Ergon	It would be of preference to include inflight transaction and cutover testing in industry testing.	Transition and cutover testing will be included as a proposed scope item – details will need to be determined as part of the transition and cutover planning (see 6, 18, 22, 50, 51, 76).
77.	Energex and Ergon	Schema regression testing should be included in the scope of industry testing, at least for high volume transactions.	Regression testing will be added to the proposed scope.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
78.	Energex and Ergon	It would be extremely beneficial for AEMO to stand up a separate industry testing environment to enable all market participants to continue to test market changes on the pre-poc schema for as long as possible.	Noted.
79.	Energex and Ergon	The proposed MSATS release in September is a significant risk due to non- inclusion in industry testing.	Noted.
80.	Energex and Ergon	Network billing end to end testing needs to be included in Industry Testing plans.	Network billing end to end testing will be added to the proposed scope.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
1.	Active Stream	Is all market/industry testing to be conducted with counterparts from other organisations, or is there a test harness (responder?) that can be used? If so what processes will the responder support?	There is no MSATS B2M responder, so B2M industry testing will involve counter parties. For parts of the B2B testing, participants will be able to use the B2B responder.
2.	Energy Australia	This document is also very brief and is very limited in the content. EA would like to see more details. (Refer to Item 2 in Table 1)	Plan v0.1 presented for industry feedback as working draft – as per the ITWG TOR, the details will be developed in collaboration with the ITWG.
3.	Select Solutions	4.3 - says ITWG will be responsible for developing the test scenarios, scripts and corresponding data sets. Spreadsheet (Item PM_03 Industry test EN-MC draft) has tab with scenario options already will these be used or used as a guide to create more detailed test scenarios?	These scenarios have been provided for participant feedback, participants are encouraged to propose additional and/or more detailed test scenarios.
4.	Select Solutions	4.3.2 - does this mean we have to have all our new participant Id's created and ready for testing. Or will AEMO provide dummy ones?	New participant IDs will be required for testing for new participants and new participant roles excepting initial metering coordinators who will use their existing participant ID. These will be issued as part of the registration and/or accreditation process.
5.	Select Solutions	Appendix A - if document is Industry Test plan (EN/MC) what would MDP, MP, or retailer Participants need to test as part of this program? Would scenario be to test as an MDP raising CR to MC or ENM for example?	The EN/MC refers to the Embedded Network and Metering Competition rule changes. An MDP, MP or Retailer would test scenarios relevant to their respective role (i.e. a MDP may receive a request to submit CR 1500)
6.	United Energy (UE)	5.7 Test Reporting: Whilst the test reports will be put together by AEMO, it is not clear in this section with regards to the inputs expected of the participants to the report. Is there anything additional apart from the information that comes from HP QC reports that is expected?	The test report templates will be developed as part of the test planning process – this will define if any additional information is required from what is available from HP QC reports.
7.	United Energy (UE)	The items of concern noted in the Test strategy also apply to the Test Plan. Rather than repeat these, it would make sense to align the Test strategy comments in the Test plan.	Noted.

Table 2: Summary of Participant Feedback to POC Industry Test Plan (EN/MC) v0.1

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
8.	Jemena	Majority of the test scenarios are focused around MSATS configuration changes in objection rules, valid objection codes, valid objection initiator.	These four scenarios will be added to the draft scenarios workbook.
		We would like to see more test scenarios related to functionality for meter churn, read type code to meter installation type code, change metering installation details and change NMI EN child. Please add the following four test scenarios:	
		Read type Code to Meter Installation Type Code	
		FRMP raises 1000 with read type code = "EI" where meter installation type code = "VICAMI' > ACK	
		FRMP raises 1000 with read type code = "NS" where meter installation type code = 'VICAMI' > NACK	
		Meter Churn	
		Current MC raised 6800 nominating incorrect MPB and MDP > NACK	
		Prospective MC raises 6800 > NACK	
		FRMP raises 6800 nominating incorrect MPB, MDP and MC > NACK	
		FRMP raises 6800 nominating correct MPB, MDP and MC > new MDP submits 1500 > 6800 goes to COM	
		Change Metering Installation Details	
		MPB raises 3051 to update Meter Register Status Code to "D" Remotely Disconnected	
		Change NMI Embedded Network (Child)	
		LNSP raises 5060 to update NMI Status Code to "N" Off Market NMI	
		ENM raises 5060 to update NMI Status Code to "N" Off Market NMI	

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
9.	AusNet Services	Point 3.3 – Exclusions – Regression testing appears to have been excluded. Participants will wish for significant bilateral regression across multiple participants.	Regression testing will be added to the proposed scope.
10.	AusNet Services	Point 3.3 – Volume Testing is excluded, however it is referenced in the Industry Test Strategy. See point 1.16	Volume testing is excluded from phase 1, and may be included in phase 3.
11.	AusNet Services	Point 4.3.2 – Participant pairing is unclear – the process of pairing, the number of 'pairs' and the process to define which testing each participant requires with, and of, the other.	Participant pairing/grouping cannot be defined until the scenarios are defined and participants have registered for testing.
12.	AusNet Services	Point 4.3.3 – More information is required around the Participant process – see point 2.3	See 11.
13.	AusNet Services	4.4 – Test Environment: MSATS Pre-Prod may be required for current Production changes and issues during Industry Testing. As the MSATS environment is not backwards compatible, it is strongly recommended that a second instance be set up for Industry Testing.	Noted.
14.	AusNet Services	Point 5 – As outlined above, the test processes and procedures need to be expanded to manage multiple participants, clarifications, reporting, suspension and resumption criteria, dispute resolution between participants (defects).	See 2.
15.	AusNet Services	Point 5.6 It seems unlikely that 30 minutes, twice a week, will be sufficient for coordination of this test effort.	Noted. Note that this refers to the EN/MC B2M test effort only and can be adjusted based on number of participants and scenarios.
16.	AusNet Services	Previously noted: One QC Instance/License is inadequate.	Noted. See 1 under Test Strategy feedback.
17.	AusNet Services	The test scenarios highlighted in the workbook were targeted to only test new functionality – no regression testing is referred to.	AEMO welcomes suggestions of additional scenarios.
18.	AusNet Services	As there was no show of hands of participants who would be ready to test by 3 rd April, it is recommended that the schemas are not updated until participants are ready to test.	Schema update is being managed through the BAU process for schema updates.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
19.	Ergon Energy Retail	Insufficient lead time for entry criteria to have validated end to end with internal systems.	Timeline for phase 1 is from April. AEMO requests participants to indicate when they will be ready to commence.
20.	Ergon Energy Retail	Will phase 1 testing be strictly for MC and EN participants or will all participants be able to participate in testing impacted by MC/EN industry changes?	The EN/MC refers to the Embedded Network and Metering Competition rule changes. An MDP, MP or Retailer would test scenarios relevant to their respective role (i.e. a MDP may receive a request to submit CR 1500)
21.	Ergon Energy Retail	Does this phase incorporate part of the ehub accreditation? What role would a retailer play in this phase?	No – this phase is B2M only and has no relation to e-hub accreditation. A retailer may wish to test any of the package 1 or 2 AEMO procedure changes (e.g. if they can raise a CR where they are not the RP).
22.	Ergon Energy Retail	How do we communicate to a sandpit environment?	Phase 1 uses the standard MSATS pre-production environment. Phase 2 refers to a sandpit environment – this is regarding the new SMP environment (web services). Details on Phase 2 will be included when they are available from the system working group – expected by end of March.
23.	Ergon Energy Retail	Other forums indicated that the level of involvement was minimal for the schema validation. What are the defined Test Scenarios?	The changes for schema validation are minimal. This phase involves testing for all the package 1 and 2 procedure changes due to the Embedded Network and Metering Competition rule changes.
			AEMO proposed 17 scenarios in the Industry Test EN_MC excel workbook. Participants are welcome to add, modify or subtract to those.

ITEM	RESPONDENT	PARTICIPANT COMMENT		AEMO RESPONSE
1.	Select Solutions	3.2.5 - if LNSP becomes initial MC for type 5-6 meters do they ha another participant Id created to be MC?	ve to have	Initial MCs will retain their current participant IDs.
2.	Select Solutions	ccredited by AEMO, then why does the MC only need to register? There are ome B2B obligations on the MC as initiator and recipient.		All participants wishing to use the B2B e-hub have to be accredited as an e-hub participant. This is in addition to other accreditation or registration statuses. So an MC is required to undertake registration to become a Registered Participant, and if will be using the B2B e-hub they must also become accredited as a B2B e-hub participant.
3.	Select Solutions	4.4.1 - what are MarketNet requirements and MSATS requireme	its?	If an organisation does not currently have MarketNet or MSATS access then this should be noted in their submission of planned activities. A template for the submission will be developed as part of the next draft of the plan to clarify this point.
4.	Active Stream	Time lines are of concern given possible high volume application accreditation/registration during the latter half of the year.	for	Noted. This is why AEMO requests all participants to give early visibility of their plans so resources can be arranged.
5.	Active Stream	Ambiguity in the dates/sequencing for the following two items. F nominate slots (how do participants define slots?) then AEMO de publish slots for participants to formally apply? Is step 4.4.1 wha 27th Feb or what is required following Step 11 below?	velops and	This section will be clarified in the next draft of the plan with the approach finalised. The approach is still being worked through with the final qualification procedure. Milestone 8 refers to participants submitting their plans –
		8 Participant submit nomination 27 February of accreditation and registration 2017 [tbc] slots (MC, MP, MDP and ENM)	All	specifically when they intend to submit complete accreditation and registration applications. AEMO will then be able to collate and undertake resource allocation. Communication around individual participants and
		11AEMO upload accreditation and registration availability slots (MC, MP, MDP and ENM)13 March 201 [tbc]	7 All	AEMO will occur on a one-one-one basis. Milestone 11 should say AEMO (not ALL) in the right hand column. This milestone intends to give an indication of likely

 Table 3: Summary of Participant Feedback to POC Industry Accreditation and Registration Plan v0.1

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
			resource capability/queue lengths for applicants who did not submit in milestone 8.
6.	Active Stream	Section 4.3 Step 3: Best for AEMO to define a more succinct timeframe with respect to 'regular'. Clears any ambiguity from Participants.	Noted. This will be included in the next draft of the plan.
7.	AusNet Services	Section 2, Table 1: AusNet Services considers the 27 February 2017 date for nominating accreditation and registration is too early given the range of uncertainty affecting Victorian regulatory arrangement. AEMO, the AER, retailers and Victorian DBs still discussing the treatment of existing Victorian AMI meters. Also the Victorian Department (DELWP) is soon to release a decision on the government's Option for introducing metering competition in Victoria. At the Readiness Working Group on 13 Feb it was minuted that accreditation requirements for Victorian DNSPs will be reviewed and updated in the next version of the document. As such, we recommend delaying the date for nominating accreditation and registration until late March 2017.	Agreed – next draft of the Plan will have dates updated.
8.	AusNet Services	Section 4.2: AusNet Services disagrees that Type 4, and particularly Type 4A, apply for existing AMI meters. There is no obligation in the version of Chapter 7 of the NER that applies from 1 December 2017 which requires AusNet Services to convert its existing VICAMI meter fleet (being the meters it was required to install in accordance with the AMI CROIC) to Type 4 or 4A metering installations. Consequently, there is no need for AusNet Services to obtain accreditation and register as a Type 4 or 4A Metering Provider.	As noted in 7, AEMO will update this section in the next version of the Plan.
9.	CitiPower Powercor	Table 2 – Key milestones (e-Hub) - There is no end date provided for the e-Hub accreditation guideline published milestone. In order to provide an appropriate timeframe for accreditation, CitiPower Powercor would like AEMO to provide requirements for accreditation by mid-March 2017.	The B2B rule change requires that the e-Hub accreditation guideline be published by 1 June 2017, however AEMO is working to publish this guideline by the end of March 2017. The Plan will be updated with this date.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
10.	Metering Dynamics	1.5.2 Reference documents – Include "Guide to the Role of the Metering Coordinator" (to replace Guide to the Role of the RP)	Agreed – addition will be made.
11.	Metering Dynamics	2. Table 1 – Insert row for - Final Industry Accreditation and Registration Plan V1.0 and date.	Agreed – addition will be made. Final plan target - 24 March 2017
12.	Metering Dynamics	 3.2.1 for completeness add as below: Initial Metering Coordinator The Metering Competition rule change requires that: A LNSP acting as the Responsible Person at a connection point with a type 5 or 6 metering installation immediately before 1 December 2017 will become the initial Metering Coordinator and will continue in this role until another Metering Coordinator is appointed at that connection point or the services cease to be classified as a direct control service, or the connection point is abolished. Victorian arrangements The Metering Competition rule change requires that: In Victoria, DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program and will continue in this role until another Metering Coordinator is appointed at that connection point or the services cease to be classified as a direct control service, or the connection point is abolished. 	Agreed – additions will be made.
13.	Metering Dynamics	3.2.6 Needs to be made clear in the document that all roles; MP, MDP, MC, ENM, etc. need to be accredited as B2B e-Hub Participants in addition to the role accreditations if they wish to use the B2B e-Hub. It would be easy for a participant to overlook this	Agreed – this section will be re-written.

ITEM	RESPONDENT	PARTICIPANT COMMENT	AEMO RESPONSE
14.	United Energy	Page 6, Table 1, Item 8 Given that the final procedures for registration/accreditation will not be published until 1 March, it may be advisable to postpone the nomination of accreditation and registration slots until 1 – 2 weeks after that date (eg 15 March). This will allow participants to assess the optimum timing for registration based on the known requirements in the procedures.	Agreed – next draft of the Plan will have date updated.
15.	United Energy	Page 6, Table 1, Proposed New Item Suggest that a new milestone be added between #12 and #13, noting the date by which the necessary accreditation exercises must be completed (eg 31 Oct?).	Agreed – addition will be made.
16.	United Energy	Page 7, Table 2, Proposed New Item Suggest a new milestone be added after #5, covering the confirmation of the registration status of all participants prior to industry go-live (eg 31 Oct?).	Agreed – addition will be made.
17.	United Energy	Page 14, Section 4.2, Table item 2 It is our understanding that accreditation for Type 4A meters is not applicable to Victorian DNSPs, on the basis that they will not be installing meters after 1 Dec 2017 and have no meters of that type. Also United Energy notes that the overall issue of whether existing AMI meters are to be considered Type 4 in the market after 1 Dec 2017 has not yet been resolved. In the absence of written confirmation from the AER or AEMO that the existing AMI meters are to be Type 4, and the resolution of whether they must be reclassified as such, we request that this section be amended to say "to be confirmed, subject to final confirmation of AMI meter classification after 1 Dec 2017".	Table will be updated to clarify.