

WDR Consultative Group #07

Tuesday 15 December 2020

WebEx only

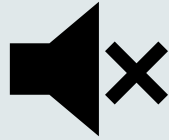
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**PLEASE NOTE THIS MEETING WILL BE RECORDED FOR THE
PURPOSE OF PREPARING MINUTES**

*We acknowledge the
Traditional Owners of country
throughout Australia and recognise
their continuing connection to
land, waters and culture.*

*We pay our respects to their
Elders past, present and emerging.*

Online forum housekeeping



1. Please mute your microphone, this helps with audio quality as background noises distract from the information being shared.



2. Video is optional, but having it turned off helps with webinar performance and minimises distractions.



3. We ask that you utilise the Chat function for any questions or comments you may have if you are unable to use audio.



4. If you have dialled in via phone, could you please email your name and organisation to WDR@aemo.com.au for our records.



5. Be respectful of all participants and the process.

AEMO Competition Law Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

1. Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
2. Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
3. Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

1. Which customers they will supply or market to
2. The price or other terms at which Participants will supply
3. Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
4. Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
5. Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.

Agenda

NO	TIME (AEDT)	AGENDA ITEM	RESPONSIBLE
1	10:00am – 10:05am	Welcome	Ruth Guest (Chair)
2	10:05am – 10:10am	Notes, actions and feedback from previous meeting	Emily Brodie
3	10:10am – 10:15am	Program update	Ruth Guest
4	10:15am – 10:25am	WDR consultation updates: - WDR Retail procedures - WDR Market and system operations procedures - Demand side participation information guidelines	- Emily Brodie - Gareth Morrah - Gareth Morrah - Magnus Hindsberger
5	10:25am – 10:45am	Draft WDR Guidelines	Greg Ruthven
6	10:45am – 11:00am	Baseline eligibility and metrics compliance policy – issues paper	Katalin Foran
BREAK 11:00am – 11:10am			
7	11:10am – 11:25am	WDR and B2B	- Jackie Krizmanic - Priti Zacharopoulos
8	11:25am – 11:40am	WDR industry readiness	Ruth Guest
9	11:40am – 11:45am	Stakeholder engagement and forward meeting plan	Emily Brodie
10	11:45am – 12:00pm	General questions and meeting close	Ruth Guest
APPENDICES			
A	Indicative program schedule		
B	Procedure changes timeline		
C	Project and system document changes		

Notes, actions and feedback from previous meeting

Emily Brodie

Responses to WDR CG #6 meeting actions

#	Topic	Action	Response
06.03.01	WDR settlement reports	WDR CG to provide feedback on proposed settlement report details to wdr@aemo.com.au	One response indicating no feedback at this time.
06.04.01	Portfolio Management System	AEMO to consider potential for participants to temporarily suspend NMIs from an aggregation through the PM system.	AEMO believes that under the NER it can allow participants to set a NMI as temporarily unavailable and amend the bid available capacity accordingly. We are working through this to assess how it might be implemented and will keep the WDR CG updated.
06.04.02	Portfolio Management System	AEMO to investigate adding baseline identifiers into the PM system screens.	Ongoing.
06.04.03	Portfolio Management System	WDR CG to send nominations for the PM system workshop to wdr@aemo.com.au.	Complete.
06.05.01	Market testing	WDR CG to send any feedback on the proposed industry testing approach to AEMO.	No responses.

Program update

Ruth Guest

API for Portfolio management system: De-scoped from WDR implementation program

- AEMO was considering whether to provide API connection to the Portfolio management system:
 - Discussed at Portfolio management walkthrough (26 Nov) and in one-to-one stakeholder conversations
- Feedback from stakeholders (WDR, ASL and VPP) is that an API is a “nice to have” and not necessary for WDR day one.
 - Introducing an API would incur costs for both AEMO and participants
- Initially, WDR program will not be providing API for the portfolio management system for WDR commencement.
 - Could be introduced at a later time subject to stakeholder demand and cost/benefit assessment
- Portfolio management system will have:
 - Web portal for viewing and downloading reports
 - CSV upload or “type it in” facility

WDR consultation update

Emily Brodie

Gareth Morrah

Magnus Hindsberger

WDR procedure consultation update

	Work package	Status	Next milestone	Date
1	WDR guidelines	Submissions closed	AEMO to publish draft determination	Thu 14 Jan
2	Settlements and prudentials: • Credit limit procedures	Submissions closed	AEMO to publish final determination	Fri 15 Jan
3	Settlements and prudentials: • NEM settlement estimates policy	Open for submissions	First stage consultation closes	Fri 18 Dec
4	Retail and B2B	Submissions closed	AEMO to publish draft determination	Tue 15 Dec
5	Market and system operations	Submissions closed	AEMO to publish draft determination	Fri 11 Dec
6	Demand-side participation information guidelines	Final published	n/a	Tue 8 Dec
7	Baseline metrics and compliance policy	Preparing issues paper	AEMO to publish issues paper	Mid Dec

Retail and B2B consultation update

- 14 submissions received on the issues paper
- Key issues:
 - Use of the PIN for advising DRSP of outages
 - Role of DRSP in agreeing substitutes
 - B2B procedures shouldn't be changed unless registered DRSP makes the request
- Submissions on the draft determination are due 2 February 2021

Market and system operations consultation update

- Only one submission received on the issues paper
- Market Suspension Compensation Methodology
 - The WDR rule (Final rule, clause 3.14.5A(h)(2A)) requires AEMO to select which class of Scheduled Generator to be used in determining the capacity-weighted average of the benchmark costs.
 - In the absence of clear direction on which class of Scheduled Generator, AEMO has made its own selection.
- Comments on the draft determination are due 29 January 2021

Demand-side participation information guidelines consultation update

- There were no submissions to the second stage consultation round.
- Following completion of the consultation process, the updated final DSPI Guidelines were published on AEMO's website:
 - <https://aemo.com.au/en/consultations/current-and-closed-consultations/dspi-guidelines>
- AEMO is now implementing changes to the DSPI portal ahead of next submission window for DSP information, starting 31 March 2021.
 - This will for the first time allow participants to enter information about forecast WDR capability
 - AEMO will discuss these changes in more detail at the WDR Consultative Group meeting in February 2021.

Draft WDR Guidelines

Greg Ruthven

WDR Guidelines

Overview of submissions to Issues Paper (1/8)

- Seven submissions

Scope of guidelines

- General support, 1 suggestion to include implementation details
 - *Implementation matters best provided outside Guidelines*

Principles for developing/amending Guidelines

- Some suggestions for additional principles
 - *AEMO reviewing whether these proposals are already covered by other principles*

WDR Guidelines

Overview of submissions to Issues Paper (2/8)

Conditions for classifying/aggregating loads

- Some issues raised – 1 opposed to 5-minute metering, clarification needed on loads with multiple NMIs and transition of MASPs/ASLs into DRSPs, suggestion to include a deadline for assessing applications to classify loads
 - *5-minute metering is mandatory for WDR settlement*
 - *AEMO will provide clarification in Guidelines for loads with multiple NMIs, noting these are excluded from WDRM by rules*
 - *AEMO considering best mechanism for transitional matters*
 - *AEMO will always aim to assess applications within 15 business days*
 - *AEMO considering need and mechanisms for DNSPs to vet applications, including a pre-approval process*

WDR Guidelines

Overview of submissions to Issues Paper (3/8)

System security assessment of aggregation

- Some concern that proposed thresholds/assessment are subjective and need for assessment is unclear, could pose barrier to entry
- Further detail needed (esp. “weaker areas of the power system”, triggers for disaggregation)
- Assessment needs to be transparent/predictable for DRSPs to avoid unnecessary costs and barriers to entry
- Potential need for DNSP assessment of system security in distribution networks
 - *Assessment relates to whether/how WDRUs need to be represented in constraints; terminology change (“congested areas”); AEMO to articulate the process and assessment as much as possible*

WDR Guidelines

Overview of submissions to Issues Paper (4/8)

Telemetry

- 1 submission broadly supportive; 1 suggested telemetry for all; 3 opposed to proposal
- Opponents question need, concerned about cost esp. given telemetry data only valuable during dispatch (which will be infrequent), suggest that proposal not suitable for future with small customer participation/2-sided market
- Suggestion that exemption should be granted where telemetry is cost barrier
- Concern that requirements uncertain until Power System Data Communications Standard review complete, may delay WDR participation
 - *On balance, AEMO considers it inefficient to require telemetry for small loads/aggregations that pose negligible risk to system security*
 - *AEMO can only grant exemption where it deems telemetry unnecessary for system security*
 - *AEMO re-examining the thresholds for telemetry requirements and interaction with Power System Data Communications Standard review*

WDR Guidelines

Overview of submissions to Issues Paper (5/8)

Regional thresholds for non-telemetered WDR

- 1 supported proposed periodic review/revision of thresholds
- 2 opposed thresholds – case not made, concern overstated, initial thresholds barrier to entry and create first-mover advantage (esp. in combination with earlier 5MW thresholds)
- Guidelines may need to describe how AEMO will treat concurrent applications that breach threshold
 - *AEMO requires real-time measurement of factors that are material to forecast accuracy – supports system security and broader market efficiency*
 - *Acknowledge first-mover advantage*
 - *Agree re concurrent applications*
 - *Commitment to review thresholds following dispatch events*

WDR Guidelines

Overview of submissions to Issues Paper (6/8)

Baseline development process

- Broadly supportive, including transparency measures
- Further information sought on assessment of costs and benefits
- Concern that process not time-bound
- Request for AEMO to allow for new baselines to be developed as early as possible
 - *AEMO will describe assessment in Guidelines, but challenging to set time limit due to uncertainty about system changes that may be required*

Applying baseline to WDRU

- broad support, suggestion that baseline change should not interrupt WDR participation
 - *Participation only interrupted where load has become baseline non-compliant; AEMO exploring options to allow a quick/temporary suspension of WDRU from an aggregation*

WDR Guidelines

Overview of submissions to Issues Paper (7/8)

Maximum responsive component

- Shorter assessments, ability to update DUID-Level MRC without changing NMIs, question over AEMO's ability to override DRSP nomination of DUID-Level MRC
 - *Reviewing assessment times to identify options to accelerate (subset of applications)*
 - *Change to DUID-Level MRC can be requested without change to NMIs*
 - *NER definitions such that a lower DUID-Level MRC is as specified by AEMO in terms and conditions of aggregation; AEMO should retain right to override nomination such as to address ongoing dispatch issues, but expect this to be used rarely*

WDR Guidelines

Overview of submissions to Issues Paper (8/8)

Provision of/access to baseline data

- One opposed to retailer receiving dispatch bid prices, suggestion that real-time WDR information by region should be published
 - *AEMO obliged to publish dispatch bids for all facilities under NER 3.13.4(p)(3)*
 - *AEMO exploring real-time publication (aggregated by region)*

Application fees

- Questions about the fees that will apply to various applications (classification, aggregation, baseline/MRC changes)
 - *Application fees determined on cost-recovery basis, further detail to be provided in early 2021*

General

- Decision to participate in WDR dependent on design matters beyond the WDR guidelines
 - Market entry may be delayed if uncertainty remains around telemetry requirements, baseline methodology/metrics/compliance process

Baselines update

Katalin Foran

Oakley Greenwood Consultancy

- AEMO has draft results from Oakley Greenwood consultancy:
 - Looked at RERT-like methodology with different adjustment types for various customer segments based on size.
 - Adjustment types were additive/multiplicative with different caps.
 - Looked at NMI data for past 3 years across the NEM, with a focus on high price events when WDR is most likely.
- Draft results gives us confidence that a 'RERT like' methodology with an 'on the day' adjustment will produce baselines with acceptable accuracy and bias characteristics.
- AEMO is still finalizing which variation (i.e. adjustment type/cap) of the RERT-like baseline methodology it will use.
- Analysis showed that accuracy threshold of between 10%-20% allows for a reasonable number of NMIs to be eligible.
- Analysis showed that for most baseline methodologies tested, NMI median bias was low (at less than 1%).
- We will be using the results from the OGW analysis to inform the proposed accuracy and bias thresholds in the Baseline Eligibility, Compliance and Metrics Policy.

Baseline eligibility compliance and metrics policy

- Will be releasing the Issues Paper and Draft Policy very soon (date TBA)
 - Eligibility - process for load to be classified as WDRU
 - Compliance - process for load to remain classified as WDRU
 - Metrics – proposed accuracy and bias thresholds
- We will be asking for feedback on:
 - Proposed processes for eligibility/compliance testing
 - Number of days over which for eligibility/compliance assessed over
 - TIs eligibility/compliance assessed over
 - Proposed frequency of baseline compliance testing
 - Proposed accuracy/bias thresholds

Baseline adjustment window – feedback required

- Adjustment window: period of time prior to WDR dispatch event from which baseline estimates are compared to actual meter data to determine an adjustment to the event baseline to reflect conditions on the day.
- Most likely will have adjustment window of 3 hours ending 1 hour before the first TI of WDR (same as RERT).
- Feedback required on different WDR scenarios. AEMO is keen to understand the impact post a WDR event on consumption and therefore baseline adjustment when there are *multiple WDR events per day*.

Scenario		Options
1	One WDR event on the day	Adjustment applied, no other considerations required
2	Multiple WDR events on the day with <u>4 or more hours</u> between them	1. Apply a different adjustment to each period of WDR based on the 4 hours prior to the specific WDR 2. Apply the adjustment from the first WDR event for the whole day 3. Revert to the unadjusted baseline for the second/subsequent events 4. Other?
3	Multiple WDR events on the day with <u>less than 4 hours</u> between them	1. Apply the adjustment from the first WDR event for the whole day 2. Revert to the unadjusted baseline for the second/subsequent events 3. Other?

WDR and B2B

Jackie Krizmanic and Priti Zacharopoulos

WDR and B2B

Item	Responsible
B2B processes in the NEM and relevance to WDR	Jackie Krizmanic
Approach B2B testing for DRSPs	Priti Zacharopoulos

B2B processes in the NEM

B2B communications in the NEM are:

1. Prescribed by the [B2B procedures](#) in accordance with the NER
 - [Information Exchange Committee](#) (IEC) is the statutory body responsible for developing and making recommendations on changing B2B Procedures
 - [B2B Working Group](#) provides advice to the IEC on issues/opportunities relating to the [B2B framework, Procedures and Guide](#).
2. Mainly administered via the B2B e-hub:
 - Electronic information exchange platform that is provided, operated and maintained by AEMO to facilitate B2B Communications
 - Enables information sharing between the different parties who have an interest in a single customer supply point.
3. Can occur through other means under bilateral agreements between participants i.e. use of the B2B e-hub is not mandatory but it is the standard industry form of communication.

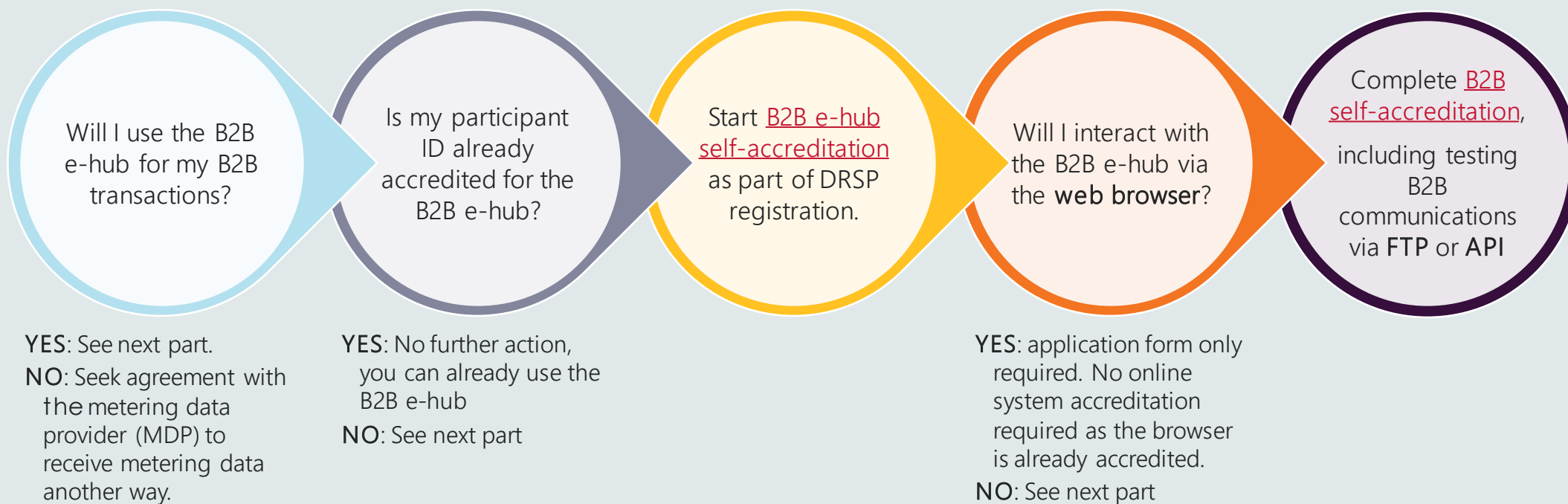
WDR and B2B

- Expected that DRSPs will use the following B2B transaction types:

Transaction	Description
Receive meter data	Enables DRSP to receive meter data from the MDP/s
Provide meter data (PMD)	Enables DRSP to request meter data from the MDP/s
Verify meter data (VMD)	Enables DRSP to request that meter data is verified by the MDP/s

- Options for connecting to and interacting with the B2B e-hub are:
 - Web browser
 - FTP
 - API
- Participants need to be **accredited** before they can transact via the B2B e-hub.

B2B self-accreditation



Proposed B2B test approach and scope for DRSPs

B2B accreditation and testing will be 'business as usual' i.e. *AEMO's WDR program will not supplement the standard B2B accreditation and testing processes*

Element	Description
Timing	As part of the DRSP registration process (any time from late June 2021)
Eligibility	Participants can test B2B transactions: • If they have completed the accreditation process as part of the DRSP registration process • Once their systems are ready and connected to the B2B pre-production environment
Environment	B2B pre-production (operated by AEMO)
Testing type	Industry testing (minimal involvement from AEMO)
Test cases	As this is a BAU function, participants will need to create their own test cases. By request, AEMO can supply documentation which will support the creation of test cases.
Test and defect management tool	At the participant's discretion. However, if a defect is detected, please raise it in PractiTest . Participants will be given the required level of access to PractiTest on request (web interface).
Suggested test scope for DRSPs	• Request/Receive Meter Data Notification from MDP • Initiate a Provide Meter Data request to the MDP • Initiate a Verify Meter Data request to the MDP

WDR industry readiness approach

Ruth Guest

WDR industry readiness considerations

	Readiness considerations
AEMO	• Implement system changes/ develop new systems by regulatory dates • Process registrations/classifications • Test new systems: • Internal testing • Invitation industry testing
DRSPs	• Register and classify/aggregate • Develop dispatch, MSATS (B2M and potentially B2B) and settlement capability (standard for participants) • Access portfolio management system to classify NMI as WDR units.
Retailers	• Retailers can choose whether or not to make any customised changes in their wholesale systems e.g. automated reconciliation processes
DNSPs	• Receive reports • Changes may be required to DNSP systems to take in and utilise the new DRSP role
B2B participants	• Changes may be required in some participants B2B systems to accommodate the new DRSP role depending on participants' systems configurability and requirement to interact with a DRSP
MASPs	• If already registered as a MASP with AEMO, not required to apply to register as a DRSP. Transitional rules provide that MASPs: • become DRSPs on 24 October 2021 • able to apply to AEMO for approval to classify load as a wholesale demand response unit from June 2021

WDR industry readiness: Context

- AEMC was specific that WDR implementation needs to minimise system changes for AEMO and participants
 - Interim step to a two-sided market
 - Short implementation timeframe
- Optional to participate in WDR
- Commences 24 Oct 2021:
 - AEMO needs to be ready – provide WDR bidding/dispatch/settlement functionality
 - Participants can start any time from that date
- Indications are that DRSP registrations will initially be low and ad hoc:
 - Stakeholders are waiting for firm WDR Guidelines and other requirements (related to telemetry and baselines) to enable appropriate cost/benefit analyses
 - Where stakeholders become DRSPs, this won't necessarily be from day one

WDR industry readiness: Proposed approach

- For ongoing WDR support, AEMO is looking to establish BAU:
 - Operational capability to support new and ongoing WDR functions e.g. baseline compliance, MRC evaluation
 - Account management function to assist on-boarding of new DRSPs
- Given context, WDR program is not proposing to provide additional WDR industry readiness support above BAU:
 - WDR commencement does not require cross-industry coordination
 - Registration/classification can occur at any time through BAU processes
 - [AEMO's Support Hub](#) is available for participants 24/7
- AEMO will continue to monitor participant activity in the lead up to registrations opening and WDR commencement. In the event there was an increase in readiness activity during this time, AEMO would review its industry readiness approach in consultation with the WDR CG.

Discussion: What are your views on the proposed approach?

Stakeholder engagement and forward agenda

Emily Brodie

WDR meetings in planning stages

- **WDR settlement workshop**

- **Timing:** TBC, likely April after WDR guidelines released
- **Purpose:** Forum for AEMO, retailers and prospective DRSPs to discuss WDR settlement processes, including reports and reconciliation.

Upcoming WDR meetings

Meeting	Meeting Date
WDR CG #8	Tue 16 Feb 21
WDR CG #9	Tue 16 Mar 21
WDR CG #10	Tue 20 Apr 21

Indicative agenda for February meeting:

- Administrative matters
- Procedure consultation updates
- Draft market testing strategy
- Overview of the Demand-side participation information portal
- Debrief on DNSP/WDR workshops



Please provide agenda suggestions at any time to WDR@aemo.com.au

WDR contact and information



Mailbox

wdr@aemo.com.au



WDR program information

<https://aemo.com.au/initiatives/trials-and-initiatives/wholesale-demand-response-mechanism>



WDR stakeholder engagement options

<https://aemo.com.au/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/wdr>

General questions

Ruth Guest

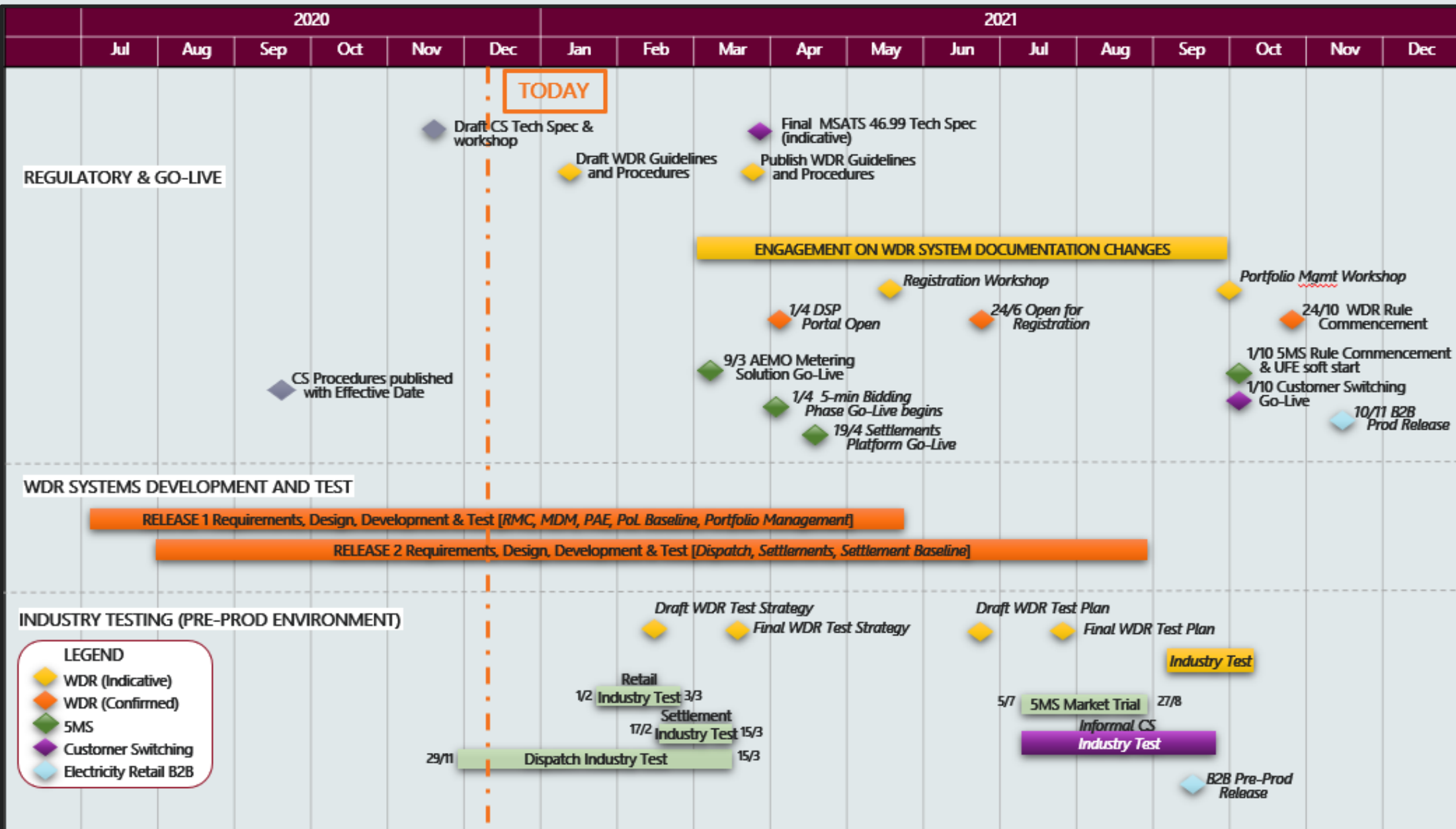
Thank you for your
participation!

APPENDIX A

Indicative program schedule

Indicative program schedule

Current as of 08 Dec 20



APPENDIX B

Procedure changes timeline

Procedure change timelines

Procedure package	Consultation Paper	Round 1 Consultation	Draft	Round 2 Consultation	Final
<u>WDR Guidelines</u>	Thu 22 Oct 2020	Fri 27 Nov 2020	Thu 14 Jan 2021	Fri 12 Feb 2021	Thu 25 Mar 2021
<u>Settlements and Prudentials procedure – CLP</u>	Fri 04 Sep 2020	Fri 16 Oct 2020	Thu 12 Nov 2020	Fri 04 Dec 2020	Fri 15 Jan 2021
<u>Settlements and Prudentials procedure - Estimations</u>	Thu 05 Nov 2020	Fri 18 Dec 2020	Fri 15 Jan 2021	Thu 04 Feb 2021	Thu 04 Mar 2021
<u>Retail procedures & B2B guide</u>	Mon 12 Oct 2020	Tue 17 Nov 2020	Tue 15 Dec 2020	Tue 02 Feb 2021	Tue 16 Mar 2021
<u>Market & System Operations procedures</u>	Fri 09 Oct 2020	Tue 17 Nov 2020	Fri 11 Dec 2020	Fri 29 Jan 2021	Fri 12 Mar 2021
<u>Demand-side participation information guidelines</u>	Wed 26 Aug 2020	Wed 30 Sep 2020	Wed 11 Nov 2020	Wed 25 Nov 2020	Tue 8 Dec 2020
Baseline Eligibility, Compliance and Metrics Policy	Mid Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021

APPENDIX C

Project and system document changes

Project and system document change timelines

Area	Document	Early version released	Comments due	Updated version published
DISPATCH COMPLIANCE	Post-event dispatch compliance framework	Jan 2021	Feb 2021	Apr 2021
TESTING	WDR Test Strategy	Feb 2021	Mar 2021	Mar 2021
	WDR Test Plan	Jun 2021	Jul 2021	Jul 2021
WHOLESALE – EMMS	EMMS Technical Specification	Mar 2021	Apr 2021	Apr 2021
	EMMS Data Model (DM) Report	Aug 2021	Sep 2021	Sep 2021
	Data Interchange (DI) online help	Aug 2021	n/a	Sep 2021
	Guide to Portfolio Management System (PMS)	Apr 2021	Apr 2021	May 2021
	Markets Portal online help (PMS updates)	Apr 2021	Apr 2021	May 2021
	Portfolio Management API Technical Specification*	Jul 2021	Aug 2021	Sep 2021
	Portfolio Management API Guide*	Jul 2021	Aug 2021	Sep 2021
RETAIL – MSATS/eMDM	MSATS Technical Specification	Apr 2021	Apr 2021	May 2021
	New/Updated MSATS/eMDM guides	Jun 2021	Jul 2021	Sep 2021

Initially, WDR program will not be providing API for PMS. Therefore, these documents are not required

