



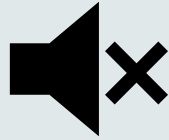
# Retail systems and WDR

Fri 6 November 2020

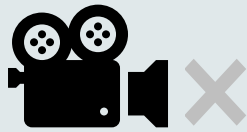
*We acknowledge the  
Traditional Owners of country  
throughout Australia and recognise  
their continuing connection to  
land, waters and culture.*

*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](mailto: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	10:30am – 10:35am	Welcome	Meghan Bibby (Chair)
2	10:35am – 10:40am	Session purpose and objective	Meghan Bibby
3	10:40am – 10:50am	Overview of WDR mechanism rule	Emily Brodie
4	10:50am – 11:00am	AEMO's WDR implementation program	Neil Batie
5	11:00am – 11:05am	Update: WDR Retail procedures consultation	Gareth Morrah
6	11:05am – 11:30am	Workshop: WDR impacts on retail systems	Jackie Krizmanic Meghan Bibby Gareth Morrah
BREAK 11:30am to 11:40am			
	11:40am – 12:20pm	Workshop continued	As above
7	12:20pm – 12:25pm	Next steps	Emily Brodie
8	12:25pm – 12:30pm	General questions and close	Meghan Bibby
9	APPENDIX: Classification lifecycle		

# Session overview

Meghan Bibby

# Purpose and objectives

- **Purpose:**
  - Forum for exploring Wholesale Demand Response (WDR) impacts on retail systems
- **Objectives:**
  - Develop a full list of WDR issues affecting retail lifecycle
  - Identify potential mitigations and opportunities where feasible and within constraints of the national electricity rules (NER)
  - Agree next steps

# Scope

## In scope:

- MSATS changes
- Impacts to participants from MSATS changes

## Out of scope:

- Portfolio Management System
- Registration and Classification Process



# Overview of WDR mechanism rule

Emily Brodie

# WDR mechanism rationale

## Current situation

- Customers can only undertake *wholesale demand response* via their retailer, facing limited pathways to participate in the NEM.
- Customers can access other *demand response* (out of market) products:
  - Emergency demand response i.e. Reliability and Emergency Reserve Trader (RERT)
  - Network demand response

## Final rule

- Facilitates greater access to WDR for **large customers** whose retailers do not currently offer such products
- Provides reliability- and price-related benefits, including by being an alternative to expensive peaking generation
- Places requirements on DRSPs to participate in central dispatch with a lesser set of obligations than other scheduled participants.

# AEMC final determination and rule

- Final determination and rule published on 11 Jun 2020
  - <https://www.aemc.gov.au/rule-changes/wholesale-demand-response-mechanism>
- Final rule introduced a WDR mechanism that will commence on **24 Oct 2021**

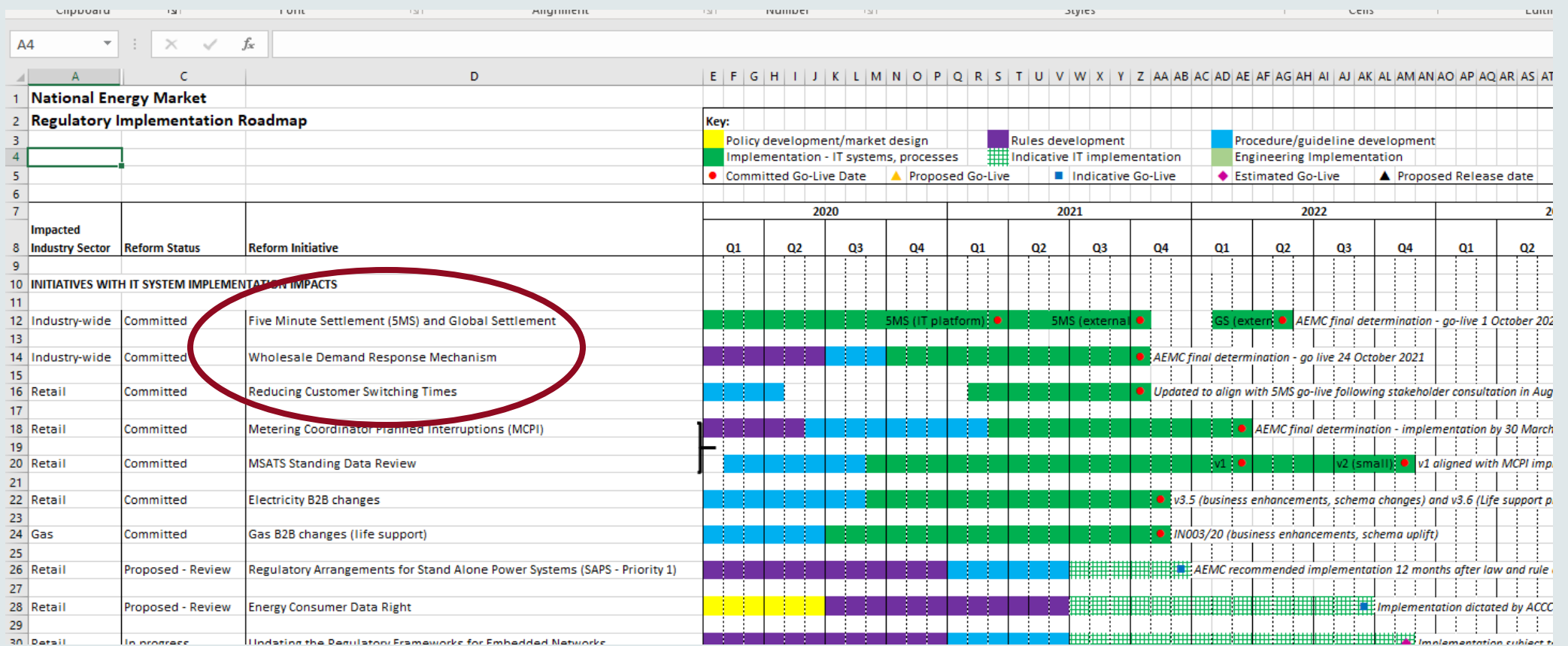


# AEMO's WDR implementation program

Neil Batie

# Partial snapshot of regulatory implementation roadmap

For full details see: <https://www.aemo.com.au/initiatives/major-programs/regulatory-implementation-roadmap>



# Planned retail schema changes

For full details see: <https://www.aemo.com.au/initiatives/major-programs/regulatory-implementation-roadmap>

			2020				2021				2022				2023			
Impacted Industry Sector	Reform Status	Reform Initiative	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Schema Changes</b>																		
***Note: Schema changes required 6 months before go-live (only applies to SMS)																		
Industry-wide	Committed	Five Minute Settlement (SMS) and Global Settlement																
Retail	Committed	Reducing Customer Switching Times																
Retail	In progress	MSATS Standing Data Review (includes MCPI)																
Retail	Proposed - Review	Regulatory Arrangements for Stand Alone Power Systems (SAPS - Priority 1)																
Retail	Proposed - Review	Energy Consumer Data Right																
Retail	In progress	Updating the Regulatory Frameworks for Embedded Networks																
Retail	Proposed - Review	Review of Competition in Metering																
Retail	Proposed - Review	B2B changes																
Note:	AEMO notes schema releases in second half of 2022 are not aligned. Options for alignment will be explored once the scope and timing of initiatives have been firmed up.																	
	No schema changes required for WDR																	

# NEM Wholesale Systems: WDR participant change heatmap

## Dispatch

- Bids/offers
- Data model
- Dispatch
- Pre-dispatch
- Spot price
- Administered pricing
- Suspension pricing
- Constraints
- Registration

## Settlement

- Settlement calculation
- Estimation and prudentials
- Reallocations
- Data model
- IRSR calculation
- Settlement residue auction
- Causer pays factors

## Power System

- Negative residue management
- ST PASA
- RERT
- Data model
- MT PASA and EAAP
- Demand forecasting
- Generator recall
- Wind and solar availability
- VAR/MW dispatch

## WDR

- Portfolio management

Major  
impact

Moderate  
impact

Some  
impact\*

\* Mainly relates to adding DRSP participant type & related attributes

# NEM Retail Systems: WDR participant change heatmap

## B2M / B2B interfaces

MDMT

B2M aseXML schema

NMID

CATS

MSATS B2M APIs

B2B transactions

B2B aseXML schema

VIC TUoS

## CATS / MDM Processes

Profiling

CATS standing data

Meter data validation

Estimation / substitution

Energy allocation

CR processing

## MSATS Browser / Reports

Meter data screens

Reports

SDR

NMID

## WDR

Baselines

Major impact

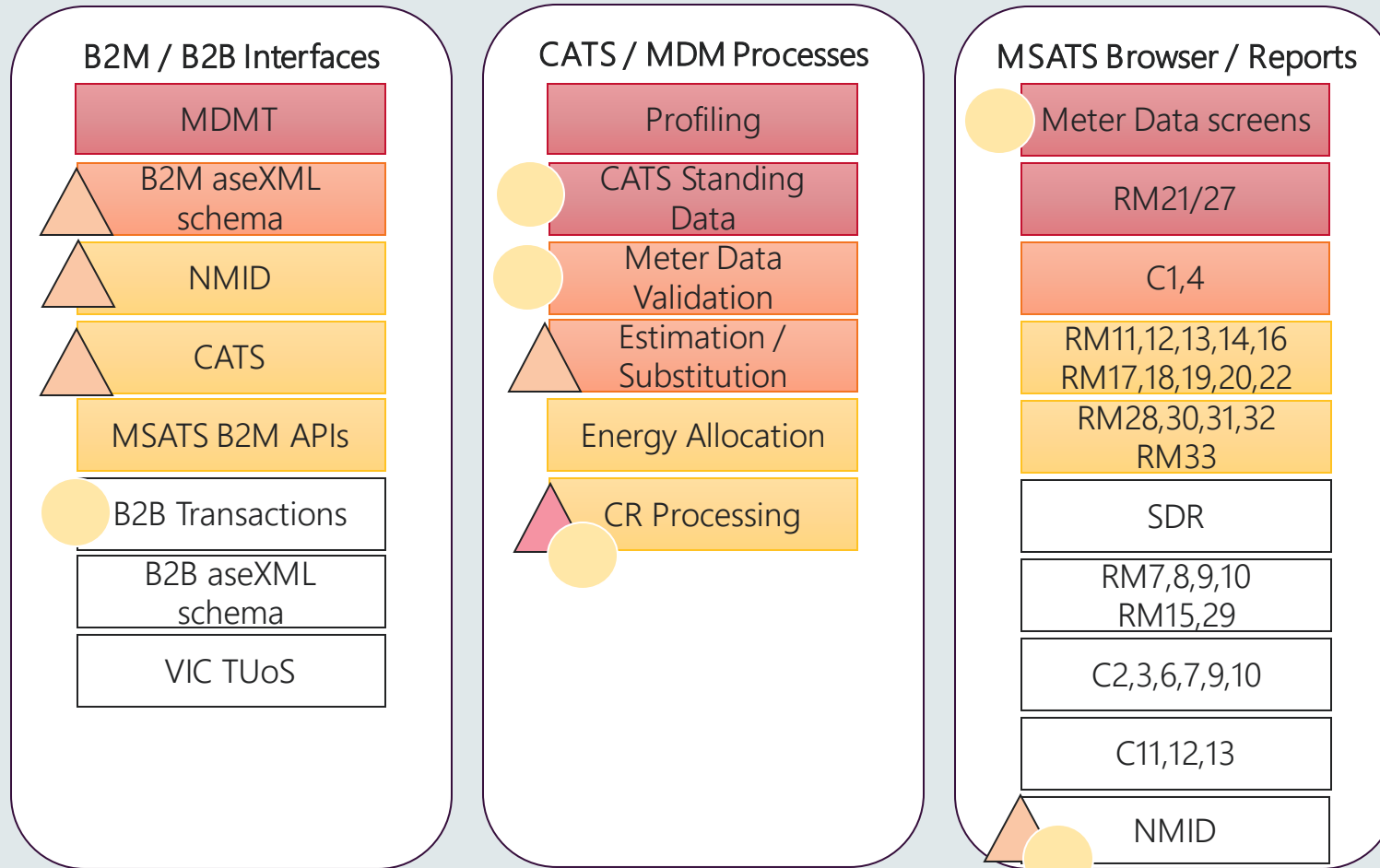
Moderate impact

Some impact\*

\* Mainly relates to adding DRSP participant type & related attributes



# NEM Retail Systems: Combined 5MS + CS + WDR change heatmap



5MS major impact

5MS moderate impact

5MS some impact

5MS no impact

CS major impact

CS moderate impact

CS some impact

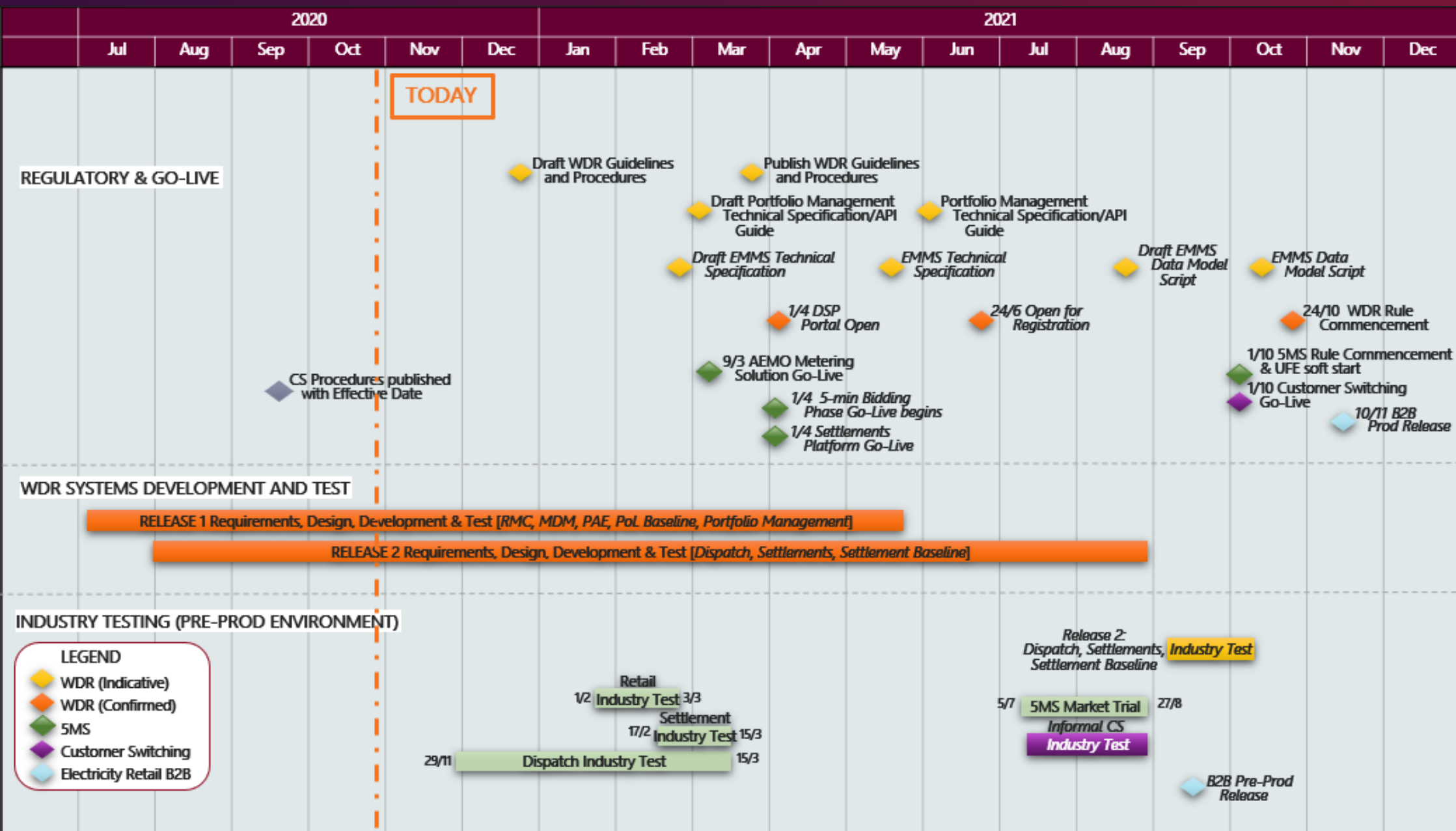
WDR major impact

WDR moderate impact

WDR some impact - adding DRSP participant type & related attributes

# Indicative WDR timeline (including key dates for 5MS and CS)

\*\*Current as of 29 Oct 20\*\*



# Update: WDR Retail procedures consultation

Gareth Morrah

# Retail procedures & B2B guide consultation

## Key consultation issues:

- Consequential changes to Retail Procedures
  - MSATS Procedures CATS Procedure
  - MSATS Procedures WIGS Procedure
  - Metrology Procedure Part B
  - Retail Electricity Market Glossary and Framework
- B2B PIN transaction
- B2B Guide and B2B Accreditation Process

Consultation stage	Date
Publish issues paper	12 Oct 2020
Submissions due	17 Nov 2020
Publish draft procedure & determination	15 Dec 2020
Submissions due	2 Feb 2021
Publish final procedure & determination	16 Mar 2021

Issues paper and the proposed changes to the documents are available at:

<https://aemo.com.au/consultations/current-and-closed-consultations/retail-procedures-wholesale-demand-response>

Existing retail procedures are listed at:

<https://aemo.com.au/initiatives/trials-and-initiatives/wholesale-demand-response-mechanism/wdr-procedure-and-guideline-consultations/work-package-3-retail>

# Workshop: Retail systems and WDR

Jackie Krizmanic, Meghan Bibby and Gareth Morrah

# WDR Registrations impact on NMIs

- The NMI will go through two lifecycles
  - Classification lifecycle [see appendix]
  - Retail lifecycle [main item for discussion today]

# Retail lifecycle

## NMI creation

NMI and relevant standing data will be created by LNSPs. A NMI must exist before it can be classified as a WDRU

## NMI Discovery/ Standing Data

NMI Discovery will be performed just like it is today with a DRSP role returning in the discovery if a DRSP has been assigned. DRSPs will have access to standing data.

## NMI Role assignment

DRSP role assignment will be performed by AEMO using the CR5101

## Metering changes

Metering changes will happen as per todays processes. DRSPs will be notified upon completion if they have a relationship with the NMI

## Role changes

Role changes will happen as per todays processes. DRSPs will be notified upon completion if they have a relationship with the NMI

## NMI re/de-energisation

Re-en/de-en processes will happen as per todays processes. DRSPs will be notified of NMI status changes via completion of change requests if they have a relationship with the NMI.

## NMI extinction

Extinction processes will happen as per todays processes. DRSPs will be notified of NMI status changes via completion of change requests if they have a relationship with the NMI.

## Removal of DRSP role in MSATS

DRSP removal will be processed by AEMO by assigning a participant id that reflects that no DRSP is assigned to the NMI.

# WDR impacts: NMI creation

NMI  
creation

NMI  
Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
No change	Process is as today	LNSP



# WDR impacts: NMI Discovery/ Standing Data Access

NMI  
creation

NMI  
Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
New role	A new role of DRSP will be created	AEMO
Role discoverability	The new role will be discoverable in Type 2 NMI Discovery	AEMO
Standing data access	The DRSP will be entitled to access standing data as per CATS Procedures	AEMO

# WDR impacts: NMI Role Assignment

NMI creation

NMI Discovery/  
Standing Data

NMI Role assignment

Metering changes

Role changes

NMI re/de-energisation

NMI extinction

Removal of DRSP role in MSATS

WDR impact	Proposed approach	Responsibility
Assignment of role to relevant NMIs	DRSPs will be assigned to NMIs that have been classified as Wholesale Demand Response Units	AEMO

# BREAK



# WDR impacts: Meter Changes

NMI creation

NMI Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
No change	DRSPs will receive notifications when change requests complete to allow them to have the most up to date information.	AEMO

# WDR impacts: Role Changes

NMI creation

NMI Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
No change	DRSPs will receive notifications when change requests complete to allow them to have the most up to date information.	AEMO

# WDR impacts: Re-energisation and de-energisation processes

NMI creation

NMI Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
No change	DRSPs will receive notifications when change requests complete to allow them to have the most up to date information.	AEMO

# WDR impacts: NMI Extinction

NMI creation

NMI Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
No change	DRSPs will receive notifications when change requests complete to allow them to have the most up to date information.	AEMO

# WDR impacts: Removal of DRSP Role

NMI creation

NMI Discovery/  
Standing  
Data

NMI Role  
assignment

Metering  
changes

Role  
changes

NMI re/de-  
energisation

NMI  
extinction

Removal of  
DRSP role in  
MSATS

WDR impact	Proposed approach	Responsibility
Participant ID will be assigned to the role.	A participant ID will be created to replace the DRSP participant id to show that a DRSP no longer exists and the NMI is no longer a classified WDRU.	AEMO



# Summary

## NMI creation

No change

## NMI Discovery/ Standing Data

- AEMO to create new DRSP role
- DRSP role will be discoverable in Type 2 NMI Discovery
- DRSP will be entitled to access standing data as per CATS Procedures

## NMI Role assignment

- AEMO to assign DRSP role to relevant WDRU NMIs

## Metering changes

No change

## Role changes

No change

## NMI re/de-energisation

No change

## NMI extinction

No change

## Removal of DRSP role in MSATS

- AEMO to create a participant ID to replace the DRSP participant ID showing that a DRSP no longer exists and the NMI is no longer a classified WDRU.

# Discussion

- What gaps are there in the retail lifecycle identified above?
- What impact will there be on participants' if AEMO implements MSATS configuration changes:
  - late May 2021 in pre-production, followed by production in June 2021
  - early October 2021 in pre-production, followed by production in late October 2021

# Next steps

Emily Brodie

# Feedback sought

Date	Action
Thu 12 Nov	<ul style="list-style-type: none"><li>Attendees to confirm via <a href="mailto:wdr@aemo.com.au">wdr@aemo.com.au</a> whether they would like to join the WDR mailing list.</li><li>Follow-up to this workshop will be managed via this channel</li></ul>
Fri 13 Nov	<ul style="list-style-type: none"><li>AEMO to send out meeting notes</li></ul>
Tue 17 Nov	<ul style="list-style-type: none"><li>Attendees to consider making a submission to the WDR retail procedures issues paper</li></ul>
Fri 20 Nov	<ul style="list-style-type: none"><li>Attendees to provide feedback on WDR impacts to <a href="mailto:wdr@aemo.com.au">wdr@aemo.com.au</a></li></ul>

# WDR contact and information



Mailbox: [wdr@aemo.com.au](mailto: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>

*Where your business has already been engaged in the WDR program, speak directly with your representatives for background information and the current context.*

Thank you for your  
attendance and  
participation!

# APPENDIX: Classification lifecycle

# Classification lifecycle

## WDRU CLASSIFICATION

DRSP applies to **classify** connection point as a WDRU through AEMO's PM system\*

AEMO assesses application

Where **AEMO** approves classification in PM system, CR automatically triggered: DRSP role populated in CATS with DRSP participant ID

## WDRU DECLASSIFICATION

DRSP applies to AEMO to **declassify** WDRU connection point through AEMO's PM system

AEMO assesses application

Where **AEMO** approves declassification in PM system, CR automatically triggered: DRSP role populated in CATS with dummy DRSP participant ID



