

# DER Market Integration Consultative Forum



29 September 2022



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

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

# 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**:

- Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- 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:

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

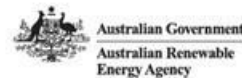
Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer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

# Today's meeting

| Time          | Item                               | Speaker                        |
|---------------|------------------------------------|--------------------------------|
| 11:00 – 11:05 | Welcome and introductions          | Rachel Rodrigues McGown (AEMO) |
| 11:05 - 11:15 | Project EDGE Trial Update          | Nick Regan (AEMO)              |
| 11:15 – 12:15 | Data Exchange – Problem Statements | Nick Regan (AEMO)              |
| 12:15 – 12:25 | Q&A                                | All                            |
| 12:25 – 12:30 | Future Meetings & Close            | Rachel Rodrigues McGown (AEMO) |

# Project EDGE Trial Update

Nick Regan (AEMO)



# Project EDGE update

## Current position

- Final CBA methodology is available (coming soon)
- Two new aggregators being onboarded for participation from September
- Ongoing customer acquisition (including additional) C&I customers
- Providing update on DOE Objective Functions study
- Further consultation on data exchange problem statements and use cases

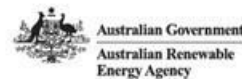
## Key upcoming activities

- More field test data becoming available from late October
- Wider sharing of results from Market Suspension tests
- Ongoing results analysis and input into reform

# Scalable Data Exchange

## Project EDGE focus area

Nick Regan (AEMO)



# EDGE Scalable Data Exchange Hypotheses

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The project will test two core hypotheses:

- 1. A data hub model provides a scalable and long-term approach for DER Marketplace data exchange compared with a web of many point to point interactions between industry actors**
  - The ESB DER Implementation Plan requires DNSPs to begin implementing DOEs in late 2023
  - The ESB also require DER to be rewarded in the market and DNSPs to procure DER-based network services
  - The Reform Delivery Committee NEM2025 Implementation Roadmap has a “DER Data Hub & Registry Services” initiative that needs to be scoped in detail and in context of parallel ESB reforms
  - The data hub concept aims to lower aggregator barriers to entry by providing one integration to access wholesale markets, local network support services and DOEs
- 2. A decentralised data hub model is the most efficient solution that could deliver the most net benefit to NEM customers**
  - AEMO currently operates a centralised hub approach, the e-hub for the retail market
  - As an off-market proof of concept project, EDGE has a unique opportunity to test innovative approaches to DER market integration
  - Project analysis on scaled data exchange challenges suggests a decentralised data hub approach could have value and testing this approach was encouraged by executive sponsors

**AEMO and Industry stakeholder feedback is paramount to understanding the merit and costs of a future DER Data Hub, centralized or decentralized.**



# We will use Mural to work through the Data Exchange Problem statements and gather relevant feedback



## High Data Exchange Costs

**Statement (1) Ease of Integration** *"I need to integrate into multiple, separate, and bespoke data exchange systems with DNSPs to know which Dynamic Operating Envelopes to apply, deliver 'similar but different' local network services across the NEM in addition to integrating with AEMO to provide wholesale market services. This complexity means its difficult, and potentially not scalable or economic, for me to deliver these services using my portfolio or participate in new B2B services as the arise."*

**Statement (2) Duplicate Identity Verification** *"I need to participate in multiple, separate and bespoke organisation identity verification processes with DNSPs to deliver 'similar but different' local network services across the NEM as well as AEMO to provide wholesale market services. This adds to my compliance burden and cost to serve customers"*

**Statement (3) Speed to market** *"I cannot seamlessly monetise new DER in my portfolio across one or more actors (wholesale (AEMO) and local (DNSP) services) because it takes a long time to register my assets to provide a service after they are installed or recruited to my VPP"*

**Statement (4) Duplicated VPP Portfolio registration updates** *The MSO and DSOs need up-to-date information about the sites and DER devices within my portfolio and there is no single mechanism to update all participants. This adds to my compliance burden and cost to serve customers. For example, if a customer that provides a particular service churns, I need to update AEMO and the relevant DSO in a timely manner.*

# We will use Mural to work through the Data Exchange Problem statements and gather relevant feedback



## DER Standing Data inconsistent across industry participants

**Statement (5) Duplicate Portfolio Management Systems** "Each party maintaining a different portfolio management system (AEMO for wholesale, DSO for local services, aggregator internal) is inefficient and raises risk of errors and disputes and is not scalable for a high DER future"

**Statement (6) Update market on inverter settings** "If required, I cannot update Market, system and network operators with updated inverter settings of DER devices in my VPP portfolio following a firmware upgrade."

## Visibility of DER

**Statement (7) EV market registration at static location** "I have no visibility of EV ownership or EVSE installations to manage emerging network loading conditions, network DER hosting capacity assessment, and in future the calculation of DOEs."

## High Data Exchange Costs

**Statement (8) Fractured settlement of EV V2G services** "When utilising an EV to provide V2G services across multiple locations, I do not have an efficient way to reconcile my settlement records against AEMO or other counterparties such as DNSPs."

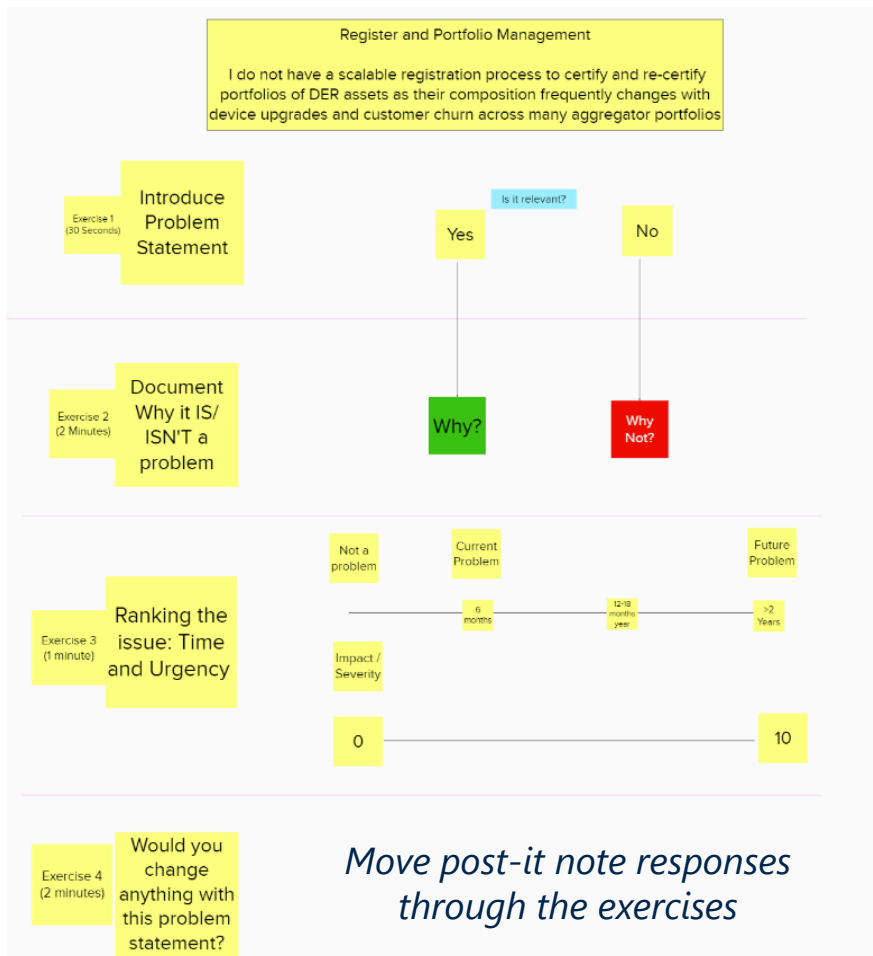
## Cyber Security

**Statement (9) Maintain cyber security in a decentralising power system** "We need to maintain a secure and reliable communication infrastructure that extends to DER devices directly and/or via aggregators."

# We will use Mural to work through the Data Exchange Problem statements and gather relevant feedback



Link: [Data Exchange Problem Statements](#)



## What are we trying to achieve?

As we walk through these statements, we have 4 exercises. Through each exercise we are looking for targeted feedback to determine if we have captured and understood the issue correctly.

**Exercise 1:** We have captured the issue correctly for Networks?

**Exercise 2:** Is this statement a problem for Networks?

**Exercise 3:** Ranking the issue by time and impact.

**Exercise 4:** What would you change about this statement?

# Any other business





# Next meeting: 27 October 2022

Future Meetings & Close

# Project EDGE Publications

| Publications  | Publication Date |
|---|------------------|
| <a href="#">Project EDGE CBA Methodology Consultation Paper</a> | July 2022        |
| <a href="#">Project EDGE Public Interim Report</a>              | June 2022        |
| <a href="#">Project EDGE Customer Insights Study</a>            | June 2022        |
| <a href="#">Project EDGE Research Plan</a>                      | March 2022       |
| <a href="#">Project EDGE MVP Showcase</a>                       | December 2021    |
| <a href="#">Project EDGE Lessons Learned Report #1</a>          | May 2021         |
| <a href="#">Project EDGE Public Webinar #1</a>                  | March 2021       |
| <a href="#">Project EDGE Factsheet</a>                          | January 2021     |

For further news and knowledge sharing publications, please visit the [Project EDGE website](#)

For any questions, comments or feedback please contact: [EDGE@aemo.com.au](mailto:EDGE@aemo.com.au)



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