

# Market Interface Technology Enhancements Working Group (MITE WG)

## Introductory session **Notes**

Wednesday 7 August 2024



# Housekeeping

1. This meeting will be recorded for minute taking purposes
2. Please mute your microphone, this helps with audio quality as background noises distract from the conversation.
3. Use the 'Raise hand' function should you wish to speak to an item.
4. Use the 'Chat' function for any other questions or comments you may have.
5. In attending this meeting, you are expected to:
  - Not only represent your organisation's interests but also the interests of Industry and its customers
  - Have an open mindset
  - Contribute constructively
  - Be respectful, both on the call and in the chat

# 1. Welcome

Blaine Miner



# Objective of today's session

The MITE WG has been established to define and develop Technical Procedures/guides for IDAM, IDX and Portal Consolidation. These initiatives seek to deliver foundational capability supporting interactions between participants and AEMO and based on the agreed scope to transition\* or enable decisions on transitioning of existing business services

To this end, this workshop aims to:



- Provide background and context
- Formalise commencement of the MITEWG
- Introduce the approach to engagement and governance



- Walkthrough working group structure
- Share the workshop plan



- Review topic backlog

**The ask of participants:**

- Engage internally with your representatives who supported the FaSI working group
- Understand your role as coordinator
- Understand the role of the MITEWG and other forums
- Enable your resource planning for the next set of workshops
- Gain understanding and solicit feedback – are there additional technical topics the MITEWG should consider?

\* Note for IDX transition of existing Business Services will be assessed via Decision Point 2.

# Agenda

#	Indicative Timings	Topic	Presenter
1	2:00pm-2:05pm	Welcome	Blaine Miner
2	2:05pm-2:20pm	MITE Introduction and Scope	Andrew Bell
3	2:20pm-2:40pm	MITE Working Group Overview	Blaine Miner
4	2:40pm-2:55pm	Forward Plan	Graeme Windley (IDX), Nirmal Narayanamurthi (IDAM)
5	2:55pm-3:05pm	Future Topics	Graeme Windley (IDX), Nirmal Narayanamurthi (IDAM)
6	3:05pm-3:15pm	Next Session(s) Outline	Graeme Windley (IDX), Nirmal Narayanamurthi (IDAM)
7	3:15pm-3:30pm	General Business and Next Steps	Blaine Miner

## Supporting materials:

- Appendix A: AEMO Competition Law Meeting Protocol

*"Please note that this meeting will be recorded by AEMO and may be accessed and used by AEMO for the purpose of compiling minutes. By attending the meeting, you consent to AEMO recording the meeting and using the record for this purpose. No other recording of the meeting is permitted"*

# 2. MITE Introduction and Scope



Andrew Bell



# Why are we here?

In 2023 and early 2024, AEMO conducted a series of business and technical workshops with a broad range of industry stakeholders to enable the development of the Identity and Access Management (IDAM), Industry Data exchange (IDX) and Portal Consolidation (PC) business case.

These initiatives have been the subject of extensive engagement with industry to:



Details regarding prior phases of engagement can be found at:

[AEMO | Market Interface Technology Enhancements](#)

## Business case endorsement

The Business Case associated with these initiatives has been approved and is now progressing into planning, noting decision point 2 associated with IDX transition continues to be forecast for Q4 2025

## A new name as the focus turns to delivery

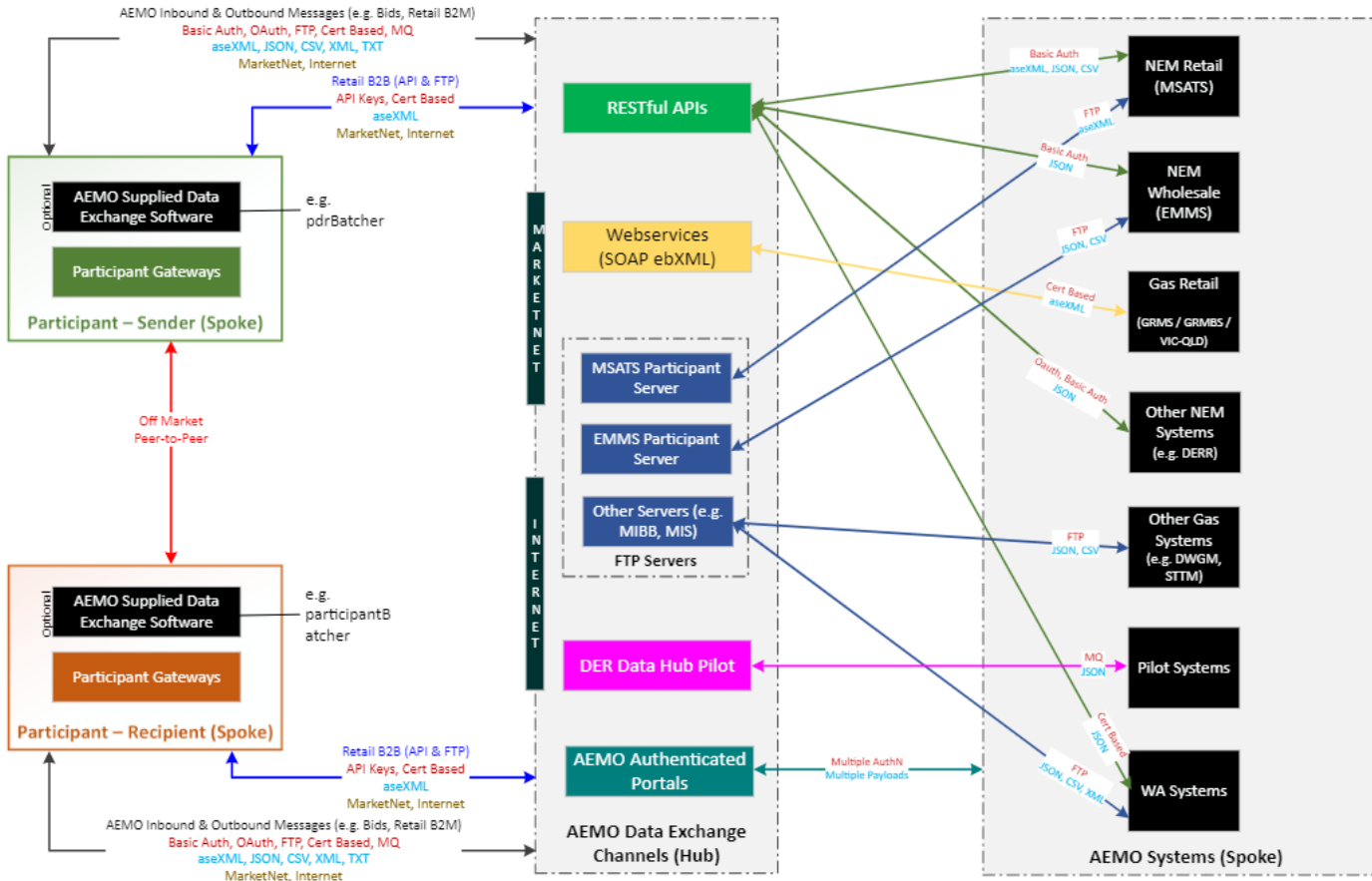
Formerly known as the Foundational and Strategic initiatives, IDAM, IDX and PC are now referred to as the **Market Interface Technology Enhancement (MITE)** projects. This is an important change to reflect the area of impact of this suite of projects more accurately. All AEMO communications will now refer to the MITE initiatives.

# Industry Data Exchange (IDX) Scope

*Industry Data Exchange: A unified data exchange mechanism to support exchanging data between energy stakeholders and AEMO.*

**Background:** AEMO’s existing data exchange systems have been variously acquired over the last 10-15 years, and use inconsistent standards, protocols and formats. AEMO’s markets are also undergoing significant transformation, resulting in new data exchange needs. AEMO is introducing new data exchange patterns without a target state and roadmap which is inhibiting participants from modernising their systems and quantifying the benefits of their investments. This Initiative will conceptualise unified data exchange standards, patterns, protocols, payload formats and channels to support market and domain-agnostic, streamlined, secure, reliable, scalable centralised data exchange platform.

## IDX Context Diagram:



## Following areas will be explored during the IDX feasibility phase.

In Scope	Out of Scope
<ul style="list-style-type: none"> <li>✓ Data Exchange between AEMO and energy stakeholders across NEM, WEM and Gas                             <ul style="list-style-type: none"> <li>• Inbound and Outbound transactions</li> <li>• Connectivity methods</li> <li>• Protocols to connect to AEMO systems</li> <li>• Payload formats</li> <li>• AEMO data exchange systems that Participants connect to</li> <li>• Data exchange standards &amp; patterns</li> </ul> </li> <li>✓ Interactions via all supported channels (current &amp; future)</li> </ul>	<ul style="list-style-type: none"> <li>× Control systems communications and interactions</li> <li>× Direct device communications and interactions</li> </ul>

! Note: Data Exchange Scenarios, Channels, Protocols & Patterns illustrated in this slide are indicative only and not the finite list



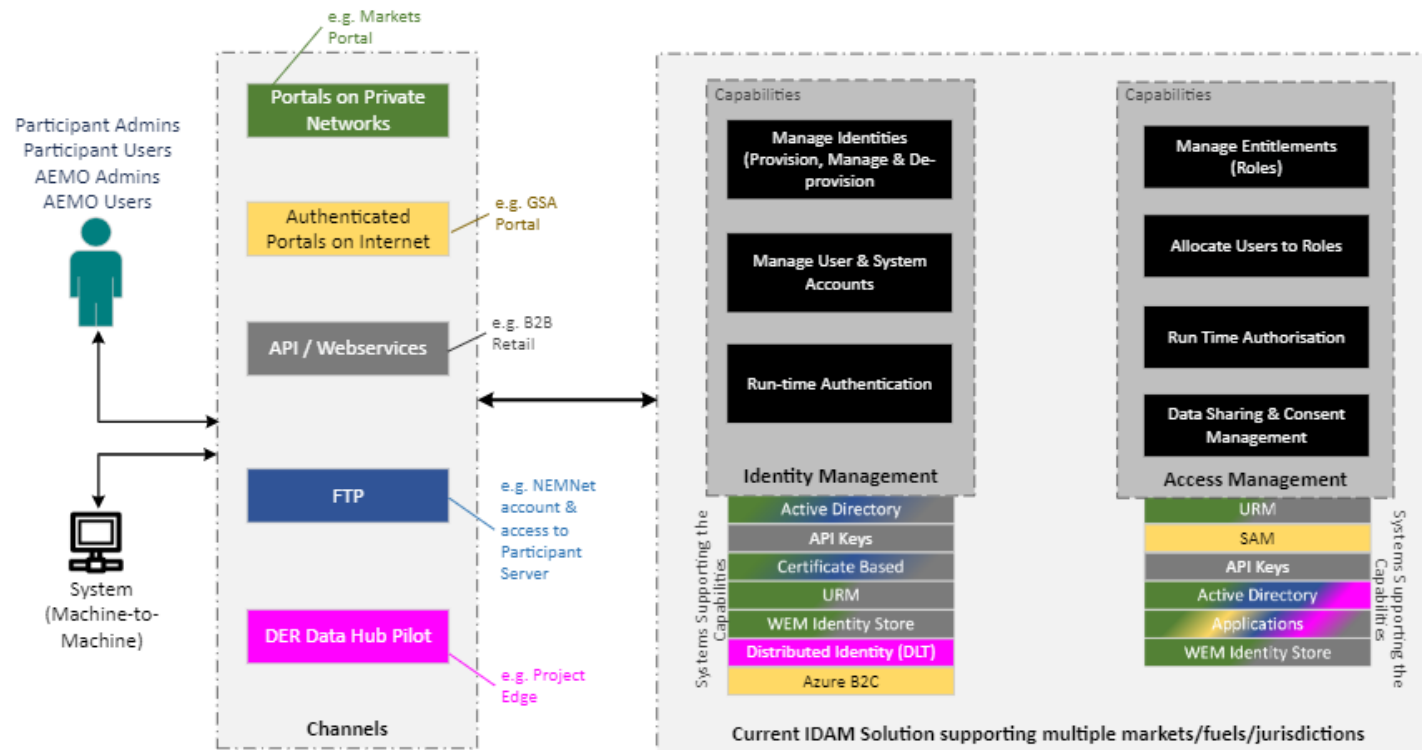
# Identity and Access Management Scope


*Identity and Access Management: A unified mechanism to authenticate and authorise external identity when accessing AEMO services, consolidating and improving overall cyber security controls.*

## Problem Statement:

AEMO's Identity and Access Management (IDAM) services are disparate, requiring users to retain multiple sets of credentials in order to access AEMO business services. The legacy IDAM services do not implement best practices in cyber security controls (e.g., multifactor authentication) and are insufficient to meet new industry obligations introduced under the SOCI Act.

## IDAM Current State Context Diagram:



 Note: Channels & IDAM Stores illustrated in this slide are indicative only and not the finite list

## Following areas will be explored during the IDAM feasibility phase.

In Scope	Out of Scope
<ul style="list-style-type: none"> <li>✓ NEM, WEM and Gas involving AEMO external interactions</li> </ul>	<ul style="list-style-type: none"> <li>× Network layer security</li> </ul>
<ul style="list-style-type: none"> <li>✓ External Identities including:                             <ul style="list-style-type: none"> <li>- Registered Participants</li> <li>- Non-registered Participants</li> <li>- Potential Participants</li> <li>- Service Providers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>× Control systems communications / interactions</li> <li>× Direct device communications /interactions</li> </ul>
<ul style="list-style-type: none"> <li>✓ External System Accounts Interactions via all supported channels (current &amp; future)</li> </ul>	

# Portal Consolidation Scope

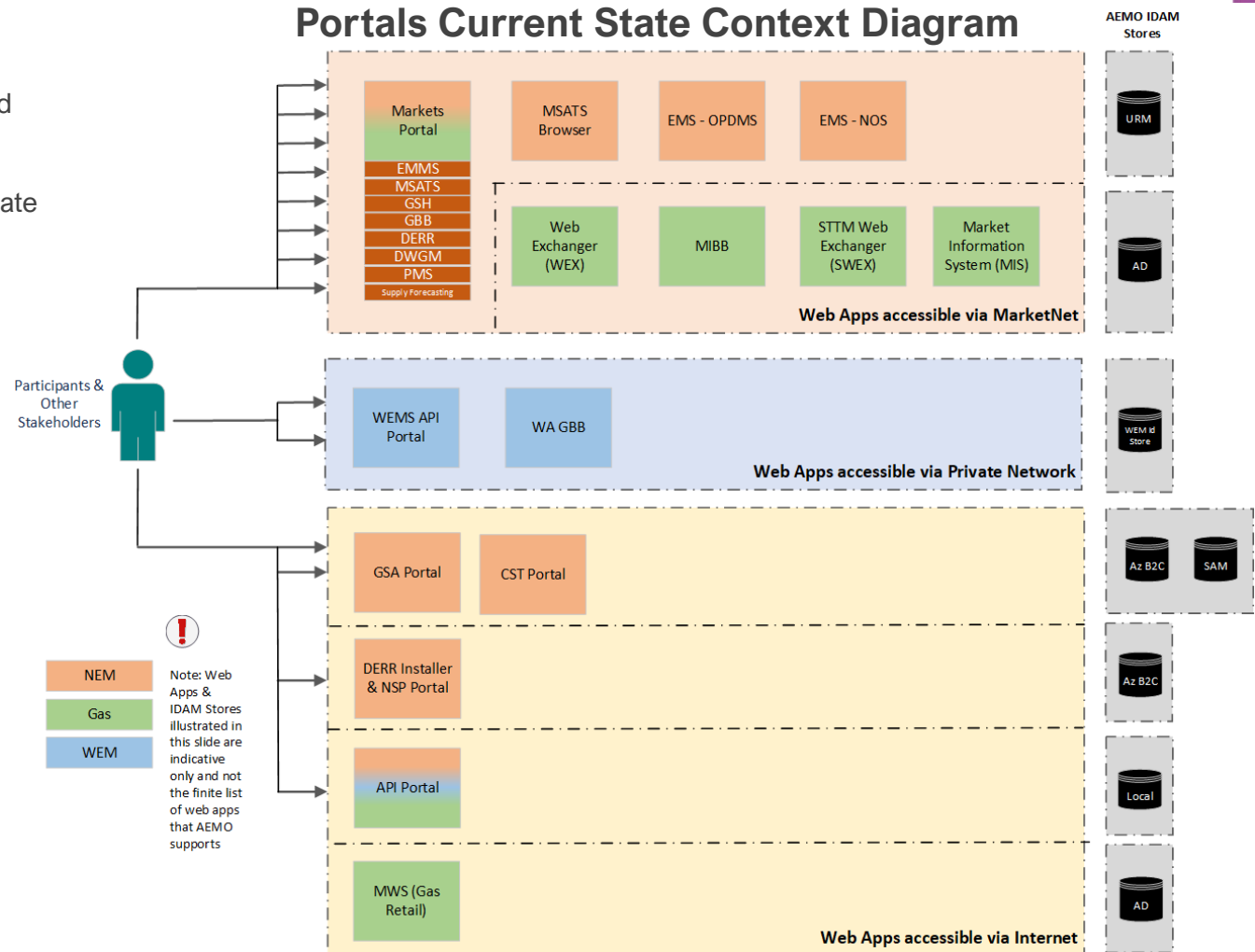
*Portal Consolidation: The aim of the Portal Consolidation project is to enable a unified stakeholder experience that hosts web applications. The portals framework is an enabling platform that supports energy market participants and other partners to consume AEMO browser services in a secure manner.*

## Problem Statement

AEMO browser services are exposed over a disparate range of end points and require multiple sets of credentials to consume these services. This results in a suboptimal user experience for energy stakeholders. The requirement to access browser services via private networks creates technical barriers to consuming these services.

**Following AEMO browser services will be explored during the Portal Services feasibility phase.**

In Scope	Out of Scope
<ul style="list-style-type: none"> <li>✓ External Authenticated Portals (accessed by Market Participants and other External Users).</li> <li>✓ AEMO users using Internal Portal for control room and market services.</li> </ul>	<ul style="list-style-type: none"> <li>× Public Un-authenticated Portals (e.g. aemo.com.au)</li> <li>× Portals in the Corporate Services</li> <li>× SharePoint Apps pertaining to Corporate Services</li> </ul>



# Vision and Benefits of IDAM, IDX and PC initiatives

## Vision

Creating **extensible, resilient and secure** enabling technology frameworks (identity management, data exchange and web access) that underpin AEMO's services to and between NEM market participants, extensible to WEM and gas.

## AEMO Overall Benefits

- ✓ Supportability of the technology ongoing (transition away from a proliferation of custom solutions)
- ✓ Reduction in security vulnerability risk through move to 'secure by design' technology
- ✓ Ability to implement reform initiatives faster through scaling resourcing and more modular solutions
- ✓ Key plank of plans to meet SOCI Compliance – both minimum and evolving requirements

## Industry Overall Benefits

- ✓ Reduced operational costs through self-service
- ✓ Lowered barriers to entry for participants, including in emerging markets
- ✓ Lowered localisation costs of global industry technology solutions, e.g. CIS platforms
- ✓ Improved security posture and assists industry in meeting their SOCI obligations

## IDENTITY & ACCESS MANAGEMENT



**A unified mechanism to authenticate and authorise external identity and entitlements** when accessing AEMO services, consolidating and improving overall cyber security controls.

### Specific Benefits

- ✓ Provides support for organisational hierarchy and federation
- ✓ Enhanced security and alignment with industry obligations and best practice in cyber security controls (e.g. multifactor authentication)
- ✓ Enhanced self-service auditing and reporting capabilities to support industry's governance and compliance and reduce operational costs

## INDUSTRY DATA EXCHANGE



**A unified data exchange mechanism to support the secure and efficient exchange of data** between energy stakeholders for new services required by NEM Reforms, existing legacy services and provide a framework extensible to other energy markets.

### Specific Benefits

- ✓ Efficiently consolidates the development of data exchange protocols for new business services – avoiding protocol 'bloat', minimising siloed development & improving speed to market for new reforms
- ✓ Aligns with changing participant systems and cyber security obligations
- ✓ Improves transaction timeliness & reduces incidence of stop files
- ✓ Enables the scalable extension of existing business services [IDX Transition]
- ✓ Enable compartmentalisation of schema changes, thereby reducing regression testing costs of twice-yearly market changes [IDX Transition]

## PORTAL CONSOLIDATION



**A new web and mobile user portal** to provide a unified stakeholder experience. The portals framework is an enabling platform that supports energy market participants and other partners to consume AEMO browser services in a secure manner.

### Specific Benefits

- ✓ Standardised experience to consume AEMO browser services
- ✓ Enhance self-service capabilities for market participants
- ✓ Integration with the enterprise identity management and user authentication solution
- ✓ Enables improved user experience by establishing standards for navigation, look and feel and help menus

# Notes

- Andrew Bell spoke to the 'MITE Introduction and Scope' slides
- Andrew noted that:
  - Portal Consolidation (PC) is part of the MITE program but that detailed discussions will likely not occur until early 2025
  - MITE 'program-level' milestones and timelines, will be determined, monitored and managed through the Program Consultation Forum (PCF)
  - The intent of MITE is to establish a framework which can support other markets, e.g., WEM and Gas, but that the immediate focus is on the NEM
  - AEMO has created a MITE webpage which provides key information and artifacts
    - <https://aemo.com.au/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/market-interface-technology-enhancements>


# 3. MITE Working Group Overview

Blaine Miner



# NEM Reform engagement framework

- AEMO has established an engagement framework to support the consideration and implementation of NEM Reform related initiatives.

Forums	Forum focus 	Cadence	Approach
Executive Forum	Program overview and status update	3 per Year	Nomination
Reform Delivery Committee (RDC)	Long term strategic perspective	Quarterly	Nomination
Program Consultative Forum (PCF)	Inflight initiatives status & co-ordination	Monthly	Open
Implementation Forum	Implementation of reforms	Monthly	Open
Electricity Wholesale (EWCF) & Electricity Retail (ERCF) Consultative Forums	Procedures working groups	Monthly	Open
Industry Testing Working Group	Testing	Monthly	Open
Working Groups	Inflight	As appropriate	As appropriate

# Key Stakeholders – Collaborate and Engage

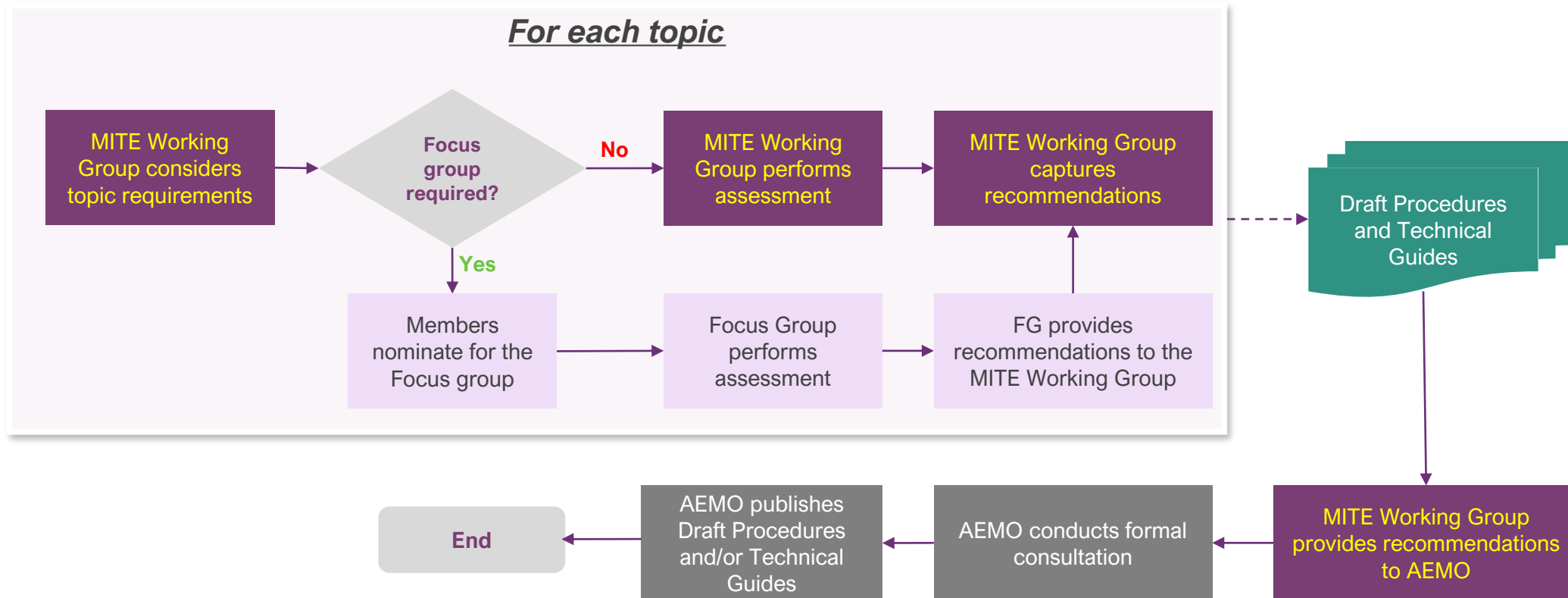
Stakeholder	Key contact	Purpose of engagement	Engagement Approach
NEM Reform Program Consultative Forum (PCF)	Chair - Chris Muffett (AEMO)	To provide information and receive guidance and direction.	In-depth collaboration
Market Participants	N/A	To collaborate with impacted market participants.	In-depth collaboration
Solution Providers/Vendors	N/A	To collaborate with organisations that provide services (systems and processes) to market participants.	In-depth collaboration
Energy Markets Cyber Group	Chair - Tim Daly (AEMO)	To provide critical energy market participants the opportunity to coordinate approaches to address cyber security threats, cyber security regulatory requirements and supporting energy market participants cyber maturity uplift.	Inform and engage
Market Systems User Group (MSUG)	Chair - Deb Armenante (AEMO)	To facilitate continuing improvement of NEM wholesale and retail IT systems, Data Model, and Data Interchange releases (including gas markets).	Inform and engage
aseXML Standards Working Group (ASWG)	Chair - Wayne Lee (AEMO)	To review proposed changes to the aseXML schema using its change management process	Inform and engage
NEM Reform Implementation Forum (IF)	Chair - Greg Minney (AEMO)	To support direct industry input into the planning and execution of readiness activities.	Inform and engage

# Key Stakeholders – Keep Informed

Stakeholder	Key contact	Purpose of engagement	Engagement Approach
CIO Forum	Chair - Gordon Dunsford (AEMO)	To provide and receive advice regarding the changing landscape of the Energy Industry from a strategic technology perspective.	Inform
NEM Reform Executive Forum (EF)	Chair – Violette Mouchaileh (AEMO)	To facilitate engagement between executive level organisational representatives from across industry.	Inform
NEM Reform Delivery Committee (RDC)	Chair – Violette Mouchaileh (AEMO)	To facilitate deep and effective collaboration across industry and navigate reforms over the coming years, includes AER and AEMC representatives.	Inform
Information Exchange Committee (IEC)	Chair - Kee Wong (AEMO) Secretariat – Meghan Bibby (AEMO)	To ensure the ongoing developing and making recommendations on changing B2B Procedures.	Inform
Electricity Wholesale Consultative Forum (EWCF)	Chair - Chris Muffett (AEMO)	To facilitate deep and effective collaboration across industry to navigate procedural consultations related to the wholesale National Electricity Market (NEM).	Inform
Electricity Retail Consultative Forum (ERCF)	Chair - Blaine Miner (AEMO)	To facilitate deep and effective collaboration across industry to navigate procedural consultations related to the Retail Electricity Market Procedures Framework (NEM).	Inform
Business-to-business Working Group (B2B-WG)	Chair - Blaine Miner (AEMO)	To provide advice to the IEC on issues and opportunities relating to the B2B framework, Procedures and Guide.	Inform
Gas Retail Consultative Forum (GRCF)	Chair - Danny McGowan (AEMO)	To ensure effective development of the retail gas markets operating in New South Wales / Australian Capital Territory, Queensland, South Australia, Victoria, and Western Australia.	Inform



# Consultation Workshop Structure



## **MITE Working Group**

- **Actively participate** in highly technical workshop discussions to assess options, co-design draft deliverables.
- **Review key drafts** of documentation prepared by the Focus Group.
- **Consult** internally within own organisation to test, socialise and ultimately champion.

## **Focus Group (as required)**

- **Co-design** draft deliverables for consultation with working group members
- **Actively participate** in the Focus Group workshops and activities
- **Participate in highly technical discussions**, including engaging within their business prior, to provide detailed responses to matters under discussion
- **Champion** technical discussions with their peers and within own organisations

# The MITE Working Group

- **Purpose**

- The Market Interface Technology Enhancement Working Group (MITEWG) has been established to collaborate in the development of technical guidelines/procedures to support the IDAM, IDX and PC initiatives and provide technical recommendations to the PCF regarding transition and other planning matters.

- **Governance**

- The MITEWG is not a decision-making body.
- The MITEWG will operate under the guidance of this Terms of Reference document and the NEM Reform Program Consultative Forum.

- **The role of the coordinator**

- The role of the coordinator is to coordinate suitably qualified representatives from their organisation to support applicable initiatives and/or agendas on a session by session basis.

- **AEMO expect representatives allocated coordinators to:**

- Have a thorough understanding of IDX, IDAM and PC reform initiatives under the NEM Reform Program.
- Have a detailed understanding of their own systems and business processes.
- Be prepared to participate in highly technical discussions, including engaging within their business prior, to provide detailed responses to matters under discussion.
- Have the expertise and authority to consider technical matters and provide views on behalf of their business.
- Provide outcomes back into their business.

# The MITE Focus Groups

- **Purpose**

- Focus Groups will be called to explore specific topics requiring more input prior to assessment with the MITEWG. AEMO will call for a small number of volunteers to support these on a topic-by-topic basis.

- **Governance**

- Focus groups will be established, as required, to explore a specific topics in more detail. AEMO will provide an overview of topics to assist coordinators in identifying appropriate volunteers.
- Focus groups will be temporary in nature with any recommendations, including applicable analysis, to be provided to the MITEWG for further consideration and feedback.
- Focus Groups are not a decision-making body.

- **AEMO expect representatives to:**

- Have a thorough understanding of IDX, IDAM and PC reform initiatives under the NEM Reform Program.
- Have a detailed understanding of their own market facing systems and business processes.
- Be prepared to participate in highly technical discussions, including engaging within their business prior, to provide detailed responses to matters under discussion.
- Have the expertise and authority to consider technical matters and provide views on behalf of their business.
- Provide outcomes back into their business.

# AEMO Role and Responsibilities

- **Meetings and administration**

- MITEWG meetings are proposed to run on a monthly basis with topics for at least the next scheduled meeting included in the prior meeting.
- MITE Focus Group meetings will be scheduled where required with AEMO coordinating with the identified volunteers supporting each session. Topics requiring Focus Groups will also be included in prior MITEWG meetings to enable identification and allocation of volunteers.
- AEMO will prepare and distribute all meeting correspondence via email and manage the MITEWG webpage.
- AEMO will endeavour to provide stakeholders with:
  - A draft agenda and relevant meeting papers at least five business days prior to the meeting.
  - Meeting outcomes within five business days after the meeting.
  - Chair, secretariat services and subject matter expert(s) for each meeting.
  - Once approved, copies of the meeting outcomes will be published on the AEMO website.

# Notes

- In Blaine Miner's absence, Graeme Windley spoke to the 'MITE Working Group Overview' slides
- As part of the discussion, Graeme and Andrew noted that:
  - AEMO would be endeavouring to provide visibility of upcoming working group and focus group meetings at least 2mths in advance
  - Meeting materials will be provided at least 5 working days prior to a session

# 4. Forward Plan

Graeme Windley (IDX),  
Nirmal Narayanamurthi (IDAM)



# MITE Engagement Forward Plan

## MITE Working Group Forward Plan

Purpose	Session Outline		Timing
Standardise Framework: Terminology and Definitions	<b>IDX</b> <ul style="list-style-type: none"> <li>• Re-Cap Target State Concepts</li> <li>• Re-Cap Target State Architecture</li> <li>• IDX Terminology and Definitions</li> <li>• Business Function end points</li> </ul>	<b>IDAM</b> <ul style="list-style-type: none"> <li>• Re-Cap Target State Concepts</li> <li>• Re-Cap Target State Architecture</li> <li>• IDAM Terminology, Definitions and Capabilities</li> </ul>	4 September
Review Recommendations from the Focus Groups	<b>IDX</b> <ul style="list-style-type: none"> <li>• Review Recommendations from the IDX Decision Tree focus group if available</li> <li>• Industry requirements for “Archiving”</li> </ul>	<b>IDAM</b> <ul style="list-style-type: none"> <li>• Review Recommendations from IDAM API Authentication and Authorisation focus groups if available</li> </ul>	2 October

## Focus Group Forward Plan

Purpose	Session(s) Outline		Indicative Timings
<b>Deep Dive</b> Focus Group	<ul style="list-style-type: none"> <li>• <b>IDX</b> Decision Tree Focus Group</li> </ul>	<ul style="list-style-type: none"> <li>• <b>IDAM</b> API Authentication and Authorisation pattern Focus Group</li> </ul>	September
<b>Deep Dive</b> Focus Group	<ul style="list-style-type: none"> <li>• <b>IDX</b> Async and event notifications Focus Group</li> </ul>	<ul style="list-style-type: none"> <li>• <b>IDAM</b> Organisation Hierarchy Use cases Focus Group</li> </ul>	October

All Topics discussed at the Focus group will be presented back to the Working group for Assessment

# MITE Engagement Forward Plan

## MITE Working Group Forward Plan

Purpose	Session Outline		Timing
Standardise Framework: Terminology and Definitions	<b>IDX</b> <ul style="list-style-type: none"> <li>• Re-Cap Target State Concepts</li> <li>• Re-Cap Target State Architecture</li> <li>• IDX Terminology and Definitions</li> <li>• Business Function end points</li> </ul>	<b>IDAM</b> <ul style="list-style-type: none"> <li>• Re-Cap Target State Concepts</li> <li>• Re-Cap Target State Architecture</li> <li>• IDAM Terminology, Definitions and Capabilities</li> </ul>	4 September
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<b>Deep Dive</b> Focus Group	<ul style="list-style-type: none"> <li>• <b>IDX</b> Async and event notifications Focus Group</li> </ul>	<ul style="list-style-type: none"> <li>• <b>IDAM</b> Organisation Hierarchy Use cases Focus Group</li> </ul>	October

All Topics discussed at the Focus group will be presented back to the Working group for Assessment



# Notes

- Graeme Windley (IDX) and Nirmal Narayanamurthi (IDAM) spoke to the 'Forward Plan' slides
- Graeme and Nirmal noted:
  - Indicative focus group timings for IDX and IDAM:
    - Week beginning 16 September and 7 October
      - Exact dates and length of sessions to be confirmed once FG nominations have been finalised
  - Timings of future sessions will be conscious of applicable time zones, including Western Australia i.e. sessions to not commence prior to 11am (AEST), where possible

# 5. Future Topics

Graeme Windley (IDX),  
Nirmal Narayanamurthi (IDAM)



# Proposed Future Topics: IDX

Topic	Session Outline
Synchronous Data Exchange Pattern	Synchronous Pattern Walkthrough <ul style="list-style-type: none"> <li>Initiating a Synchronous request</li> <li>Synchronous responses</li> <li>Use case examples</li> </ul>
Fire and Forget Data Exchange Pattern	Fire and Forget Pattern Walkthrough <ul style="list-style-type: none"> <li>Initiating a Fire and Forget request</li> <li>Fire and Forget responses</li> <li>Use case examples</li> </ul>
Deep Dive: Large File Share Data Exchange Pattern	Detailed discussion on Large File Share pattern <ul style="list-style-type: none"> <li>Solution Walkthrough</li> <li>Large File Share Pattern walkthrough</li> <li>Requests and Response Channels for Large File Share</li> <li>Use case examples</li> </ul>
Deep Dive: Data Exchange Payloads	Detailed discussion on Payload <ul style="list-style-type: none"> <li>Payload Types and Sizes</li> <li>Payload Encryption</li> <li>Payload Versioning</li> <li>Payload Transforms</li> </ul>
Deep Dive: Inquiry Services Data Exchange Pattern	Detailed discussion on Inquiry pattern <ul style="list-style-type: none"> <li>Inquiry pattern walkthrough</li> <li>Inquiry service requests for data</li> <li>Responses to Inquiry service requests</li> <li>Use case examples</li> </ul>
Deep Dive: Low Volume Interface	Detailed discussion on IDX Low Volume Interface <ul style="list-style-type: none"> <li>Scope of the IDX Low Volume interface</li> <li>IDX Low Volume Interface capabilities</li> </ul>
Deep Dive: AEMO Gateway Software	Detailed discussion on AEMO Gateway Software <ul style="list-style-type: none"> <li>Scope of the AEMO Gateway Software</li> <li>AEMO Gateway Software capabilities</li> <li>Integration with participants systems</li> <li>Use case examples</li> </ul>
Pilot Lite scope	Detailed discussion on the Pilot Lite scope <ul style="list-style-type: none"> <li>Scope of the Pilot Lite</li> <li>Discuss / Agree on Success Measures of Pilot Lite</li> </ul>

# Proposed Future Topics: IDAM

Topic	Session Outline
Organisation Hierarchy	Organisation Hierarchy <ul style="list-style-type: none"> <li>Review the recommendation from Focus Group</li> </ul>
Identity Management Capabilities	Identity Management Capabilities <ul style="list-style-type: none"> <li>Creation of local accounts.</li> <li>Federated identity</li> <li>Multifactor authentication, OAuth, etc.</li> </ul>
Self-serve Capabilities and Basic Auditing & Compliance Reports	Self-serve Capabilities and Basic Auditing & Compliance Reports <ul style="list-style-type: none"> <li>Password reset, consent management, etc.</li> <li>Review &amp; Manage identities and access rights</li> </ul>
Entitlement Management Capabilities	Entitlement Management Capabilities <ul style="list-style-type: none"> <li>Account &amp; Role Sync up and Role assignment</li> </ul>
Security compliance obligations	Security compliance obligations <ul style="list-style-type: none"> <li>Within the context of the scope of the approved business case</li> </ul>
Transition Plan	Transition Plan <ul style="list-style-type: none"> <li>Transition plan for Organization Admin and Org Hierarchy Set up</li> <li>Transition plan (progressive / bulk) for participant users</li> <li>Transition plan (bulk) for system accounts</li> </ul>
Training support & communication	Training support & communication <ul style="list-style-type: none"> <li>Update training materials and guides</li> </ul>

# Notes

- Graeme Windley (IDX) and Nirmal Narayanamurthi (IDAM) spoke to the 'Forward Plan' slides
- Graeme, Nirmal and Andrew noted that:
  - A third column will be added to the 'Proposed Future Topics' slides, which indicates which month a topic is proposed to be discussed
  - IDX patterns will need to be discussed over several sessions, to allow sufficient time to consider them both individually and collectively
  - AEMO is seeking to implement/commence transition period(s) of 'core capability' as efficiently as possible. Exact timings and sequencing will be discussed at future MITE WG and FG sessions, and subsequently endorsed at the PCF.

# 6. Next Session(s) Outline

Graeme Windley (IDX),  
Nirmal Narayanamurthi (IDAM)



# IDX Sessions Outline



# IDX MITE Working Group Session

## Business Function End Points

The objective of this working group session is to define the principles, scope and the functionality of the business function endpoints provided to the users of the Industry Data Exchange.

- In the target state for **RESTful API endpoints**, AEMO proposed a move from a single endpoint for all functions to business function-specific endpoints. The objective is to provide a more structured and targeted approach to data exchange that also allows AEMO to support at the business function level.
- Please refer to the target state pack: [Target State Proposal for Technical Focus Groups \(aemo.com.au\)](#) (slide 48)



### Audience Skill Set

- Technical Leads / Gateway / Support teams
- Integration Architecture Teams (Market Interface Specific)

### Topics for discussion

- Introduction to Business Functions & rationale
- Principles for defining a Business Function end point
- Naming standards for a Business Function end point
- Managing Inbound & Outbound data via Business Function endpoint definitions



# IDX MITE Working Group Session “Archiving”

The objective of this working group session is to discuss the high-level overview of target state archiving processes.

## Message archival discussion points:

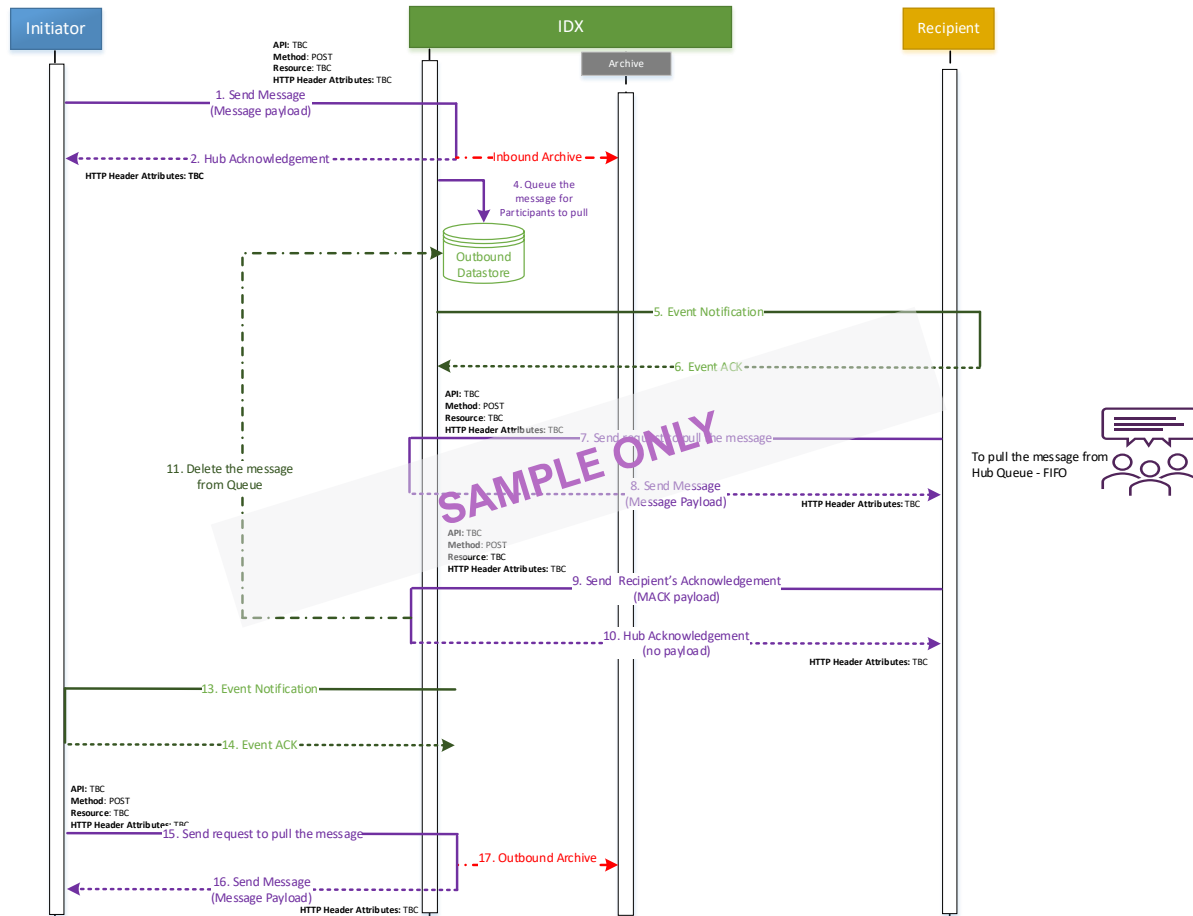
- Archive Rules for **Inbound** and **Outbound** archive
- Access to the Archive and other archive tools:
  - Day Zips
  - Consolidated Archive
  - Retention Periods for Archive
  - Existing and Future state access to Archive

## Audience Skill Set

- Technical Leads / Gateway / Support teams
- Integration Architecture Teams (Market Interface Specific)

## Topics for discussion

- High level overview of target state archiving solution
- Current use cases (Day zip etc) for archiving solution across NEM Retail & NEM Wholesale
- Drafting requirements/use cases for target state archiving solution for NEM Retail & NEM Wholesale.



*This working group discussion will be relevant to all stakeholders who participate in exchanging data between AEMO and energy stakeholders*

# IDX Focus Group: Decisions Trees

The objective of this focus group meeting is to assess the principles and attributes / parameters that contribute to the development of proposed Decision Trees.

- A Decision Tree is an artefact that guides AEMO and Industry through choosing an appropriate integration channel (e.g. APIs) and protocols (e.g. https) for a given use case; aligning to the following target state principle agreed in the business case phase – *“For each use case, a single channel and protocol is to be offered”*
- Please refer to the Target state pack: [Target State Proposal for Technical Focus Groups \(aemo.com.au\)](#) (slide 44)

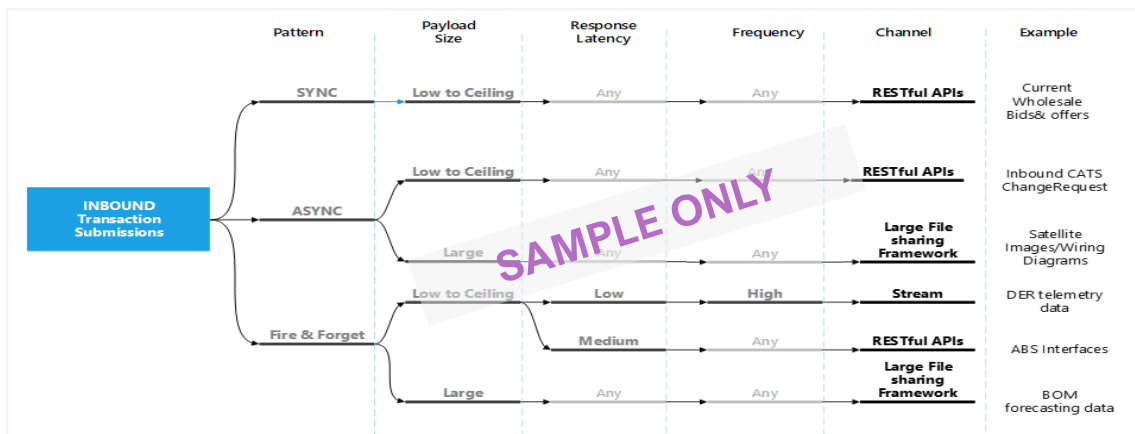


## Audience Skill Set for Focus Group Discussion

- Technical Leads
- Integration Architecture Teams (Market Interface Specific)

## Topics for discussion

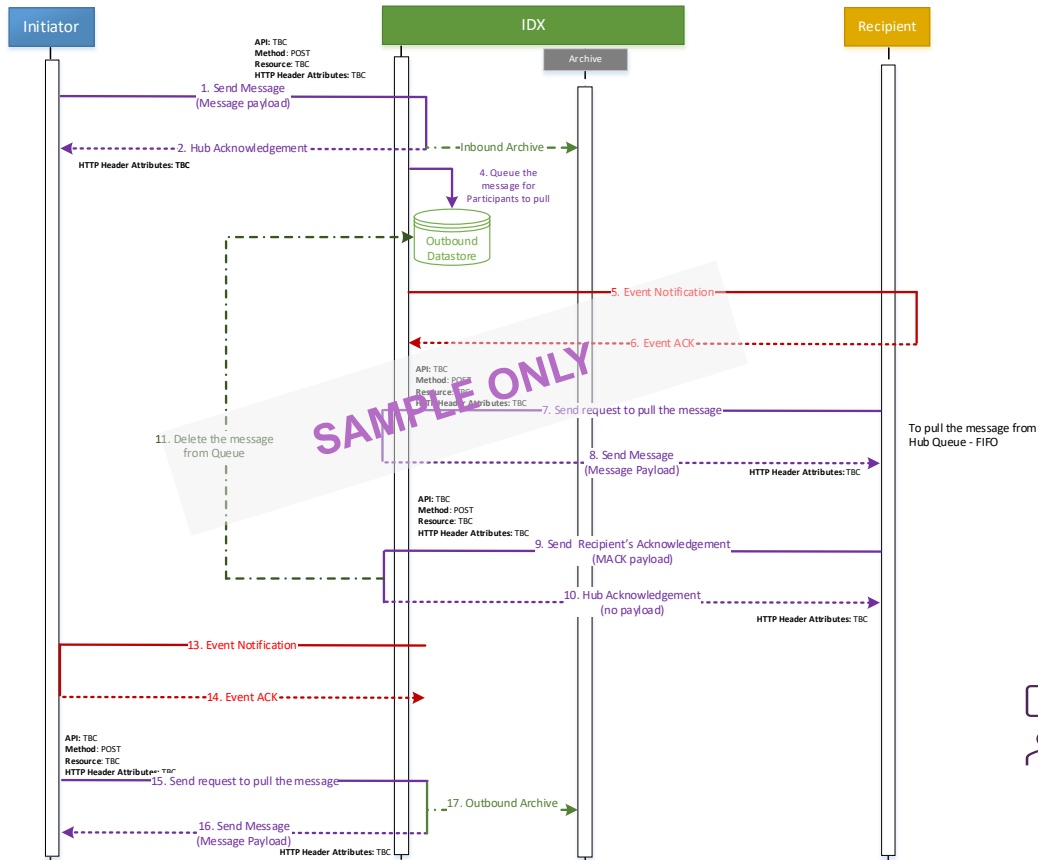
- Objective of developing ‘Decision Trees’
- Principles used to develop Decision Trees
- Number/ Categories of Decision Trees to be developed (e.g. Decision Tree for Inbound, Outbound, Payload formats etc)
- Attributes or parameters that contribute to the selection of a channel e.g. selecting the channel (e.g. APIs) based on parameters such as size of the payload, response time to the request
- Decision Tree for each of the categories identified



This Focus group discussion will be relevant to all stakeholders who participate in exchanging data between AEMO and energy stakeholders

# IDX Focus Group Session “Async and Event Notifications”

The objective of this focus group is to review an End to End Asynchronous pattern (including events) and discuss technical topics related to this type of data exchange.



**Asynchronous** data exchange patterns are used for business processes that require a multi-legged approach to facilitate a data exchange.

### Asynchronous Inbound discussion points:

- Push data to IDX
- API, Method and Resource
- HTTP Header attributes
- Acknowledgements

### Asynchronous Outbound discussion points:

- Pull data from IDX
- API, Method and Resource
- HTTP Header attributes
- Acknowledgements

**Event Notification** is the interface delivery pattern presented in the target state which delivers events such as outbound message notification and other event types.

### Event notification Discussion points:

- Event Interface, Event Payload
- Event Acknowledgements, Event Optionality



### Audience Skill Set for Focus Group Discussion

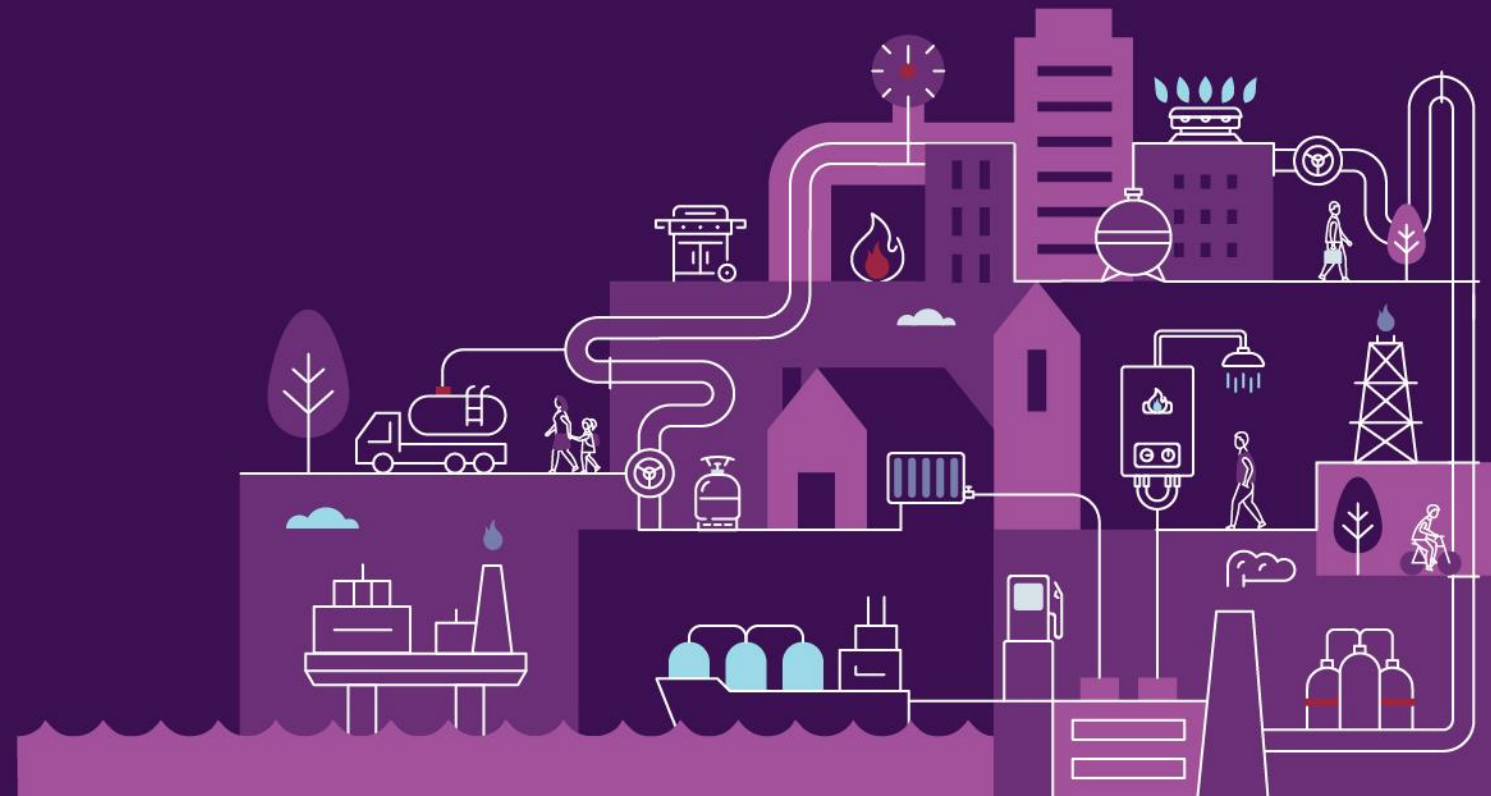
- Technical Leads
- Integration Architecture Teams (Market Interface Specific)

### Topics for Discussion

- A draft end to end business use case for asynchronous flow
- Sequence diagram demonstrating the Asynchronous pattern (including events) to support the end to end business case.
- Interface requirements for Asynchronous pattern (including events).

*This Focus group discussion will be relevant to all stakeholders who participate in exchanging data between AEMO and energy stakeholders*

# IDAM Sessions Outline



# IDAM Focus Group: API Authentication and Authorisation Patterns

The objective of this focus group meeting is to assess the proposed API Authentication and Authorisation flows for Industry Data exchange, exploring both practical and technical aspects to ensure robust security and ease of use.

- Authentication and authorisation, in simple terms, involve verifying a user's or service account's identity and then determining their access permissions, respectively.
- The IDAM Focus Group will discuss the integration of OAuth Client Credentials Flow within IDX systems to bolster security and also deliberate on strategies for maintaining the integrity and security of client credentials.



## Audience Skill Set for Focus Group Discussion

- Technical Leads / Gateway / Support teams
- Cyber Security Teams / Security Architecture Teams
- Integration Architecture Teams (Market Interface Specific)

## Topics for discussion

- Overview of Service Accounts Authentication and Authorisation using OAuth 2 Client Credentials Flow
- Proposed Authentication and Authorisation Flows

# IDAM Focus Group: Organisation Hierarchies and Enhanced Data Sharing

The objective of this focus group meeting is to thoroughly explore the technical capabilities introduced as part of the new Organisation Hierarchy and Enhanced Data Sharing Capabilities.

In the target state for Entitlements Management AEMO proposed a new set of capabilities known as Organisation Hierarchy and Enhanced Data Sharing, which will enable participants to more accurately model their corporate group structures within AEMO systems. These capabilities will facilitate the management of complex data sharing and user entitlements scenarios in a structured manner, including those involving third-party service providers.



The focus group will discuss the application flows and would seek inputs on design decisions regarding the Organisational Hierarchies and Data Sharing Framework.

## Audience Skill Set for Focus Group Discussion

- Business leads who coordinate multiple PIDs arrangements
- Service Provider leads who support data sharing configurations
- Technical leads / Architects supporting multiple PID solutions and data sharing solutions

## Topics for discussion

- New and enhanced Entitlements Management capabilities due to the Organisation Hierarchies
- Enhanced Data Sharing Framework.

*Note: This focus group discussion will be relevant to the organisations with multiple participants Ids and all stakeholders who leverage data sharing capabilities.*

# Notes

- Graeme Windley (IDX) and Nirmal Narayanamurthi (IDAM) spoke to the 'Next Session' slides, which provide additional information and guidance regarding the Sept and October focus topics
- In response to questions asked:
  - Andrew noted that as FGs will consist of a small group of representatives (8 to 10), AEMO will attempt to work with FG members to determine preferred session dates and timings, acknowledging the pace required for the initiatives to be successfully implemented
  - Regarding Organisational Hierarchies, Phil Hayes confirmed that one user identity was the target state to access all AEMO services

# Next Steps



[NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au)



[NEM Reform Program Consultative Forum](#)





# Next Steps and Proposed Actions

- AEMO will send out meeting notes, actions and Working Group meeting invites (for Sept and Oct) within the next week.
- Upcoming MITW WG sessions:
  - **4 September:** Standardise Framework: Terminology and Definitions
  - **2 October:** Review Recommendations from the Focus Group

AEMO welcomes Focus Group nominations to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au) by **16 August**

## Focus Groups:

- To be limited to 8 – 10 volunteers to ensure effectiveness, appropriate technical skillsets required (Refer to slides 29-33)
- AEMO to confirm attendees once nominations have closed

Session(s) Outline		Indicative Timings
• <b>IDX</b> Decision Tree Focus Group	• <b>IDAM</b> API Authentication and Authorisation pattern Focus Group	September
• <b>IDX</b> Async and event notifications Focus Group	• <b>IDAM</b> Organisation Hierarchy Use cases Focus Group	October

AEMO welcomes any feedback from the MITE Working Group to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au)

# Notes

- Sept and Oct IDX and IDAM FG nominations **close Friday 16 Aug**
  - Where more than 8-10 volunteers are received for a particular FG, AEMO will confirm 'successful nominations' to ensure:
    - The preferred balance of skills and representation is achieved
    - Sessions have the best opportunity to be effective
  - FG nominations will be shared with the MITE WG for transparency
  - FG session invites and materials will be sent directly to successful nominations



For more information visit

[aemo.com.au](http://aemo.com.au)

# Appendix A

Workshop structure



# 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, all participants agree to adhere to the CCA at all times and to comply with appropriate protocols where required to do so.

AEMO has developed meeting protocols to support compliance with the CCA in working groups and other forums with energy stakeholders. Before attending, participants should confirm the application of the appropriate meeting protocol.

To access the full protocol at AEMO's website, visit: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups>