

# Market Interface Technology Enhancements Working Group (MITE WG)

Thursday 12 December 2024  
(1:00pm to 5:00pm AEDT)

This meeting will be recorded for  
minute taking purposes.





**We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.**

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.

**'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan**

AEMO Group is proud to have delivered its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation - a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Read our  
RAP



# 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

Graeme Windley



# 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

This workshop aims to cover:

- IDX Low Volume Interface (LVI)
- IDX Synchronous Message Pattern
- IDX Fire and Forget Message Pattern
- Next Steps

The ask of participants:

- Invite and share this pack with your technical experts who will support the MITE WG process to provide context and background
- Provide your inputs on the outcomes, polls and results as presented – in and out of session is fine
- Engage in the workshop – questions are welcome

*[Link to the target state pack established in consultation with the industry stakeholders](#)*

# Agenda

#	Indicative Timings	Topic	Presenter
1	1:00pm-1:05pm	Welcome	Graeme Windley
2	1:05pm-2:35pm	Low Volume Interface	Antonio Ramos / Bhanu Rajan
3	2:35pm-3:35pm	Synchronous Message Pattern	Antonio Ramos
4	3:35pm-4:40pm	Fire and Forget Message Pattern	Antonio Ramos
5	4:40pm-4:45pm	Future Topics	Graeme Windley
6	4:45pm-4:50pm	Forward Plan	Graeme Windley
7	4:45pm-4:50pm	General Business and Next Steps	Graeme Windley
	Appendix	Appendix A: AEMO Competition Law - Meeting Protocol	

# 2. IDX Low Volume Interface

Antonio Ramos / Bhanu Rajan



# IDX LVI

## Definition

A **Low Volume Interface** web-based portal channel, providing the capability for users to undertake data exchange with AEMO-managed markets without the need for developing system-to-system market interfaces. Additionally, it allows participants to monitor and configure their market integrations with AEMO's IDX platform.

## Scope & Principles

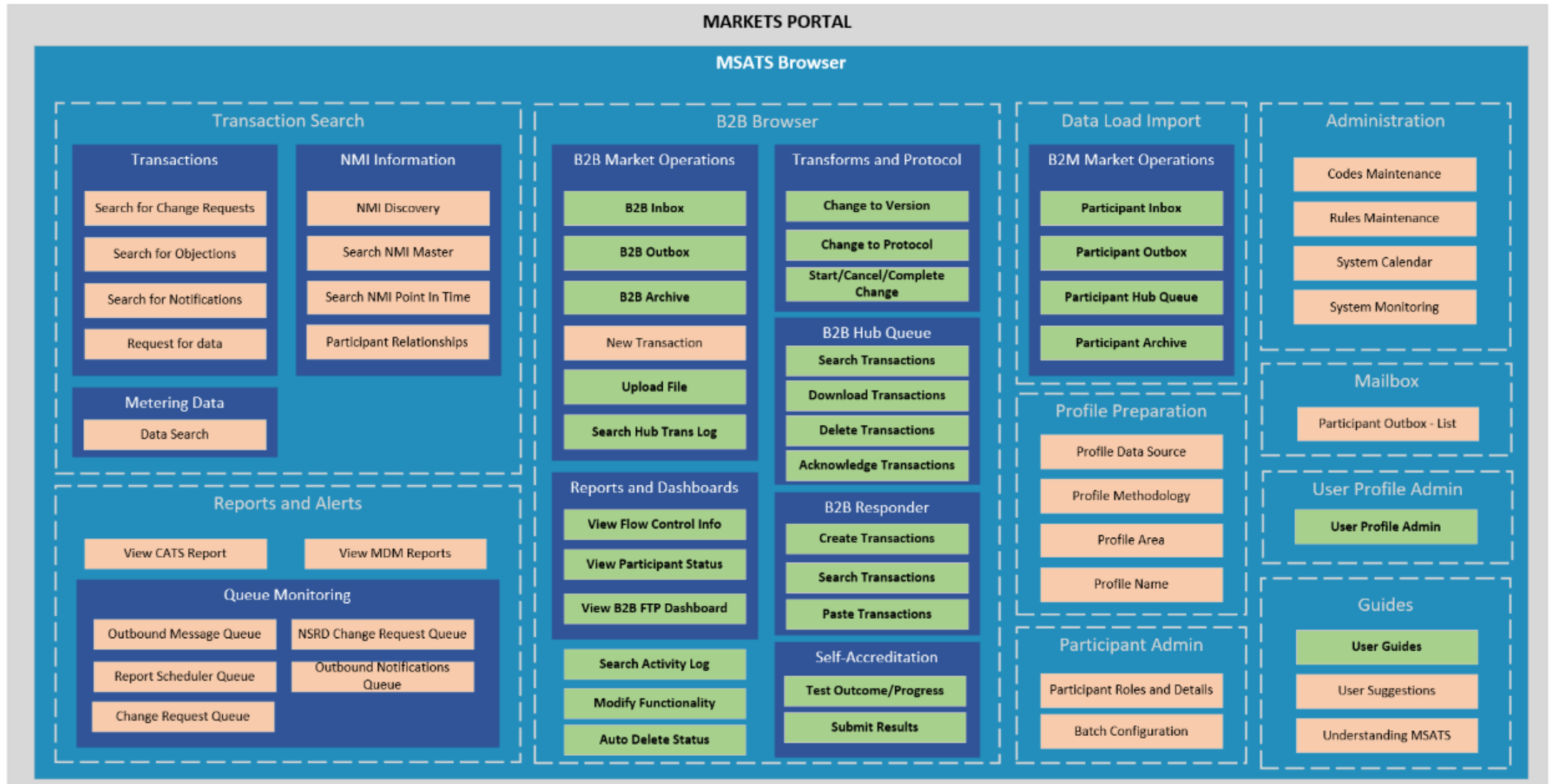
- The IDX LVI will concentrate on generic data exchange functionalities spanning multiple business functions. Application-specific functions will be excluded to maintain a unified view of data exchange.
- While some screens within the IDX LVI support specific data exchange patterns. Where a function is generic, a single LVI screen will be utilised to promote consistency and ease of use.
- The IDX LVI will be designed to enable bulk updates and bulk actions, particularly from an administrative perspective to assist Participants who manage multiple Participant IDs.
- IDX LVI enables the following core capabilities for Users who perform:
  - Business Operations Staff, who perform data exchange functions to meet procedural obligations.
  - Systems Support Functions, who monitor and support system integrations, as well as resolve technical issues.
  - IDX Integration Specialist, who implement system integrations, conduct testing and validation for system accreditation purposes.
  - Administration Functions, who manage user access, permissions, and system configurations.

## Call-out's

- Identity & Entitlement will be covered by IDAM
- Look & Feel will be covered by Portal Consolidation



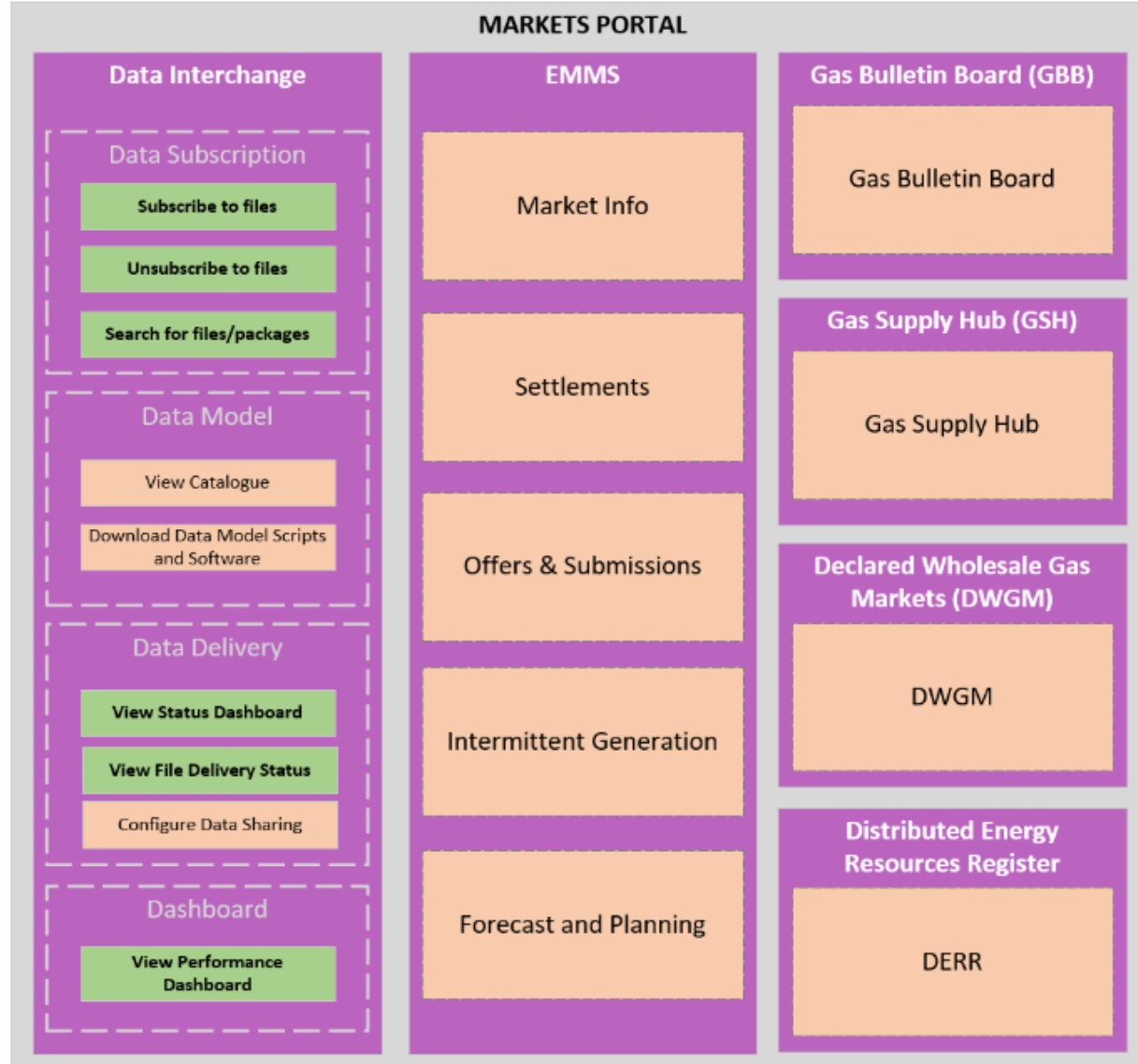
# Current MSATS Browser Capabilities



Out-of-Scope – Application Specific  
 In-Scope

Have we missed any current state or new capabilities participants see as required for LVI?

# Other Browser Capabilities

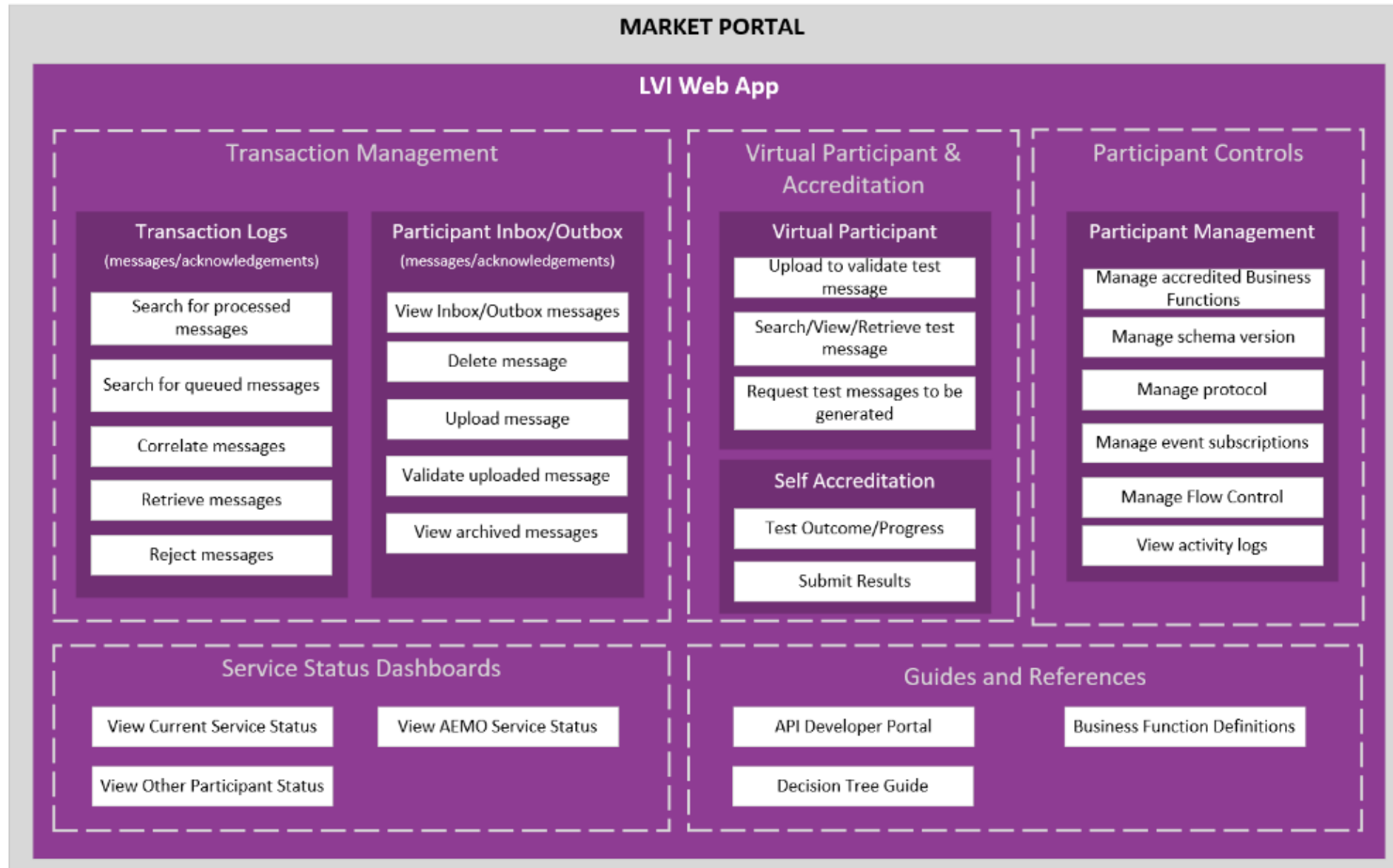


 Out-of-Scope – Application Specific  
 In-Scope



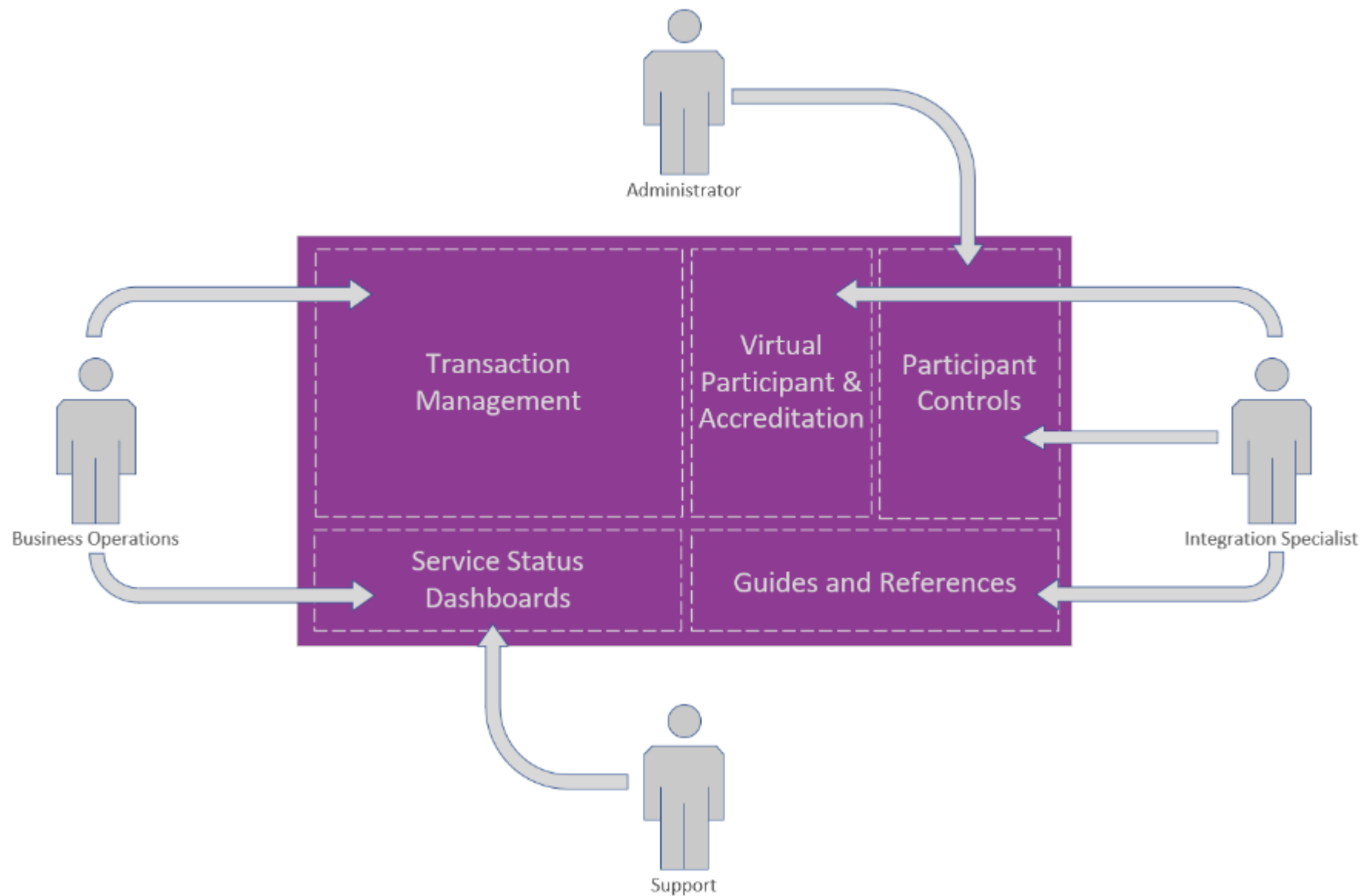
Have we missed any current state or new capabilities participants see as required for LVI?

# IDX LVI Capabilities



Have we missed any current state or new capabilities participants see as required for LVI?

# Use Cases and Personas

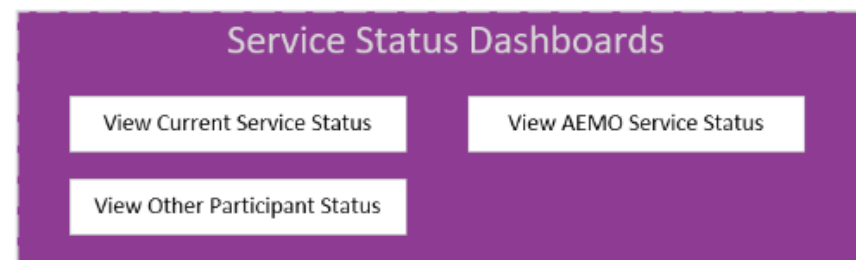
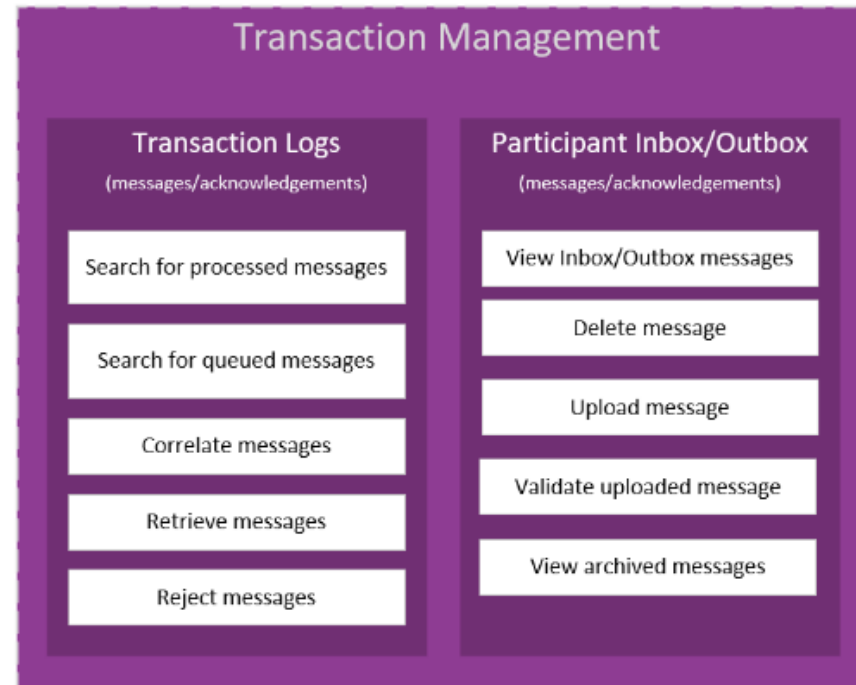


# UC: Business Operations Staff

- Use Case - Business Operations Staff uploading transactions via IDX LVI
- Objective - Fulfill participant ID's role-based obligations through operational data exchange.
- Process - User navigates to the **Inbox** and uploads a prepared Transaction for file exchange
  - Single Participant ID focus where data exchange is performed for one participant ID at a time.
  - Supports only data exchange-specific functions.
  - Not Supported:
    - Application-specific functions.
    - Web forms for viewing or creating new transactions based on procedural requirements.
- Related Use Cases
  - User navigates to the **Transaction Log** and uses common search fields across business functions to verify the uploaded transaction was sent successfully.
  - User navigates to the **Hub Queue** and uses common search fields to retrieve MACK and TACK acknowledgments from the recipient.

**Dashboard** Capability for Business Operations would allow them to:

- View summary metrics related to their BAU interaction with the data exchange platform (e.g. how many transactions have been sent for a particular business function for a time period, how many aged messages are there in the Hub Queue, etc.)





# UC: Support (Business / IT)

- Use Case - Support (Business / IT) diagnosing issues via Service Status Dashboard
- Objective - Identify and diagnose issues within the Market Data Exchange processes to ensure smooth and uninterrupted data flow.
- Process - User navigates to the **Service Status Dashboard** reviews real-time metrics and statuses displayed on the dashboard. Access rights are based on user roles with appropriate permissions
  - Monitor multiple Participant ID's simultaneously
  - View key metrics such as volume of transactions
- Key areas include **Flow Control Status** and **Real-Time Connection Monitoring**

## Service Status Dashboards

View Current Service Status

View AEMO Service Status

View Other Participant Status

**Dashboard** capability will allow the Participant to ensure their Participant ID's are operating successfully, as well as:

- Able to view AEMO's Systems status details as well as other Participant's data exchange status details
- Assist with trouble shooting data exchange issues – be able to identify if the issue relates to:
  - their own Market System
  - their Flow Control status
  - the Flow Control status of a Recipient they are interacting with
  - an AEMO platform issue

# UC: IDX Integration Specialist

- Use Case - IDX Integration Specialist performing schema upgrade.
- Objective - To subscribe to a schema version for a business function against a specific pattern. Additionally, to perform production verification testing after a schema upgrade, confirming the ability to send and receive transactions using the new schema.
- Process - User navigates to the **Manage Schema Version** to configure schema preference after which The participant uses the **Virtual Participant** feature within the LVI to perform relevant tests, ensuring compatibility with the new schema by sending and receiving test transactions.

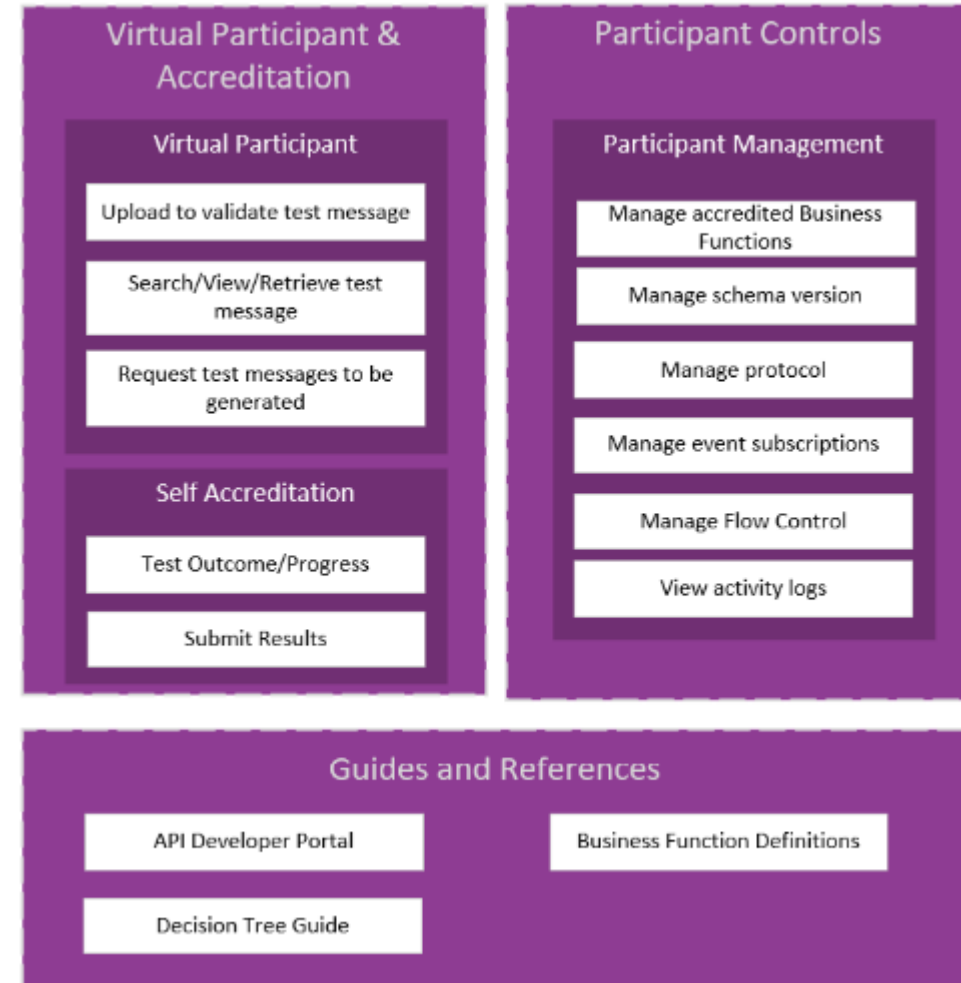
**Subscriptions** capability would allow the IDX Integration Specialist to subscribe to various Events, including:

- New Inbound Message
- Aged Message Alert
- Flow Control Event
- Outbound Message available (NEM Report)



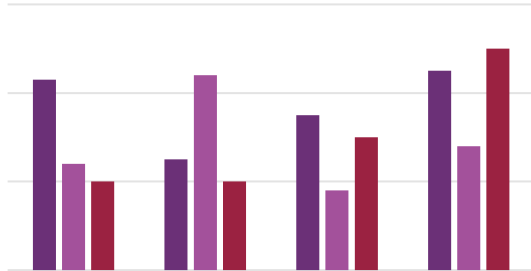
**Flow Control** capability would allow the Participant to:

- View the Flow Control Configuration and Control Files
- Suspend delivery to themselves if they are undertaking system upgrades
- To update the Flow Control Configuration (with limitations in place)



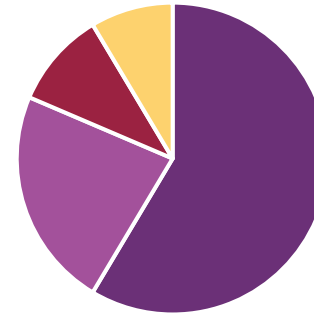
# Service Status Dashboard

View based on User Role



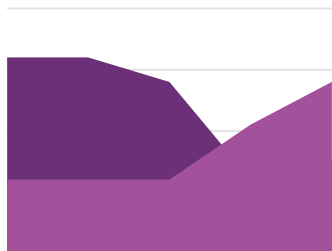
## Real-time Connection Monitoring

- Provide real time insights to Data Exchange processes
- Health status of the Heartbeat Function to the Market
- Monitor the Connection Status to the API Endpoint



## Transactions Metrics

- Transaction Management volumes



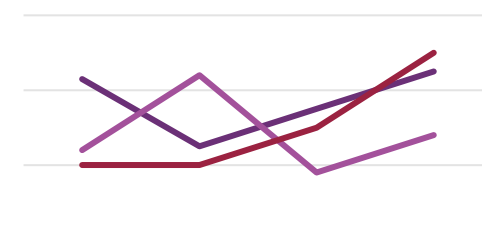
## Message Acknowledgements Tracking

- Message Acknowledgements are being received successfully



## Alerts

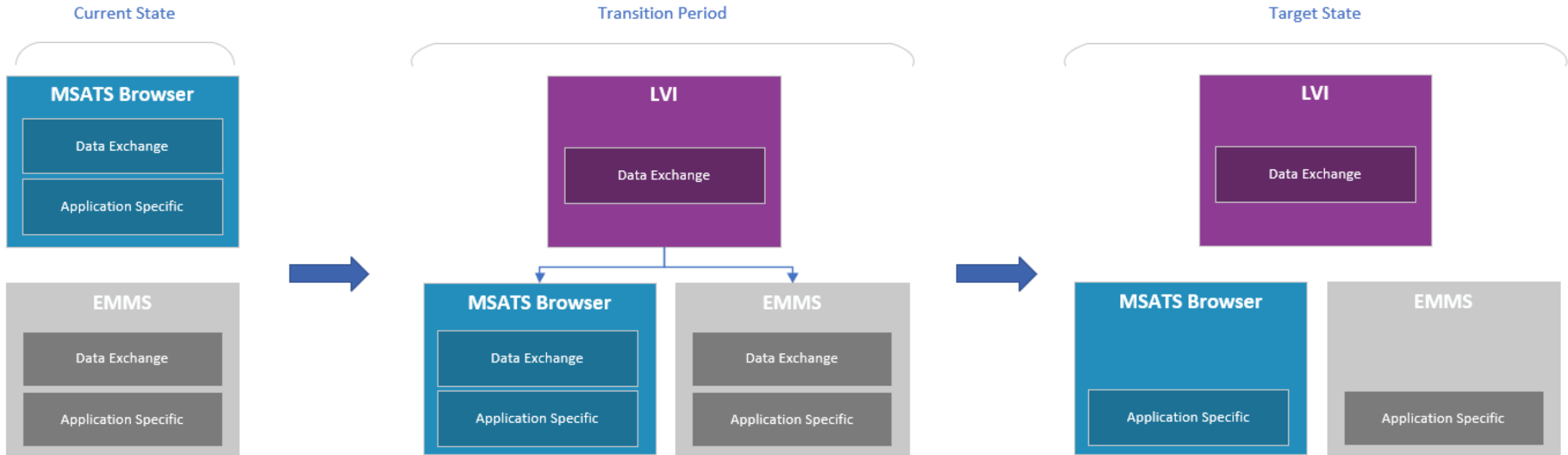
- Issues requiring attention highlighted
- Failed Connections highlighted
- Flow Control messages or alerts



## Transactions Flow Verification

- Inbox Transaction Data is flowing correctly

# Transition Period



- Data exchange for current market transactions will remain available in the existing web applications without any changes.
- The data exchange functionality on the LVI will only support the new IDX Business Functions.
- Users will have the option to navigate directly to the existing web applications or through a routing screen on the LVI.

**Important Note:** Future AEMO projects may affect some existing web application capabilities.

# Notes

Bhanu and Antonio spoke to the IDX LVI topic, a few questions were raised and clarified during this particular section.

## The following questions were raised:

- Participant was seeking clarification for '**Out of Scope**' items displayed on the diagram (Current MSATS Browser Capabilities slide) – “does it mean the functionality would be gone after IDX is implemented?”. **AEMO** clarified the transition slide would confirm that the existing capabilities (for MSATS) would remain where they are during the transition.
- A question was raised around **Self-Serve Reports** and **AEMO** clarified that these particular reports on User Profiles will be part of the **IDAM Solution**. IDX has not considered any Self-Serve Reports but there has been considerations for Self-Serve Reports on User Profiles in the IDAM program. Further clarification was provided on the IDX LVI Capabilities:
  - Currently, there are two parts to the capability MSATS browser contains – one is Participant Administration side which will belong in the IDAM capability, the other major component (currently within the MSATS solution) is Data Exchange (NEM B2B for example) is what we are covering as part of IDX LVI Capabilities.
- Participant enquired if the IDX LVI would contain any **Transaction Limit** view (**Queue Monitoring**) as they pointed out it seems to be listed in the Out of Scope (current capabilities) category in the diagram. **AEMO** confirmed that there are certain application specific details which remain in MSATS, as we go through the detailed design there will be analysis performed on the boundaries on what will be in IDX LVI vs current MSATS capability, from a User friendly functionality perspective. There will be visibility provided for Stop File volumes, etc. in IDX LVI.
- Question was raised regarding '**New Transaction**' being out of scope and **AEMO** confirmed that in IDX LVI there will be no screens for creating New Transactions (exists today) as they are forms which are specific to Transaction Types. IDX LVI focuses on more generic Data Exchange capability and move away from Transaction specific forms, Participants will be able to upload all types of Transactions using the upload file functionality (pasting JSON payloads).
- Participant enquired how will Users access **IDX LVI capabilities vs Application specific capabilities**, will there be a single sign-on etc. **AEMO** confirmed that this will be part of the Identity and Access discussions in **IDAM**. During the **Transition** period, there will be the IDX LVI webapp which will have it's own access controls via **IDAM** and MSATS access will remain as it works today. There are sessions planned in 2025 on identity and entitlement which will better explain the interaction between user permissions and how a User navigates between these. Also, there will be a way for a User to be routed to the Application specific functions as they come to IDX LVI and need to access anything Application specific.
- Participant enquired – in the target state, if there is an **outage** on LVI, will it impact both **Retail** and **Wholesale**. **AEMO** confirmed that it will be a consolidated web application and there will be features serving both Retail and Wholesale, meaning the impact will be on both. The overall intent is that there is a unified capability between Retail and Wholesale, that being the case there will be considerations given to things such as Outage windows. If there's a particular service such as Archiving, which is shared between Retail and Wholesale and there were changes being made that need an Outage, in this case it will mean that Participants will not be able to access both Retail and Wholesale during the Outage window. LVI will be built to meet the service levels defined for AEMO to operate these services; these are very high and require AEMO to have rapid plans to resolve outages in place. An outage on LVI in and of itself would not stop IDX from operating.



# 3. IDX Synchronous Pattern

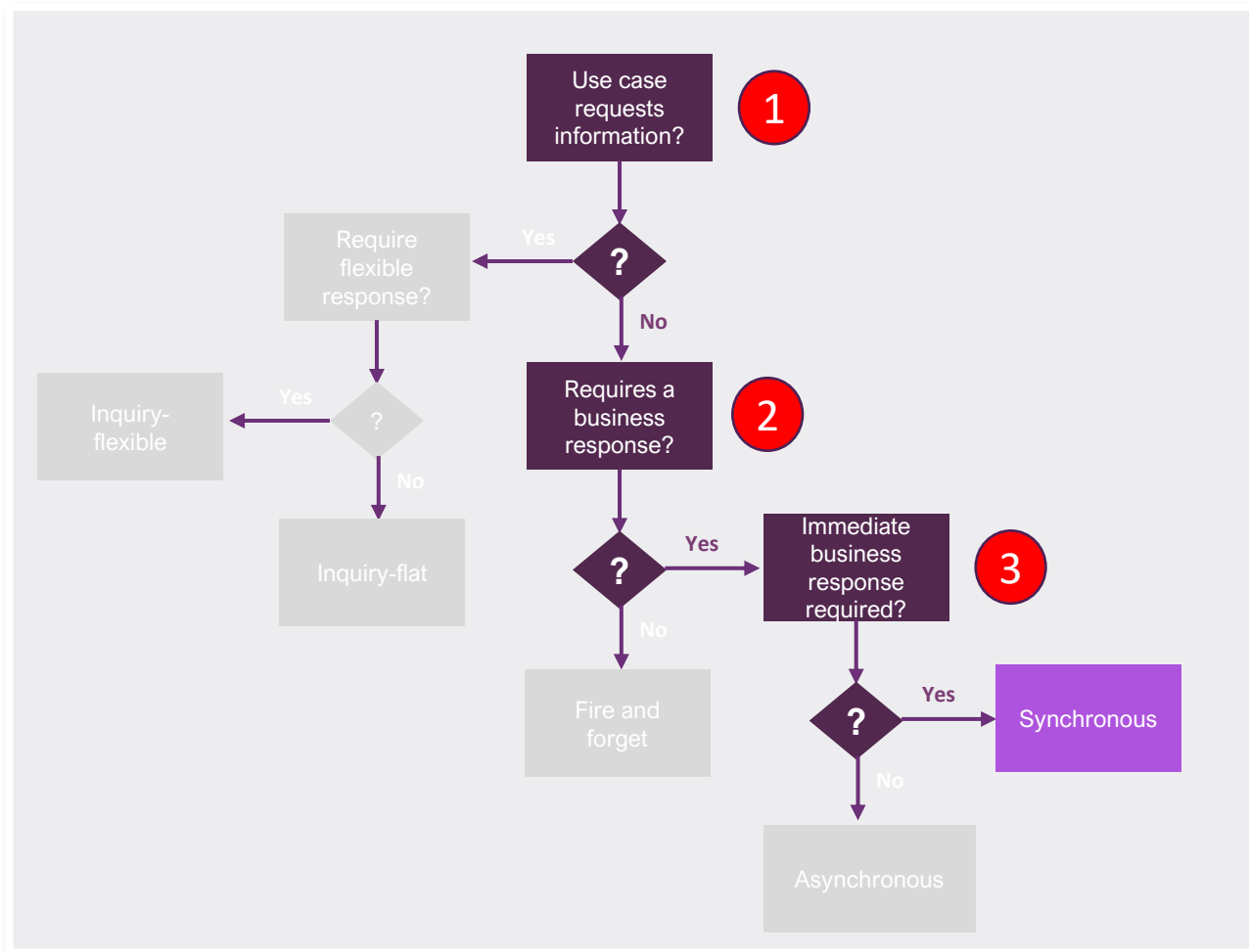
Antonio Ramos



# Synchronous Pattern - Definitions

Definitions	Business document received, validated, processed and business response delivered in the blocking thread. The connection between the initiator and recipient remains open during this period until the configured timeout.
Data Direction	Inbound – AEMO is the recipient of the business document request and responds with the business document response
Communication Channel	Restful API ONLY
Supported API Methods	POST, PATCH, DELETE, PUT  Note: GET method is part of the Inquiry Service pattern
Acknowledgement	Message Acknowledgement and Transaction Acknowledgements are <b>not applicable</b>
Features/Capabilities	Refer to Validation Matrix – future slides

# Synchronous Pattern - Decision Tree



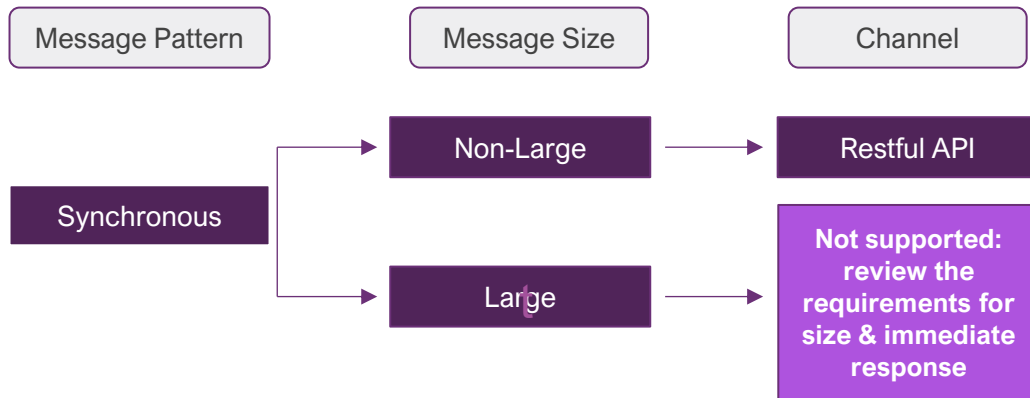
## Decision tree applied criteria

1. Request is submitted
2. The request requires a business response
3. The business response is required in a synchronous manner

# Synchronous vs. Inquiry Services

	Synchronous	Inquiry Flat	Inquiry Flexible
Data Direction	Inbound	Outbound	Outbound
Communication Channel	Restful API	Restful API	GraphQL
Supported API Methods	POST, PATCH, DELETE, PUT	GET	GraphQL (POST or GET)
Response Payload	Server defined	Server defined	Client defined
Acknowledgement	Not applicable	Not applicable	Not applicable

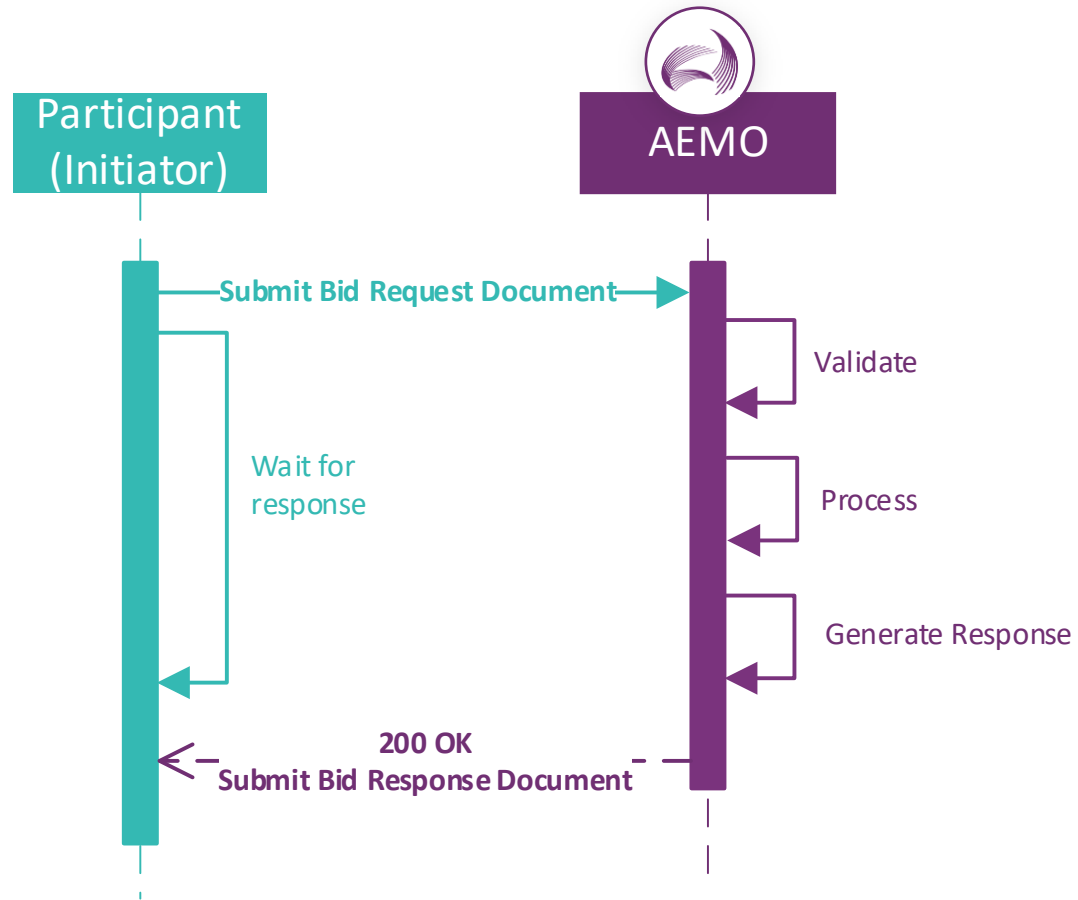
# Synchronous Pattern - Decision Tree



- Synchronous patterns are only applicable to **non-large** message sizes
- Synchronous patterns are only suitable for **RESTful API channels**
- Large message size payloads **cannot** be implemented using a synchronous pattern.
- The synchronous pattern is generally not suitable for large payloads due to the following reasons:
  - Long wait times, large payload transfers may be slow or encounter network latency
  - Poor user experience
  - Complex Error handling



# Synchronous Pattern - Sample



## Business Function API Endpoint

**Market:** NEM Wholesale

**Business Function:** ..

**Business Function API:** <https://.../NEM/Dispatch/v1/bids>

Use Case	API Method	API Definition
Participant submits Bids to AEMO	POST	NEM/ <b>Dispatch</b> /V1/bids

# Synchronous API - Features

Feature Category	Features / Capabilities	Sync API	Async API Inbound	Async API Outbound	Async Large File Inbound	Async Large File Outbound	Fire & Forget API Outbound	Fire & Forget Large File Outbound	Inquiry Flat	Inquiry Dynamic	Event Notifications	Other Categories
Network Connectivity and Security	Connectivity: MarketNet & Internet	X	X	X	X	X	X	X	X	X	X	
	Certificate Management	X	X	X	X	X	X	X	X	X	X	X
	Transport Layer Security	X	X	X	X	X	X	X	X	X	X	
IDAM	IDAM Authentication & Authorisation Patterns	X	X	X	X	X	X	X	X	X	X	
Policies	Encryption & encoding	X	X	X	X	X	X	X	X	X	X	
	Flow control & spike management	X	X	X	X	X	X	X	X	X		
	Round Robin				X	X	X	X			X	
	Virus & malware scans				X	TBC	X	TBC				
	Enforce file/message size limitations		X		X							
	Enforce file masking		TBC		X		X					
	Other policy enforcements	X	X	X	X	X	X	X	X	X	X	X
Archiving	Archiving	X	X	X	X	X	X	X				
Non-Repudiation	Non-Repudiation	X	X	X	X	X	X	X	X	X	TBC	
Logging & Monitoring	Technical Audit Logs - Capture & LVI views	X	X	X	X	X	X	X	X	X	X	
	Monitoring via LVI	X	X	X	X	X	X	X	X	X	X	
Payloads	Payload compression	X	X	X	X	X	X	X	X	X		
	JSON payload data exchange	X	X	X	X	X	X	X	X	X	X	
	AEMOCSV payload data exchange	X	X	X	X	X	X	X	X	X		
	Unstructured payloads	X	X	X	X	X	X	X	X	X		
	Schema validations	X	X	X	X	X	X	X	X	X	X	
Transformation	On-Demand transformation	X		X			X		X			
	Hub transformation based on opt-in version					X		X				
	Support inbound 'n' & 'n-1'	X	X		X				X	X		
	Ability to define the outbound data elements									X		
Business Acks	Manage message acknowledgements		X	X	X	X					X	

# Synchronous API - Features

Feature Category	Features / Capabilities	Sync API	Async API Inbound	Async API Outbound	Async Large File Inbound	Async Large File Outbound	Fire & Forget API Outbound	Fire & Forget Large File Outbound	Inquiry Flat	Inquiry Dynamic	Event Notifications	Other Categories
Orchestration & Routing	Orchestration	X	X	X	X	X	X	X	X	X		
	Routing	X	X	X	X	X	X	X	X	X		
Fan In & Out	Fan-out		X	X	X	X	X	X			X	
	Fan-In		X		X							
Message Enrichment	Message enrichment	X	X	X	X	X	X	X	X	X		
Business Logs	Business Message & Transaction Logs		X	X	X	X	X	X				
Event Notifications	Trigger outbound message event notification			X		X		X			X	
	Flow control notifications (stop files)					TBC			X		X	
	System health & notifications				TBC	TBC			X		X	
AEMO Gateway	AEMO Gateway supported patterns, Channels and Payloads	X	X	X	X	X	X	X	X	X	X	
IDX Self Certification	IDX Technical Self Certifications	X	X	X	X	X	X	X		X	X	
	Responder capability	X	X	X	X	X	X	X	X	X		
	Validation Module											X
IDX LVI	IDX LVI capabilities	X	X	X	X	X	X	X				X
Manifest & Reconciliation Process	Patterns where message exchange will logged for Manifest Process			X		X	X	X				
	Reconciliation process for the messages/files transacted using the patterns:			X		X	X	X				
	Retrigger transactions			X		X		X				
Enhance Developer Experience	Developer experience (API, MFT Portals, Data dictionary system documentation)	X	X	X	X	X	X	X	X	X	X	X
Non Functionals	Highly available services (Tier 1 services)	X	X	X					X	X	X	
	Highly available services (Tier 2 services)				X	X	X	X				
	Performance & volume simulation	X	X	X	X	X	X	X	X	X	X	X
Exception Management & Error Handling	Business exceptions & errors	X	X	X	X	X			X	X		
	Technical exceptions & errors	X	X	X	X	X	X	X	X	X		

# Synchronous SLAs

To ensure reliability, performance and predictability, Service Level Agreements (SLAs) for synchronous APIs will be established and monitored. These SLAs will be consulted and agreed upon with participants during the technical design phase.

	Critical Business Function	Non-critical Business Function
Response Times	<ul style="list-style-type: none"> <li>• Average Response Time: xxx <b>ms</b></li> <li>• 95<sup>th</sup> Percentile Response Time: yyy <b>ms</b></li> <li>• Maximum Response Time: zzz <b>ms</b></li> </ul>	<ul style="list-style-type: none"> <li>• Average Response Time: aaa <b>ms</b></li> <li>• 95<sup>th</sup> Percentile Response Time: bbb <b>ms</b></li> <li>• Maximum Response Time: ccc <b>ms</b></li> </ul>
Availability	<ul style="list-style-type: none"> <li>• Uptime: xx.xx%</li> <li>• Error Rate: x.x%</li> <li>• Rate Limit: xxx <b>requests per minute per participant</b></li> </ul>	<ul style="list-style-type: none"> <li>• Uptime: yy%</li> <li>• Error Rate: y.y%</li> <li>• Rate Limit: yyy <b>requests per minute per participant</b></li> </ul>
Error Handling	<ul style="list-style-type: none"> <li>• Error Codes</li> <li>• Error Messages</li> <li>• Retry mechanisms</li> <li>• Incident Response Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Error Codes</li> <li>• Error Messages</li> <li>• Retry mechanisms</li> <li>• Incident Response Plan</li> </ul>

# Notes

Antonio spoke to the IDX Synchronous Pattern Topic, a few questions were raised during this section.

**The following questions were raised:**



# 4. IDX Fire and Forget Pattern

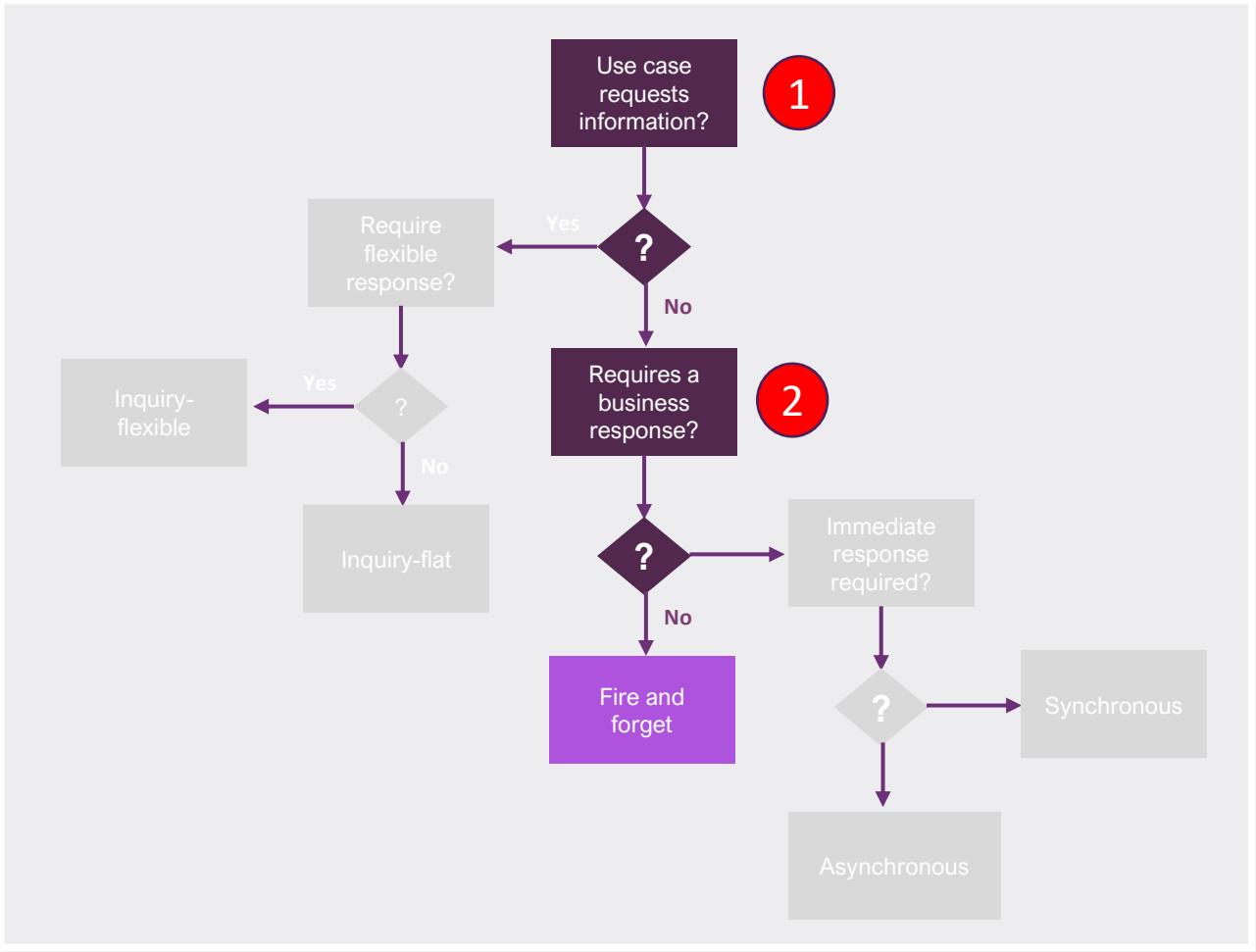
Antonio Ramos



# Fire and Forget Pattern - Definitions

Definitions	The initiator sends the request message with no expectation of handling a response message. The initiator does not wait for the response to continue operating.
Data Direction	Inbound OR Outbound
Communication Channel	<ul style="list-style-type: none"><li>• Restful API</li><li>• File Transfer</li></ul>
Acknowledgement	Message Acknowledgement and Transaction Acknowledgements are <b>not applicable</b>
Features/Capabilities	Refer to Validation Matrix – future slides

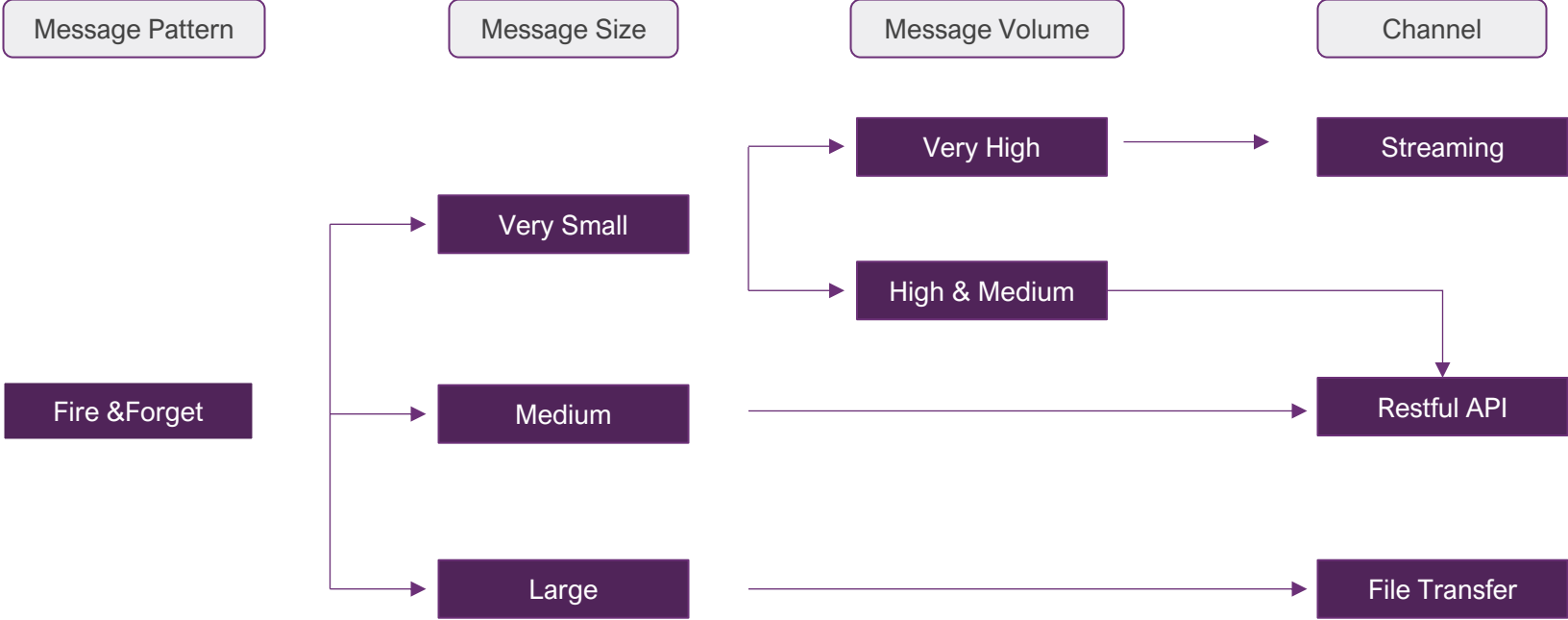
# Fire and Forget – Decision Tree



## Decision tree applied criteria

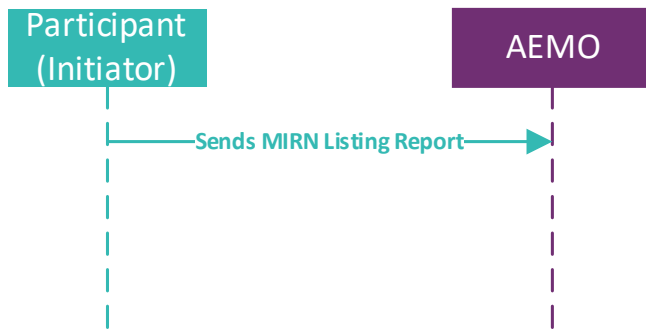
1. Data is being submitted, not requested
2. A response is not required, as there is no expectation of validation or acknowledgement

# Fire and Forget – Decision Tree



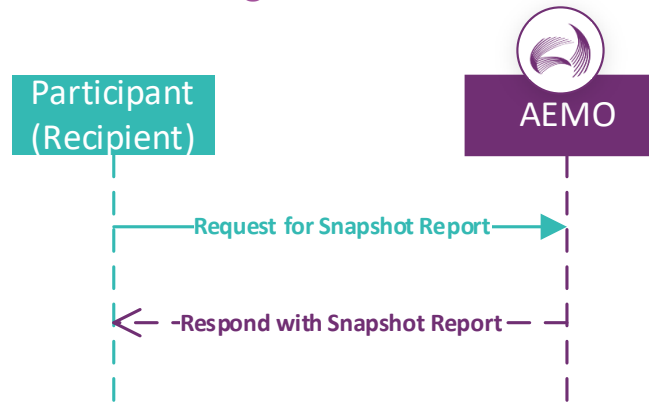
# Fire and Forget - Samples

## F&F: Large File Inbound



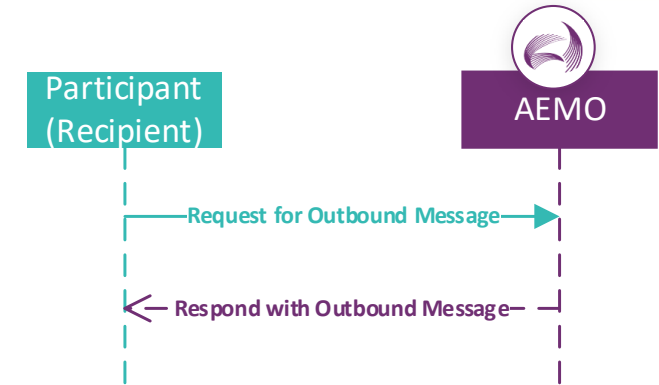
- The participant submits a MIRN Listing Report to AEMO using the Large File Transfer mechanism.
- The participant does not expect any acknowledgement or a business response back from AEMO.

## F&F: Large File Outbound



- AEMO generates an outbound Snapshot Report that is ready for retrieval.
- Participants can retrieve the Snapshot Report using the Large File Transfer mechanism.
- AEMO does not expect an acknowledgement or any business response back from the participants.
- AEMO will remove the Snapshot Report after a configured Time-To-Live period.

## F&F: API Outbound



- AEMO generates an outbound message that is ready for retrieval.
- The participant retrieves the outbound message using a RESTful API.
- AEMO does not expect an acknowledgement or any business response back from the participants.
- AEMO will remove the outbound message after a configured Time-To-Live period.

# Fire and Forget - Features

Feature Category	Features / Capabilities	Sync API	Async API Inbound	Async API Outbound	Async Large File Inbound	Async Large File Outbound	Fire & Forget API Outbound	Fire & Forget Large File Outbound	Inquiry Flat	Inquiry Dynamic	Event Notifications	Other Categories
Network Connectivity and Security	Connectivity: MarketNet & Internet	X	X	X	X	X	X	X	X	X	X	
	Certificate Management	X	X	X	X	X	X	X	X	X	X	X
	Transport Layer Security	X	X	X	X	X	X	X	X	X	X	
IDAM	IDAM Authentication & Authorisation Patterns	X	X	X	X	X	X	X	X	X	X	
Policies	Encryption & encoding	X	X	X	X	X	X	X	X	X	X	
	Flow control & spike management	X	X	X	X	X	X	X	X	X		
	Round Robin				X	X	X	X			X	
	Virus & malware scans				X	TBC	X	TBC				
	Enforce file/message size limitations		X		X							
	Enforce file masking		TBC		X		X					
	Other policy enforcements	X	X	X	X	X	X	X	X	X	X	X
Archiving	Archiving	X	X	X	X	X	X	X				
Non-Repudiation	Non-Repudiation	X	X	X	X	X	X	X	X	X	TBC	
Logging & Monitoring	Technical Audit Logs - Capture & LVI views	X	X	X	X	X	X	X	X	X	X	
	Monitoring via LVI	X	X	X	X	X	X	X	X	X	X	
Payloads	Payload compression	X	X	X	X	X	X	X	X	X		
	JSON payload data exchange	X	X	X	X	X	X	X	X	X	X	
	AEMOCSV payload data exchange	X	X	X	X	X	X	X	X	X		
	Unstructured payloads	X	X	X	X	X	X	X	X	X		
	Schema validations	X	X	X	X	X	X	X	X	X	X	
Transformation	On-Demand transformation	X		X			X		X			
	Hub transformation based on opt-in version					X		X				
	Support inbound 'n' & 'n-1'	X	X		X				X	X		
	Ability to define the outbound data elements									X		
Business Acks	Manage message acknowledgements		X	X	X	X					X	

# Fire and Forget - Features

Feature Category	Features / Capabilities	Sync API	Async API Inbound	Async API Outbound	Async Large File Inbound	Async Large File Outbound	Fire & Forget API Outbound	Fire & Forget Large File Outbound	Inquiry Flat	Inquiry Dynamic	Event Notifications	Other Categories
Orchestration & Routing	Orchestration	X	X	X	X	X	X	X	X	X		
	Routing	X	X	X	X	X	X	X	X	X		
Fan In & Out	Fan-out		X	X	X	X	X	X			X	
	Fan-In		X		X							
Message Enrichment	Message enrichment	X	X	X	X	X	X	X	X	X		
Business Logs	Business Message & Transaction Logs		X	X	X	X	X	X				
Event Notifications	Trigger outbound message event notification			X		X		X			X	
	Flow control notifications (stop files)					TBC			X		X	
	System health & notifications				TBC	TBC			X		X	
AEMO Gateway	AEMO Gateway supported patterns, Channels and Payloads	X	X	X	X	X	X	X	X	X	X	
IDX Self Certification	IDX Technical Self Certifications	X	X	X	X	X	X	X		X	X	
	Responder capability	X	X	X	X	X	X	X	X	X		
	Validation Module											X
IDX LVI	IDX LVI capabilities	X	X	X	X	X	X	X				X
Manifest & Reconciliation Process	Patterns where message exchange will be logged for Manifest Process			X		X	X	X				
	Reconciliation process for the messages/files transacted using the patterns:			X		X	X	X				
	Retrigger transactions			X		X		X				
Enhance Developer Experience	Developer experience (API, MFT Portals, Data dictionary, system documentation)	X	X	X	X	X	X	X	X	X	X	X
Non Functionals	Highly available services (Tier 1 services)	X	X	X					X	X	X	
	Highly available services (Tier 2 services)				X	X	X	X				
	Performance & volume simulation	X	X	X	X	X	X	X	X	X	X	X
Exception Management & Error Handling	Business exceptions & errors	X	X	X	X	X			X	X		
	Technical exceptions & errors	X	X	X	X	X	X	X	X	X		



# Notes

Antonio spoke to the IDX Fire and Forget Pattern Topic, a few questions were raised during this section.

## The following questions were raised:

- Large File Fire and forget was identified as missing in the matrix, there is an action on AEMO to update.
- In case of any errors in this scenario, would they be visible in the LVI dashboards for the IT support people to look at? **AEMO responded** HTTPS perspective, you would expect to see that in your service status dashboard
- Should Fire and Forget provide Non-repudiation **AEMOs Response** It will be a case by case basis, however this was challenged so AEMO took an **action** to go away and assess.

# 5. Future Topics

Graeme Windley



# IDAM Future Topics

# IDAM Focus Group: Security Compliance Overview

Early 2025



In this session we will discuss security compliance in terms of what AEMO will require participant solution to provide for machine-to-machine connectivity as well as participant process requirements noting these will in part be required to meet AEMO and participants obligations including SOCI and AESCSF.



## Audience Skill Set for Focus Group Discussion

- Security representatives
- Technical leads support federation within your Organisation
- Participant administrators

We will discuss policy and delve into process and technical controls that will be required to enforce such policy.

## Topics for discussion

- Identity
- Entitlements
- Federation Enrolment

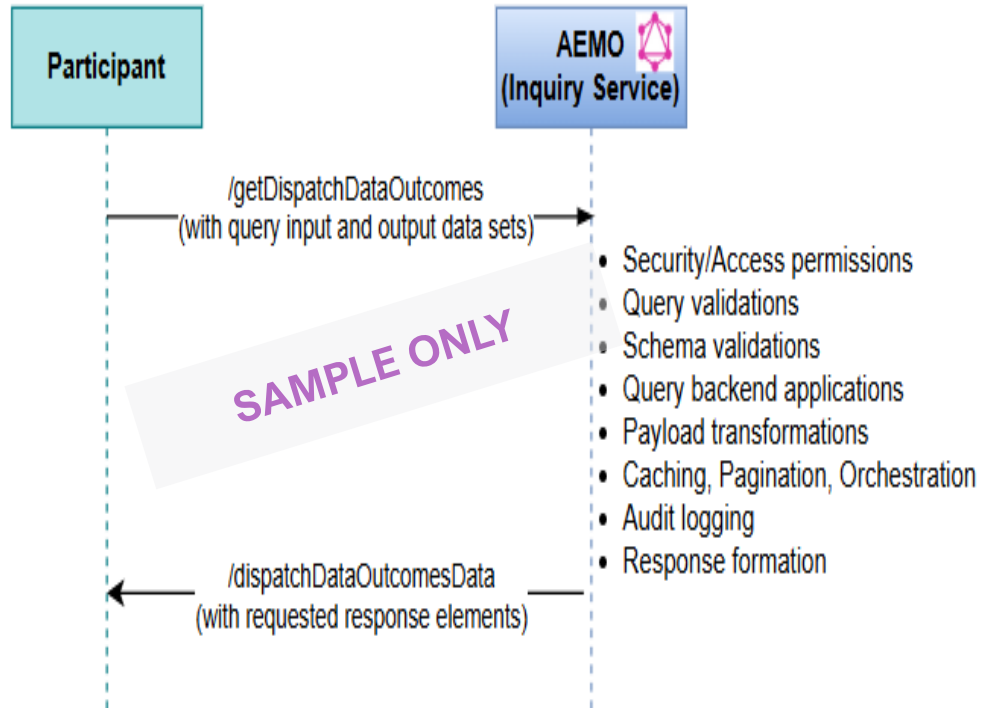
***Note:** There are other obligations relating to cyber controls and existing participant obligations to connect to AEMO services not proposed to be included in this session which will focus specifically on the introduction of the new IDAM capability*

# IDX Future Topics

# IDX Focus Group Session: “Inquiry Service”

Friday 21 February 2025, 1:00pm – 4:00pm AEDT

The objective of this focus group session is to discuss capabilities to be delivered in the IDX Inquiry Service.



The **Inquiry Service** uses a query language framework for APIs, such as GraphQL, enables clients only retrieve data they are interested in, removing the dependencies on new data introduced.

Sample business drivers for consideration in the focus group are:

- The capability for clients to define the structure of their response by customising the request query.
- To addresses over-fetching challenges where a large dataset is returned by an API, but only a subset of the fields may be of interests to the client.



## Audience Skill Set

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

## Topics for discussion

- Demonstrate current use case(s) that require the over fetching of data.
- A draft end to end business use case for Inquiry Service flow.
- Sequence diagram demonstrating the Inquiry Service to support the end-to-end business case.
- Interface requirements for implementing the Inquiry Service.
- Discuss on the Proof-of-concept outcomes.

*This focus group discussion will be relevant to all stakeholders who participate in exchanging data between AEMO and energy stakeholders via user interfaces*

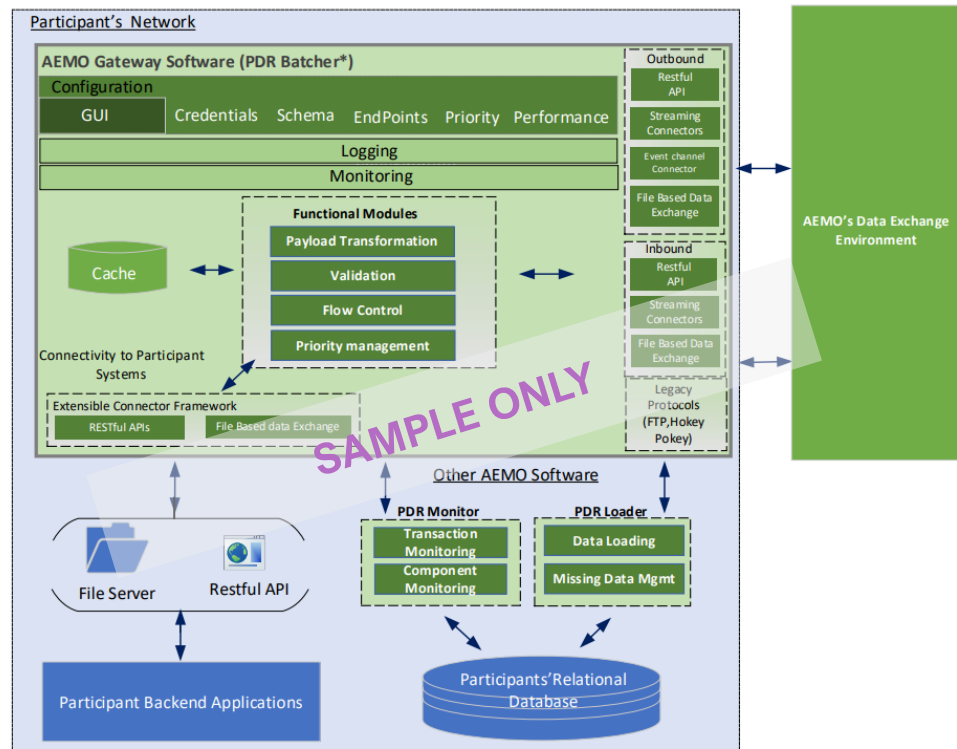
# IDX Focus Group Session: AEMO Gateway Software

Friday 14 February 2025 – Time TBC

Nominations closed



The objective of this focus group session is to discuss capabilities to be delivered by the AEMO Gateway Software, which is proposed to combine the Participant Batcher, pdrBatcher capabilities and is extended to support the target state AEMO IDX Environment.



The **AEMO Gateway Software** will be participant-side software, developed by AEMO, to allow participants to easily interface with new services on the IDX platform. Primarily the AEMO Gateway Software will offer the same services as pdrBatcher does today and allow the translation of existing integration to the new IDX patterns.

Sample business drivers for consideration in the focus group are:

- As part of transition, reduce or remove the need for participants to “recode” their integrations to AEMO's new IDX patterns.
- Support participants using the existing pdrBatcher software.
- Allow 3<sup>rd</sup> party integrators a cost-effective mechanism to integrate their applications into IDX.

**Audience Skill Set**

- Technical leads from participants using pdrBatcher.
- Technical/business leads who wish to use existing integration patterns during transition.

**Topics for discussion**

- Scope of the AEMO Gateway Software
- Existing pdrBatcher features
- Capabilities required by the AEMO Gateway Software e.g.:
  - Connectivity and integration services
  - Data handling and Transformation
  - Flow and priority management
  - Configuration and monitoring
  - Logging and error management

*This focus group discussion will be relevant to all stakeholders who currently use pdrBatcher, and participants who may look to use AEMO Gateway Software to integrate with services transitioned to the new IDX platform.*

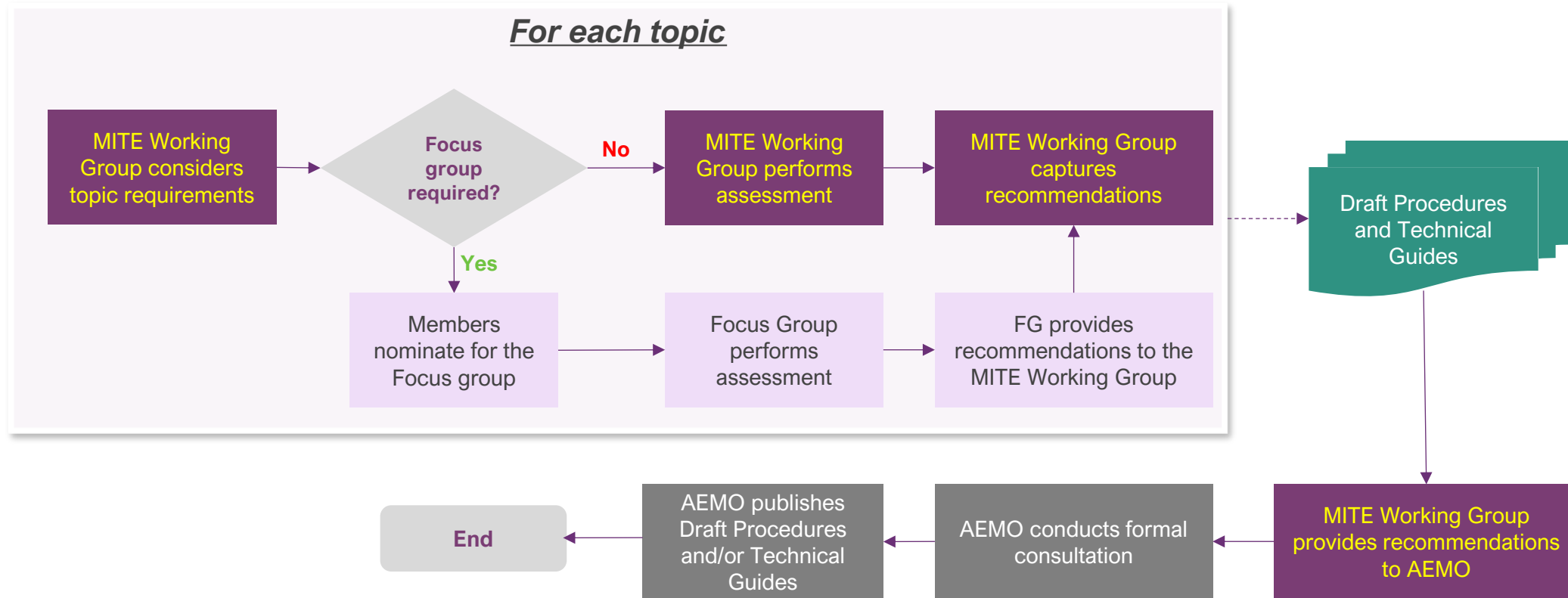


# 6. Forward Plan

Graeme Windley



# Consultation Workshop Structure



## **MITE Working Group**

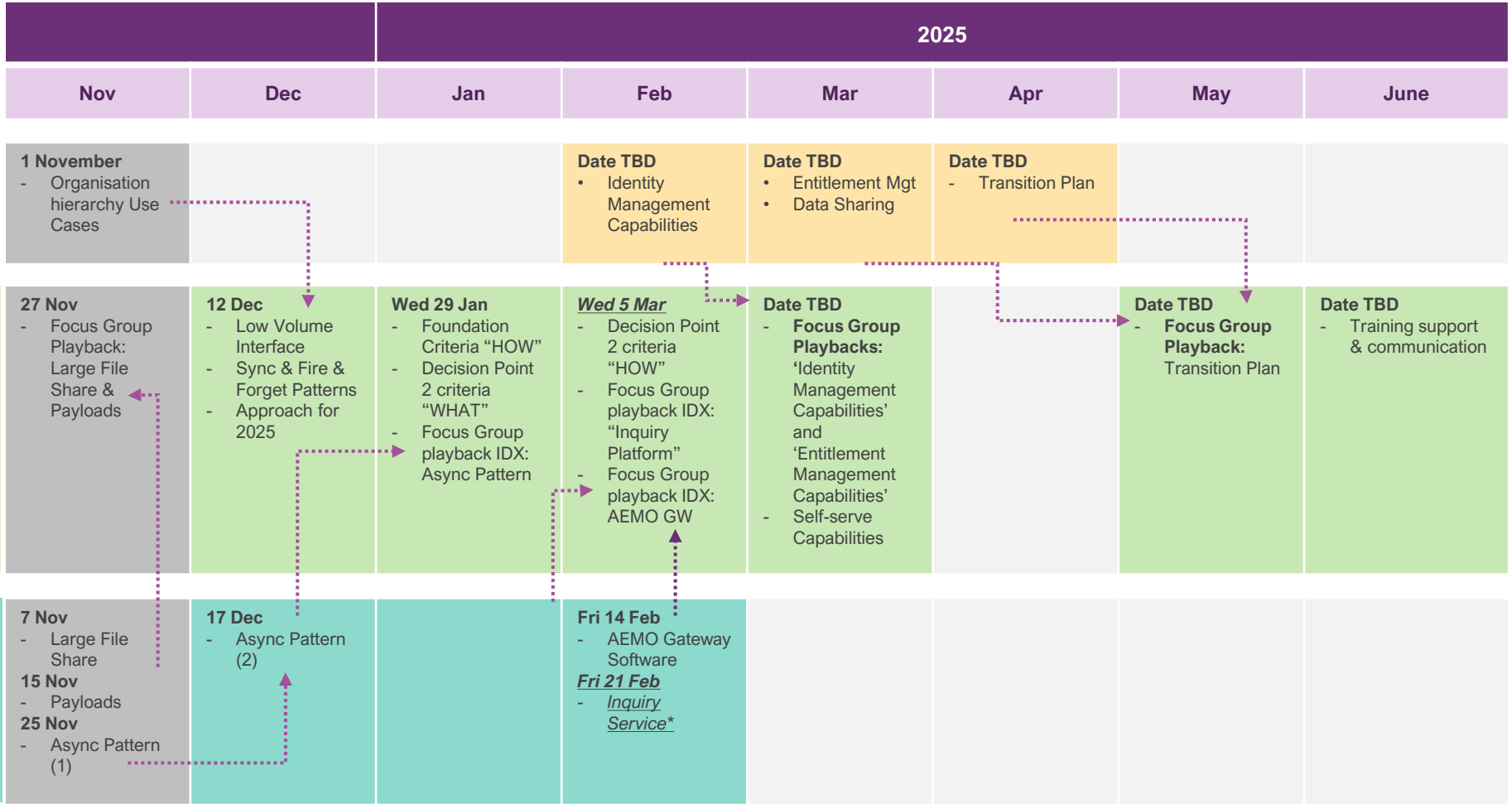
- **Actively participate** in highly technical workshop discussions to assess options, co-design draft deliverables.
- **Review key drafts** of documentation prepared by the Focus Group.
- **Consult** internally within own organisation to test, socialise and ultimately champion.

## **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

# Indicative Timeline for Upcoming Sessions

(as at 12 Dec 2024)



- **Notes:**
  - **'Inquiry Service':**
    - Date is under review. AEMO is completing a POC and will need to ensure this is completed with results summarised and presented before hosting the Focus Group on the subject. This date will not impact the overall plan.
- **Notes 12 Dec:**
  - **'Inquiry Service' & Feb MITE WG:**
    - The date of the Inquiry Service Focus Group has now been deferred three weeks to 21 Feb.
    - The MITE WG scheduled in Feb has subsequently been deferred one week to enable playback of the Inquiry Service FG session to proceed.

# 7. General Business and Next Steps



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



# General Business and Next Steps

MITE Working Group Forward Plan		
Stream	Content	Timing
IDX	<ul style="list-style-type: none"> <li>Foundation Criteria “HOW”</li> <li>Decision Point 2 criteria “WHAT”</li> <li>Focus Group playback IDX: Async Pattern</li> </ul>	29 January '25
IDX	<ul style="list-style-type: none"> <li>Decision Point 2 criteria “HOW”</li> <li>Focus Group playback IDX: “Inquiry Platform”</li> <li>Focus Group playback IDX: AEMO GW</li> </ul>	26 February '25

Focus Group Forward Plan		
Stream	Topic	Timing
IDX	Inquiry Service Focus Group	21 February '25
IDX	AEMO Gateway Software Focus Group	14 February '25





For more information visit

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

# Appendix A

AEMO Competition Law - Meeting Protocol





# 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>