



**Energy Transformation
Implementation Unit**

WEM Reform Implementation Group (WRIG)

Meeting #2

7 May 2020





Ground rules and virtual meeting protocols

- Please place your microphone on mute, unless you are asking a question or making a comment.
- Please keep questions relevant to the agenda item being discussed.
- If there is not a break in discussion and you would like to say something, you can 'raise your hand' by typing 'question' or 'comment' in the meeting chat. Questions and comments can also be emailed to wrig@energy.wa.gov.au after the meeting.
- The meeting will be recorded for minute-taking purposes. Please do not make your own recording of the meeting.
- Please state your name and organisation when you ask a question to assist with meeting minutes.
- If there are multiple people dialling in through a single profile, please email wrig@energy.wa.gov.au with the names of the attendees to be recorded in the minutes.
- If you are having connection/bandwidth issues, you may want to disable the incoming and/or outgoing video.



Agenda



9.30
am

Introductions

Aden Barker| ETIU

9.35
am

Joint Industry Plan – Feedback Review

Aden Barker| ETIU and Stuart Featham| AEMO

10.15
am

Joint Industry Plan – Focus Presentation

Arthur Panggabean and Ben Brearley| AEMO

10.45
am

Joint Industry Plan – Review and Reporting

Stuart Featham| AEMO

11.15
am

Market and Power System Procedures

Aden Barker| ETIU and Stuart Featham| AEMO

11.40
am

Next Steps

Aden Barker| ETIU

Joint Industry Plan Feedback review

Session Purpose

- Review and discuss initial feedback on JIP scoping questions



Joint Industry Planning

Framing questions

During the first WRIG session, the following six ‘framing’ questions were raised to initiate group discussion on how to build a Joint Industry Plan (JIP) for the WEM Reform Program:

1. What does or should the Go Live milestone define – is it possible to shift from one set of market/power system arrangements to another in one interval?
2. What are the major changes that you will need to prepare for and/or implement (e.g. IT systems, business process, plant upgrades)?
3. What are the key phases or activities required to be captured in the JIP?
4. What are your views on the testing and trialling arrangements (e.g. scenario-based, ‘parallel run’)?
5. What regulatory considerations need to be addressed (e.g. pre-Go Live requirements to pass scenario exit criteria, post Go Live monitoring and compliance)?
6. What are your key dependencies and high priority information/data requirements?

The following slides summarise the key issues and responses provided and we seek further input from attendees on these topics.



Framing questions feedback

Milestone definitions

Key Points:

- Potential for staged SCED Go Live exists, but participants have differing opinions on what can be staged and how (e.g. STEM separated from ‘real time’ markets)
- Majority preference (to date) is to have cutover within a single period where possible
- There is a need for a backup plan – potentially using the existing systems/market rules
- General consensus that Go-live should incorporate:
 - Publication of required Market Rules, Market Procedures, Interface documentation and guidelines;
 - Significant testing and trial participation of Market Participants;
 - A period of parallel operation for a pre-production environment for AEMO and participants; and
 - a compliance amnesty period.

Other considerations/queries

1. There are likely to be a number of ‘mini’ go lives as different rule obligations are activated pre October 2022 (e.g. new constraint management and GPS obligations) – recommend that we look to define each one.
2. What type of gating/decision making process should be used – who is responsible for Go Live decisions?



Framing questions feedback

Major changes

Key Points:

- There are significant changes across many aspects of participant businesses, including impacts to people, process and technology. The following activities were noted as likely to require significant effort:
 - Trading system upgrades
 - IT infrastructure upgrades (e.g. greater volume of data/flows)
 - Interface modifications
 - Generator communication protocols and signals
 - B2B and customer system modifications (e.g. billing and invoicing)
 - Contractual arrangements
 - Cessation of Generator Interim Access (GIA) arrangements
- Recruitment of labour will be important for enhancing systems – this introduces the potential for resource contention across participants and AEMO

Other considerations/queries

1. Are there any activities related to new entrants (generation and/or retail) that need to be identified specifically?
2. Will parties need to run significant recruitment/procurement exercise to undertake implementation activities?
3. Are there any areas where AEMO can 'build out' its systems to reduce build effort for participants?



Framing questions feedback

Phases & key activities

Key Points:

- There is a dependency on AEMO providing more detailed system design, for participants to assess the impacts to their own IT systems and business processes
- Market trials and transition will require expert advisors to be available for participants to call upon. AEMO and EPWA need to be in a position to support this requirement
- Potential Phasing:
 - Design: Development and release of the Market Rules and other governing docs;
 - Build: Development by AEMO and market participants of IT systems, physical works, organisational and business process changes;
 - Test: end-to-end industry testing of IT and power systems changes
 - Trials: end-to-end market trials (IT and power systems scenarios)
 - Transition: activities required to move to the new market.

Other considerations/queries

1. What type and level of education and training do participants believe is necessary (e.g. market design 'walk throughs'; class room training; online modules etc?)



Framing questions feedback

Testing & trial arrangements

Key Points:

- Testing and market trials have different purposes – testing verifies that the solutions meet market requirements, trialling ensures that the market functions effectively under a range of conditions.
- Participants will need documentation and training as packages are released to trial environments
- A minimum standard of trialling and testing is important to ensure confidence that AEMO and participants are ready for transition
- Integrated test plans will be important to allow participants to test inter-related scenarios.

Other considerations/queries

1. Are there any significant changes to the current processes/systems used for testing and market trial required?
2. Is there appetite for staging areas/sandpits – if so what are the minimum service levels expected for these?



Framing questions feedback

Regulatory considerations



Key Points:

- A compliance amnesty is required for at least a few months post Go-live. This period can be used to educate participants regarding compliance issues
- Regulatory focus for Go-live activities should be to ensure there are sufficient transitional provisions in the Market Rules to minimise transition risks
- Industry-wide market-readiness criteria is needed to ensure we can measure readiness for transition to the new market
- Market participants need to take accountability for achieving a required level of proficiency in order to participate.
- Some views provided that additional obligations for go live' readiness should not be introduced – better to rely on self-certification.

Other considerations/queries

1. If an 'amnesty' is introduced, what is a reasonable timeframe?
2. What are broader views on trade-offs between obligated Go Live certification/readiness vs self-certification?



Framing questions feedback

Key dependencies & high priority requirements

Key Points:

- Detail needs to be provided regarding AEMO's solution design, calling out where impacts to participants will be. This enables participants ability to review their systems and determine the effort and timing of system changes.
- Clear communication is required regarding available testing and trialling environments
- Staged releases are preferred to enable participants to manage their workloads
- Expert advisors should be available for participants as they build systems.

Other considerations/queries

1. Important to differentiate between the technology drivers of change (e.g. interface and communication systems) and the market design drivers (e.g. new markets, regulatory obligations)
2. Responses focussed on dependencies on AEMO and ETIU – what if any are the cross participant dependencies?

Joint Industry Plan

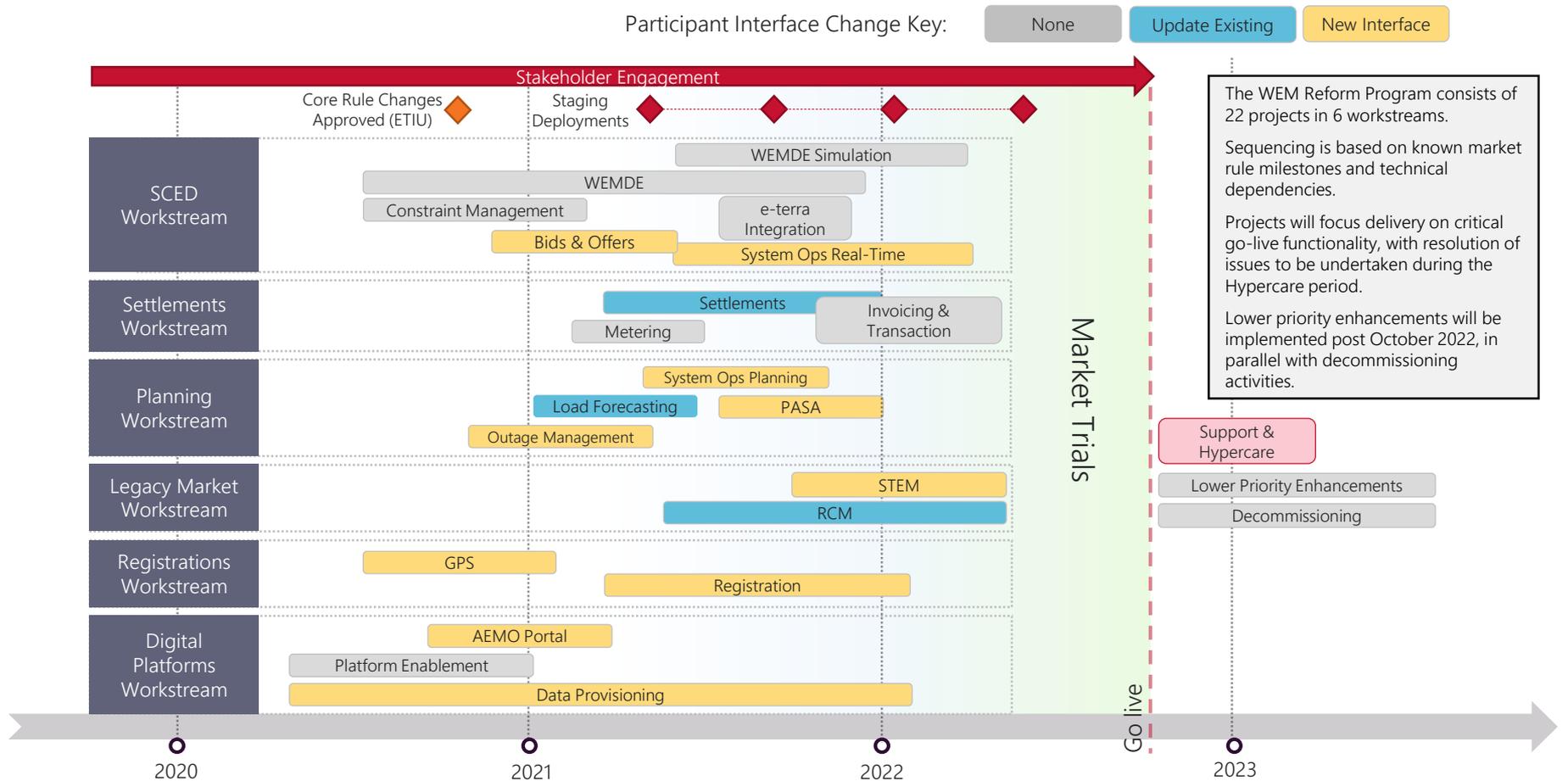
Focus presentation - AEMO

Session Purpose

- Group discussion on proposed 'focus presenter' segment for future WRIG sessions
- AEMO present on on-going design and planning work

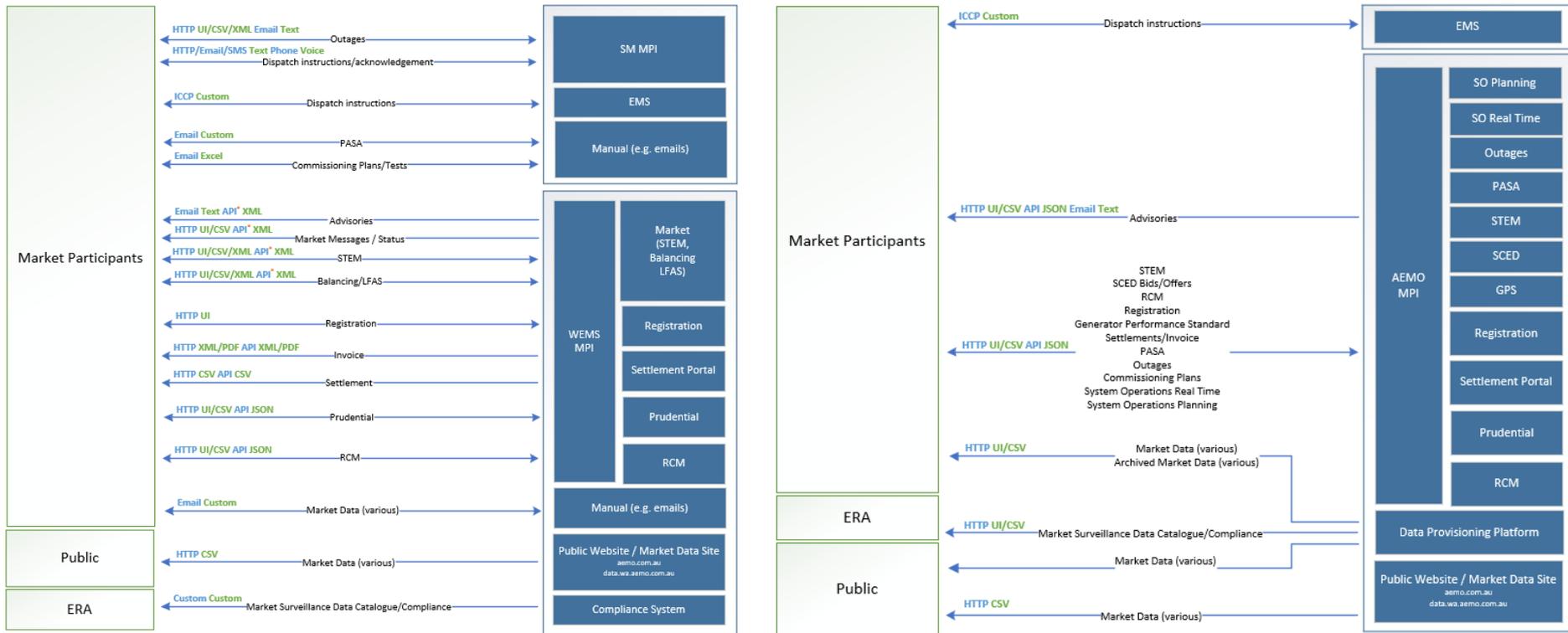
AEMO Solution Design & Planning

Indicative Program Plan



AEMO Solution Design & Planning

Industry interfaces



Pre Reform

- Separate Market and System Management Portal
- Mixed of SOAP and REST APIs

Legend

Data: Protocol Format
 * Custom format can be unstructured data

API Interface: • SOAP

Post Reform

- Unified AEMO Portal and API Protocols
- The format of the data will be designed and published pending Market Rules
- Interfaces will be deployed regularly in external staging environment





AEMO Solution Design & Planning

Technical Design - Further WRIG Input

1. Respond to a survey regarding feedback on existing User and Technical Interfaces
2. Attend the first WRIG sub-group to commence discussions regarding design requirements for market participant interfaces.

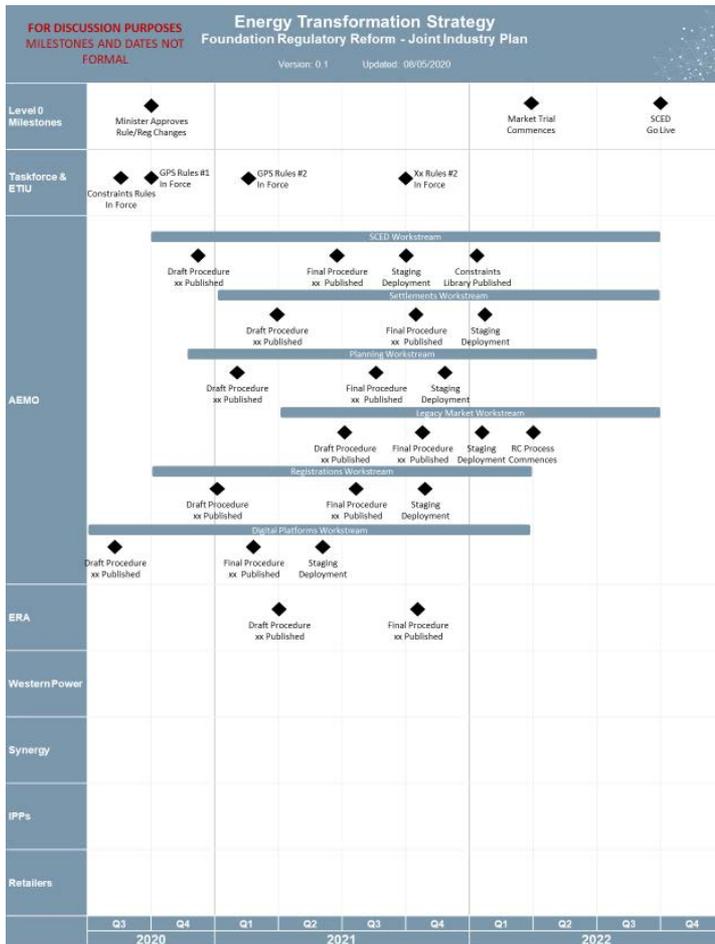
Joint Industry Plan Review and reporting

Session Purpose

- Review developing JIP and group feedback on format and key content
- Discussion on status reporting and 'central' Program coordination role

Joint Industry Plan

Format and detail



AEMO has started to populate an initial form of the JIP and aims to present a first draft at the June WRIG and seek endorsement to baseline at the July WRIG.

The purpose of today's session is to discuss the 'dummy' version of the JIP and seek feedback on:

- Structure and appropriate swim lanes
- Level of detail including types of milestones and activities expected
- Supporting information requirements (e.g. milestone definitions table to support plan)
- Views on RAG reporting of milestones



Joint Industry Plan

Status & RAID reporting

The JIP is intended to be a key tool in providing program stakeholders with a view of key milestones, activities and dependencies. However, its value is dependent on the quality and accuracy of information being fed into it.

As set out in the first WRIG session, AEMO will play the role of ‘central coordinator’ for the Program and ETIU and AEMO are seeking stakeholder views on the following questions:

Should there be central reporting into AEMO?

- If not – why not?
- If so...

What level/frequency is reasonable?

- How often should reports be provided – monthly/quarterly?
- What type of data should be provided (e.g. RAG status against key milestones, RAID items?)
- Should there be a (basic) template for completion/submission or free form?

Who should be reporting?

- Should reporting be limited to central/singular (e.g. AEMO, WP, ERA) organisations only?
- How should reporting work across groups e.g. Retailers, IPPs) – could there be trade body reporting on behalf of individuals?

What types of **outbound** reporting is expected?

- Is ‘simple’ RAG reporting of key milestones on the JIP enough?
- Is there a requirement for a centrally held RAID Log with updates each month/quarter?

Procedure Development Categorisation & consultation



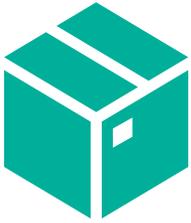
Session Purpose

- Review process for Procedure development and consultation
- Review AEMO's initial categorisation of its Procedures

Market Procedures & PSOPs

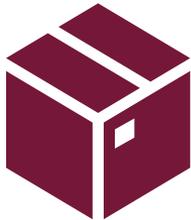
3 Box Model Approach

Box 1



- Required as a fully drafted and complete Procedure to support immediate requirements/obligations
- Examples includes Procedures stemming from the revised GPS or Constraints Governance obligations in the WEM Rules

Box 2



- Core content required (but not fully formed Procedures) to enable stakeholders to understand and assess proposed Rule/Code amendments or undertake implementation planning
- Examples include Procedures related to Settlements or Scheduling and Dispatch

Box 3



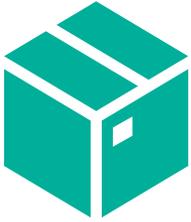
- Procedures not required in the short-medium term to support Rule development or implementation planning – can be developed in parallel with implementation activities

Three Box Model

Consultation Approaches

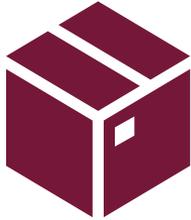
2020

Box 1



Transitional 'Formal' Process

Box 2



TDOWG 'Informal'

2021/2022

Transitional 'Formal' Process

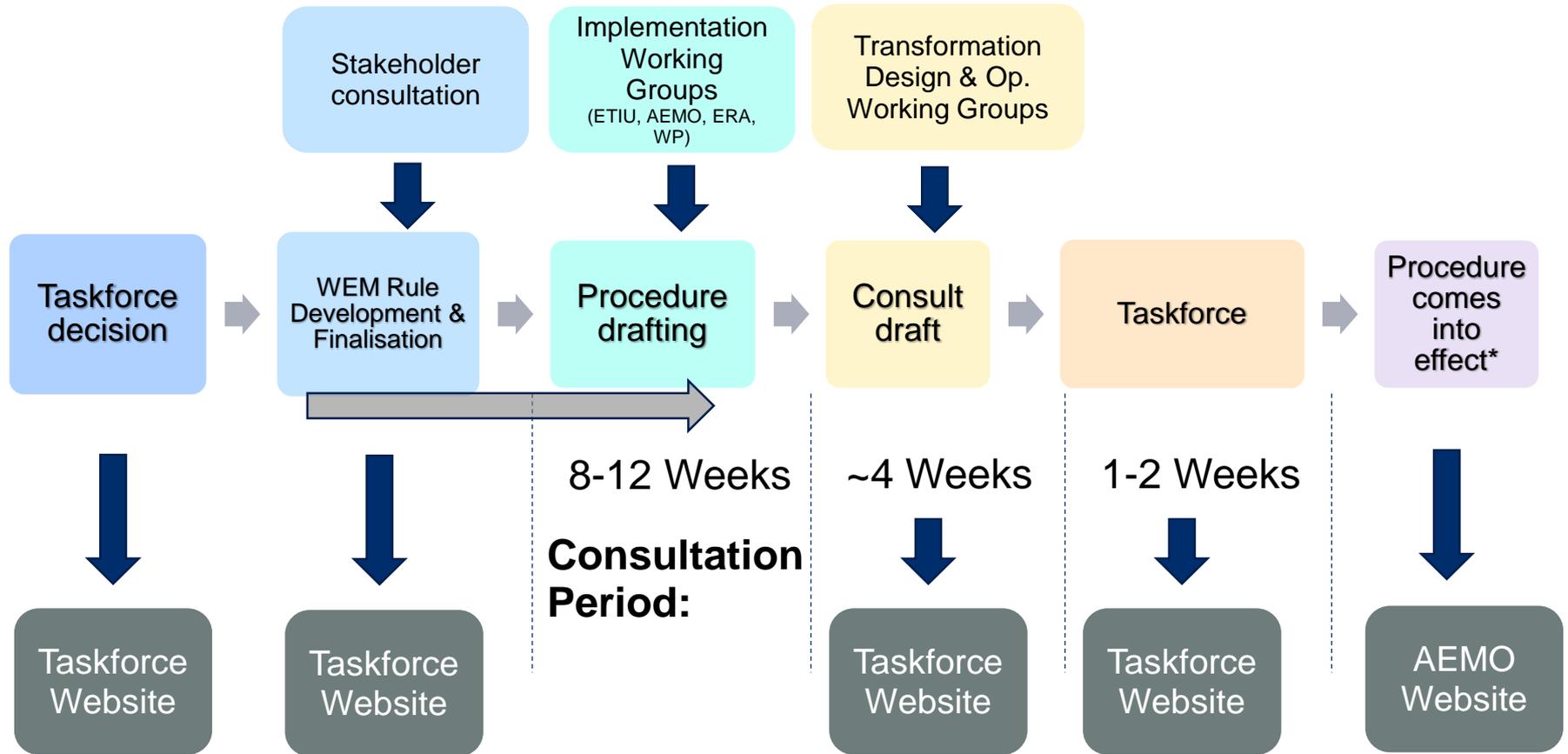
Box 3



Transitional 'Formal' Process

'Box 1' Process and consultation

Aligned to rule amendment consultation



**Date of commencement may vary*

AEMO Document Categorisation

Provisional internal assessment

THREE BOX CATEGORISATION	TOTAL COUNT OF DOCS
BOX 1	19
BOX 2	40
BOX 3	157
Total	216

This is inclusive of Market Operations, Power Systems and Governance documentation published externally by AEMO;

- New Documents anticipated (indicative pending draft rules)
- Procedures
- Guides, overviews and Technical Specifications
- Forms, templates
- Reports
- Web-page information

*Analysis to-date is indicative and will need to be re-assessed to confirm the magnitude of change based on the draft WEM rules.

AEMO Document Categorisation

Provisional internal assessment

BREAKDOWN	TOTAL COUNT OF DOCS	BOX 1	BOX 2	BOX 3
Market Operations	132	7	18	107
Operation Governance Integration	13			13
Power Systems	50	12	13	25
Overlaps both	21		9	12
Total	216	19	40	157
		New Procedures, Existing Procedures and Guides, Transitional Guide	New Documents, Existing Procedures, Technical Specifications, Guides, Templates, Reports	Forms, Reports, webpage info, templates, guides, lists (large no is webpages)

AEMO Document Categorisation

Categorisation methodology

Examples of questions used to differentiate and categorise into Box 1, 2, 3

Procedure or document is to take effect pre October 2022 (rules are to take operative effect pre Oct 2022, or transitional rule) (Y) or on Oct 2022(n)	Procedure or document is new or existing?	Procedure or document parameterisation is required for the Market Rule to be understood by Market Participants or used by AEMO for implementation by September 2020 i.e. fully drafted	The procedure or document can be understood by the Market Participant or AEMO regarding the intent and operation of the Market Rule in the absence of the Procedure core content	Procedure or document relates to a long lead time action of AEMO or Market Participants	The procedure or document relates to an obligation or action that imposes significant financial, reputational or operational consequence to AEMO or the Market Participant if non compliance occurs	The amount of modification of the existing procedure or document is high, medium or low	Report/Review (e.g. takes effect post October 2022 and or an annual reports)	Web page information only – (may require updates to information and rule clause references to be corrected)
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AEMO Document Categorisation

Examples of categorisation

	BOX 1	BOX 2	BOX 3
Market Operations	<ul style="list-style-type: none"> <input type="checkbox"/> Accreditation (ESS, New) <input type="checkbox"/> CVP Ordering and value setting methodology (SCED, New) <input type="checkbox"/> Supplementary ESS Mechanism Procedure (new) <input type="checkbox"/> Assignment of NAQs (RCM, New) <input type="checkbox"/> Reserve Capacity Security Procedure (underway) <input type="checkbox"/> Market Procedure Declaration of Bilateral Trades and the RCM (underway) <input type="checkbox"/> Participation & Registration Transitional Guide (new) 	<ul style="list-style-type: none"> <input type="checkbox"/> Settlement Procedure (existing) <input type="checkbox"/> ABC and AGC Interface Requirements (SCED, existing) <input type="checkbox"/> Registration, Deregistration, Transfer procedure and registration technical guide (existing) <input type="checkbox"/> WEMS submission specifications, validations (SCED, existing) <input type="checkbox"/> Registration Forms, guides 	<ul style="list-style-type: none"> <input type="checkbox"/> Webpage updates <input type="checkbox"/> Reports <input type="checkbox"/> Guides <input type="checkbox"/> Factsheets
Power Systems	<ul style="list-style-type: none"> <input type="checkbox"/> DER - Register and data access (new) <input type="checkbox"/> GPS - Monitoring; and Generation Compliance Testing (new) <input type="checkbox"/> Constraints – development proc, information resource (new) <input type="checkbox"/> PSSR – reliability standard, implementation, PS stability, inertia requirements, system strength requirements, classification/reclassification of credible contingency events (new) <input type="checkbox"/> Ancillary Services (existing) 	<ul style="list-style-type: none"> <input type="checkbox"/> Balancing Facility Requirements (existing) <input type="checkbox"/> Balancing Market Forecasts (existing) <input type="checkbox"/> Short Term, Medium Term PASA (existing) <input type="checkbox"/> IMS interface (existing) <input type="checkbox"/> Power System Security (existing) <input type="checkbox"/> Communication & Control Systems (existing) 	<ul style="list-style-type: none"> <input type="checkbox"/> Network Modelling Data (existing) <input type="checkbox"/> Facility Outages (existing) <input type="checkbox"/> Commissioning Tests (existing) <input type="checkbox"/> Tolerance Ranges (existing) <input type="checkbox"/> Webpage updates (existing)

Next Steps

Looking towards WRIG#3





Next Steps

Joint Industry Plan

- Group members please continue to provide feedback to AEMO and ETIU on planning/implementation approach; phases and content; and reporting responsibilities.
- AEMO will continue to develop the JIP and with aim of presenting first 'full' iteration for review by WRIG at the June session (and target approval of baseline plan in July).
- Proposed focus area of discussion at next session is key/shared RAID items

Technical Design and User Requirements

- AEMO will look to initiate first WRIG sub-group to commence discussions with appropriate technical representatives on design requirements for user interfaces

Procedure Development and Planning

- AEMO, Western Power and ERA to finalise views on Procedures within their responsibility
- ETIU to share a full provisional list of Procedures and proposed box allocation with TDOWG/WRIG members and seek feedback
- Reflect Procedure development in Drafting Plans and Joint Industry Plan