



DER Stakeholder Forum

DER Implementation Plan

31 March 2022



Time	Topic	Speaker
10.00	Welcome	Neil Gibbs
10.10	Overview of DER Implementation Plan	Jo Witters
10.20	Scope of works for Horizon One	Jo Witters
10.30	Update across activities	Market body leads – ESB, AEMC, AEMO, AER
11.45	Next steps / upcoming activities	Jo Witters
12.00	Q&A	Market body leads – ESB, AEMC, AEMO, AER

PURPOSE OF TODAY'S WORKSHOP



Objective –

- Update stakeholders on the progress of Horizon 1 workstream activities across the DER Implementation Plan
- Understand further opportunities to align activities to improve customer value.

Today's session will be facilitated by Neil Gibbs

ESB

Jo Witters – Program Overview and reform

Chris Alexander – Customer Insights

Phil Blythe – DER Interoperability

AEMC

Ed Chan – Clarifying roles and responsibilities

AEMO

Lee Brown – Flexible Trading Arrangements

Trent Morrow – Scheduled Lite

AER

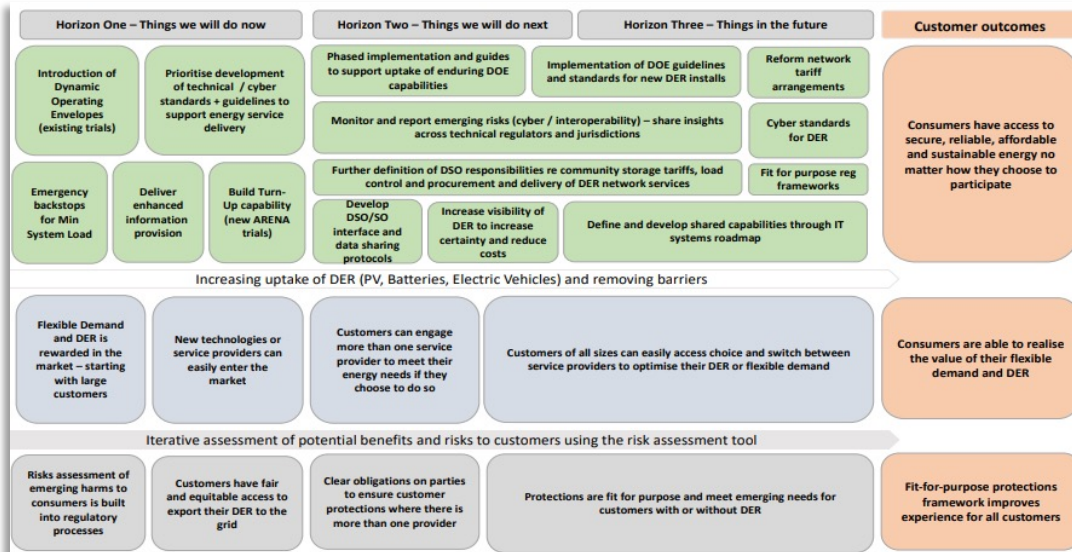
Isabel Durie – Retailer Authorisation and Exemption Review

Miriam Wishart – Dynamic Operating Envelopes

OVERVIEW OF THE DER IMPLEMENTATION PLAN



DER Implementation Plan



Delivering the plan



The reforms address a range of technical, regulatory and market issues over a three-year period.



The plan sequences key dependencies to ensure the reforms are delivered promptly.



Reform activities are well underway to address urgent issues.

HORIZON ONE – SCOPE OF WORK

REFORM ACTIVITIES UNDERWAY OR PLANNED FOR 2022



Key activities	
Key outcomes	<ul style="list-style-type: none">• Development and introduction of Dynamic Operating Envelopes – technical development via DEIP, AER to consider appropriate governance arrangements• Prioritising development of technical standards and guidelines to set foundations, and support energy service delivery (interoperability / EV charging / cyber)• Emergency backstops + development of enduring frameworks to support system challenges associated with minimum system load conditions
	<ul style="list-style-type: none">• Enhanced information provision to signal where flexibility is valuable to the system (e.g. to highlight conditions associated with minimum system load)• Reward flexible demand and DER in the market• Build turn-up capability to enable flexible demand and DER to deliver services into the market (new Arena trials)• Remove barriers to enable new technologies to enter the market
	<ul style="list-style-type: none">• Integrating consumer risk assessments into existing regulatory processes• Assessing the regulatory frameworks for retailer authorisations and exemptions – need fit for purpose frameworks in place as new business models emerge• Ensuring customers have fair and equitable access to export their DER to the grid

Key focus:

Identifying linkages/ emerging issues between the workstreams to ensure the coherent delivery of the DER Implementation plan

Inform and adapt reform activities with insights

HORIZON ONE – SCOPE OF WORK

REFORM ACTIVITIES UNDERWAY OR PLANNED FOR 2022



Objective

Technical requirements

To establish technical foundations by developing technical standards (including cyber security protections) to support emerging needs and facilitate the integration of new energy services

Market Changes

To remove barriers so parties can offer services that customers value, and ensure customers are properly rewarded for access to their flexible assets (DER or flexible demand) in the market.

System needs

To enhance visibility & forecasting of resources on the system, build capabilities & measures to support system security, and enhance understanding of how to integrate customer owned assets into the grid in ways that meet customer needs.

Customer Protections

To establish fit for purpose protections for all consumers, so they can confidently engage in the delivery and use of new energy services and be fairly rewarded for their flexibility.

Governance

To build a robust governance framework that provides clarity to all actors regarding obligations and compliance settings and supports the effective integration of new resources and technologies.

Workstream activities

Development of technical standards

Policy advice for application of tech. standards

Interoperability for solar PV / batteries

EV Charging

Cyber Security

Shared capabilities – IT roadmap

Flexible Trading Arrangements

Review implementation of Wholesale Demand Response Mechanism

Project Edge

ARENA trials – load flexibility

Scheduled Lite

Develop & implement DOEs

Ongoing tariff reform

Information transparency - conditions contributing to minimum system load

Introduce Emergency backstops alongside enduring frameworks

Customer Insights

Retailer Authorisation & Exemption Review

Metering services

Governance of tech. standards

Clarify roles & responsibilities and how these will need to evolve across actors

DOE policy / reg. framework



Customer Insights

Customer
Protections



Description

- The Customer Insights Collaboration will inform design and delivery of DER Implementation Plan activities. First six-month block of work on barriers and enablers to customer reward for DER and flexible energy use has commenced, with evidence review and workshops in progress.



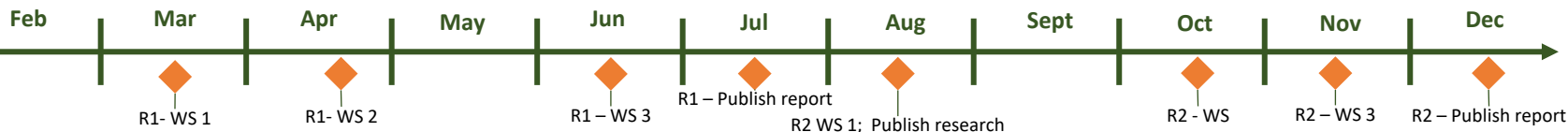
Key issues for H1

- Initial work has identified understanding customers' diverse needs and motivations, as well establishing trust, as key challenges that we need to engage with in H1.
- Dealing with complexity, comfort with technology, access to finance, building tenure and personal circumstances also vary - services will need to accommodate.



Next steps

- Stakeholder Steering Group – refining problem statement based on Workshop 1 feedback, and deep dives on priority barriers and enablers.
- ESB – stakeholder workshops on 13 April and 4 May.





Retailer Authorisation and Exemption Review

Customer
Protections

Description

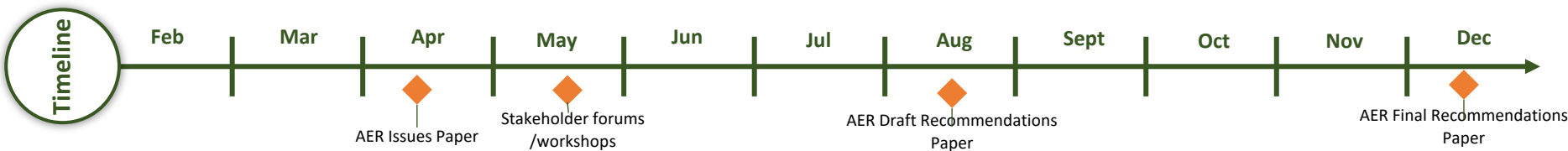
- The review will assess whether the retailer authorisation and exemption framework is fit-for-purpose for the future energy market and how the emergence of new technologies and energy service models will impact consumers.
- It will explore if/how the NECF captures new energy products and services, and where they are not captured, will assess the potential consumer benefits and harms arising from these products and services using the ESB's Consumer Risk Assessment Tool.
- The review will then recommend appropriate regulatory reforms where required, including changes to the authorisation and exemption processes.

Key issues for H1

- Understanding how the NECF captures new energy products and services.
- Undertaking extensive analysis of consumer benefits and harms.
- What are the appropriate forms of regulation for new energy products and services?

Next steps

- AER: publish issues paper (mid April).
- ESB&AER: run stakeholder workshops and customer focus groups to undertake risk assessments.
- AER: publish draft recommendations paper (end August) and final recommendations paper (late November/early December).





Policy advice for tech standards - DER Interoperability

Tech.
Standards

Description

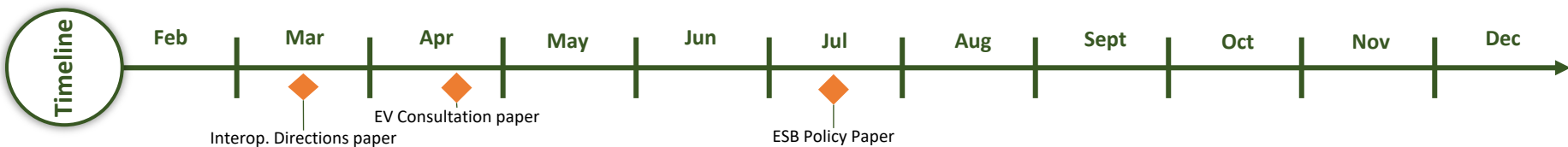
- Forward looking policies around technology and communications standards for DER are needed to ensure that customers are free to switch DER service providers where they choose to do so, and that the system can be maintained within its safe operating limits.

Key issues for H1

- Progressing interoperability standards for solar PV and storage (CSIP Aus).
- Will involve consideration of roles and responsibilities.

Next steps

- DEIP – Provide technical recommendations on standards for certain DER classes. First priority, Interoperability for inverters (solar PV / batteries). Upcoming focus on EV charging standards, cyber security standards for DER assets.
- ESB – Building on consultation feedback, undertaking assessment of trade offs associated with application of CSIP Aus standard. Coordinating activities and development of clear roadmap to meet system / customer needs.
- AEMC – Progressing detail on governance settings and how interoperability policy would be given effect (i.e. rule / law changes).





Flexible Trading Arrangements

Market changes

Description

- Enabling customers to access competitive offers and services for controllable resources independent from their general supply – enhancing customers' ability to be rewarded for flexibility and maximise value of their DER.
- Enabling customers to engage in services from multiple service providers at the same premises (home or business).

Key issues for H1

- Creation of high-level design to accompany the rule change proposal.
- Intensive stakeholder engagement to test key design concepts.

Next steps

- AEMO – consolidate stakeholder feedback and finalise rule change request and high-level design.
- AEMC – consider rule change proposal once submitted.

Timeline

Feb

Mar

Apr

May

Jun

Jul

Aug

Sept

Oct

Nov

Dec

AEMO engaging stakeholders

AEMO to submit FTA rule
change request



Governance of tech standards - clarifying roles and responsibilities

System
needs

Description

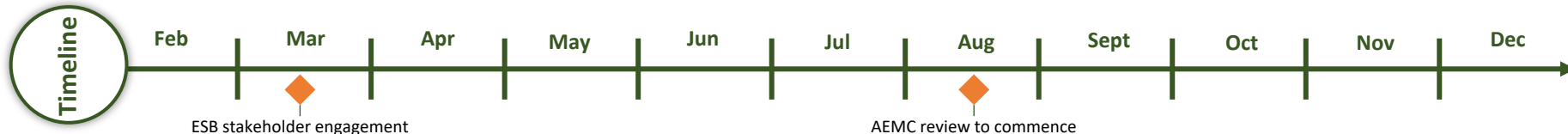
- The AEMC is reviewing the need for new DER technical standards as well as assessing the progress to date of implementing current requirements. The review will consider the ability of DER devices to deliver benefits to consumers as well as the NEM, interactions between the National Electricity Rules and other instruments and clarifying roles and responsibilities for developing technical standards.
- Stakeholder views are currently being sought on AEMC proposed terms of reference for considering the NEM's priorities from DER technical standards.

Key issues for H1

- Technical standards: identifying when new technical standards are needed and how existing standards are being adopted, including compliance and enforcement.
- Interactions with broader discussions on development of operational roles and responsibilities – ESB and market bodies currently considering stakeholder feedback in relation to priority issues (e.g. new and emerging tools/reforms such as dynamic operating envelopes, interoperability settings and access to customers DER assets).

Next steps

- AEMC - Review on DER technical standards to commence in H2 2022.





Scheduled Lite

System
needs

Description

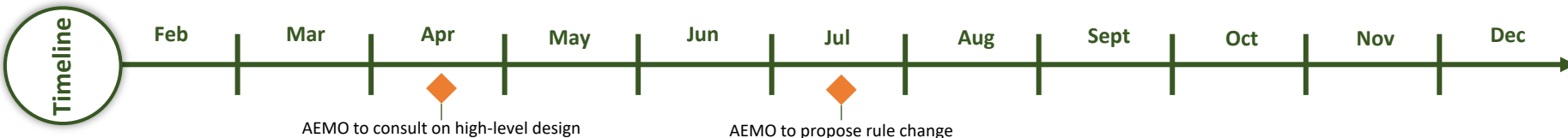
- Mechanism that aims at lowering barriers and providing incentives for non-scheduled load and generation to participate in market scheduling processes.
- Visibility Model involves the submission of price-responsive forecasts and real-time information to enhance short demand forecasting and market information.
- Dispatch Model will provide a framework for Aggregated DER to participate in dispatch and short-term operational processes.

Key issues for H1

- Developing a high-level design for the Visibility Model for Aggregated DER, non-scheduled generation and large loads.
- Develop a high-level design for the Dispatch Model with a focus on Aggregated DER.

Next steps

- AEMO: engage with stakeholders on the development of the Scheduled Lite high-level design.
- AEMO: prepare rule change request and submit to AEMC in mid 2022.





Dynamic Operating Envelopes

System
needs



Description

- DOEs allow a more efficient approach to managing network capacity by allowing DNSPs to vary customer export limits dynamically.
- As part of the ESB's DER Implementation Plan, the AER has established a project to deliver policy direction and advice to ESB in relation to DOEs and their implementation within the National Electricity Market.
- This work will be led by the AER on behalf of the ESB, in collaboration with AEMO, the AEMC and will be informed by the findings of the DEIP DOE whitepaper, thereby complementing the work of the DEIP.



Key issues for H1

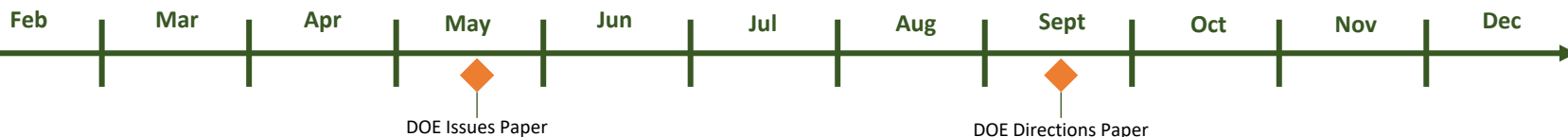
- Evaluation of the key policy issues and options for the establishment of DOEs and to identify and develop the key elements of a roadmap for the implementation of DOE governance arrangements.



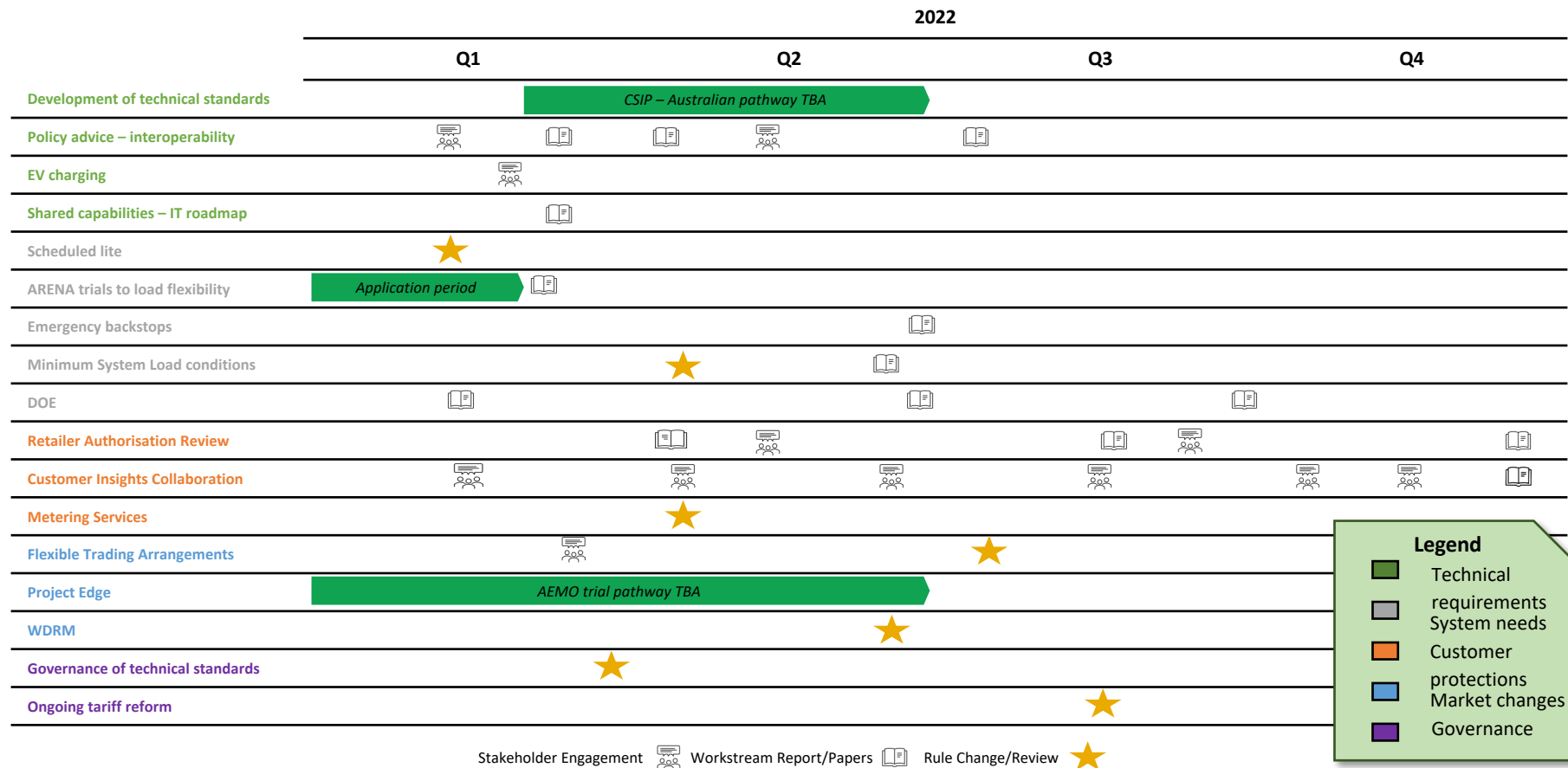
Next steps

- The AER will deliver an Issues Paper for mid-year release, and then a Directions Paper in Q3 2022.

Timeline



DER IMPLEMENTATION PLAN – HORIZON 1 OVERVIEW





Questions can be entered into the chat