

26/01/24

Future Power Markets Update

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Introduction

Over the course of 2024 we will continue to update you on the work of the Future Power Markets team through this newsletter and ongoing engagements. Our core work areas, Strategic Markets Programme, Future Arrangements for System Services and the Scheduling and Dispatch Programme, continue to evolve as we put the market arrangements in place to facilitate up to 80% renewable energy share in electricity (RES-E).

We will closely follow developments at an EU level that are relevant to the market and will continue to knowledge share and learn from Transmission System Operators (TSOs) around the world on the future market arrangements fit for a renewable energy driven electricity grid.

You can contact the Future Power Markets team by emailing futurepowermarkets@eirgrid.com

- David Carroll, Head of Future Power Markets



Future Power Markets

The Future Power Markets team is focused on how the ambition of up to 80% renewable energy share in electricity (RES-E) will be facilitated through the market.

The team's work spans across a number of core project areas, including:

- Strategic Markets Programme (SMP)
- Future Arrangements for System Services (FASS)
- Scheduling and Dispatch Programme (SDP)

Additional workstreams include:

- Long Duration Energy Storage (LDES)
- Energy Market Policy (EMP)



Strategic Markets Programme

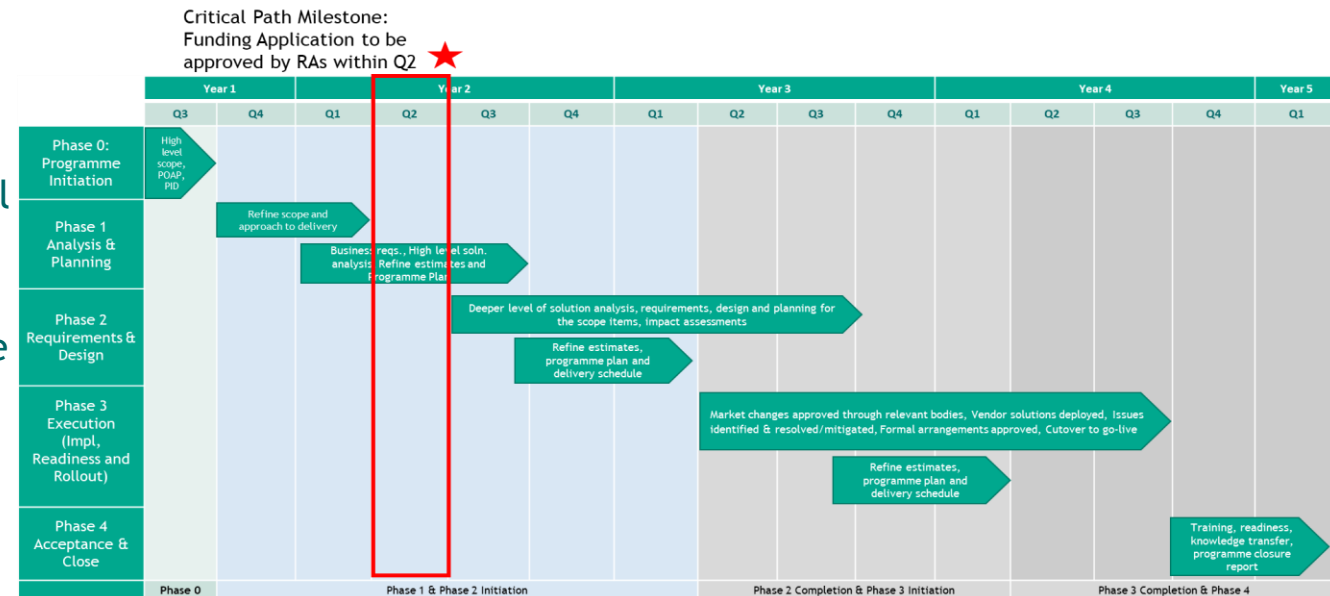
The Strategic Markets Programme (SMP), set up in 2023 to develop those elements covered under Pillar 2 of the SOEF Roadmap, pulls together the following:

- **Full EU Integration:** Once the SEM is physically connected with continental Europe after the Celtic Interconnector goes live, there will need to be full integration into EU forwards, day-ahead, intraday, and balancing markets. This involves re-coupling the day-ahead market but also new arrangements for coupled intraday markets and participation on the EU balancing platforms
- **Post Brexit Trading Arrangements:** Following Brexit we only have local intraday auctions between SEM and GB. We will need to implement the changes that arise from the ongoing UK and European Commission discussions on same
- **Balancing Market Reform:** This will investigate items like scheduling of long duration storage, enduring implementation of Non-Priority Dispatch Renewables and Dispatchable Demand.

- A funding application was submitted to the Regulatory Authorities in December 2023 where we estimate the rough order of magnitude cost of €130m.
- RA funding approval is required in order to proceed with full mobilisation across TSOs and MO.
- As part of the regular Market Operator User Group (MOUG) meeting on 25th January, we have provided an outline of the programme and the process and engagement we intend to undertake with industry.



Strategic Markets Programme - Indicative High-Level Programme Plan On A Page (POAP)



* Level of confidence in the high-level timelines for Phase 1 and Phase 2 initiation, however, very low confidence in timelines to complete Phase 2 and for Phases 3 and 4.

Future Arrangements for System Services

The design and implementation of Future Arrangements for System Services (FASS) includes:

- “To deliver a competitive framework for the procurement of System Services, that ensures secure operation of the electricity system with higher levels of non-synchronous generation”, in line with the Single Electricity Market Committee (SEMC) request
- The implementation of a Day Ahead System Service Auction (daily auction/DASSA), Layered Procurement Framework and Fixed Term Contracts
- The creation of a System Services market code and updates to relevant codes and licenses.

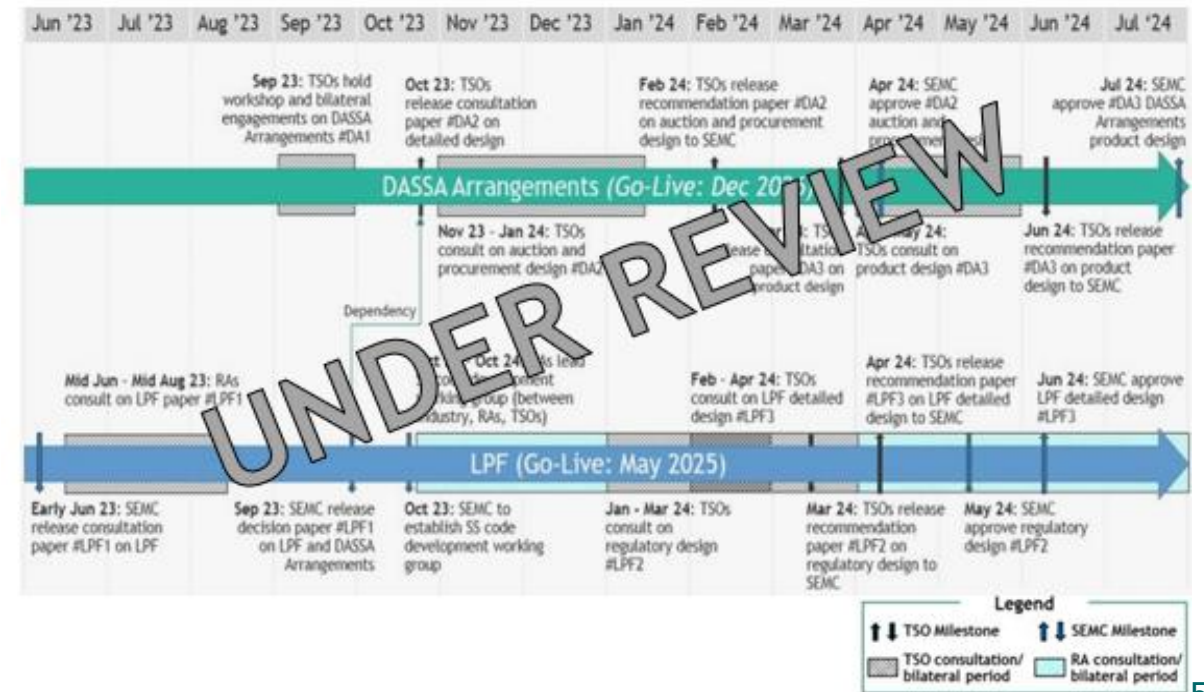
➤ The TSOs are working on the final Phased Implementation Roadmap for the FASS programme, subsequent to the publication of [SEM-23-103](#) in December 2023.

➤ The team continues to work on the DASSA detailed design proposals with our partners DotEcon and Afry. The team is also developing the TSOs’ DASSA consultation paper expected to be published in Q1 2024.

➤ Development of the High Level Requirements for DASSA has commenced. Work continues on the volume forecasting and product review workstreams.

➤ TSO/RA engagement on FASS priority topics is ongoing. The TSOs will shortly be submitting a funding application (approx. €60m) to the RAs based on the direction outlined in SEM-23-103. Approval will be required prior to May 2024 to continue work on the programme.

High Level Roadmap: FASS Phased Implementation (to be revised by the TSOs based on SEM-23-103 Decision Paper)



Scheduling and Dispatch Programme

The Scheduling and Dispatch programme aims to:

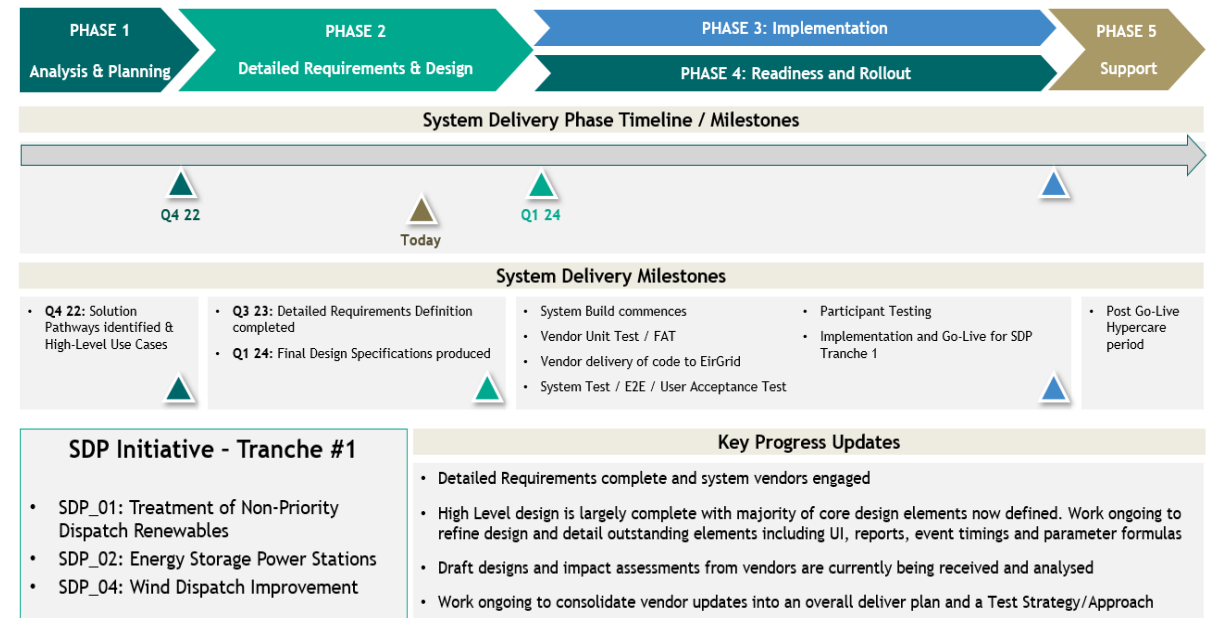
- To enhance the scheduling and dispatch systems and processes in Ireland and Northern Ireland
- To bring about compliance with the Clean Energy Package (CEP) and the treatment of variable Non-Priority Dispatch Renewables (NPDR)
- Facilitate low/zero carbon grid technologies such as Batteries, Synchronous Condensers in support of the broader goals of renewables and System Non-Synchronous Penetration (SNSP) penetration targets.

- An Industry Workshops was held on the 10th January with a readiness survey being sent to market participants prior to this. The next industry workshop will be held on February 7th.
- We are currently awaiting RA funding approval to commence Phase 3 of the project (approx. €37m). Detailed timelines cannot be provided until funding is secured.
- We have completed initial high-level requirements for Tranche 2 initiatives and gave industry an overview of same.
- The detailed design for SDP Tranche 1 initiatives is nearing completion. We are engaging with industry to progress the required modifications.

Systems Delivery Update: Tranche 1

Stakeholder Engagement: Industry Workshop

Systems Delivery Update - SDP Tranche 1



Additional Market Developments

Long Duration Energy Storage

LDES Call for Evidence

The submission window for the Call for Evidence on Market Procurement Options for LDES closed on December 1st 2023. There was significant interest in the Call for Evidence as we received many submissions from a variety of industry partners and individuals. We would like to thank everyone who provided feedback in this process.

Further LDES Analysis

Further modelling is underway which aims to study the effects of longer duration storage (>8 hours) on the all-island system.



Energy Market Policy

Areas of focus

The Energy Trilemma (Energy Security, Energy Sustainability and Energy Affordability) will continue to guide future energy market policy. Market arrangements are evolving as grids are increasingly powered by renewable sources of energy. Facilitating a net-zero market, supporting a robust capacity market and understanding the SEM's future market interactions with the EU and Great Britain will continue to be key areas of focus for future energy market policy.

Electricity Market | Redesign

The text of the provisional agreement reached between the European Parliament and Council on the EU's electricity market design is available [here](#). Contracts for Difference (CfDs), Capacity Renumeration Mechanisms (CRM) and Power Purchase Agreements (PPAs) were among the key political issues. The text is currently being translated into the various EU languages and is expected to be published in the Official Journal of the EU in the spring.

Contact Information

If you require further information on what has been published in this update, please email futurepowermarkets@eirgrid.com

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