

28/03/24

Future Power Markets Update

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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)



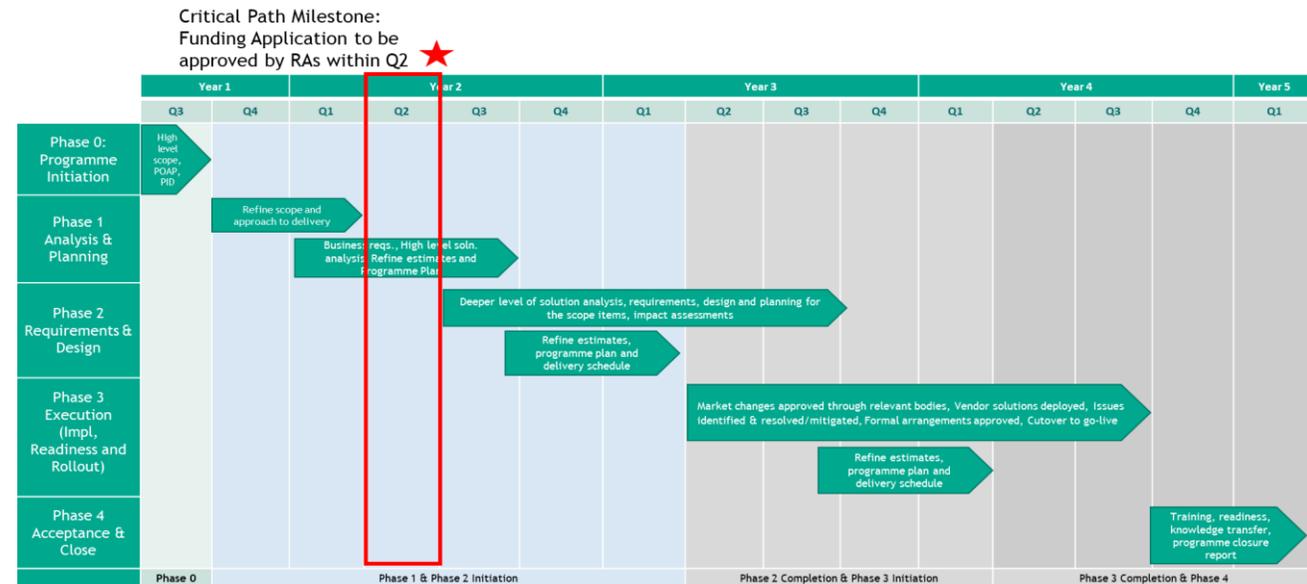
Strategic Markets Programme

The Strategic Markets Programme (SMP), set up in 2023 to develop those elements covered under Pillar 2 of the Shaping Our Electricity Future 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 (RAs) in December 2023 where we estimate the rough order of magnitude cost to be in excess of €130m.
- RA funding approval is required to proceed with full mobilisation across TSOs and Market Operators (MO).
- A Market Operator Special Topic (MOST) for the SMP was facilitated on the 14th March, which provided market participants with more detailed information on the intended scope for delivery by the programme.
- The programme has a dependency on a decision from ACER published in March 2024 in respect to the proposed Core Capacity Calculation Regions (CCR).
- The Specialised Committee on Energy have not yet made a decision with regards to Multi-Region Loose Volume Coupling.

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:

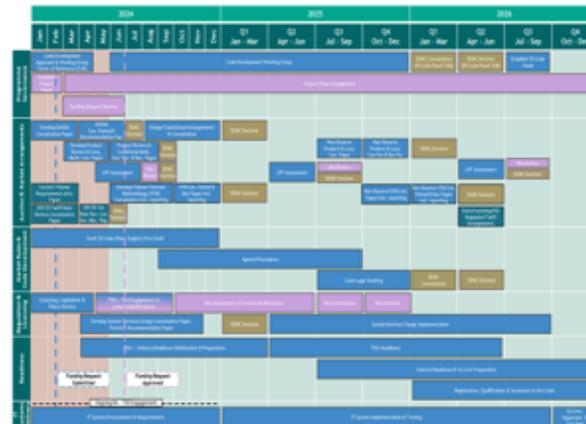
- “To deliver a competitive framework for the procurement of System Services, that ensures secure operation of the electricity system with higher levels of non-synchronous generation”, in line with the Single Electricity Market Committee (SEMC) request
- The implementation of a Day Ahead System Service 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 Phased Implementation Roadmap (PIR) was approved by the SEMC and subsequently published on 13th March by the TSOs on the [EirGrid](#) and [SONI](#) websites.
- The DASSA Arrangements Design Consultation was published the on 15th March by the TSOs, available at the following links: [EirGrid](#) & [SONI](#). The consultation period is currently open and will close on 10th May at 5:00 pm. An industry workshop will be scheduled during the consultation period.
- The first (RA-led) SSFA Project Panel was held on 26th February.
- The TSOs and RAs are still engaging in relation to the funding application submitted by the TSOs on 16th February. Funding approval will be required prior to May 2024 to continue work on the programme.

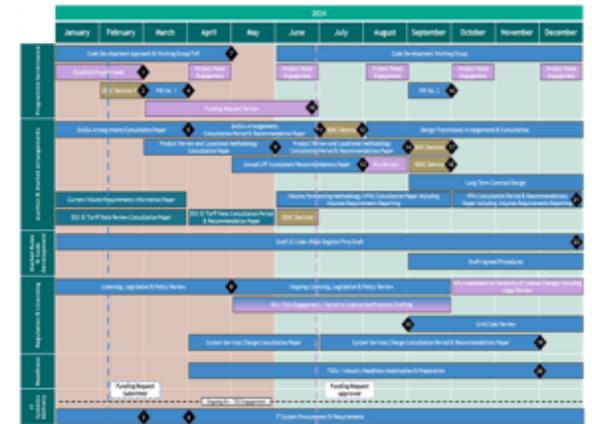
TSOs Phased Implementation Roadmap (March 2024):

The PIR presents a condensed overview of the programme in both a Level 1 and Level 2 format:

Level 1 PIR: 2024 - 2026



Level 2 PIR: 2024



Please refer to the published PIR for full details.



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.

- The Scheduling and Dispatch Programme is composed of six initiatives, split into two tranches, with tranche 1 targeting a go live of :

Tranche 1: - SDP-01 Operation of Non-Priority Dispatch Renewables (NPDR)

- SDP-02 Energy Storage Power Station (ESPS) integration
- SDP-04 Wind dispatchability improvements

Tranche 2: - SDP-03 Fast Frequency Response (FFR)

- SDP-05 Reserve services scheduling and dispatch
- SDP-06 Synchronous condenser scheduling and dispatch

- On 29th February, the SEMC provided full funding approval for the “Scheduling & Dispatch” phase 3 “Implementation”
- An Industry workshops was held on 7th March in Belfast. Participants were updated on the programme milestones.

Scheduling and Dispatch: Programme Milestones		
Phase 2: Detailed Requirements & Design		
SOEF Milestone ID	Milestone	Dates
Tranche 1	Requirements Definition Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	September 2023
Tranche 1	System Design Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	March 2024
Tranche 1	TSC, CMS & GC Mods Review Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives by the relevant review group (Mods Committee, Grid Code Review Panel, Capacity Market Workshops respectively)	March 2024
Tranche 2	Requirements Definition Complete for Scheduling and Dispatch Programme Tranche 2 Initiatives	July 2024
Tranche 2	Publication of milestones for Scheduling and Dispatch Programme Tranche 2 Initiatives	September 2024
Phase 3: Implementation		
SOEF Milestone ID	Milestone	Dates
Tranche 1	System Build Commenced for Scheduling and Dispatch Programme Tranche 1 Initiatives	March 2024
Tranche 1	Publication of key milestones for testing and go-live, including revised ISEM Technical Specification of Scheduling and Dispatch Programme Tranche 1 Initiatives	June 2024
Tranche 1	Regulatory Authority approval for TCS, CMC & GC Mods for Scheduling and Dispatch Programme Tranche 1 Initiatives	June 2024
Tranche 1	Implementation and Go Live for Scheduling and Dispatch Programme Tranche 1 Initiatives	April 2025
Tranche 2	Implementation and Go Live for Scheduling and Dispatch Programme Tranche 2 Initiatives	Oct – Dec 2025

Additional Market Developments

Long Duration Energy Storage

- A factual summary of the responses to the Call for Evidence on Long Duration Energy Storage (LDES) has been published on both the [EirGrid](#) and [SONI](#) websites. This paper aims to provide a condensed overview of the 38 responses received and present the varying viewpoints and arguments from stakeholders. We were very happy with the level of engagement with many insights from respondents proving to be extremely valuable, and we would once again like to thank everyone who provided feedback to the Call for Evidence.
- Work has also begun on the LDES consultation paper which looks to address and implement the learnings from the Call for Evidence process. We are aiming for the LDES consultation to be released at the end of April.

Energy Market Policy

- Supported by an independent consultancy, work is progressing well on a high-level position that reflects the TSO perspective on a Net Zero future for markets. Much of what is being outlined in SOEF 1.1 forms a solid foundation for market development up to 2030. However, there are likely to be additional elements that are needed beyond that, in order to deliver a Net Zero electricity market.
- EirGrid continues to work with other TSOs and other stakeholders at EU level to advance the market priorities on the island of Ireland. ACER has published its decision approving that SEM will be joining the Core Capacity Calculation of Regions (CCR). This is a significant milestone for the delivery of the Celtic Interconnector.

Contact Information

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

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