

26/04/24

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

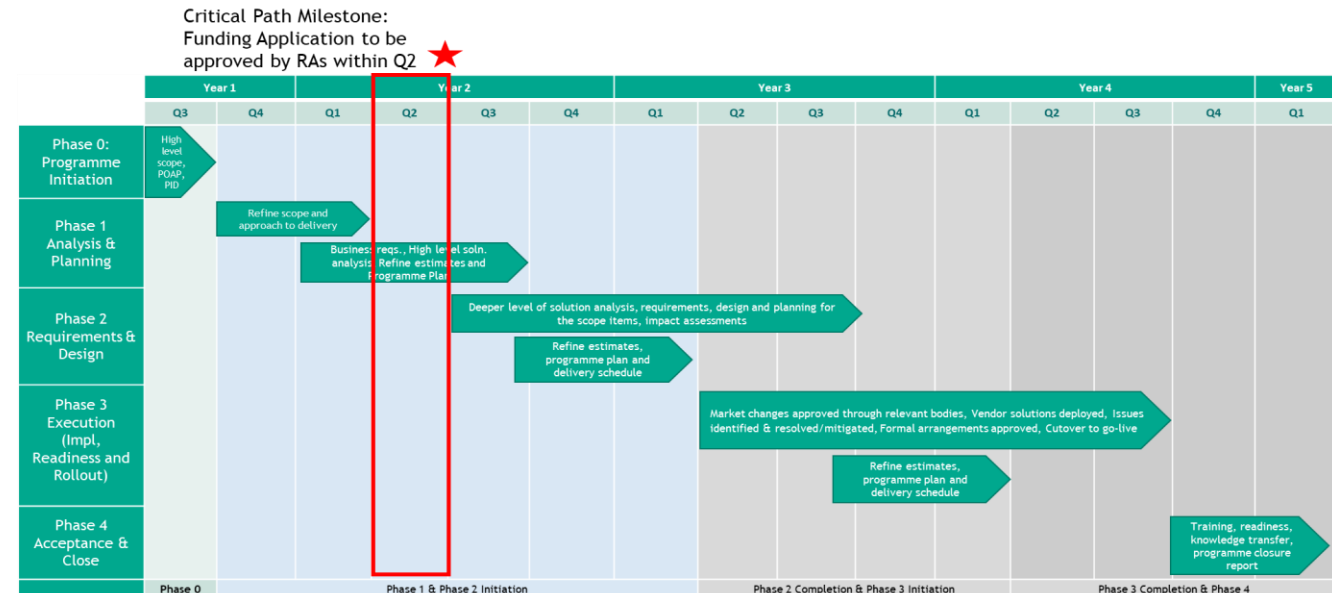
The Strategic Markets Programme (SMP), set up in 2023 to develop those elements covered under Pillar 2 of the Shaping Our Electricity Future Roadmap, pulls together the following:

- **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 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 MO.
- An industry workshop was facilitated on 11th April 2024 and a deeper look at the Balancing Market Reform workstream was provided to the attendees.
- The Specialised Committee on Energy have not yet decided in respect to Multi-Region Loose Volume Coupling (MRLVC).



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.

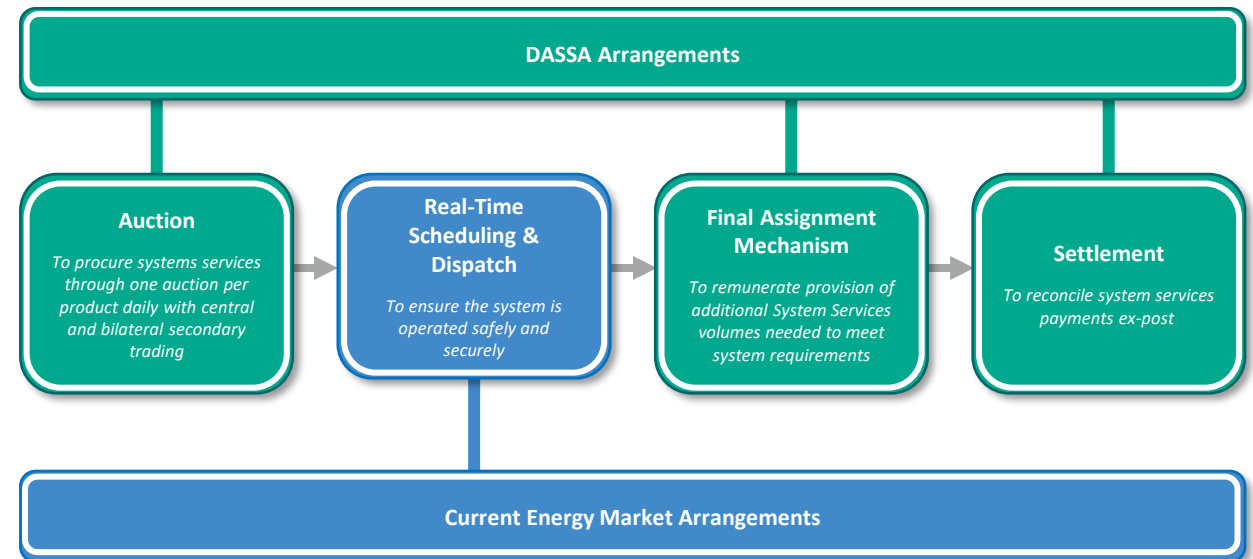
Future Arrangements for System Services

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 DASSA Arrangements Design Consultation was published 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.
- The TSOs facilitated an industry workshop on the DASSA Design Consultation Paper on 24th April 2024.
- The TSOs are developing the Terms of Reference (ToR) for the System Services Code working group. The ToR will be published by the end of April, with the first working group meeting to take place in June.
- 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 to continue work on the programme.

Overview of the DASSA Design:



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 April 2025:

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

- SEMC All-Island Programme sub-committee approved the full funding request for the S&D (phases 3-5) programme on 22nd March 2024.
- An industry workshop was held on 11th April. Participants were updated on milestones, MODS progress and process for determining NPDR unit designation.
- The programme has issued draft input into consultation for Annex SEM 13_011 to the RAs.

Scheduling and Dispatch: Milestones

Phase 2

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

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



- EirGrid is continuing to engage with regulators and industry to update on progress within the LDES workstream. Insights from these meetings will play a key role in determining the timelines and next steps for this programme.






















Energy Market Policy

- There are a number of wider policy areas that EirGrid Future Power Markets has recently commenced work on. These studies include assessment of the implications of Multi-Region Loose Volume Coupling (MRLVC) and other planned changes on current and future SEM-GB arrangements.



Future Power Markets Programmes: Consolidated View of Key Dates

-  Meeting/Workshop
-  Consultation/Decision
-  Programme Milestone

Programme	April 24	May 24	June 24	July 24	Aug 24	Sep 24	Oct 24	Nov 24
 SDP	 ESPS Modification Follow-Up 05 Apr		 Publication of Delivery schedule					
 LDES								
 FASS	 DASSA Auction Design Workshop		 DASSA Auction Design Recommendations Paper	 DASSA Auction Design SEMC Decision			<i>Summary view. See FASS Phased Implementation Roadmap for full view of <u>programme milestones</u>.</i>	
	 Code Development Panel TOR		 Product Review and Locational Methodology Consultation Paper			 Phased Implementation Roadmap 2		
 SMP								
 EMP								
	 FPM Industry Workshop 11 April	 FPM Industry Workshop 08 May	 FPM Industry Workshop 05 June	 FPM Industry Workshop 03 July	 FPM Industry Workshop 07 August	 FPM Industry Workshop 11 September	 FPM Industry Workshop 09 October	 FPM Industry Workshop 06 November



Contact Information

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

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