

27/09/24

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

SMP has a wide scope, a significant portion of which are changes required for Celtic Interconnector Go-Live and enabling increased flexible technology incorporating:

- **Full EU Integration:** The Celtic Interconnector, that is due to go-live in Q4 2026, requires the SEM Markets and Operational Systems to be compatible with European standards, which includes re-coupling the day-ahead market but also new arrangements for coupled intraday markets and participation on the EU balancing platform
- **Post-Brexit Trading Arrangements:** Changes to the trading of electricity between the SEM and GB to increase market efficiency
- **Balancing Market Reform:** Changes to the balancing market to enable flexible technology.

➤ EU Integration:

- High Level and Detailed requirements gathering underway for changes to systems and processes required to implement scope of programme.
- Detailed programme planning underway with key resources being onboarded and vendor engagement commencing.
- Current Celtic Interconnector go-live is planned for Q4 2026, and integration with EU markets will need to be in place for this date.

➤ Post-Brexit Trading Arrangements:

- No update

➤ Balancing Market Reform Updates:

- High level requirements for Balancing Market Reform initiatives are under review and moving to the next phase, these are also currently under assessment for code and system changes required and put into project delivery plans.



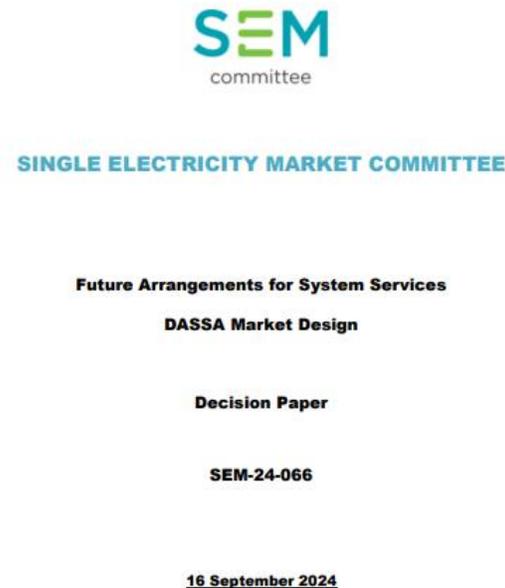
Future Arrangements for System Services

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 SEMC Decision on the DASSA Market Design was published on 18th September ([SEM-24-066](#)). This decision should be read in conjunction with the TSOs’ DASSA Design Recommendations Paper, which is published alongside it ([SEM-24-066a](#)).
- DASSA Product Review and Locational Methodology Recommendation Paper was submitted to the RAs at the end of August 2024 for consideration at the September SEM Committee Meeting.
- Work has commenced on the System Services Supplier Charge Recommendation Paper following the closure of the consultation period on 18th September.
- The Volume Forecasting Methodology Consultation paper is near completion, informed by the Product Review & Locational Methodology workstream and on target to publish by the end of September.
- A funding application was submitted by the TSOs earlier in 2024. The Regulatory Authorities have advised that they have initially approved 90% of this. The remaining 10% is pending the TSOs clarifying a number of questions. The TSOs welcome this approval.
- The TSOs will publish the next iteration of the Phased Implementation Roadmap (PIR) in September, which will offer additional clarity on the timing of upcoming TSU Consultations, TSO Recommendations, and SEMC Decisions. The TSOs are actively engaging with the RAs on the PIR development.
- A second industry System Services Code Working Group meeting will be held virtually on 2nd October. This shorter session will provide a recap and update on queries raised in the previous working group meeting. In addition, it will cover further information in relation to Accession to the System Services Code, the Registration process, and an update on the progress of DASSA mechanics.

DASSA Market Design SEM Decision Paper and TSO’s Recommendation Paper



FASS Programme

Day-Ahead System Services Auction (DASSA) Design Recommendations Paper V1.0

July 2024



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

➤ Industry workshop held on 11th September, participants were updated on Milestones/Mods Progress, the upcoming SDP participant survey to assess their readiness, details provided on the participant sandpit environment that will be made available and training was delivered on balance market bidding.

➤ System vendors are coming to the end of the system build. Test has commenced for some of our vendors with test preparation at an advanced state for others.

➤ Target date for Tranche 1 Modifications approval of June 2024 has not been met, no immediate impact but the risk that changes will be required is present until Modifications are approved.

➤ Planning for Tranche 2 delivery is in progress.



Scheduling and Dispatch: Programme 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 Trading and Settlement Code (TSC), Capacity Market Code (CMC) & Grid Code Mods (GC) for Scheduling and Dispatch Programme Tranche 1 Initiatives	June 2024
Tranche 1	Publication of Technical Specification for Scheduling and Dispatch Programme Tranche 1 Initiatives	July 2024
Tranche 1	Vendor System Build and Test Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Dec 2024
Tranche 1	TSO/MO System Test and Validation Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025
Tranche 1	Participant Interface Test (PIT) Commences for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025
Tranche 1	Participant Interface Test (PIT) Complete for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025
Tranche 1	Cutover activities Commences for Scheduling and Dispatch Programme Tranche 1 Initiatives	Mar 2025
Tranche 1	Confirm Go Live Decision for Scheduling and Dispatch Programme Tranche 1 Initiatives	April 2025
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 and SONI are continuing to engage with regulators and industry to brief on progress within the LDES workstream.

Timeline for LDES procurement agreed with CRU for the procurement of LDES in Ireland; communicated to industry on the 20th August.

In line with this timeline the LDES Consultation document is in progress to be published for review in H2 2024.

Modelling of LDES in Ireland and Northern Ireland is ongoing to identify the impact it has on dispatch down across the island. Potential locations for LDES units are being assessed to determine benefits to the power system, usage levels and feasibility for development and connection.

A Literature Review workstream is also in progress to gain an up to date and complete view of available LDES technologies, case studies, procurement methods and support mechanisms being used worldwide.



Energy Market Policy

The EU recently published its consultation on Network Code priorities. The publication outlined priorities such as CACM2.0, FCA 2 and NC Demand response. EirGrid and SONI will continue to work through ENTSO-E to ensure that our market's perspective will be reflected in the development of the new version of these market network codes.

With regards to the Electricity Market Design: Regulation 1747 has entered into force and Directive 1711 will be transposed into Irish legislation between now and January 2025. The NI assembly will get the chance to vote on the amended EU laws in what is known as an applicability motion. 1747 contains inter alia a number of changes regarding state aid approval for Capacity Markets in addition to the introduction of a flexibility assessment. While 1711 includes several sections dealing with storage.

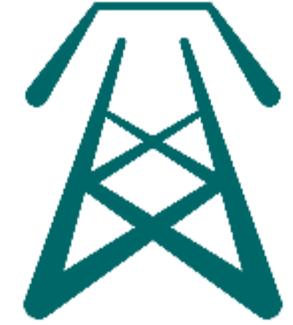
Elsewhere EirGrid and SONI continues to work with Stakeholders to address challenges surrounding the practical implementation of CBAM.

Finally, EirGrid has commenced a high-level examination of the main issues to be addressed when designing Net Zero markets. This work, which is being supported by external advisors, is a first step on the road to understanding the challenges faced by TSOs in the implementation of Net Zero markets.

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 programme milestones.</i>	
	 Code Development Panel TOR		 Product Review and Locational Methodology Consultation Paper		 Phased Implementation Roadmap 2			
 SMP								
 EMP								
	 FPM IW 11 April	 FPM IW 08 May	 FPM IW 05 June	 FPM IW 03 July	 FPM IW 20 August	 FPM IW 11 September	 FPM IW 09 October	 FPM IW 06 November



Contact Information

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