

Future Power Markets

Stakeholder Engagement

Industry Workshop: 05th June 2024

This presentation provides an update on the Future Power Markets Programmes.

Achievable - Valuable - “Simple”



Future Power Markets - Industry Outreach

Why Are We Here?



Inform

We are here to provide information about the ongoing programmes of work in the Future Power Markets space and the impact on the market participant community. We will provide a view of the programmes' drivers, functional details, structure, timelines, and stakeholder engagement.



Discuss

We will discuss the changes and how this impacts you and your portfolio. We will discuss the functional, technical, and formal arrangement changes, stakeholder engagement, and programme management updates. We are happy to field all questions - and we may not be able to answer all of them today.



Listen

We are here to listen. What are your thoughts on the FPM programmes, the functional, technical, and regulatory details and the impacts to your business? What questions do you need answers to? What clarity do you need?



Ask

We will ask for your participation throughout - we are better together.

FPM - Industry Workshop

Setting Expectations



Meeting Rules

1. **Engage:** actively listen and ask questions. This session is for you.
2. **Show Courtesy:** allow everyone the time and space to participate in the discussion. Don't talk over another speaker.
3. **Scope Discipline:** maintain focus on FPM.



FPM: Industry Workshop (5th June 2024)

Agenda for today's workshop

Time	Topic
13:00 - 13:05	Introduction & Housekeeping
13:05 - 13:25	Future Arrangement System Services - Status Update
13:25 - 13:45	Scheduling & Dispatch - Status Update
13:45 - 14:00	Strategic Markets Programme - Status Update
14:00 - 14:15	Participants Topic Discussion/Q&A
14:15 - 14:30	Close Out/AOB

FASS Programme Update

FASS: Status Update (June 2024 Industry Workshop)

■ As planned, no issues ↑ Improving
■ Minor - moderate concern ⇄ Steady
■ Significant issue / concern ↓ Worsening

⚡ FASS Summary Status

Overall Status	➔	Overall green status following the completion of the DASSA Design Consultation and publication of TSOs’ Phased Implementation Roadmap (PIR), providing clarity in terms of programme trajectory and scope.
Schedule	➔	Overall schedule remains green; however, schedule remains challenging. PIR No. 2 to be published in September 2024 which will provide further clarity by way of 2025 programme milestones.
Resourcing	➔	TSO programme teams are staffed and engaged to continue work at pace. However, continued funding approval is required to maintain resources
Finances	➔	Awaiting RA decision on Phase 2 Uplift and Phase 3 & 4 ROM Estimate Funding Application.

Key Messages



Service Provider Sentiment:

- TBC. Industry readiness survey to be issued later in calendar year which will inform High Level Readiness Approach (FASS.20).
- Service providers requesting further clarity on the interaction between the various components of FASS design (noted at SSFA panel)



Key Activities for Immediate Action

- Funding approval
- DASSA Consultation response analysis and publication of Recommendations Paper
- Product Review & Locational Methodology Paper due to be published, industry workshop scheduled for Wednesday 19th June.



Positive Developments (Since Last Report)

- DASSA Consultation period closed
- Product Design & Locational Methodology Consultation Paper scheduled to be published
- IT System Procurement continues



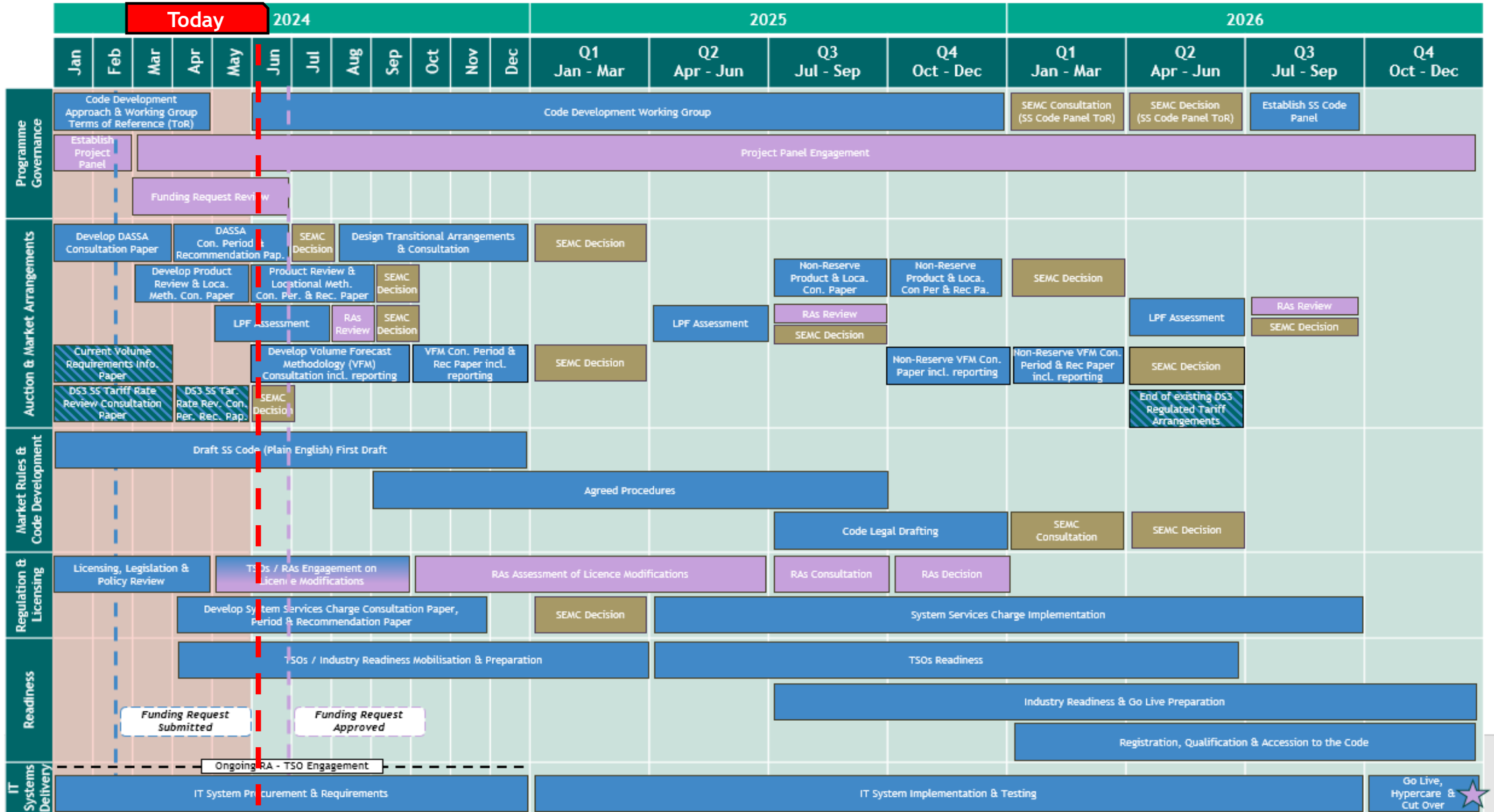
Challenges (Since Last Report)

- Funding uncertainty persists

Phased Implementation Roadmap - Level 1

Legend

- TSOs Led Activity
- SEMC Decision
- DS3 Activity
- RAs Led Activity
- RA TSOs Activity
- Depletion of Funds



Milestone Reference List

*Milestone closed internally, ongoing discussion with RAs re. next steps.

**Publication scheduled for early June 2024

Milestone #	Milestone Description	Milestone Dependencies	Milestone Owner	Milestone Target Date	Status
FASS.01	Establish The Project Panel	-	RAs	February 2024	Complete
FASS.02	SEMC Decision On Phased Implementation Roadmap	-	SEMC	February 2024	Approved
FASS.03	Commence IT Systems Procurement	FASS.02	TSOs	February 2024	Complete
FASS.04	Publish Phased Implementation Roadmap 1	FASS.02	TSOs	March 2024	Complete
FASS.05	Publish FASS Daily Auction/Procurement Design Consultation Paper	FASS.04	TSOs	March 2024	Complete
FASS.06	Commence Detailed Requirements	-	TSOs	March 2024	Complete
FASS.07	Establish System Service Code Development Working Group ToR	FASS.04	TSOs	April 2024	Complete
FASS.08	Issue List of Proposed Licence Modifications to RAs	-	TSOs	April 2024	Complete*
FASS.09	Publish FASS Daily Auction Product Review and Locational Methodology Consultation Paper	-	TSOs	May 2024	Pending**
FASS.10	FASS Programme Funding Request Approval	-	RAs	June 2024	Pending
FASS.11	Publish FASS Daily Auction/Procurement Design Recommendation Paper	FASS.05	TSOs	June 2024	In Progress
FASS.12	SEMC Decision on FASS Daily Auction/Procurement Design	FASS.11	SEMC	July 2024	
FASS.13	Publish Annual Layered Procurement Assessment Recommendations Paper 2024	-	TSOs	July 2024	
FASS.14	Publish FASS Daily Auction Product Review and Locational Methodology Recommendation Paper	FASS.09	TSOs	August 2024	
FASS.15	Commence Grid Code Review	FASS.14	TSOs	September 2024	
FASS.16	Publish Phased Implementation Roadmap 2	FASS.04	TSOs	September 2024	
FASS.17	SEMC Decision on FASS Daily Auction Product Review and Locational Methodology	FASS.14	SEMC	September 2024	
FASS.18	SEMC Decision on Annual Layered Procurement Assessment 2024	FASS.13	SEMC	September 2024	
FASS.19	Publish System Services Charge Recommendations Paper	-	TSOs	November 2024	
FASS.20	Publish High Level Readiness Approach	FASS.12	TSOs	November 2024	
FASS.21	Publish Volume Forecasting Methodology Recommendation Paper including Volumes Requirements Reporting	FASS.17	TSOs	December 2024	
FASS.22	Draft Plain English Version of SS Code	FASS.07 FASS.12 FASS.17	TSOs	December 2024	

DASSA Design Consultation Update

The Day Ahead System Services Auction Design Consultation period closed on Friday 24th May.



16 responses have been received, including responses from all major industry representative bodies



Industry has shared valuable insights and thoughts on the design and articulated areas of concern. The feedback received will help inform the TSOs' recommendations.



The TSOs are working on a recommendations paper which they intend to submit to the SEM Committee for consideration at their July meeting

DASSA Consultation: Key Themes



TIMING OF AUCTION AND A HOLISTIC VIEW OF MARKET OPERATIONS



GUIDANCE ON TRANSITIONAL ARRANGEMENTS



INTERACTION BETWEEN COMPONENTS OF FASS ARRANGEMENTS



VOLUME INSUFFICIENCY MEASURES

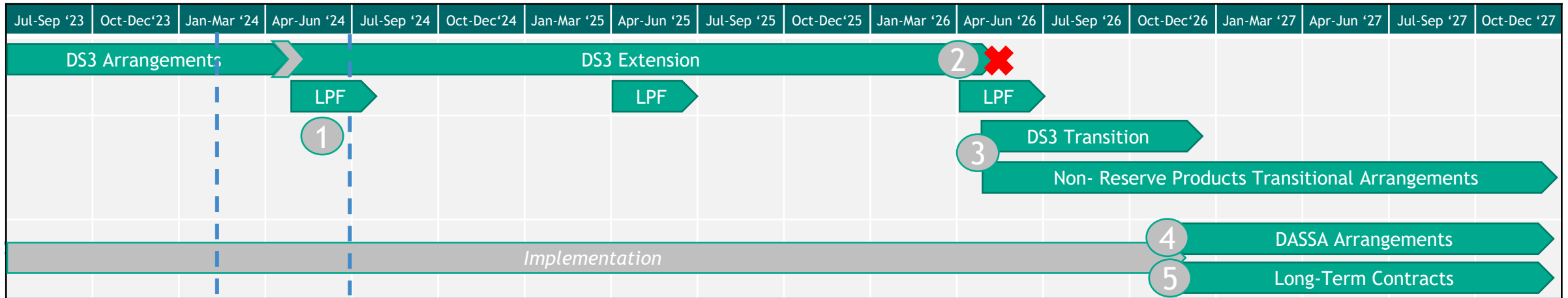


COMPLEX BIDDING AND AUCTION CLEARING PARAMETERS



CURRENT AND FUTURE PROPOSALS FOR FINANCIAL INCENTIVES

FASS Components



1	LPF	Per SEM-23-103 the TSOs are required to conduct an (at least) annual assessment of the necessity of LPF	Annual
2	DS3 Extension	SEM-23-103 published in December confirmed the extension of DS3 arrangements to end April 2026.	April 2026
3	Transitional Arrangements	Transitional arrangements are required for both reserve and non-reserve products.	April 2026
4	DASSA Arrangements	Go-Live of daily auctions (reserve services) expected December 2026.	December 2026
5	Long-Term Contracts	Procurement of fixed term contracts and development of future products (e.g.: Low Carbon Inertia Service (LCIS) to operate in parallel.	December 2026

Product Review & Locational Methodology Consultation



Product Review & Locational Methodology Consultation Paper to be published early June.



Email notification will be issued upon publication on the TSOs respective websites. Industry Workshop provisionally scheduled for 19th June.



We also welcome any further questions to be directed to FASS@Eirgrid.com or FASSProgramme@soni.ltd.uk

Timelines per PIR

March - May 2024

Develop Product Review & Locational Methodology Consultation Paper

June - August 2024

Product Review & Locational Methodology Consultation & Recommendations Paper

September 2024

SEMC Decision

Thank You

Questions can be submitted to

FASS@Eirgrid.com or
FASSProgramme@soni.ltd.uk

Next Steps:

- The TSOs will publish a recommendations paper in advance of the SEM Committee Decision in **July 2024** as per the timelines set out in the PIR.
- Product Review Consultation Workshop provisionally scheduled for **19th June**.
- **System Services Supplier Charge** consultation period to commence by July, per PIR.
- **Code Development Working Group** to be established with first Working Group provisionally scheduled for end of June.

Scheduling and Dispatch Programme



Scheduling & Dispatch Programme Overview

Key Principles

For this complex programme...

1. Be **pragmatic** about solution pathways.
2. Solve the **immediate and urgent** problems at hand.
3. Don't allow perfect to be the enemy of **good**.
4. **Communicate** early and often - to all **stakeholders**.
5. Maintain **support of industry**.
6. **Actively manage** multidisciplinary delivery team.

**Achievable - Valuable -
"Simple"**

SDP Objective & Drivers

To enhance and improve the technology and capability of scheduling and dispatch in Ireland and Northern Ireland. This is driven by market participant needs, the EU Clean Energy Package mandates, and in support of the broader goals of renewables and System Non Synchronous Penetration (SNSP) penetration targets.

- Clean Energy Package requirements - NPDR treatment
- Ireland and Northern Ireland Government renewables targets for the 80%/70% total renewable energy and 95+% system non-synchronous penetration (SNSP) on an instantaneous basis.
- Market Participant requests for certainty on treatment of renewable assets, batteries - revenue certainty.
- Market Participant requests for improvement in re-balancing and re-dispatching (prevailing weather).



Scope of SDP



One component of the broader SOEF programme.

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 1 Go Live: April 2025

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

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

Tranche 2 Go Live: October - December 2025

SDP: Status Update (June 2024 Industry Workshop)

- As planned, no issues
- Minor - moderate concern
- Significant issue / concern
- ↑ Improving
- ↔ Steady
- ↓ Worsening

This update is provided to the FPM industry workshop on 05 June 2024



SDP

Summary Status

Overall Status	➔	Overall programme status is Green. Design is complete for Tranche 1 initiatives. Additional SDP Tranche 1 delivery milestones have been shared with industry
Schedule	➔	Additional SDP Tranche 1 delivery milestones have been shared with industry. Tranche 1 Design has been completed with IT vendors. Making good progress in preparation of detailed requirements for Tranche 2. Potential change to AMBER schedule status if Modifications approval extends beyond planned date of June 2024.
Resourcing	➔	TSO/MO programme teams are fully staffed and engaged to continue work at pace.
Finances	➔	SEMC All-Island Programme sub-committee approved the full funding request for the S&D (phases 3-5) programme on 22nd March 2024.

Key Messages



MP Sentiment is Green (steady)

- MPs actively engaged and driving forward solutions
- Strong support for SDP



Key Activities For Immediate Action

- Consultation on SEM-13-011 changes
- Tranche 2 design and engagement



Positive Developments (Since Last Report)

- Tranche 1 Design complete
- Tranche 2 Detailed Requirements under review
- SDP-01 NPDR public consultation in NI completed
- Progressing SEM-13-011 annex changes

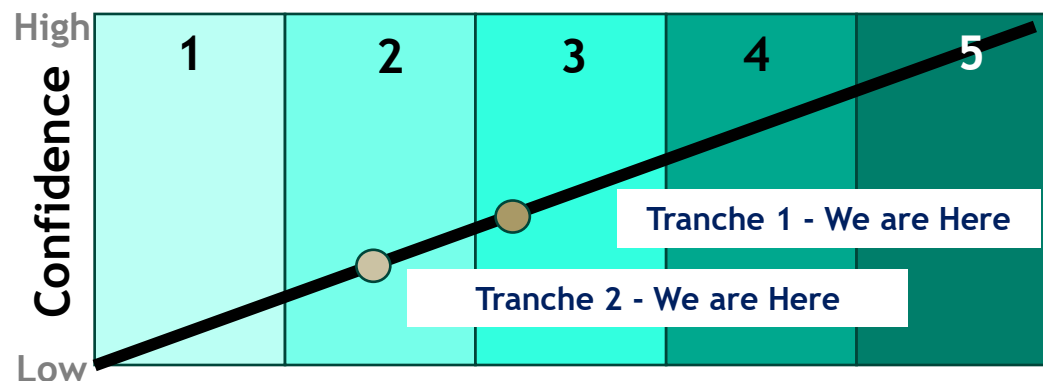


Challenges (Since Last Report)

- No new challenges

Scheduling and Dispatch: Phase 2 Milestones

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



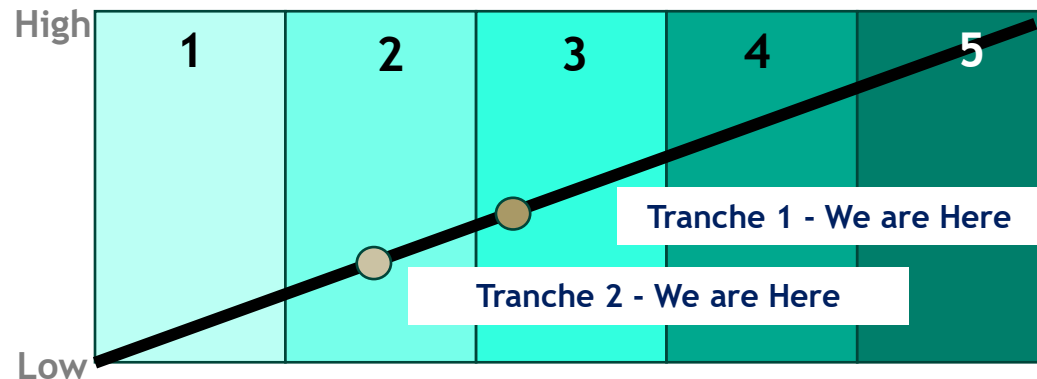
We currently have an overall **low - medium** level of confidence on the timelines. Confidence levels will increase as milestones are achieved and programme progresses further into Phase 3 for Tranche 1 and Phase 2 for Tranche 2

Scheduling and Dispatch: Phase 3 Milestones

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

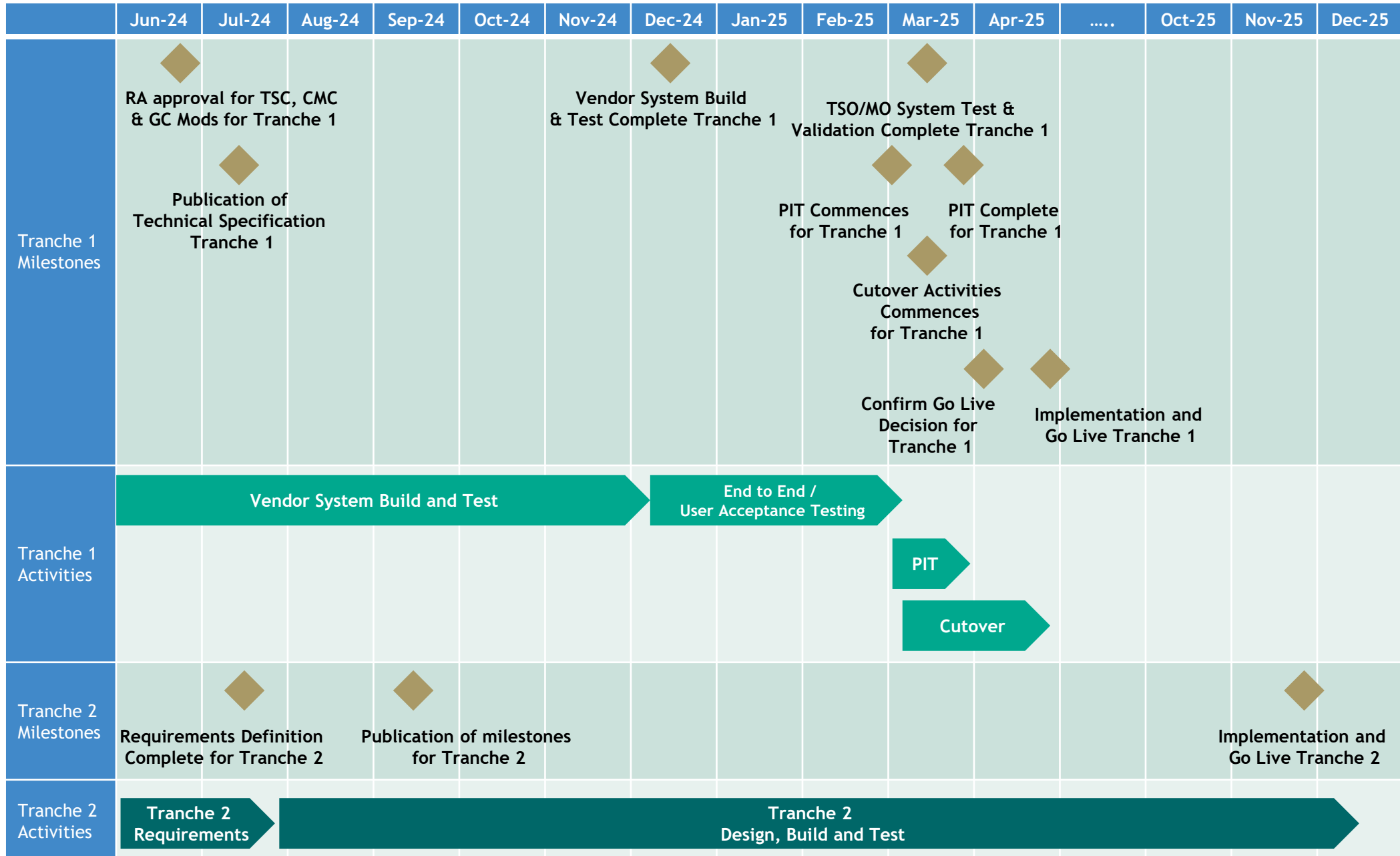


New Milestones
Published June 2024



We currently have an overall **low - medium** level of confidence on the timelines. Confidence levels will increase as milestones are achieved and programme progresses further into Phase 3 for Tranche 1 and Phase 2 for Tranche 2

Scheduling and Dispatch - Milestone Plan



SDP Tranche 1 Initiatives - Modifications Update

SDP_01 Operation of Non-Priority Dispatch Renewables (NPDR)

SDP_02 Energy Storage Power Station (ESPS) Integration

SDP_04 Wind Dispatchability Improvements

Trading and Settlement Code

SDP_01 T&SC mod was recommended for approval by the Modifications Committee on 08-Feb and was sent for RA decision.

Updated SDP_02 T&SC mod was recommended for approval by the Modifications Committee on 23-Apr and was sent for RA decision.

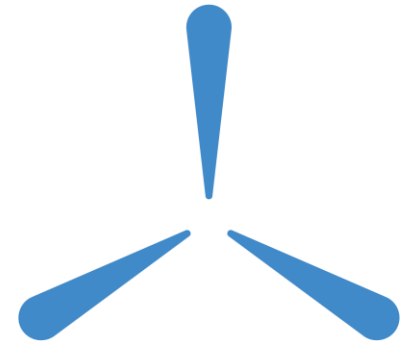
TSO has provided proposed text for updates to SEM-13-011 annex to RAs, which is expected to be published for consultation in summer 2024.

Grid Codes

The SDP_01 Grid Code mod has been reviewed by the Grid Code Review Panels/Joint Grid Code Review Panel on 20-Mar. Was recommended for approval by EirGrid panel, public consultation in NI has completed. Following on from consultation, recommendation paper will be issued to CRU and UR.

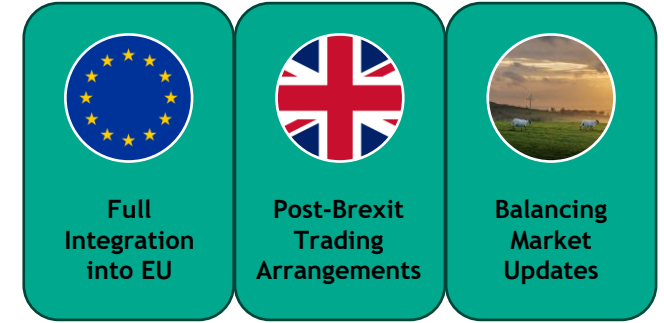
The SDP_02 Grid Code mod has been reviewed by the Grid Code Review Panels/Joint Grid Code Review Panel on 20-Mar. Panel members requested more time to review, may need to be brought back to panels in September if changes are required.

SDP Q&A



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



The following updates since last industry forum:

- **EU Integration:**

- Primary legal contract signed between TSOs in the Core Capacity Calculation Region (CCR), the Core TSOs Cooperation Agreement (CoA), with effective date of 1st July 2024;
- Work ongoing to develop High Level Requirements for EU Integration - requiring changes to market rules and schedules, operating processes and system scheduling;
- 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 development;
- Once agreed, these will be assessed for code and system changes required and put into project delivery plans.

Participant Survey



Stakeholder Engagement: FPM Industry Workshop

Contacting FPM Programmes

To raise an issue or query for the Future Markets Programmes:

Contact



SDP Queries

SchedulingandDispatch@Eirgrid.com

LDES Queries

FuturePowerMarkets@Eirgrid.com

FuturePowerMarkets@Soni.ltd.uk

FASS Queries

FASS@Eirgrid.com

FASSProgramme@soni.ltd.uk

SMP Queries

SMP.PMO@Eirgrid.com

FPM Policy

FuturePowerMarkets@Eirgrid.com

FuturePowerMarkets@Soni.ltd.uk

Information to Provide

- Your Name
- Your email & phone number
- Your organisation
- Topic of Issue/Query & Programme Name
- Description of the issue or query
- Any additional information to aid in understanding the issue or query

Future Power Markets: Industry Workshop

Future Workshop Schedule

Date	Time	Location
05 June 2024	13:00 - 14:30	Herbert Park Hotel, Dublin
03 July 2024		TBD - Dublin, Belfast, Dundalk
07 August 2024		TBD - Dublin, Belfast, Dundalk
11 September 2024		TBD - Dublin, Belfast, Dundalk
09 October 2024		TBD - Dublin, Belfast, Dundalk
06 November 2024		TBD - Dublin, Belfast, Dundalk
04 December 2024		TBD - Dublin, Belfast, Dundalk



Future Discussion Topics

SDP

- ESPS and NPDR Modification Approval - Updates
- Ongoing NPDR designation process updates

LDES

- Continuing to liaise with the RAs and Departments on next steps

FASS

- The TSOs will publish a recommendations paper in advance of the SEM Committee Decision in July 2024 as per the timelines set out in the PIR.
- Product Review Consultation period open until 17th July. Workshop to be held on 19th June.
- System Services Supplier Charge consultation period to commence by July, per PIR.
- Code Development Working Group to be established with first Working Group provisionally scheduled for end of June.

SMP

- Additional details on functional approach
- Additional topics TBD based on feedback

EMP

- TBD