



Integrated Single Electricity Market (I-SEM)

High Level Framework for I-SEM Go-Live Readiness

SEM-17-005

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1 BACKGROUND

1.1 CONTEXT

The Single Electricity Market (SEM) on the island of Ireland is undergoing a radical transformation arising from changes to European legislation designed to create a single wholesale market across the European Union (EU). The new market design will result in what has been commonly referred to as the Integrated Single Electricity Market (I-SEM). The I-SEM will more fully facilitate coupling with the electricity market in the rest of the EU and is due to go-live on 23 May 2018.

The existing SEM involves an ex-post spot energy market, a capacity payment mechanism, and physical transmission rights (PTR) auctions. The new I-SEM arrangements will instead include six markets or auctions (the day ahead market, the intraday market, the balancing market, the capacity market, financial transmission rights (FTR) auctions and a forwards market intended to facilitate trading in hedging contracts) spanning different trading timeframes with separate clearing and settlement mechanisms. Such differences will result in changes to the regulatory framework supporting the market, and also fundamental changes to the systems and processes operated by the EirGrid plc/ SONI Ltd as Transmission System Operators (TSOs)/Market Operators (MOs), the interconnector owners and by market participants in advance of go-live.

Consistent with the “Programme Management and Working Arrangements” published in January 2015¹, dedicated ‘Market Readiness’ workstreams have been set up within the Regulatory Authorities (RAs) in Ireland and Northern Ireland (which includes the Commission for Energy Regulation (CER) and the Utility Regulator (UR) respectively), and in EirGrid plc/ SONI Ltd to assess progress towards readiness for live operation against an agreed set of metrics.

¹ Design and Implementation of I-SEM, Agreed Approach Document: Project Organisation and Working, January 2015, <https://www.semcommittee.com/news-centre/i-sem-agreed-approach-document-between-urcer-and-eirgrid-and-engagement-going-forward>

1.2 PURPOSE OF THIS DOCUMENT

This document outlines how the RAs and TSOs will manage the transition to I-SEM go-live within the overall I-SEM programme. It provides a high level overview of how the RAs will work with EirGrid plc/ SONI Ltd to co-ordinate activities and provide a consolidated readiness function for I-SEM. It will identify critical go-live events and provide a high-level roadmap for each event, intending to inform stakeholders of the approach to monitoring the overall readiness of participants and market systems ahead of go-live.

A subsequent more detailed Readiness Framework document, setting out the criteria, governance and contingency for each go-live event will be published by the SEM Committee in May 2017.

2 MARKET READINESS ROLES AND RESPONSIBILITIES

This section explains what I-SEM market readiness is, and outlines the roles and responsibilities in I-SEM readiness monitoring at a high level.

2.1 MARKET READINESS MONITORING AND REPORTING

Market readiness monitoring and reporting is the process carried out collectively by the RAs and by EirGrid plc/ SONI Ltd which aims to provide a 'health check'² of the progress of all affected stakeholders towards the new arrangements required for I-SEM.

Each stakeholder (including the RAs, TSOs, MOs, interconnector owners, Meter Data Providers (MDPs) and market participants) has its own I-SEM implementation project setting out changes they will need to make to their businesses, systems and processes in order to meet I-SEM deadlines and fully participate in I-SEM. These changes (while not an exhaustive list) include:

- **Staffing** - Have resource requirements been considered? Are recruitment/training plans in place?
- **Business Process Redesign** - Has an impact assessment been completed of I-SEM on existing processes? Are there plans for any redesign, development and testing requirements?
- **IT System Development** - Has an impact assessment been completed of I-SEM on existing IT Systems? Have plans been produced for system design, development and testing requirements? Are projects underway that will meet the I-SEM timeline?
- **Financial & Credit Arrangements** - Are the implications of I-SEM understood? Are there plans in place with institutions and participants? Are arrangements being progressed in line with the I-SEM timetable?
- **Legal, Regulatory & Commercial Compliance** - Is there a clear roadmap/understanding of the various agreements³ that will be updated or introduced? Are there plans for participant accession to the various new agreements?

The RAs and EirGrid plc/ SONI Ltd will be monitoring and reporting on the readiness progress of all parties through the Market Readiness Assessment (MRA) process. Reports are regularly provided by the RAs and EirGrid plc/ SONI Ltd to go-live

² The primary engagement mechanism between the I-SEM programme and participants is the Market Readiness Assessment process operated by EirGrid plc/SONI Ltd.

³ These include bilateral agreements as well as centralised agreements.

decision makers including the I-SEM Steering Group (which consists of the Chair of the Commission for Energy Regulation (CER) in Ireland, the CEO of the Utility Regulator in Northern Ireland, and the Chief Executive of EirGrid Group) and the SEM Committee (SEMC).

This process should provide assurance to the I-SEM Steering Group and the SEMC that market systems are fit-for purpose and participants have prepared and are ready to participate within the new I-SEM arrangements, and that the consequential business and operational risks are firmly understood and being managed.

2.2 ROLES AND RESPONSIBILITIES

The RAs' Market Readiness function is primarily focused on ensuring that the criteria, governance and contingency arrangements for each critical Go-Live Event are clearly understood, and, that all necessary and relevant information is available to support the I-SEM Steering Group and SEMC as decision-making bodies⁴. This will involve close co-operation with EirGrid plc/SONI Ltd who are leading the market participant and central system facing aspects of the readiness function but is envisaged to also involve direct engagement by the RAs with industry stakeholders.

EirGrid plc/SONI Ltd's work has involved developing a wide range of metrics to build a comprehensive view of I-SEM market and market participant readiness. The metrics cover the main components of the market arrangements, such as legal arrangements, systems and business processes. It is recognised that additional metrics may be identified through the detailed assessment of each Critical Go-Live Event and that these may be added to the current reporting suite.

Market Participants are asked to voluntarily self-assess their progress towards readiness by completing online questionnaires. EirGrid plc/SONI Ltd aggregate this information and discuss the output with the RAs. Reports are then published to provide a summary of the results⁵.

While EirGrid plc/ SONI Ltd are responsible for coordinating and publishing the results of Market Readiness surveys, the RAs oversee the process, query the results and ensure that any risks or concerns are flagged and explained.

The RAs began engagement with EirGrid plc/SONI Ltd about I-SEM Market Readiness in July 2016. EirGrid plc/SONI Ltd have since established a Market Readiness team and published a Market Readiness Reporting Strategy⁶ and Market Readiness Reporting Plan⁷. These documents provide the basis of how the programme will interact with all participants including Market Participants, other entities within the EirGrid Group, Interconnector Owners, MDPs and the RAs.

⁴ The MRA process provides the basis for all such reporting.

⁵ A number of Market Readiness Reports have already been published. These can be found here: <http://www.sem-o.com/ISEM/General/I-SEM%20October%20Data%20MRA%20Report%2028112016.pdf>

⁶ EirGrid's Market Readiness Reporting Strategy, April 2016, <http://www.sem-o.com/ISEM/General/Market%20Readiness%20Reporting%20Strategy.pdf>

⁷ EirGrid's Market Readiness Reporting Plan, <http://www.sem-o.com/ISEM/General/Market%20Readiness%20Reporting%20Plan.pdf>

3 SUMMARY OF READINESS FRAMEWORK

This section sets out an overview of a more detailed framework document setting out the criteria, governance and contingency for each critical go-live event, due to be published in May 2017 by the SEMC.

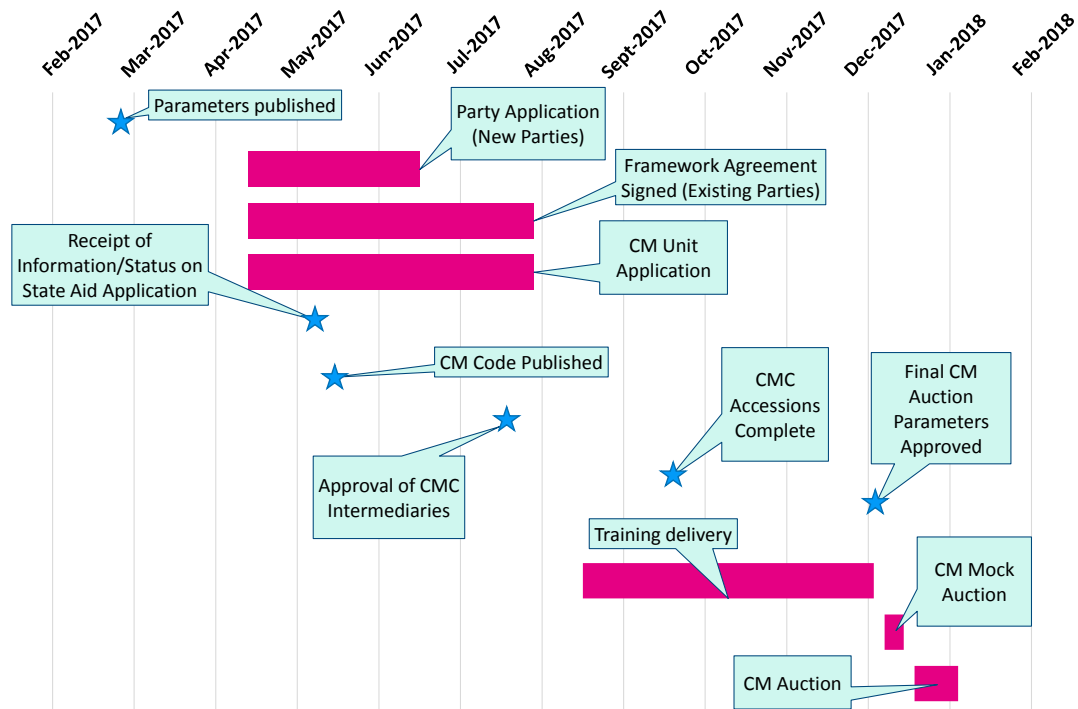
3.1 CRITICAL GO-LIVE EVENTS

Implementation of I-SEM encompasses a number of critical events leading up to the final go-live of the energy trading arrangements on 23 May 2018. These are:

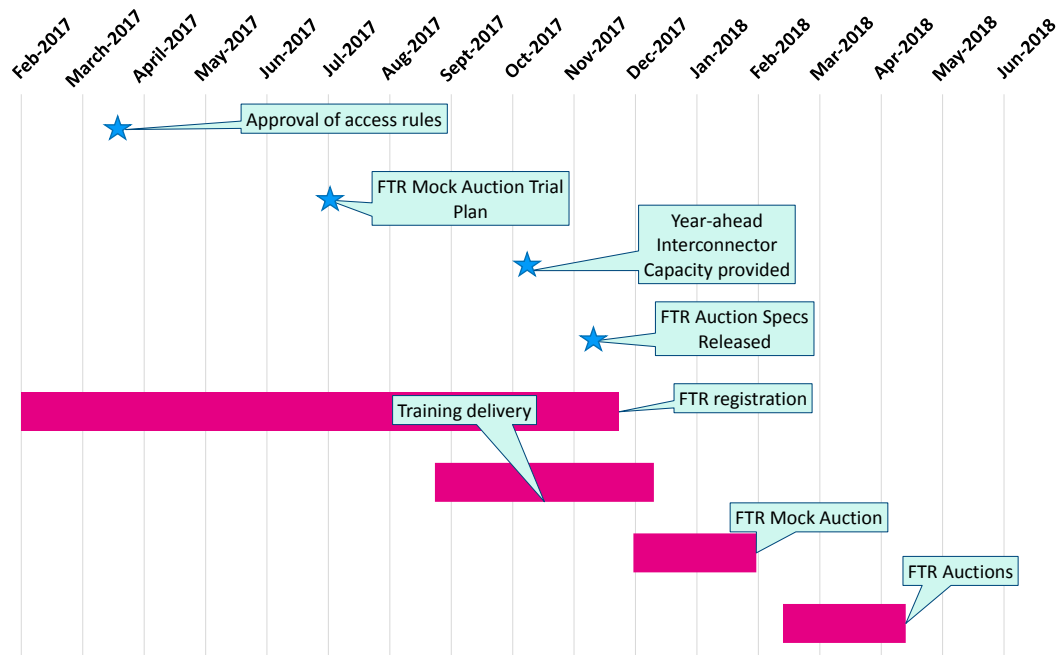
- The first T-1 Capacity Remuneration Market (CRM) Auction (scheduled to take place in Q4 2017);
- The Financial Transmission Rights (FTR) Auction (currently scheduled to take place in Q1 2018);
- The Market Trials (scheduled to take place between December 2017 and May 2018);
- The Energy Trading Arrangements go-live on 23 May 2018, which include the Day-Ahead, Intra-Day and Balancing Markets; and
- The first T-4 Capacity Remuneration (CRM) Auction in Q3 2018.

In order to support these Critical Go-Live Events, there are a number of milestones that Market Participants must meet. These include completing central system development, delivery of codes and licences, deadlines for registration and accession to the various markets, as well as successful participation in various market trials. The key activities and milestones associated with each Critical Go-Live Event are set out below.

1 - Pathway to CRM Auction⁸

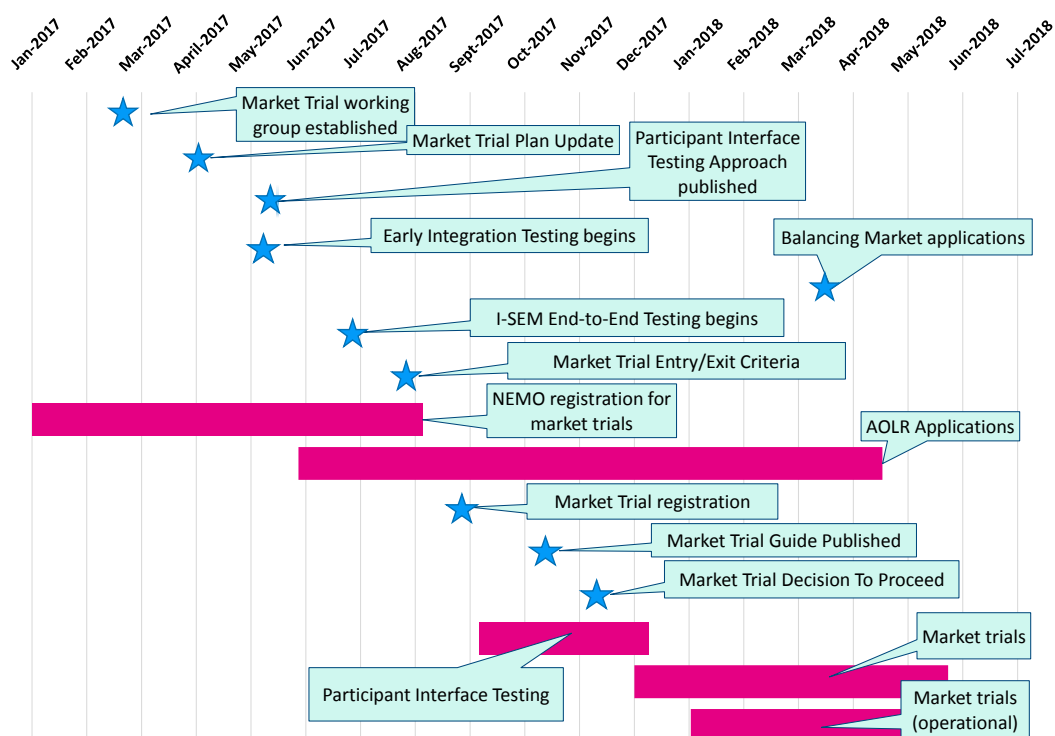


2 - Pathway to FTR Auction

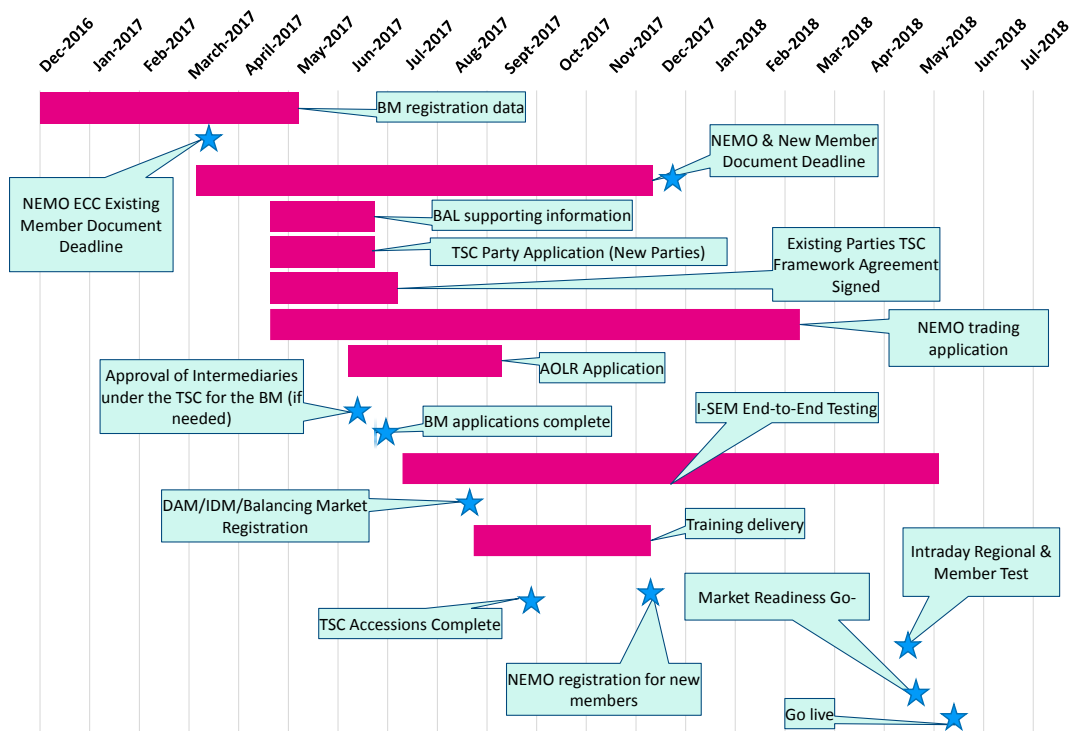


⁸ The pathways diagrams (1 to 4) are presented for illustrative purposes only and each critical go-live event will be subject to Impact Assessment and the Change Request process.

3 - Pathway to Market Trials



4 -Pathway to Go-Live of the Energy Trading Arrangements



3.2 CRITERIA, GOVERNANCE & CONTINGENCY

As set out in the “Agreed Approach Document”⁹ between the RAs and EirGrid plc/ SONI Ltd, the I-SEM Steering Group is responsible for deciding whether to proceed with significant aspects of the project, and is responsible for making a recommendation to the SEM Committee about the final I-SEM go-live decision.

The I-SEM Steering Group will therefore face decision points for each Critical Go-Live Event (and to make a recommendation to SEMC for the final go-live date). These are points at which the Steering Group will review the evidence that is available, and decide whether the next Go-Live Event should go ahead.

In order to support the I-SEM Steering Group, detailed criteria, governance and contingency arrangements will be developed for each event. These are discussed further below.

Criteria

Building upon the TSOs “Readiness Criteria”¹⁰ detailed metrics and criteria will be defined for each Critical Go-Live Event.

These will be elaborated on further in the RAs’ scheduled May 2017 publication of a more detailed Readiness Framework document, but at a high level, in order to achieve a go-live date of 23 May 2018, all parties involved in the market must have completed the requisite activities such as:

- The RAs must ensure to have legislative, licencing and regulatory frameworks in place, received confirmation of State Aid Approval and that agreements are in place to facilitate market regional coupling, including across neighbouring NEMOs and TSOs. Any systems necessary to perform market monitoring must also be ready;
- SEMO must have necessary resources, systems, processes and procedures (including Helpdesk) in place to execute the balancing market operator function;
- The NEMO function of the MOs must have resources and systems in place for ex-ante market operation;

⁹ Design and Implementation of I-SEM, Agreed Approach Document: Project Organisation and Working, June 2015, <https://www.semcommittee.com/news-centre/i-sem-agreed-approach-document-between-urcer-and-eirgrid-and-engagement-going-forward>

¹⁰ As defined in Section 8 of EirGrid’s Market Readiness Reporting Strategy: <http://www.sem-o.com/ISEM/General/Market%20Readiness%20Reporting%20Strategy.pdf>

- The TSOs must have necessary resources, processes and procedures in place and all the systems necessary to fulfil their obligations for system and market operation. This will include outage planning, network model management, demand forecasting, wind forecasting and scheduling/ dispatch;
- Participants (including interconnector owners and meter data providers) must have modified their business processes to meet the new requirements under the I-SEM and completed any necessary systems modifications to enable them to communicate with the central market systems. Interfaces to the TSOs and MOs need to be in place; and
- Relevant parties should have successfully reviewed their bilateral arrangements and completed their component of the Market Trial.

Governance Arrangements

For each Critical Go-Live Event the process and timing of each decision point will be defined.

The I-SEM Steering Group is responsible for deciding whether to proceed with each critical Go-Live event, and is responsible for making a final go-live recommendation to the SEM Committee. It is important that necessary and relevant information is available to the decision makers at each decision point. The information requirements will be outlined in the more detailed Readiness Framework document in May 2017.

Contingency Arrangements

For each Critical Go-Live Event the necessary actions resulting from a “no-go” decision will be defined. For example, the impact of a failure of the ETA to go-live on the scheduled date on both the FTR and CRM arrangements.

The development of the criteria, governance and contingency arrangements will be done in cooperation with both the TSOs so as to avoid duplication and unnecessary overhead for market participants.

3.3 CUTOVER FROM SEM TO I-SEM

At the I-SEM “Go-Live” there will need to be a cut-over from the SEM to the I-SEM.

As part of the RAs’ Readiness workstream, a strategic plan for cut-over will be developed, and there will also need to be a contingency for what happens if the I-SEM Go-Live date is re-scheduled to a later date. Details on the arrangements for cut-over will follow in due course.

4 NEXT STEPS

Building on this document, and with close engagement with the EirGrid plc/SONI Ltd and wider industry stakeholders, the full framework document due to be published in May 2017 will:

- Confirm when the SEM Committee and I-SEM Steering Group will be making decisions about Critical Go-Live Events (“decision points”);
- Confirm detail of criteria that will feed into decisions; and
- Provide detailed contingency arrangements.

It is envisaged that the RA team will engage with industry stakeholders to inform development of the full framework document. An invitation to bilateral meetings will be published on the SEMC website shortly.