



**SINGLE ELECTRICITY MARKET
COMMITTEE**

**I-SEM Project Plan
Quarterly Update: April 2016**

SEM-16-020

28th April 2016

Table of Contents

1	Introduction	3
2	Project Plan - Detailed Design and Implementation	4
3	Key Update and Milestones	6
4	Current dates for RA Paper Publications and Workshops	14
5	Stakeholder Engagement	15
6	Frequency of Updates.....	16

1 Introduction

1.1 Background

The all-island Single Electricity Market (SEM) is regulated jointly by the Commission for Energy Regulation (CER) in Dublin and the Northern Ireland Authority for Utility Regulation (or Utility Regulator) in Belfast, known as the Regulatory Authorities or RAs. The decision-making body which governs the market is the SEM Committee (SEMC)¹, consisting of the CER, the Utility Regulator as well as an independent member (who also has a deputy), with each entity having one vote.

The SEM is to undergo radical transformation arising from changes to European legislation designed to create a single wholesale electricity market across Europe. The new market design developed by the SEM Committee will result in what has been named an Integrated SEM (I-SEM) which will more fully facilitate coupling with the electricity market in the rest of Europe. Following extensive public consultation, the High Level Design for the new I-SEM was published by the RAs on 17th September 2014 (SEM-14-085a)² completing Phase I and Phase II of the Market Integration Project.

Since then, the I-SEM project has entered its final phase, Phase 3, namely the detailed design and implementation work needed to go-live with the new market anticipated for Q4 2017. Phase 3 includes various detailed design workstreams led by RAs, systems developed by the Transmission System Operators (TSOs – EirGrid and SONI) and market participant readiness testing.

The “Detailed Market Design and Implementation” phase of the I-SEM project is now well underway. The RAs and Transmission System Operators (TSOs) in Ireland (EirGrid) and Northern Ireland (SONI) and the Market Operator (SEMO) have been working collaboratively to ensure development of a robust and achievable project timeline with alignment of key workstreams, led respectively by the RAs or TSOs/MO.

1.2 Purpose of this Paper

In order to inform stakeholders of how the project is progressing, the RAs undertook to publish quarterly project updates. This is the seventh in a series of quarterly project updates; the next will be published in July 2016. Overall, I-SEM remains on track for go-live on 1st October 2017.

In addition to this quarterly update, a more detailed monthly snapshot of progress is shared with market participants via the Project Managers Group. This tracks progress against an

¹ The SEM Committee is established in Ireland and Northern Ireland by virtue of section 8A of the Electricity Regulation Act 1999 and Article 6 (1) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 respectively. The SEM Committee is a Committee of both CER and NIAUR (together the Regulatory Authorities) that, on behalf of the Regulatory Authorities, takes any decision as to the exercise of a relevant function of CER or NIAUR in relation to an SEM matter.

² [Publications | SEM Committee](#)

enhanced set of Project Milestones, which show the journey to market readiness. Any slippage against the baseline plan is reported, together with an explanation of the impact and mitigating actions being taken to preserve the go-live date. Changes to existing milestones or the addition of new milestones can only be made via a Change Request, each of which is shared with members of the Project Managers' Group for their consideration and impact assessment, prior to being approved.

2 Project Plan - Detailed Design and Implementation

The RAs and TSOs each maintain detailed project plans of their own for the design and implementation of the I-SEM. They have come together to combine the key milestones from their respective plans into an integrated Project Milestone Plan. All of the Milestones included are those which impact on two or more parties (e.g. TSO, RA, market participants). An explanatory paper is published on the SEMO website, which describes each of the Milestones. A small subset of the more significant Level 2 Milestones is presented in the Level 1 Milestone Plan, also available on the SEMO website.

The schematic in Figure 1 shows the 'Level 2' Milestone Plan underpinning the RA, TSO and market participant readiness aspects of I-SEM Phase 3, to facilitate the go-live of I-SEM on 1st October 2017.

Each Milestone detailed in Figure 1 is colour-coded, to show whether it has been:

- Completed (blue);
- On track (green);
- At risk (amber); or
- Is late, or has a later expected date than that in the baseline Milestone Plan (red).

As detailed in Section 3 of this update, good progress has been made over the last quarter, with all key Milestones having been delivered. However, it should be noted that a number of future milestones are shown as being 'at risk' and therefore coloured as 'amber', due to the central system requirements and designs progressing on the basis of informed assumptions, which can only be fully validated in July 2016 when the market design is finalised. Provided that these assumptions hold true, all of these Milestones will revert to being 'on track' (i.e. coloured green).

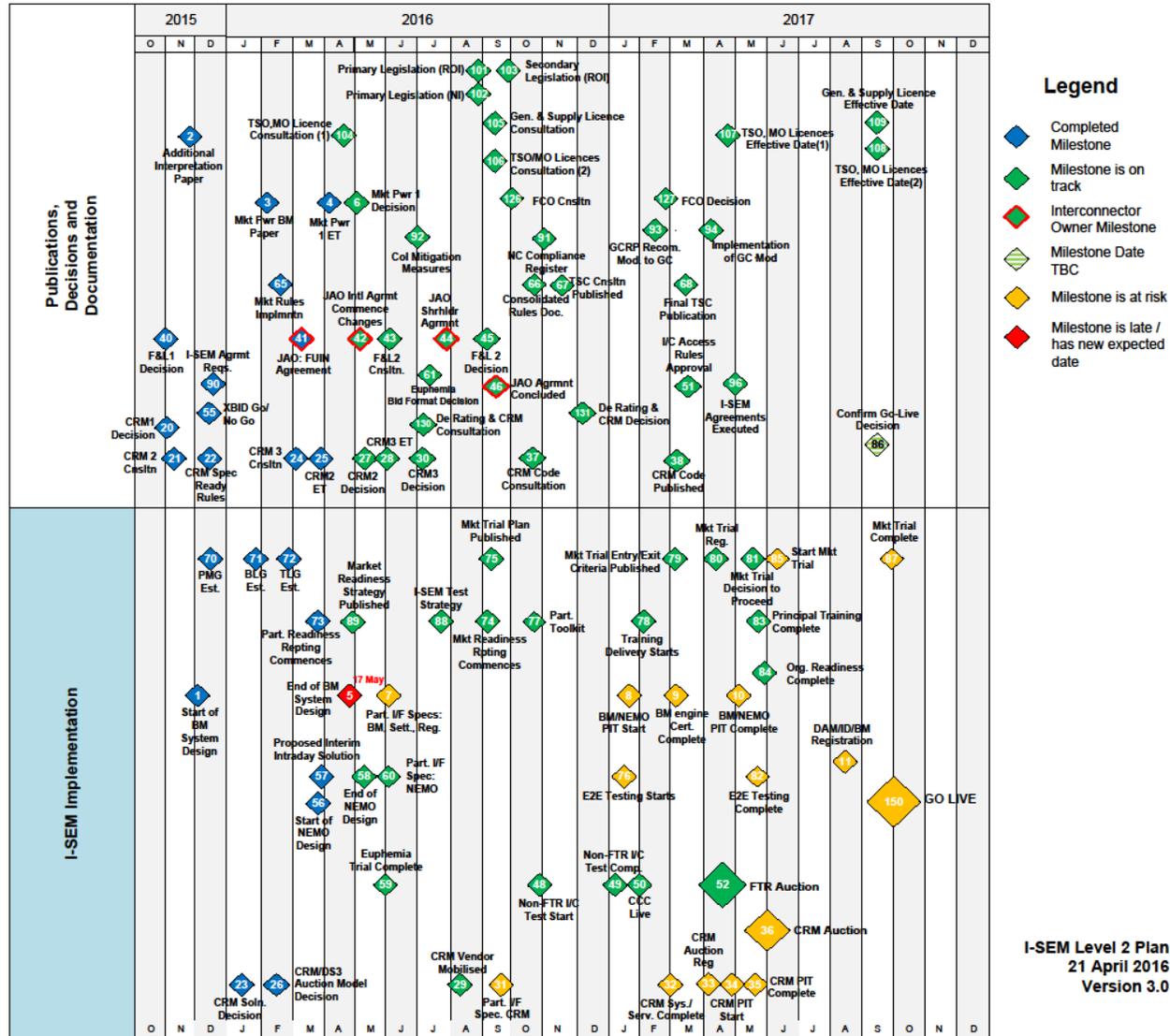


Figure 1 – Level 2 Milestone Plan for Phase 3 'Detailed Design'

3 Key Update and Milestones

Since the last I-SEM Quarterly Update was published on 29th January 2016³, the RAs have continued to work with the TSOs to ensure that the project is progressing to schedule and that key stakeholders are afforded an opportunity to engage regarding the project – most notably via the Project Managers Group, Business Liaison Group, Technical Liaison Group and Market Rules Working Group. In parallel to this group activity a Change Control Process which includes input from market participants via a Query Management Process has been agreed and implemented. The RAs have also continued to engage with the Department of Communications, Energy and Natural Resources (DCENR) in Ireland and the Department of Enterprise, Trade and Investment (DETI) in Northern Ireland.

In this Section we report on progress by owner (RA or TSO) against the Level 2 Milestones shown in Figure 1, above. Key Level 2 Milestones were also identified in a summary Level 1 view as presented to the Project Managers Group on 24th February. All Level 1 Milestones are included at Level 2 and referenced within the Explanatory Paper available on the SEM-O website.

3.1 RAs’ update

The RA workstream teams continue to develop and publish policy papers supported where appropriate by presentations and workshops. Those published since the last report are listed in Table 3.1 ‘Recent RA Publications and Presentations’.

Date	Description
07/04/2016	CRM Emerging Thinking Consultation 2
07/04/2016	CRM Workshop full slide pack 2016-03-16
11/03/2015	CRM Consultation 3
24/02/2016	CRM Responses to Consultation 2
12/02/2016	Forwards & Liquidity Working Group -Terms of Reference
20/04/2016	TSO & MO Licence Changes Consultation

Table 3.1 Recent RA Publications and Presentations

The RAs’ I-SEM team has also concentrated on the planned development of further consultation and decision papers and with this, the hosting of a number of workshops and stakeholder engagement events. It is proposed to host the next Senior Stakeholder seminar in June 2016.

The SEM Committee commissioned a new website last year to replace the All-Island Project (AIP) website and this is now live. The new website is part of efforts to improve the quality and accessibility of information about the SEM and I-SEM over the next few months.

While the AIP website will remain live until the end of June, to allow the migration of historic content, it will cease to exist after this date. It can be accessed by clicking on the link at the bottom of the homepage of the new SEM Committee website.

Subscribers can sign-up to news alerts from the SEM Committee website homepage; those who signed-up to receive news alerts from the AIP website have been automatically transferred to the new website; however, in order to continue to receive news alerts you must confirm your subscription.

To access the new website please click: [SEM Committee](#)

The tables which follow, report progress against the RA owned Milestones, categorised by area of activity. In each case, a commentary is provided on progress together with a list of those Milestones achieved in the last quarter and those scheduled for delivery in the next quarter. Any Milestones due in the quarter but not achieved are also noted and discussed.

For a description of each Milestone, please see the I-SEM section of the SEMO website.

1. MARKET DESIGN		
<i>Market Design encompasses Energy Trading Arrangements, Capacity Remuneration Mechanism, Market Power, and Forwards & Liquidity workstreams</i>		
	Milestones Completed	Commentary
Last Quarter (to 30 April 16)	<p>#3, Market Power BM Working Assumption</p> <p>#4, Market Power Emerging Thinking Paper</p> <p>#24, CRM3 Consultation Paper</p> <p>#25, CRM2 Emerging Thinking Paper</p>	<p>Good progress; all Market Design Milestones due in the quarter have been completed. The RA workstreams working with TSOs continue to support the Market Rules Working Group workshops with meeting 6 of 10 in the Calendar recently completed on 7th April. An escalation process has been developed to track and manage issues raised by market participants which require additional discussion for resolution.</p> <p>Recent work on CRM included a number of publications, development of Specification Ready Rules, initial thinking on De-rating and Capacity Requirements Methodology and factors, secondary trading, Capacity Market Code, and extended discussion on cross border issues.</p> <p>The separation of the Forwards & Liquidity workstream into two - covering policy on cross-border trading in the form of Financial Transmission Rights (FTRs) and within-zone liquidity addressing liquidity within I-SEM – was reflected in the plan as separate Milestones.</p>
Next Quarter (to 31 July 2016)	<p>#6, Market Power 1 Decision Paper</p> <p>#27, CRM Decision 2</p> <p>#28, CRM Decision 3 Emerging Thinking</p> <p>#30, CRM Decision 3 ‘Auction Rules’</p> <p>#43, F&L 2 (CFD) Consultation</p> <p>#61, Euphemia Bid Format decision</p> <p>#130, De-rating & Capacity Consultation</p>	<p>In the next quarter, key decisions are expected on market power mitigation measures, CRM 2 & 3, and the Euphemia Bid Format. In addition further work will be completed on De-rating & Capacity Consultation and F&L (CFD) Consultation. These workstreams continue to engage with market participants through workshops and bi-lateral meetings.</p> <p>Arising from the ETA rules working group, the RAs intend to publish a Consultation Paper on the Terms of Reference for the Balancing Market Principles Statement in May. This isn’t a milestone on the current plan but has been discussed with the ETA Rules Working Group. Prior to publication however, the change to the plan will be subject to programme change control.</p>

2. GOVERNANCE & LICENCING		
<i>Governance & Licencing covers the I-SEM Project and the European Regulations that underpin the market.</i>		
	Milestones Completed	Commentary
Last Quarter (to 30 April 16)	<p>#65, Market Rules Implementation Paper</p> <p>#104, TSO/MO Licence Consultation</p>	<p>The Governance and Licencing Workstream has engaged in a mapping review process to identify and assess licence changes required to give effect to SEM Committee Decisions with respect to I-SEM implementation. This workstream has identified a number of new roles and responsibilities as well as changes in the responsibilities of a number of existing licence holders in the SEM including the TSOs, interconnector owners and market participants.</p> <p>Since the last report the Governance and Licencing team have completed a number of governance review initiatives through workshops, bilateral meetings, and detailed discussions on changes to TSO MO Licences which were recently published for consultation.</p>
Next Quarter (to 31 July 2016)	<p>#92, Conflict of Interest mitigation measures</p>	<p>In the next quarter, this workstream will be focusing on developing Licence changes to Generator and Supplier market participant and completing work on Conflict of Interest matters.</p>

3.2 TSOs' Update

The last quarter has seen significant progress against a range of implementation activities – notably across the development of market rules and market systems. In addition, the extended Trial of the Euphemia day-ahead pricing algorithm continues to progress well and is due to conclude at the end of May 2016.

Participant engagement continues to progress, notably via the Project Managers Group, Business Liaison Group, Technical Liaison Group and the Rules Working Group. In addition, a participant readiness reporting initiative commenced at the end of March, which will feed into the market readiness reporting process later in the year. A market readiness strategy document was issued at the end of April detailing this wider readiness reporting approach.

All TSO owned Milestones due in the quarter have been successfully delivered, with the exception of Milestone #5, 'End of the Balancing Market System Design' - the expected date for which has slipped three weeks from 26 April to 17 May. This later date results from the scale and complexity of the BM design being greater than anticipated, with additional time being required to provide the level of detail necessary in the user requirements to minimise future change orders with the systems vendor. However, the resulting slippage in this Milestone will not adversely impact on the overall timeline – including testing and the publication of participant interface specifications, which remain on schedule.

The tables below report progress against the TSO owned Milestones, categorised by area of activity. In each case, a commentary is provided on progress together with a list of those Milestones achieved in the last quarter and those scheduled for delivery in the next quarter. Any Milestones due in the quarter but not achieved are also noted and discussed.

As before, for Milestone descriptions, please see the I-SEM section of the SEMO website.

3. MARKET RULES		
<i>The development of the Trading & Settlement Code plus associated Agreed Procedures, the Capacity Market Code, and the NEMO Code</i>		
	Milestones Completed	Commentary
Last Quarter (to 30 April 16)		<p>Although no specific ‘Level 2’ Milestones were due in the last quarter, excellent progress has continued in the development of the market rules, with a significant volume of documentation having been shared with the Rules Working Group. There has been some adjustment in the detailed workplan to accommodate the scale of work required and the complexity of issues which required resolution.</p> <p>The RA workstreams working with TSOs continue to support the Market Rules Working Group workshops, with meeting 6 in the Calendar recently completed on 7th April. An escalation process has been developed to track and manage issues raised by market participants who require additional discussion for resolution.</p> <p>Further, as noted earlier under ‘Governance & Licensing’, the RAs have published an information paper setting out how the I-SEM market rules will be implemented, including specifying a separate code for the capacity market and an explanation of how the various codes will fit together.</p> <p>Market Rules Working Group material may be located using the following link: Publications</p>
Next Quarter (to 31 July 2016)		<p>Three more meetings of the Rules Working Group are scheduled for the next quarter, taking us to meeting 9 in the schedule.</p> <p>Work on the Agreed Procedures is due to ramp-up during the quarter and it will be necessary to introduce additional milestones (via a Change Request) for the development of a Capacity Market Code – including the necessary consultation.</p>

4. CENTRAL MARKET SYSTEMS & SERVICES		
<i>The development of the necessary central market systems by the TSOs and the procurement of services (e.g. NEMO)</i>		
	Milestones Completed	Commentary
Last Quarter (to 30 April 16)	<p>#41, JAO Decision on developing FUIN platform</p> <p>#56, Start of NEMO design</p> <p>#57, Proposed Interim Intraday Design</p> <p><u>Slipped Milestone:</u></p> <p>#5, End of Balancing Market System Design</p>	<p>A significant programme of work has been completed since the BM systems vendor was appointed and mobilised in December 2015. Highly detailed user requirement specifications have been completed by the TSO and shared with the vendor. However, the resulting system design will not now be complete until 17 May, some three weeks later than the 26 April date in baselined Milestone Plan.</p> <p>This later date results from the scale and complexity of the BM design being greater than anticipated, with additional time required to provide the level of detail necessary in the user requirements to minimise future change orders with the systems vendor. The resulting slippage in this Milestone will not adversely impact on the overall timeline – including testing and the publication of participant interface specifications, which remain on schedule.</p>
Next Quarter (to 31 July 2016)	<p>#7, Participant Interface Specification – Balancing Market, Settlement & Registration</p> <p>#42, JAO – Initial Agreement to change platform</p> <p>#44, JAO Shareholder Agreement complete</p> <p>#58, End of NEMO service design</p> <p>#60, Participant Interface Specification for NEMO</p> <p>#88, I-SEM Test Strategy</p>	<p>In the next quarter, the build phase begins in earnest for the Balancing Market systems. The NEMO service design is due to be completed and the JAO agreements established. The I-SEM Test Strategy will be published, as will the participant interface specifications.</p> <p>Details of the documentation associated with these milestones will be shared via the Business Liaison Group (NEMO) and Technical Liaison Group (interface specs & test strategy).</p>

5. PARTICIPANT ENGAGEMENT		
<i>I-SEM communication and other engagement with Participants to ensure understanding, provide the necessary training/trialling, and report readiness</i>		
	Milestones Completed	Commentary
Last Quarter (to 30 April 16)	<p>#72, Technical Liaison Group established.</p> <p>#73, Participant Readiness Reporting commences</p> <p>#89, Market Readiness Strategy published</p>	<p>Building on the established model of the Rules Working Group, all of the other participant liaison groups are now in full swing.</p> <p>Following discussion at the Project Managers Group and the sharing of a draft set of metrics with market participants, participant readiness reporting commenced at the end of March 2016. A month later, the Market Readiness Strategy was published, describing how the TSO I-SEM Project will measure, assess, track and periodically report upon market readiness against pre-defined criteria. The strategy was published to provide all stakeholders with an understanding of the approach to tracking, assessing and periodically reporting progress towards readiness for live operations.</p>
Next Quarter (to 31 July 2016)	<p>#59, Euphemia Trial completed</p>	<p>In the next quarter, the TSO will develop a Market Readiness Plan.</p> <p>The Euphemia Trial is also due to complete, at which time the TSOs will submit a final report summarising the outcomes of the Trial and presenting a recommendation on the bid formats.</p>

4 Current dates for RA Paper Publications and Workshops

Topic	Consultation Paper	Workshops	Decision Paper
CRM			
CRM Consultation/Decision 2	18 th Dec 2015	29 th Sept 2015 20 th Jan 2016 5 th April 2016	10 th May 2016
CRM Consultation/Decision 3	11 th March 2016	16 th March 2016	8 th Jul 2016
CRM Derating & Capacity Requirement Methodology Consultation	7 th Jul 2016	Oct/Nov 2016	8 th Dec 2016
Market Power			
Phase 1 Consultation/Decision Paper	Nov 2015	2nd Dec 2015	3 rd May 2016
Forwards & Liquidity			
Within Zone Forward Contracting	3 rd June 2016	Mar/Apr/Jun/Jul 2016	5 th Sept 2016
Governance and Licencing			
Governance & Rules Working Group meeting schedule		Starts 22 nd Oct 2015 (ongoing)	
TSO & MO Licence consultation (First Tranche)			20 th April 2016
Generator & Supplier Licence Changes (Second Tranche)			16 th Sept 2016
Energy Trading Arrangements			
Market Rules Working Groups (meeting at approximately 5 week intervals)		Working Group 3 (Dublin)	21 st Jan 2016
		Working Group 4 (Belfast)	25, 26 Feb 2016
		Working Group 5 (Dublin)	7 th Apr 2016
		Working Group 6 (Belfast)	11,12 May 2016
Date to be confirmed		Working Group 7 (Dublin)	Jun 2016
Date to be confirmed		Working Group 8 (Belfast)	July 2016
Date to be confirmed		Working Group 9 (Dublin)	Sept 2016
Date to be confirmed		Working Group 10 (Belfast)	Oct 2016

5 Stakeholder Engagement

5.1 Upcoming milestones and engagement

Notification of other events regarding the I-SEM Project will be updated by the RAs on the SEM Committee website and by the TSOs on the I-SEM page of the SEMO website. An events calendar can be access via:

[All I-SEM Events](#)

6 Frequency of Updates

6.1 Updates

The RAs have committed to publishing an update to the I-SEM Phase 3 Project Plan on a quarterly basis. Hence the next Project Plan will be published by the RAs on the SEM Committee website at the end of July 2016.

~ End of Document ~