



# **SINGLE ELECTRICITY MARKET COMMITTEE**

## **I-SEM Project Plan Quarterly Update: January 2016**

**SEM-16-004**

**29<sup>th</sup> January 2016**

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## 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)<sup>1</sup>, 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 17<sup>th</sup> September 2014 (SEM-14-085a)<sup>2</sup> 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 sixth in a series of quarterly project updates; the next will be published in April 2016. Overall, I-SEM remains on track for go-live in Q4 2017.

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<sup>1</sup> 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.

<sup>2</sup> <http://www.allislandproject.org/GetAttachment.aspx?id=85dd208f-cc91-4e35-9b58-021cb9b7b162>

## 2 Project Plan 2017 - Detailed Design and Implementation

The schematic in Table 2.1 Phase 3 Detailed Design provides the latest high-level project plan underpinning the RA, TSO and market participant readiness aspects of I-SEM Phase 3, to facilitate the go-live of I-SEM in Q4 2017. This includes the following key workstreams:

Led by the RAs

- Energy Trading Arrangements (ETA);
- Capacity Remuneration Mechanism (CRM);
- Market Power (MP);
- Forwards & Liquidity (F&L);
- Governance and Licensing (G&L);

Led by the TSOs/MO

- Central Systems & Services
- Central Arrangements
- Operational Capability;
- Participant Engagement and Market Readiness led by the TSOs/MO and RAs; and,
- Legislation led by the respective departments in Northern Ireland and Ireland.

I-SEM PHASE 3 DETAILED DESIGN AND IMPLEMENTATION PHASE																													
Project Activities	ID No	High Level Tasks	2014				2015				2016				2017														
			S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
High Level Design	0	Development of High Level Design	◆																										
Energy Trading Arrangements 1	1.1	Building Blocks Consultation						◆																					
	1.2	Detailed Design Decision																											
	1.3	Aggregator of Last Resort																											
	1.4	Rules																											
	1.5	Agreed Procedures																											
	1.6	Implementation																											
Capacity Remuneration Mechanism 2	2.1	CRM Decision 1																											
	2.2	CRM Decision 2																											
	2.3	CRM Consultation 3																											
	2.4	CRM Auction																											
	2.5	Rules																											
Market Power 3	3.1	Phase I Principles of MP Mitigation																											
	3.2	Phase II Licencing/Implementation																											
Governance & Licencing 4	4.1	I-SEM Institutional Arrangements																											
	4.2	Designation of NEMO																											
	4.3	Licensing Changes																											
	4.4	Modification of Codes																											
Forwards & Liquidity 5	5.1	X Border Risk Hedging (FTRs)																											
	5.2	Internal Forward Contracting (CFDs)																											
	5.3	FTR Auction																											
Central Systems & Services	6.1	Balancing Market (BM) PQQ																											
	6.2	BM RFP Development/Issue																											
	6.3	BM RFP Evaluation/Award																											
	6.4	BM System Design																											
	6.5	Test Complete																											
	6.6	Market Trial & Cutover																											
Central Arrangements 7	7.1	Euphemia Conceptual Trial																											
	7.2	Euphemia Commercial Trial																											
	7.3	Market Rules & Agreed Procedures																											
Operational Capability 8	8.1	Operational Change																											
	8.2	Operational Transitional Planning																											
	8.3	Operational Readiness Preparation																											
	8.4	Market Trial Planning																											
	8.5	Market Trial Preparation																											
Participant Engagement & Readiness 9	9.1	Participant Project Updates (Qtr)		◆			◆			◆			◆			◆			◆			◆			◆			◆	
	9.2	Participant Market Trial Readiness																											
Legislation	10.1	Legislation Review																											

Table 2.1 Phase 3 Detailed Design

### 3 Key Update and Milestones

Since the last I-SEM Quarterly project update was published on 30<sup>th</sup> October 2015<sup>3</sup>, the RAs have continued to work with the TSOs to ensure that the project is progressing to schedule and that key stakeholders are afforded opportunity to engage regarding the programme. 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.

#### 3.1 RAs' update

The RA workstream teams continue to develop and publish policy papers supported where appropriate by presentations. Those published since the last report are listed in Table 3.2 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. A Senior Stakeholder seminar was held on 27<sup>th</sup> November. It was well attended with useful feedback and comment for RAs and TSOs to consider.

The RAs have worked closely with TSOs/MO to monitor a Joint High Level Integrated plan on a weekly basis supported by an agreed change management process. A number of workshops and joint planning sessions were held with TSOs by workstream managers supported by the two project offices. These meetings and workshops have become a regular and important point of contact and sharing of cross workstream dependencies. The change management processes within TSOs and RAs which have been integrated for joint project control is proving beneficial in supporting design clarifications, managing pressures on milestone dates and deliverables, tracking change requests and impact assessments. Market Participants will have access to an Issues Management Process with consultation as appropriate for impact assessment. The Change Control process is being extended to provide a mechanism for market participant issues to be proposed and developed as change requests. The RAs and TSOs have been in discussions with Interconnector Owners to synchronise this parallel project with I-SEM programme. Key milestones from the high level plan of the Interconnector Owners will be added to the joint RA/TSO plan.

As the programme moves through the Detailed Design and Implementation Phase the emphasis on progress monitoring and tracking (based on a rolling wave version of the joint plan) will shift more from market design activity to include system procurement, design, development, testing, implementation and relevant supporting activities. In support of this approach the RAs and TSOs have agreed to embark on a planning review to develop a more detailed plan to better reflect the need for market participation communication and support in key areas such as market trials and market readiness. It is expected that communication will be through the established working and liaison groups and use of the I-SEM section of the SEM-O website.

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<sup>3</sup> [http://www.allislandproject.org/en/wholesale\\_overview.aspx?article=375d0858-d3fa-49b3-91f1-ead057903bed](http://www.allislandproject.org/en/wholesale_overview.aspx?article=375d0858-d3fa-49b3-91f1-ead057903bed)

In parallel the RAs have recently established a number of working groups to provide input to the development of consultation and decision papers. In particular the Market Rules Groups and the Governance Review Process have an important role to contribute to the development of the Trading & Settlement Code and Licence Change requirements.

Within the Energy Trading arrangements (ETA) workstream, recent activity has concentrated on the development of market rules for I-SEM. There will be a suite of market rules for I-SEM (Trading and Settlement Code, NEMO Rules, Grid Code, etc) and these will be developed initially through the working groups. The Working Group process is led by the TSOs and SEMO while the RAs chair the Working Group meetings.

Each market rules topic to be developed will go through a multi-stage process over the course of five working group meetings (each meeting is approximately five weeks apart).

The multi-stage approach is:

- Proposals / positions papers;
- Plain-English draft;
- Updated plain-English draft;
- Legal drafting; and
- Finalised legal drafting for sign off.

A range of topics, at various stages of development, may be discussed at any single meeting. It will not be necessary for all topics to go through this five stage approach. For example, there will be issues where the design requirements are sufficiently clear from the SEM Committee decisions to allow for movement straight to Plain English drafting. More information on the Working Group process and relevant information is available on the SEM-O website.

The Capacity Remuneration Mechanism workstream continues with a number of parallel activities in policy development. The first decision and the second consultation paper on the CRM detailed design were published in December 2015. A further consultation is currently being developed for the Auction Rules which is scheduled for the end of Q1 2016. Throughout 2016 Capacity Market Settlement Rules, and De-rating Methodology and Factors will also be consulted upon and the RAs and TSOs are working towards the development of this. In addition the RAs continue to work closely with the Departments, DECC and OFEGM on key items such as the Cross-Border element of the CRM and State Aid approval.

The Forwards & Liquidity workstream has been separated into two elements covering policy on cross-border trading in the form of Financial Transmission Rights (FTRs) and within-zone liquidity addressing liquidity within I-SEM. Following publication of a Consultation paper on FTRs, nineteen responses from market participants were received in October and fed into

the RAs’ final decision. The FTR Decision Paper was published on 14 December and determined that FTRs will initially take the form of Options with the potential to consider Obligations at a later date. It was also decided that FTR’s will be discounted for losses but not for ramping. Views on the potential FTR auction platform were requested and the RAs are working with the Interconnector Owners on the planning and delivery of a platform for I-SEM go-live. The RAs will continue their close engagement with Ofgem in implementation of the Forward Capacity Allocation Guideline. Consultancy support has also been tendered for the within-zone element of the workstream and it is anticipated that this support will commence work in February. The within-zone workstream will include initial public engagement with market participants in March and April 2016.

The Governance and Licensing 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. The Governance and Licencing work programme includes target dates of April and September to begin consultation on proposed Licence Changes. It is thought that generator and licence changes will be considered in the second tranche of consultation in September 2016.

The RAs have also, following the publication of the I-SEM Roles and Responsibilities Consultation Paper (SEM-140016) and Decision Paper (SEM-15-077), instigated a review of TSO and MO synergies and conflicts of interest with a view to identifying and mitigating against actual and perceived conflicts of interest. Further engagement by way of bilateral meetings with market participants on this topic is envisaged later this year.

In advance of delivering a new SEMC website a dedicated I-SEM webpage has been developed. This page will be mirrored on the UR and CER websites and will, for the first time, provide in one place key background and publications information about the I-SEM. This webpage will have links directly to the existing AIP website.

The following table 3.1 lists recent publications and presentations.

Date	Description
20/01/2016	I-SEM CRM Stakeholder Workshop
13/01/2016	I-SEM Stakeholder Workshop Agenda 20 <sup>th</sup> January
16/12/2015	I-SEM Capacity Remuneration Mechanism Detailed Design Paper 1
15/12/2015	Forwards and Liquidity Financial Transmission Rights Decision Paper
04/12/2015	Presentation Slides from I-SEM Market Power Workshop
02/12/2015	I-SEM Market Power Workshop
27/11/2015	I-SEM Senior Stakeholder Forum
21/11/2015	CRM Consultation Paper 2
20/11/2015	I-SEM Market Power Consultation Paper



**Table 3.1 Recent RA Publications and Presentations**

### **3.2 TSOs' Update**

Over the last quarter, the focus of the TSOs' I-SEM Project has shifted towards implementation of the new market arrangements, whilst continuing to support the RAs' market design process and the translation of that emerging design into market rules. This shift towards a new phase of activities includes the implementation of the technology infrastructure, service arrangements, organisational changes, and process changes necessary to carry out the duties of system and market operator under the I-SEM.

Recognising this shift towards implementation and with the appointment of a new Client Side Advisor, a re-planning exercise was successfully completed to define clear plans, structures and tools appropriate for the future conduct of the I-SEM Project.

Significant delivery progress has been made over the quarter. This is typified by the market rules development process, where - as detailed in the RAs' update - a major programme of work has been set out and an outline of the rules content presented. The outputs of the multi-stage development process are flowing according to the Working Group's timetable, with notable areas to date including rules for imbalance pricing and imbalance settlement.

Following the successful conclusion of a procurement process, a Balancing Market systems vendor (ABB) was appointed in late 2015 to develop the necessary system changes. These include participant registration, data management, scheduling and real time operations, Balancing Market operations, settlement and credit management. Having mobilised quickly and now two months into the system design, the work is progressing well.

The definition of system requirements and the development of the system design are proceeding to plan. This is despite the market design not being fully bedded-down and the necessity that system development proceeds before the market rules have been defined. This approach to system development is obviously not without risk, but it is necessary to preserve the scheduled go-live date.

A procurement process for the selection of a Nominated Electricity Market Operator (NEMO) service provider is nearing conclusion; the NEMO solution development will follow.

An extensive programme of participant engagement has been initiated and will ramp-up over the coming months. In addition to the Rules Working Group, three other participant liaison groups have been established, each with a specific purpose:

1. **Project Managers' Group**, a discussion and information forum for I-SEM project managers across industry to develop a common understanding of the central delivery plans; to gain a shared understanding of progress against those plans; and to discuss the impact on individual plans of any slippages in milestones or proposed changes to milestone dates. It therefore serves as the key communication channel for project management personnel. The Group first met before Christmas 2015 and will next meet on 24 February 2016.

2. **Business Liaison Group**, the I-SEM forum for communication, consultation and coordination with Market Participants on issues of a business interest relating to I-SEM, most notably regarding the functional and process aspects of the I-SEM implementation. The principal focus of the Group is to provide business input into business process and system specification activities, particularly those related to participant interfaces. The BLG will also serve as a forum for Market Participants to communicate with each other regarding the I-SEM business challenges they face in the implementation of their own processes, procedures, systems and organisational changes, thereby assisting their own readiness programmes for market go-live. Topics might include such matters as training, certification testing, readiness monitoring, and the Market Trial. This Group first met in January 2016.
  
3. **Technical Liaison Group**, serves as the principal forum for engagement with industry on topics of a technical nature, such as connectivity and interface specifications. The inaugural meeting of this Group is scheduled for 24 February 2016.

A page on the SEMO website has been developed to communicate I-SEM progress and provide key information to participants; this includes a calendar of liaison group meetings and other I-SEM events. The website will be further developed over the coming months.

In the next quarter, the TSOs will initiate a participant readiness reporting process; more details will be forthcoming shortly.

As noted in the previous quarterly update, the EUPHEMIA commercial phase trial commenced last year. Developed by the Price Coupling of Regions (PCR) initiative, EUPHEMIA is the day ahead pricing algorithm currently in use throughout Europe. As outlined in the High-Level Design, it is to be used for the day-ahead market in the I-SEM and, as such, the EUPHEMIA Trial seeks to explore the ability of I-SEM participants to successfully represent their trading requirements through EUPHEMIA. The objective is to ensure adequate understanding of the algorithm among participants and of how it can be used to allow for efficient participation in I-SEM. The extended Euphemia Trial continues to progress well and is due to conclude at the end of May 2016.

#### 4 Current dates for Paper Publications and Workshops

Topic	Consultation Paper	Workshops	Decision Paper
<b>CRM</b>			
<b>CRM Consultation 2</b>	Nov 2015	29 <sup>th</sup> Sept 2015 20 <sup>th</sup> Jan 2016	Mar 2016
<b>CRM Consultation 3</b>	March/April 2016	April 2016	Jul 2016
<b>Market Power</b>			
<b>Phase 1 Consultation Paper – Mitigation Measures</b>	Nov 2015	2nd Dec 2015	May 2016
<b>Forwards &amp; Liquidity</b>			
<b>Within Zone Forward Contracting</b>	June 2016	Jun/Jul 2016	Sept 2016
<b>Governance and Licencing</b>			
<b>Governance Review Proces</b>		Starts Oct 2015 (ongoing)	
<b>TSO &amp; MO Licence consultation</b>			April 2016
<b>Generator &amp; Supplier Licence Changes</b>			Sept 2016
<b>Energy Trading Arrangements</b>			
<b>Market Rules Working Groups (meeting at approximately 5 week intervals)</b>		Working Group 3 (Dublin)	21/01/2016
		Working Group 4 (Belfast)	25/02/2016
		Working Group 5 (Dublin)	07/04/2016
		Working Group 6 (Belfast)	19/05/2016
		Working Group 7 (Dublin)	24/06/2016

		Working Group 8 (Belfast)	29/07/2016
		Working Group9 (Dublin)	01/09/2016
		Working Group 10 (Belfast)	06/10/2016

## 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 All Island Project website and by the TSOs on the I-SEM page of the SEMO website.

## 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 AIP website in April 2016.

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