



**SINGLE ELECTRICITY MARKET
COMMITTEE**

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

SEM-17-002

10th January 2017

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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)¹, consisting of the CER, the Utility Regulator, and 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.

1.2 Purpose of this Paper

In order to inform stakeholders of how the project is progressing, the RAs undertook to publish project updates on a quarterly basis. This is the ninth in a series of such quarterly project updates; the next will be published in April 2017.

The Quarterly Update provides one of a number of means by which progress is communicated to market participants and other stakeholders. Retrospective in nature, its focus is on achievements over the previous three months, as well as providing a snapshot of progress at the end of each quarter.

1.2 Reporting Progress in this Update

The Quarterly Update reports progress against plan. In this context we note that during the last quarter, the SEMC undertook a stocktake exercise which identified that there were a number of risks in the current timeline which were at an unacceptably high-level, such that the SEMC determined to de-risk the I-SEM delivery by reprogramming a number of key

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

milestones which will result in an operational go-live date of 23 May 2018 for the I-SEM Balancing Market.

As such, the RAs and TSOs have proposed a detailed set of reprogrammed Level 2 Milestones, which are consistent with the reprogrammed Level 1 Milestone dates determined by the SEMC. This revised milestone plan is subject to Change Control (see JCR170) and will be finalised in early 2017, following evaluation of the impact assessments received from market participants.

It will be against this revised baselined milestone plan that progress will be tracked going forwards. However, for the purposes of this largely retrospective report, progress is tracked against the previous baseline (published in January 2016), which applied during the period up to Q4 2016

A summary of the Stocktake Report is included in Section 2.

1.3 Regular Tracking & Reporting Progress

In addition to this quarterly retrospective detailing the progress of the I-SEM Project, the latest status of progress against plan is updated and presented on a weekly basis on the SEMO website: [here](#).

This weekly status report provides a description of each milestone, its current status, and reports details of any slippage against milestone dates in the baseline plan, together with an explanation of the impact and mitigating actions being taken to preserve the go-live date(s).

Please note that, in accordance with a recent decision at the Project Managers Group, status on the SEMO website is being reported against the reprogrammed baseline defined by the Level 2 Milestones proposed in JCR170, and not against the previous baseline which is utilised in this Quarterly Update. Although these reprogrammed dates are subject to JCR170 being approved, they are deemed to be the best dates currently available to report progress against going forward. However, for this retrospective, the previous baseline plan is more appropriate, as this was the baseline which applied during the period in question.

Market Participants are reminded that all are welcome at the Project Managers Group, which meets at least monthly to discuss progress against the baselined Level 2 Plan, to manage risks and issues, and to consider the impacts of proposed changes to milestones.

In addition to regular status reporting, detailed market readiness reporting commenced in September 2016 and will also be reported regularly and with increasing frequency during 2017. Against a defined set of metrics for each market, this will provide periodic reporting of readiness to live operation of each market and the actors within. It will provide the primary means by which stakeholders will be able to track and understand the current state of readiness, and the risks which are being managed to ensure that the markets and all those intending to participate in them are ready by the scheduled go-live date. This readiness reporting will also provide an important input into the go-live decision making process, which the Regulatory Authorities will be defining shortly.

2 Stocktake

The SEMC undertook a stocktake exercise, to identify design and delivery risks associated with the I-SEM Project, and to determine whether an October 2017 Go Live should still be pursued.

ESP Consulting completed this exercise, and presented a final report to the SEMC meeting in October 2016.

The SEMC was pleased to note that the Stocktake acknowledged the significant progress being made by the many parties, across the multiple workstreams, in a highly complex programme. The SEMC also noted that the Stocktake confirmed the I-SEM design is fit for purpose.

The SEMC also accepted the report's recommendation that there are a number of risks in proceeding to the current timeline that are at an unacceptably high level, in particular, associated with the challenges for industry readiness.

On this basis, the SEMC agrees to the report's recommendation that the I-SEM delivery is best de-risked through a reprogramming of a number of key milestones. This reprogramming has been completed, with the following objectives in mind:

- the central systems and processes which support the I-SEM market are targeted to be delivered by end 2017;
- this will support a four month market trial (running in parallel to the existing SEM) starting in January 2018;
- the first CRM auction is due to take place in December 2017; and
- I-SEM is then planned to Go Live during May 2018.

The reprogramming will:

- align all delivery activities within the I-SEM Project, addressing serious challenges in the CRM pathway and providing additional contingency throughout for all parties;
- maintain a focus on delivery of fully tested central systems and processes for the energy market by the end of 2017;
- give more time for testing and trialling to de-risk the likelihood of identifying problems close to the Go Live date;
- increase market participant confidence in the Go Live date and thus facilitate their commercial, organisational and systems delivery and readiness activities; and
- support parallel SEM operation, and I-SEM trialling, to afford participants extended time for commercial testing and readiness, thereby reducing risk at Go Live.

DRAFT REVISED LEVEL 1 MILESTONES

In light of the above, the RAs and TSO are now replanning the I-SEM Project's Level 1 and Level 2 milestones, against which progress is reported publicly. In addition, we have taken

the opportunity to include some new milestones, reflecting activities which need to be publicly reported as they directly impact on industry. By the same token, a limited number of milestones have been removed, as they are either no longer relevant or are internal milestones to the TSOs which do not directly impact on other parties.

The table below lists the draft revised Level 1 delivery milestones for the I-SEM Project. These are subject to I-SEM Change Control; a Change Request including also the draft revised Level 2 milestones was published in November 2016 for Impact Assessment by participants, with a view to baselining a new Level 2 Plan in early 2017.

Participants should note, that the revised I-SEM Go Live date of 23 May 2018 has been approved at Departmental level in both jurisdictions, and is not therefore expected to change further as a result of the Impact Assessment.

Level	Ref	Milestone	Current Baseline Date	Current Expected Date	Proposed Date	Comments	Owner
1	106	TSO & MO Licence Changes (second tranche) – publication Publication of the second tranche of proposed licence changes for TSOs & MO	16 September 2016	18 November 2016	16 December 2016	Second Tranche of TSO and MO Licences has not been published.	RAAs
1	45	Forwards & Liquidity (CFD) 2 Decision Paper SEMC decision on F&L2 consultation.	05 September 2016	08 November 2016	6 March 2017	Decision is rescheduled in the light of the large and detailed number of responses to this consultation.	RAAs
1	37	CRM: Capacity Market Code Consultation Paper Published Public consultation on draft ‘CRM rules’	31 October 2016	05 December 2016	12 January 2017	Publication of CMC Consultation is re-scheduled for January to allow for any decisions in respect of Derating and Local Security of Supply, and minimise overlap with the T&SC consultation	RAAs
1	68	Publication of final TSC Final TSC (including the Agreed Procedures) approved and published.	15 March 2017		05 April 2017	Change due to extension in Consultation Period over the Christmas and New Year	RAAs
1	105	Generation and Supply Licence Changes – publication Publication of proposed changes for Generation and Supply licences	16 September 2016	05 November 2016	02 June 2017	Licence publication is rescheduled after the Trading and Settlement Code and Capacity Market Code are finalised. This will also facilitate input from the F&L Work Stream, BCOP and other policy decisions.	RAAs
1	38	CRM: Decision and Publication of Capacity Market Code Decision and publication of final ‘CRM rules’	08 March 2017		02 June 2017	Date change as a consequence of the later consultation publication date.	RAAs
1	8	Participant Interface Testing Begins Participant interface testing begins three months in advance of market trial	23 January 2017		07 September 2017	Realigned with revised I-SEM delivery schedule; now extended to 12 week duration	TSOs
1	36	Capacity Market Auction First Capacity Market Auction takes place	01 June 2017		15 December 2017	Allows a five month window prior to I-SEM Go Live	TSOs
1	85	Market Trial Commences Commencement of an extended period of operational trialling of central market systems and processes which support the I-SEM market but without the financial consequences. It will be open to all participants to assist their understanding and trialling of market processes.	01 June 2017		01 December 2017	Now scheduled for a five month period, with four months of actual operational trialling from Jan to May 2018	TSOs

Level	Ref	Milestone	Current Baseline Date	Current Expected Date	Proposed Date	Comments	Owner
1	87	Market Trial Complete A full operational trial of all market systems and processes open to all participants to assist their understanding and trialling of market processes.	29 September 2017		22 May 2018		TSOs
1	150	Go live I-SEM Operational Go-Live.	01 October 2017		23 May 2018		RAs

Dates to be determined							
1	52	FTR Auctions commence	17 April 2017		01 February 2018	This date is indicative and subject to ICO confirmation, but is not likely to be less than 3 months before Go Live	ICOs
1	N6	MRC Validation Complete	n/a		TBC	New milestone	

3 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 – the ‘Level 2 Plan’.

All of the Milestones on the Level 2 Plan are included as they affect more than just a single party – that is, they impact on two or more parties (TSO, RA, Interconnector Owners, market participants, RDPs, etc.). Hence, it is important that those milestones are understood and progress against them is shared on a regular basis.

The Level 2 Plan tracks progress against a baselined set of Project Milestones, which have been selected to show the key steps on the journey to market readiness. Any slippage against dates in the baseline plan are reported on the weekly updates, 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.

An explanatory paper is published on the SEMO website, describing each of the Milestones. A small subset of the more significant Level 2 Plan Milestones is presented in the Level 1 Plan, which provides a high-level summary of the key steps to I-SEM go-live.

A snapshot of the Level 2 Plan just prior to the Stocktake Report being published is shown in Figure 1, below. Each Milestone detailed in Figure 1 is colour-coded, to show whether it has been:

- Completed (blue);
- On track (green);
- At risk (amber);
- Is late or is expected to be later than the date in the baseline Level 2 Plan (red); or
- Is newly proposed and subject to a change request (grey).

In the case of red milestones, the later expected completion date is shown in red font.

As detailed in the Stocktake Report, significant progress was made during 2016 in delivery of the I-SEM Project and that progress was maintained over the last quarter. Significant achievements during that period included finalisation of all key aspects of the market design in December 2016 with the publication of a further two capacity market decisions, and the publication of a consultation draft of the Trading & Settlement Code in November 2016.

However, Figure 1 also helps to illustrate some of the risks identified in the Stocktake Report, notably with regard to the capacity market pathway, with the milestone representing the first auction (Milestone #36) being shown as expected to be late (i.e. “red”).

With the proposed re-programming of the plan, the risks evident in Figure 1 are addressed.

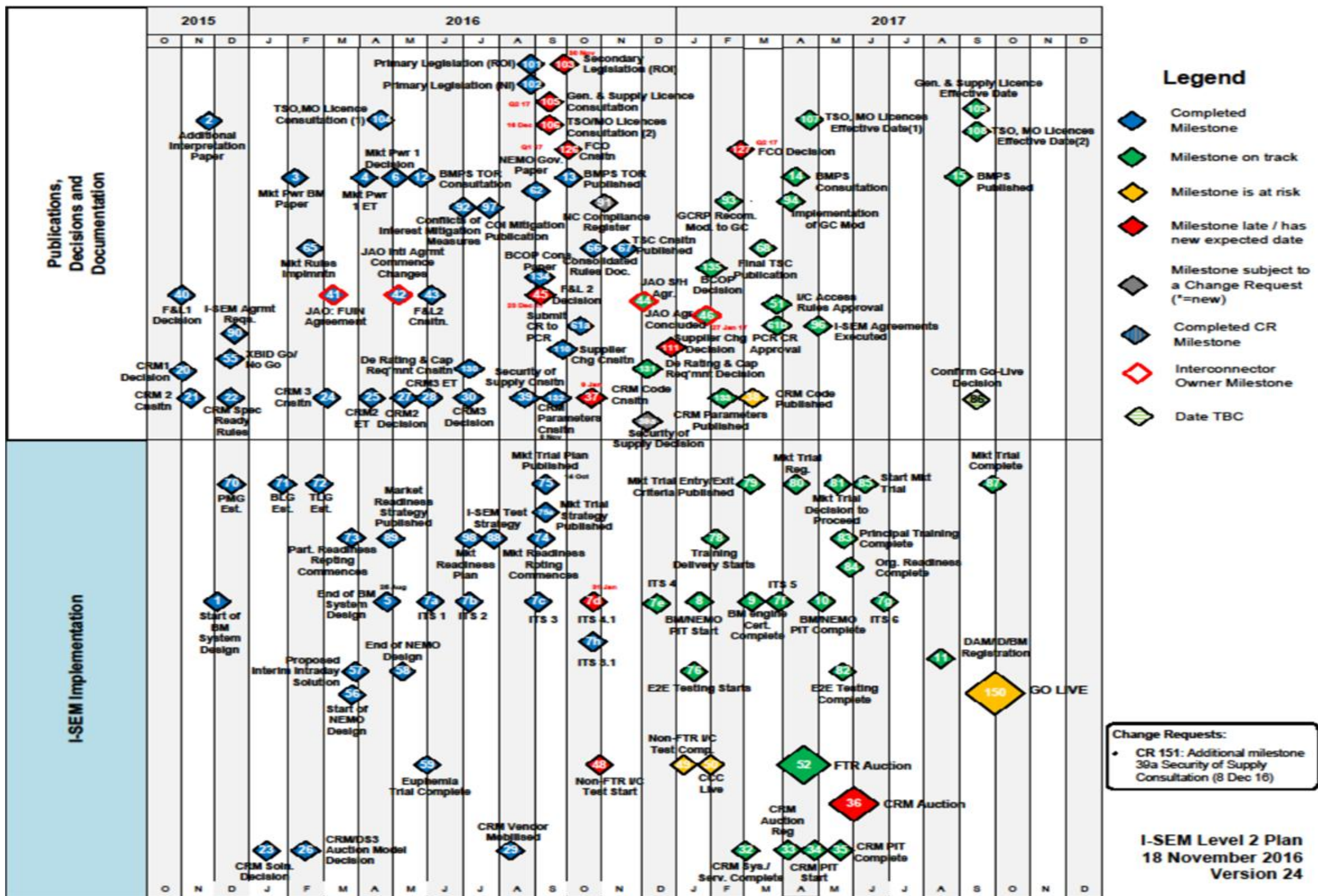


Figure 1 – Level 2 Milestone Plan for Phase 3 ‘Detailed Design’ (18 November 2016 – Prior to Stocktake Report & JCR170)

4 Key Update and Milestones

Since the last I-SEM Quarterly Update (covering the period to 31 July 2016), 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 I-SEM Project – most notably via the Project Managers Group, Business Liaison Group, Technical Liaison Group and Rules Working Group.

The RAs have also continued to engage with the Department of Communications, Climate Action & Environment (DCCAE) in Ireland and the Department for the Economy (DfE) in Northern Ireland.

In this Section 4 of the Quarterly Update, we report on progress over the five months from 1 August 2016 by owner (RA or TSO) against the Level 2 Milestones which were originally baselined at the start of 2016, as shown in Figure 1, above. Where those Milestones are included in the summary Level 1 view, they are marked as being ‘Level 1’; otherwise they are shown as being ‘Level 2’.

Please note that all reporting is against the current baselined plan, prior to the proposed replanning resulting from the SEMC’s Stocktake Report, as detailed in Joint Change Request JCR170. Given the intended move to a new baselined plan and timeline, for this quarterly report we have made the focus on progress completed, rather than on upcoming milestones. In future Quarterly Updates, we will return to looking both back on progress and forward to upcoming milestones.

3.1 RAs’ update

Considerable progress has been achieved in the last quarter, with the market design now largely complete and a design authority established to ensure that the integrity of the design is maintained during implementation.

Key decisions published include CRM Locational Security of Supply and CRM De-Rating Market and the Terms of Reference for the Balancing Market Principles Statement.

Consultations have also commenced in respect of the Trading and Settlement Code, CRM Parameters, Offers in the ISEM Balancing Market, Supplier and MO Charges (BCOP)

In the tables below, progress is reported in a little more detail 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 and its latest status, 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 (F&L)</i>		
	Milestones	Commentary
Completed since last Report (1 August 16 to 23 December 16)	<p>#130, Derating and Capacity Requirement Methodology Consultation issued (published for consultation on 22/8/2016, six weeks later than baseline date)</p> <p>#131, Derating and Capacity Requirement Decision</p> <p>#13, Publish Decision on Balancing Market Principles Statement Terms of Reference</p> <p>#39, Local Issues: Security of Supply Consultation</p> <p>#39a, Local Issues: Security of Supply Decision</p> <p>#110, Supplier Charges Consultation (published two weeks later than baseline date)</p> <p>#132, CRM Parameters Consultation</p> <p>#134, BCOP Consultation (published four weeks later than baseline date)</p> <p><u><i>Planned but not completed in period August-December 2016:</i></u></p> <p>#37, CRM: Capacity Market Code Consultation Paper Published due 12 Jan</p> <p>#45, F&L Decision 06 March 2017</p> <p>#126, Detailed FCOs Technical Operation Rules Decision (this milestone is proposed to be deleted as a result of JCR170 “<i>The requirement for this milestone is dependent upon the decision on Forwards and Liquidities (Milestone 45); as such this milestone may be deleted</i>”)</p>	<p>Market design is now substantially complete, with publication in December 2016 of decisions on capacity market ‘local security of supply’ and ‘derating and capacity requirement’.</p> <p>Key outstanding market design decisions in 2017 relate primarily to values of parameters for the first T-1 auction.</p>

2. GOVERNANCE & LICENCING		
<i>Governance & Licencing covers The I-SEM Project and the European Regulations that underpin the market (i.e. the CACM Guidelines)</i>		
	Milestones Completed	Commentary
Completed since last Report (1 August 16 to 23 December 16)	<p>#92, Conflict of Interest mitigation measures</p> <p>#101, Primary Legislation in Force (ROI)</p> <p>#102, Primary Legislation in Force (NI)</p> <p>#106, TSO and MO Licence Changes (Second Tranche) consultation published</p> <p><i>Planned but not completed in period August-December 2016:</i></p> <p>#103, Secondary Legislation in Force (ROI)</p> <p>#105, Consultation on Changes to Generation & Supply Licences</p>	<p>The second tranche of the TSO and MO Licences were published on 16/12/16.</p> <p>The consultation on Generator and Supplier licences has been deferred to June 2017 (see revised proposed dates in JCR170).</p>

3.2 TSOs' Update

Significant progress against a range of implementation activities has continued in the period covered by this report. Work has spanned a broad range of activities including:

- completing the Balancing Market system design;
- finalising requirements for the multitude of other TSO/MO systems which need to be developed or updated;
- publication of two further releases of the I-SEM participant interface technical specifications;
- significant progress in the system build activities of the Balancing Market systems and commencement of the build of a number of the other systems;
- development of test plans;
- commencement of the process of readiness reporting, including the introduction of a comprehensive on-line survey of market participants;
- development and finalisation of consultation drafts of the Trading & Settlement Code and the Capacity Market Code;
- continued development of the NEMO Rules;
- ongoing detailed engagement with participants on the draft rules via the Rules Working Group and the Business Liaison Group;
- publication of weekly status reports showing progress against the Level 2 Plan, with detailed reporting of any variances (including impact);
- initiating detailed discussions with all relevant National Regulatory Authorities, TSOs, ICOs, and NEMOs (Ireland, Northern Ireland, and Great Britain) on development of a framework Agreement between TSOs, ICOs & NEMOs for Day Ahead Regional Coupling; and
- progress against plan of a significant body of work continues within the TSOs, towards operational readiness of the business to perform their system operation and market operation duties under I-SEM.

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 five months covered by this Update. Any Milestones due in the period, 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

The development of the Trading & Settlement Code plus associated Agreed Procedures, the Capacity Market Code, and the NEMO Code

	Milestones Completed	Commentary
<p style="text-align: center;">Completed since last Report (1 August 16 to 23 December 16)</p>	<p>#62, NEMO Governance paper</p> <p>#66, Consolidated Rules Document</p> <p>#67, TSC Consultation</p> <p><u>Planned but not completed in period August-December 2016:</u></p> <p>#37, Capacity Market Code consultation published</p>	<p>Significant work was once again completed in the second half of 2016. Having completed extensive development via the Rules Working Group over the course of 2016, the draft Trading & Settlement Code (T&SC) was successfully published for consultation in November 2016, with a view to the final code being published in March 2017; this has now been extended to April 2017 due to an extension on the the Consultation Period over the 2016 Christmas period. This consultation draft included initial drafts of the Agreed Procedures.</p> <p>Considerable progress has also been made in the development of the Capacity Market Code (CMC), since the CRM3 decision was published in July 2016. In December 2016, the TSOs completed their drafting of the CMC; the document is now with the RAs who plan to consult on the draft code commencing in January 2017. Note however, that this document is now being published for consultation later than planned; this was principally to allow for market design decisions on local security of supply and derating (December 2016) to be included in the draft CMC. The TSOs have now incorporated these decisions in to the drafting provided to the RAs.</p> <p>Drafting of the NEMO Rules continues, with engagement for sharing draft rules with industry being via the Business Liaison Group (BLG). This work continues to progress to plan.</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
Completed since last Report (1 August 16 to 23 December 16)	<p>#5, End of BM Design (delivery of this milestone internal to the TSOs slipped by four months from 26/4/16 to 23/8/16 in order to accommodate the full complexity of the I-SEM Balancing Market requirements)</p> <p>#7c, I-SEM Technical Specification Release 3</p> <p>#7h, I-SEM Technical Specification Release 3.1</p> <p>#29, CRM Vendor mobilised</p> <p><i>Planned but not completed in period August-December 2016:</i></p> <p>#7d, I-SEM Technical Specification Release 4.1 (participant toolkit will not be available before 2017 and was therefore moved into a subsequent release; the rest of the planned release was successfully published on-time in Release 3.1)</p>	<p>The last five months has seen the finalisation of the Balancing Market Design, considerable progress in build activities, and two further planned releases of the I-SEM Technical Specifications (participant interface specifications), detailing the interfaces for the Balancing Market, Capacity Market and NEMO systems.</p> <p>Building on the I-SEM Test Strategy, which was published earlier in the year, detailed test plans are also in development.</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
Completed since last Report (1 August 16 to 23 December 16)	<p>#61a, Submit Euphemia CR</p> <p>#74, Market Readiness reporting commences (one week later)</p> <p>#75a, Market Trial Strategy Published (newly added milestone)</p> <p>#75, Market Trial Plan published (published four weeks later than originally planned, but strategy document was inserted to mitigate)</p>	<p>Participant engagement continued to gather pace during the last five months; most notably with the commencement of market readiness reporting and weekly updates published showing status against the Level 2 Plan. The Market Trial Strategy and Market Trial Plan were also successfully published in the last five months.</p> <p>Following the successful conclusion of the Euphemia Trial in the first half of the year, the associated Euphemia Change Request was successfully submitted since the last Quarterly Update was published. Early indications are positive, but further testing against updated versions of the Euphemia system are planned into 2017, before final approval of the Order Types is given.</p> <p>The participant liaison groups have continued to meet regularly, providing valuable opportunity for information exchange and dialogue, plus issue resolution.</p> <p>A short-term resourcing issue delayed the start of the Market Trial planning activity. Subsequently resolved, the resulting four weeks slippage will not impact on future milestones as preparation for the Market Trial is many months away. By introducing a Market Trial Strategy, it offered the advantage of sharing the document with participants prior to the Market Trial Plan being finalised in mid-October, thereby allowing opportunity for participants to inform and shape the Market Trail Plan.</p>

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 AIP website by the end of April 2017.

~ End of Document ~