



# **Integrated Single Electricity Market (I-SEM)**

## **Information Paper I-SEM Readiness Criteria, Governance and Contingency**

**SEM-17-030**

**11<sup>th</sup> May 2017**

**TABLE OF CONTENTS**

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>4</b>
1.1	GOVERNANCE .....	5
1.2	METRICS AND CRITERIA.....	7
1.3	CONTINGENCY.....	7
1.4	NEXT STEPS .....	7
<b>2</b>	<b>INTRODUCTION.....</b>	<b>8</b>
2.1	CONTEXT.....	8
2.2	PURPOSE OF THIS DOCUMENT .....	9
<b>3</b>	<b>MARKET READINESS ROLES AND RESPONSIBILITIES .....</b>	<b>10</b>
3.1	MARKET READINESS AND REPORTING .....	10
3.2	MARKET READINESS ROLES AND RESPONSIBILITIES .....	11
<b>4</b>	<b>OVERVIEW OF THE READINESS FRAMEWORK .....</b>	<b>12</b>
4.1	STAGE GATES AND GO-LIVE EVENTS.....	12
4.2	MILESTONES, METRICS & CRITERIA.....	13
4.3	GOVERNANCE .....	14
4.3.1	<i>Governance Summary.....</i>	<i>16</i>
4.4	CONTINGENCY CONSIDERATIONS .....	16
<b>5</b>	<b>THE CAPACITY MARKET .....</b>	<b>18</b>
5.1	OVERVIEW .....	18
5.2	CM STAGE GATE 1: THE INITIAL T-1 AUCTION INFORMATION PACK.....	19
5.2.1	<i>Governance Readiness.....</i>	<i>19</i>
5.2.2	<i>TSO Readiness.....</i>	<i>20</i>
5.2.3	<i>Market Participant Readiness.....</i>	<i>21</i>
5.2.4	<i>Decision Making.....</i>	<i>21</i>
5.3	CM STAGE GATE 2: THE MOCK AUCTION .....	22
5.3.1	<i>TSO Readiness.....</i>	<i>22</i>
5.3.2	<i>Market Participant Readiness.....</i>	<i>23</i>
5.3.3	<i>Decision Making.....</i>	<i>24</i>
5.4	CM GO-LIVE EVENT: THE INITIAL T-1 AUCTION .....	24
5.4.1	<i>Governance Readiness.....</i>	<i>25</i>
5.4.2	<i>TSO Readiness.....</i>	<i>25</i>
5.4.3	<i>Market Participant Readiness.....</i>	<i>26</i>
5.4.4	<i>Decision Making.....</i>	<i>26</i>
5.5	CM STAGE GATE 3: THE T-4 AUCTION INFORMATION PACK.....	27
5.5.1	<i>Governance Readiness.....</i>	<i>27</i>
5.5.2	<i>TSO Readiness.....</i>	<i>28</i>
5.5.3	<i>Market Participant Readiness.....</i>	<i>28</i>
5.5.4	<i>Decision Making.....</i>	<i>29</i>
5.6	CM GO-LIVE EVENT: THE T-4 AUCTION .....	29
5.6.1	<i>Governance Readiness.....</i>	<i>30</i>
5.6.2	<i>TSO Readiness.....</i>	<i>30</i>
5.6.3	<i>Market Participant Readiness.....</i>	<i>30</i>
5.6.4	<i>Decision Making.....</i>	<i>30</i>
5.7	CAPACITY MARKET CONTINGENCY CONSIDERATIONS .....	31
5.7.1	<i>The Initial T-1 Auction Information Pack .....</i>	<i>31</i>
5.7.2	<i>The Mock Auction .....</i>	<i>32</i>
5.7.3	<i>The Initial T-1 Capacity Market Auction.....</i>	<i>32</i>

5.7.4	<i>The T-4 Auction Information Pack and T-4 Auction</i> .....	32
<b>6</b>	<b>FINANCIAL TRANSMISSION RIGHT (FTR) AUCTIONS</b> .....	<b>33</b>
6.1	OVERVIEW .....	33
6.2	FTR MARKET READINESS.....	33
6.3	FTR STAGE GATE 1: FTR TRADING INFORMATION PACK .....	34
6.3.1	<i>Decision Making</i> .....	35
6.4	FTR STAGE GATE 2: FTR MOCK AUCTION .....	35
6.4.1	<i>ICO Readiness</i> .....	36
6.4.2	<i>TSO Readiness</i> .....	37
6.4.3	<i>Market Participant Readiness</i> .....	37
6.4.4	<i>Decision Making</i> .....	38
6.5	FTR GO-LIVE EVENT: INITIAL FTR AUCTION .....	38
6.5.1	<i>ICO Readiness</i> .....	39
6.5.2	<i>TSO Readiness</i> .....	39
6.5.3	<i>Market Participant Readiness</i> .....	40
6.5.4	<i>Decision Making</i> .....	40
6.6	FTR CONTINGENCY CONSIDERATIONS.....	41
6.6.1	<i>FTR Trading Information Pack</i> .....	41
6.6.2	<i>FTR Mock Auction</i> .....	41
6.6.3	<i>Initial FTR Auction</i> .....	42
6.6.4	<i>FTR Contingency Summary</i> .....	42
<b>7</b>	<b>ENERGY TRADING ARRANGEMENTS</b> .....	<b>43</b>
7.1	ENERGY TRADING ARRANGEMENT READINESS .....	43
7.2	ETA STAGE GATE 1: DIRECTED CONTRACT ARRANGEMENTS .....	44
7.2.1	<i>RA Readiness</i> .....	44
7.2.2	<i>Market Participant Readiness</i> .....	45
7.3	ETA STAGE GATE 2A: ENTRY TO THE MARKET TRIAL .....	45
7.3.1	<i>Governance Readiness</i> .....	46
7.3.2	<i>Systems Readiness</i> .....	47
7.3.3	<i>TSO and MO Readiness</i> .....	47
7.3.4	<i>Market Participant Readiness</i> .....	48
7.3.5	<i>NEMO Readiness</i> .....	49
7.3.6	<i>Meter Data Provider (MDP) Readiness</i> .....	49
7.3.7	<i>Interconnector Owner Readiness</i> .....	50
7.3.8	<i>Decision Making</i> .....	51
7.4	ETA STAGE GATE 2B: MARKET TRIAL EXIT .....	51
7.4.1	<i>TSO &amp; MO Readiness</i> .....	52
7.4.2	<i>Market Participant Readiness</i> .....	52
7.4.3	<i>Interconnector Owner Readiness</i> .....	53
7.4.4	<i>Meter Data Provider Readiness</i> .....	53
7.4.5	<i>NEMO Readiness</i> .....	53
7.4.6	<i>Agent of Last Resort Readiness</i> .....	54
7.4.7	<i>Decision Making</i> .....	54
7.5	ETA GO-LIVE EVENT: I-SEM GO LIVE .....	55
7.5.1	<i>Governance Readiness</i> .....	55
7.5.2	<i>Participant Assurance</i> .....	56
7.5.3	<i>Readiness to Exit the Market Trial</i> .....	57
7.5.4	<i>Decision Making</i> .....	57
7.6	ETA CONTINGENCY CONSIDERATIONS .....	58
7.6.1	<i>Impact of a delay to ETA on the Capacity Market and FTR Arrangements</i> .....	58
<b>8</b>	<b>SUMMARY AND NEXT STEPS</b> .....	<b>59</b>
8.1	SUMMARY .....	59
8.2	NEXT STEPS .....	60

## 1 EXECUTIVE SUMMARY

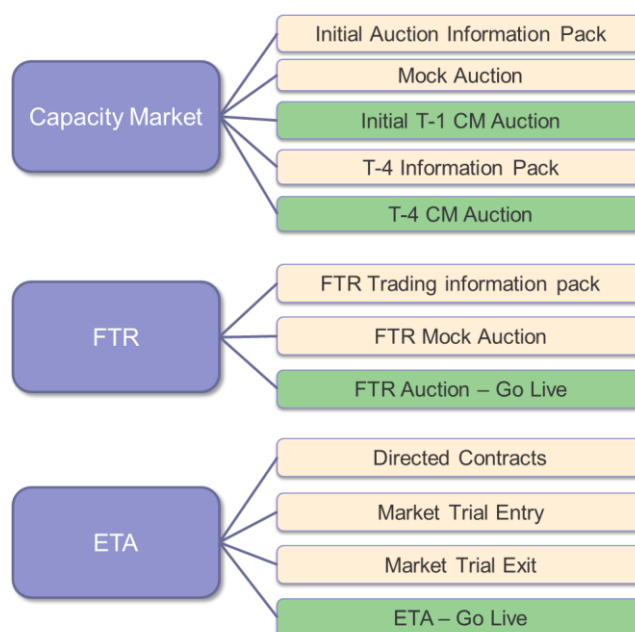
In January 2017, the SEMC published a 'High Level Framework for I-SEM Go-Live Readiness' (SEM-17-005) which outlined:

- How the RAs and TSOs will work together to ensure readiness for I-SEM Go Live;
- The Go-Live Events for each market component in the lead-up to 23 May 2018, and
- The approach to monitoring readiness.

This more detailed framework document will:

- Explain the key interactions and Stage Gates leading up to each of the Go-Live Events;
- Outline the decision-making process as to whether an event can 'go-live' or 'no-go-live';
- Provide views on contingency should a 'no-go' decision be made at any stage.

Go-Live Events comprise the go live of the Capacity Market (the Initial T-1 and T-4 auctions), Financial Transmission Rights (FTR) and the Energy Trading Arrangements (ETA). Stage Gates have been identified ahead of each Go-Live Event as illustrated in Figure 1.



**Figure 1: Go-Live Events and Stage Gates**

Readiness activities of all industry participants will be monitored and reported so as to support timely go-live decision making for each key I-SEM market component.

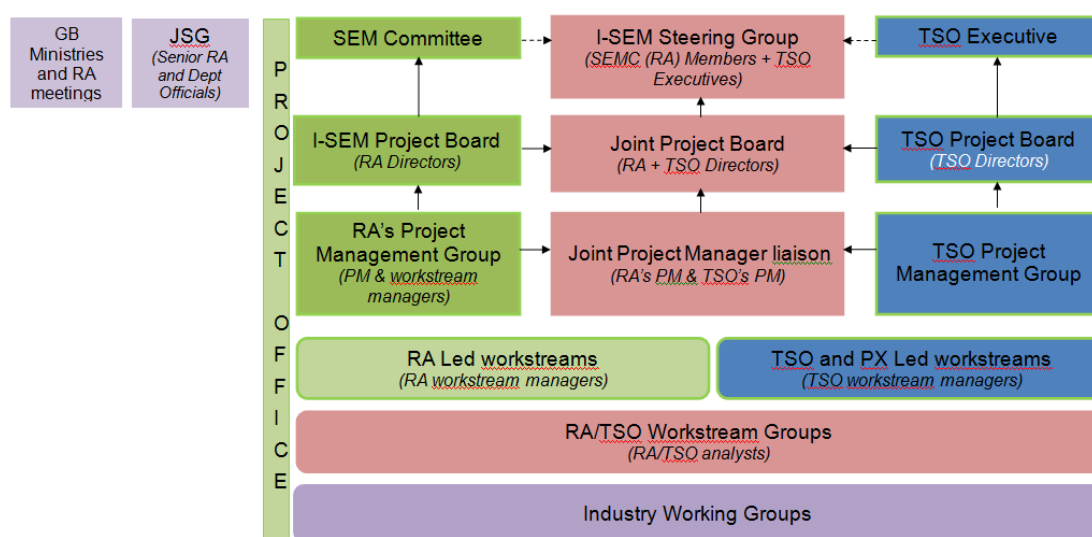
This document therefore sets out:

- The Stage Gates and Go-Live Events for each I-SEM market;
- The criteria that will be monitored to inform each decision to proceed;
- The organisation which will recommend a decision at each point and the programme forum at which decisions will be confirmed;
- The contingency available within the programme should a Stage Gate or Go-Live Event be delayed.

## 1.1 GOVERNANCE

The I-SEM programme is underpinned by a dedicated governance structure and working arrangements which complement the existing roles, responsibilities and forums which govern the operation of SEM and establishment of I-SEM.

The arrangements, illustrated in Figure 2 and summarised below, ensure a coordinated and effective implementation. They are set out in the Agreed Approach Document which was published in January 2015<sup>1</sup>.



**Figure 2: I-SEM Governance Arrangements**

The SEM Committee (SEMC) has authority over the I-SEM project. However, as the authority for the overall market trading arrangements in Ireland and Northern Ireland is with DCCAE and DfE, any market design developed by the SEMC must be endorsed

<sup>1</sup> 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>

by the Departments. The Departments are updated on progress of the project at regular intervals through the Joint Steering Group (JSG).

To best ensure a successful and coordinated delivery of I-SEM, the RAs and TSOs (as delivery body of central systems) have established a dedicated governance structure and working arrangements. This is led by the I-SEM Steering Group which comprises senior executives from both the RAs and TSOs. In the context of readiness, the Steering Group is in place to agree and provide approval to proceed with significant aspects of the project, and ultimately make recommendations to the SEM Committee on the final I-SEM go live date.

The I-SEM Steering Group is therefore the primary decision making forum for programme activities and will make the final go live recommendation to the SEM Committee. In support of its function a Joint Project Board has been established to proactively manage and coordinate implementation activities between the RAs and TSOs.

For each Go-Live Event and Stage Gate the document identifies the decision-making organisation and programme forum at which decisions will be confirmed, as shown in Table 1.

		Decision Responsibility	Forum
CM	Initial Information Pack	RAs	SEM Committee
	Mock Auction	TSOs	I-SEM SG
	Initial T-1 CM Auction (No Go)	RAs	SEM Committee
	T-4 Auction Info Pack	TSOs	I-SEM SG
	T-4 CM Auction (No Go)	RAs	SEM Committee
FTRs	FTR Trading Information Pack	ICOs	I-SEM SG
	FTR Mock Auction	ICOs	I-SEM SG
	Initial FTR Auction	ICOs	I-SEM SG
ETA	Directed Contracts	RAs	SEM Committee
	Market Trial Entry	TSOs	I-SEM SG
	Market Trial Exit	TSOs	I-SEM SG
	ETA Go-Live	RAs	SEM Committee

**Table 1: Decision Making Summary**

### 1.2 METRICS AND CRITERIA

EirGrid plc/SONI Ltd's Market Readiness team have developed a wide range of metrics that provide 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.

This document focuses on ensuring that relevant metrics and criteria for each Go-Live Event and Stage Gate are clearly understood, and, that all necessary and relevant information is available to support the relevant decision-making bodies.

### 1.3 CONTINGENCY

The I-SEM programme is working to a strong baseline assumption that it will deliver in May 2018, with no delay. Efforts are focused on delivery against the programme plan and robust programme management arrangements are in place to mitigate issues as they arise.

That notwithstanding, it is prudent within any large programme to understand the contingency available and consequences should critical events be delayed. Consistent with the PRINCE2 methodology, for each Stage Gate and Go-Live Event, an assessment is made of what contingency or tolerance is available within the programme timeline and what consequences any delay may have. This allows the programme as a whole to understand what flexibility exists and what implications may arise if critical events are delayed.

Ultimately the success of the I-SEM project is inherently reliant on the ability of those involved to use their technical and business knowledge to evaluate and then control programme risks. On that basis, programme risks will continue to be managed through the existing programme management processes and contingency plans developed as necessary with all impacted parties.

### 1.4 NEXT STEPS

Building on this document, the RAs and EirGrid plc/SONI Ltd will continue to engage with all industry stakeholders in order to inform the SEM Committee and I-SEM Steering Group of overall readiness in preparation for each Stage Gate and Go-Live Event.

## 2 INTRODUCTION

### 2.1 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 Europe. The new market design will result in what has been named an Integrated Single Electricity Market (I-SEM). The I-SEM will more fully facilitate coupling with the electricity market in the rest of Europe and is due to go live on May 23, 2018.

The existing SEM involves an ex-post spot energy market, a capacity payment mechanism, a forward market 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, the forward market and FTR auctions) 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.

The programme of implementation across industry has been underway for some time. The underpinning regulatory arrangements are close to completion while central system procurement and development are well advanced. Over the coming months, the programme will begin the system testing phase ahead of the main market trial. This change in programme emphasis from “central market design” towards “implementation” requires on-going coordination and cooperation across industry participants. It also requires decision makers to consider the process, evidence and contingency arrangements that will support the go-live and cutover decisions to the new I-SEM arrangements.

Dedicated ‘Market Readiness’ workstreams have been set up within the Regulatory Authorities (RAs) in Ireland and Northern Ireland (which includes 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.



## 2.2 PURPOSE OF THIS DOCUMENT

This document follows the “High Level Framework for I-SEM Go-Live Readiness”<sup>2</sup> published in January 2017, which outlined how the RAs and TSOs will work together to ensure readiness for I-SEM Go Live and the approach to monitoring readiness. The purpose of this more detailed information paper is to explain the key interactions leading up to the go live of each I-SEM market component, to outline the decision-making process for each ‘Go-Live’ event, and to provide views on contingency should a ‘No-Go’ decision be made in any instance.

This document explains the framework under which the readiness activities of all industry participants will be monitored and reported so as to support timely go-live decision making for each I-SEM market component.

In doing so it sets out, for each component of the I-SEM market arrangements, the following:

- The Stage Gates and Go-Live Events for each I-SEM market;
- The programme milestones, metrics and criteria that will be monitored to inform each decision;
- The decision making organisation at each point and the programme forum at which decisions will be confirmed, and
- The contingency available within the programme should a Stage Gate or Go-Live Event be delayed.

---

<sup>2</sup> SEM-17-005 “High Level Framework for I-SEM Go-Live Readiness” 20 January 2017

### 3 MARKET READINESS ROLES AND RESPONSIBILITIES

This section explains and outlines the roles and responsibilities in I-SEM readiness monitoring.

#### 3.1 MARKET READINESS 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 regular update<sup>3</sup> of the progress of all affected stakeholders towards the new I-SEM arrangements.

Each stakeholder (including the RAs, TSOs, NEMOs, 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 agreements 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 process (MRA), to the go-live decision makers which includes the I-SEM Steering Group (consisting of a Commissioner 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

---

<sup>3</sup> The primary engagement mechanism between the I-SEM programme and participants is the Market Readiness Assessment process operated by EirGrid plc/SONI Ltd.

to the SEM Committee (SEMC). In addition, regular engagement will take place with market participants via bilateral meetings with the RAs and through opportunities for feedback on progress at the monthly Project Managers' Group (PMG) fora.

This overall reporting process is designed to provide assurance to the I-SEM Steering Group and the SEMC that central market systems are fit-for purpose and industry 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.

---

### 3.2 MARKET READINESS ROLES AND RESPONSIBILITIES

The RAs' Market Readiness function is primarily focused on ensuring that the criteria, governance and contingency arrangements for each Go-Live Event are clearly understood, and, that all necessary and relevant information is available to support the relevant decision makers<sup>4</sup>. 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 Market Readiness team have developed a wide range of metrics that provide 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.

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 results<sup>5</sup>. An overview of the process is described in the Market Readiness Reporting Strategy<sup>6</sup> and Market Readiness Reporting Plan<sup>7</sup>.

---

<sup>4</sup> The MRA process provides the basis for all such reporting.

<sup>5</sup> 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>

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

[o.com/ISEM/General/Market%20Readiness%20Reporting%20Strategy.pdf](http://www.sem-o.com/ISEM/General/Market%20Readiness%20Reporting%20Strategy.pdf)

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

[o.com/ISEM/General/Market%20Readiness%20Reporting%20Plan.pdf](http://www.sem-o.com/ISEM/General/Market%20Readiness%20Reporting%20Plan.pdf)

## 4 OVERVIEW OF THE READINESS FRAMEWORK

This section provides an overview of the framework under which the readiness function will operate. In doing so it sets out, for each new component of the I-SEM market arrangements, the approach to defining:

- Stage Gates ahead of the Go-Live Events for each I-SEM market;
- Programme milestones, metrics and criteria that will be monitored to inform each Stage Gate and Go-Live Event;
- The decision making organisation at each point and the programme forum at which decisions will be confirmed, and
- The contingency available within the programme and what consequential impact any decision delays may have.

### 4.1 STAGE GATES AND GO-LIVE EVENTS

Implementation of I-SEM encompasses delivery of a number of new market components:

- The (T-1)<sup>8</sup> and (T-4)<sup>9</sup> Capacity Market (CM) Auctions;
- The Financial Transmission Rights (FTR) Auctions, and
- The Energy Trading Arrangements (ETA), which include the Day-Ahead, Intra-Day and Balancing Markets.

Each market component involves its own complex pathway to go-live which was discussed in the “High Level Framework for ISEM Go-Live Readiness”<sup>2</sup>.

These pathways describe the range of activities and deliverables required to enable the go-live of each I-SEM market. These include completing central system development, delivery of codes and licences, meeting deadlines for registration and accession to the various markets, as well as successful participation in mock auctions and market trials.

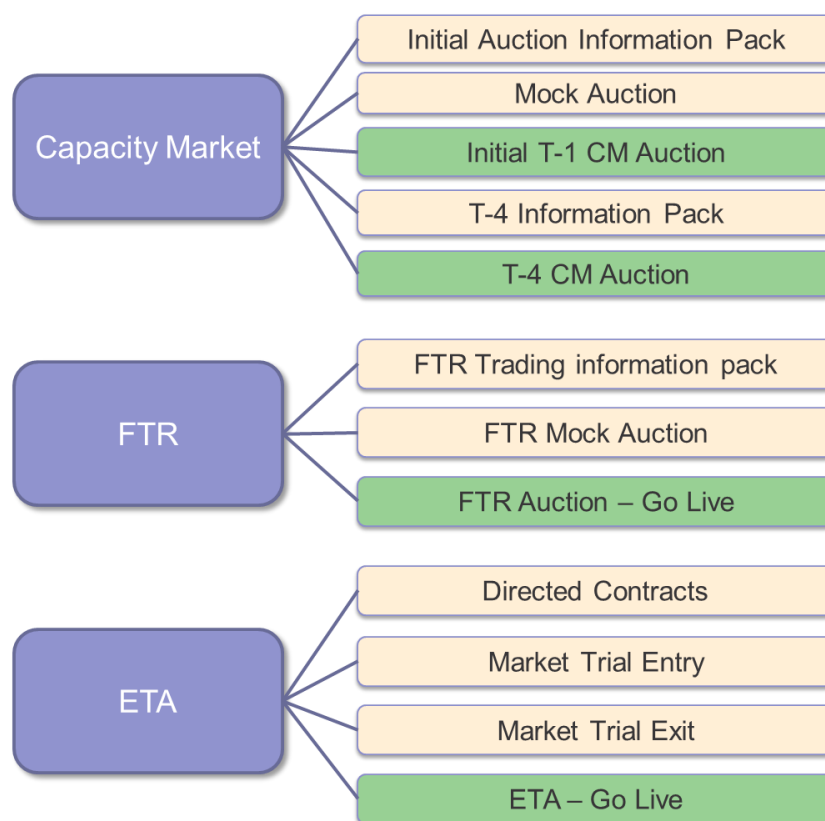
Given the complexity of each pathway, it is good programme management practice to divide these into phases or stages, each separated by gates. At each gate, or “stage gate”, the continuation of the process is confirmed by a positive decision.

---

<sup>8</sup> For the Capacity Year from ETA Go-Live until 30<sup>th</sup> Sept 2019

<sup>9</sup> For Capacity Year 2022-23

Stage Gates, as shown in Figure 3, have been identified ahead of the Go-Live Event for each I-SEM market. These are discussed in more detail in the relevant section of this document.



**Figure 3: Stage Gates & Go-Live Events**

The decision to proceed at each point will be based upon the information available at that time, primarily progress against relevant milestones, metrics and criteria.

#### 4.2 MILESTONES, METRICS & CRITERIA

Information to inform decision points at the various Stage Gates and Go-Live Events will be based on:

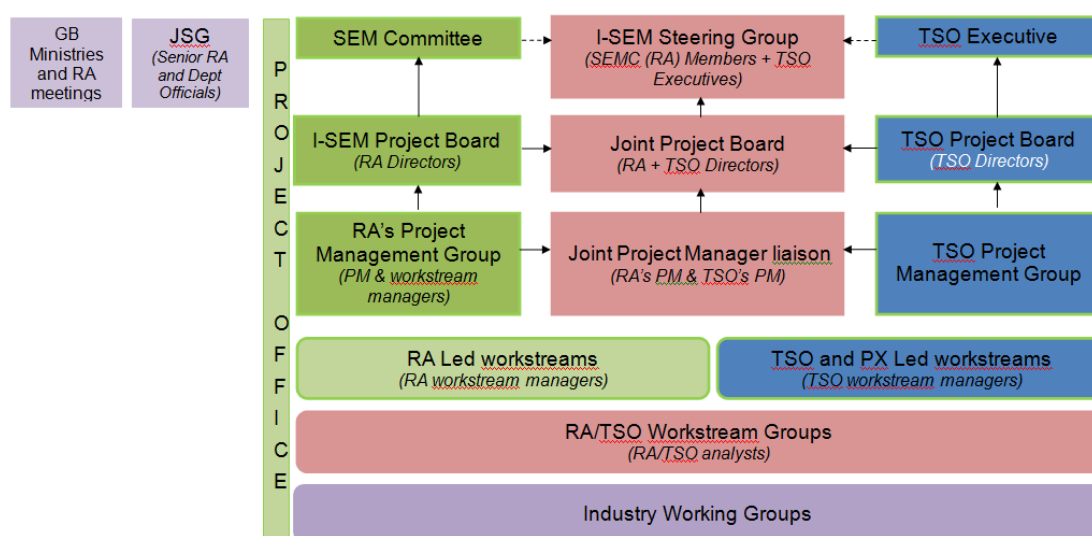
- Progress of the programme against the Level 1 & 2 Milestones;
- Participant responses to the TSO’s regular MRA process, and
- Information arising from direct engagement with industry participants.

The relevant milestones and MRA criteria are identified for each Stage Gate and Go-Live Event.

### 4.3 GOVERNANCE

The I-SEM programme is underpinned by a dedicated governance structure and working arrangements which complements the existing roles, responsibilities and forums which govern the operation of SEM and establishment of I-SEM.

The arrangements, illustrated in Figure 4 and summarised below, ensure a coordinated and effective implementation. They are set out in the Agreed Approach Document which was published in January 2015<sup>10</sup>.



**Figure 4: Governance Arrangements Overview**

The role of each forum in the context of I-SEM readiness is discussed briefly below.

#### **Joint Steering Group (JSG)**

Although compliance with the European Target Model and development of new market arrangements are the responsibility of the Member States, the Departments<sup>11</sup> have charged the SEM Committee with developing the new I-SEM arrangements.

The Joint Steering Group (JSG) is in place between the RAs and the Departments to provide regular updates on progress of the project.

<sup>10</sup> 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>

<sup>11</sup> Department of Communications, Climate Action and the Environment in Ireland and the Department for the Economy in Northern Ireland.

### **SEM Committee (SEMC) & I-SEM Project Board**

The SEM Committee is the decision-making body for the I-SEM project. In support of its function it has established a Project Board to facilitate I-SEM implementation, and, to progress and manage the RAs internal I-SEM work programme.

In addition, and to ensure a successful and coordinated implementation of I-SEM, the RAs and TSOs (as delivery body of central systems) have established a dedicated governance structure and working arrangements.

### **I-SEM Steering Group**

The I-SEM Steering Group comprises senior executives from both the RAs and TSOs. Amongst other things, the Steering Group is in place to:

- Provide overall direction and guidance to the programme;
- Endorse significant decision making;
- Agree and provide approval to proceed with significant aspects of the project, and
- Make recommendations to the SEMC on the final I-SEM go live date.

As such the I-SEM Steering Group is the primary decision making forum for programme activities and will make the final go live recommendation to the SEMC. The Steering Group ordinarily meets quarterly or otherwise as required in advance of key project milestones.

In support of its function a Joint Project Board has been established to proactively manage and coordinate implementation activities.

### **Joint Project Board**

The Joint Project Board (JPB) meets at least monthly and more frequently as key project milestones approach. The JPB is comprised of the respective RA and TSO I-SEM Programme Directors. Amongst other things the JPB is responsible for:

- Making recommendations to the I-SEM Steering Group as required;
- Providing project oversight and a channel of communication between the parties (including an escalation and issue resolution channel) to ensure timely and effective delivery to programme;
- Provide a change control approval process;

- Reviewing risks and mitigation strategies for the project, and
- Promptly resolving, or escalating as appropriate to the I-SEM Steering Group, any issues brought to it for consideration.

The JPB is the key forum between the RAs and the TSOs ensuring delivery of the overall regulatory framework and central systems is coordinated.

### **TSO Executive & TSO Project Board**

The TSOs have an extensive implementation programme spanning the establishment of SEMOpx, its new role as Capacity Market delivery body and changes to the central market systems. Internal governance structures have been established to manage the implementation programme.

---

#### 4.3.1 GOVERNANCE SUMMARY

As the programme approaches go-live a broad range of activities will require coordination and cooperation between the RAs, TSOs and market participants. Decision making to support progress at these key points needs to be clear.

Decision making organisations are identified for each Stage Gate and Go-Live Event. In addition, the programme forum at which each decision will be confirmed is identified.

---

#### 4.4 CONTINGENCY CONSIDERATIONS

The I-SEM programme is working to a strong baseline assumption that it will deliver in May 2018, with no delay. Efforts are focused on delivery against the programme plan and robust programme management arrangements are in place to mitigate issues as they arise.

That notwithstanding, it is prudent within any large programme to understand the contingency available and consequences should critical events be delayed. Consistent with the PRINCE2 methodology, for each Stage Gate and Go-Live Event, an assessment will be made of what contingency or tolerance is available within the programme timeline and what consequences any delay may have. This will allow the programme as a whole to understand what flexibility exists and what implications may arise if critical events are delayed.

Ultimately the success of the I-SEM project is inherently reliant on the ability of those involved to use their technical and business knowledge to evaluate and then control programme risks. On that basis programme risks will continue to be managed through



the existing programme management processes and contingency plans developed as necessary with all impacted parties.

## 5 THE CAPACITY MARKET

### 5.1 OVERVIEW

The Capacity Market Code<sup>12</sup> (“the CM Code”), establishes the new arrangements and processes, roles and responsibilities associated with the I-SEM Capacity Market.

The CM Code sets out the process by which Market Participants are notified of the Initial Auction date and the timetable of activities required to, amongst other things, register and qualify for the auction.

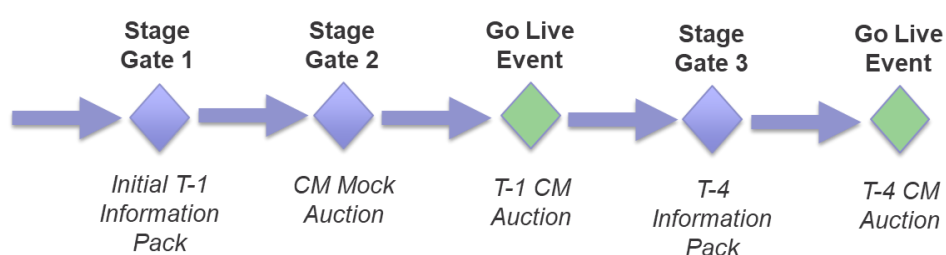
Notification is provided by publication by the TSOs of an Auction Timetable<sup>13</sup> which, for the Initial T-1 Auction, will be published as part of the Initial T-1 Auction Information Pack.

Publication of the Initial T-1 Information Pack starts the Capacity Market auction process and from there on the Initial T-1 Auction can only be postponed or cancelled by the RAs up to five working days ahead of the Initial Auction Date.

In parallel with the processes for the Initial T-1 Information Pack and Initial T-1 Auction, a number of project activities will be continuing in preparation for the Capacity Market Mock Auction.

Following the Initial T-1 Auction and within the timelines of the I-SEM Programme, the process leading to the first T-4 Auction will be undertaken.

Stage Gates have been defined for the pathways leading to the go live of the Initial T-1 and T-4 Auctions as shown below:



**Figure 1: Capacity Market Stage Gates / Go Live Events**

The metrics, criteria, milestones and decision-making process for each Stage Gate and Go-Live Event are set out in the following sections.

<sup>12</sup> Draft 5, 12 January 2017

<sup>13</sup> CM Code Draft 5, Section D2.1.4

## 5.2 CM STAGE GATE 1: THE INITIAL T-1 AUCTION INFORMATION PACK

Evidence to inform publication of the Initial T-1 Auction Information Pack, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- Governance Readiness;
- TSO Readiness, and
- Market Participant Readiness.

Each is outlined below.

### 5.2.1 GOVERNANCE READINESS

There are a number of legal and regulatory activities scheduled to be completed before the new processes go active. These include:

- Confirmation that the CM arrangements are State Aid compliant;
- Publication and designation of the CM Code, and
- Terms of reference for the Capacity Market Auditor and Auction Monitor.

In addition, the CM Code requires RA approval of detailed technical data. This includes, but is not limited to:

- CM Parameters;
- Indicative Demand Curve, and
- Local Capacity Constraints

The relevant Governance activities necessary for publication of the Initial T-1 Information Pack are shown in Table 2 and where appropriate the Programme Milestone Reference has been included. These activities will be tracked in order to inform the decision to approve the Initial T-1 Initial Auction Information Pack.

<b>Activities ahead of Initial T-1 Information Pack Publication</b>
<b>Governance Readiness</b>
<b>State Aid</b>
State Aid Application Report (181)
<b>CM Auditor &amp; Monitor</b>
CM Auditor & Monitor Consultation (140)
CM Auditor & Monitor Decision (141)
<b>CM Code</b>
CM Code Published (38)
<b>CRM Parameters Decision</b>
CM Parameters Decision Published (133)
<b>Constraint Setting - Consultation</b>
Consultation Paper Published

**Table 2**

### 5.2.2 TSO READINESS

In preparation for the live processes triggered by publication of the Initial T-1 Information Pack the TSOs are implementing business, organisational and system changes. The MRA process will be the primary vehicle for monitoring and reporting TSO progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of Initial T-1 Information Pack Publication</b>
<b>TSO Readiness</b>
<b>TSO Business Processes &amp; Procedures</b>
CM15 <sup>14</sup> – Business Processes Identified
CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM20 – Management Team in place
CM21 – Staff in place
<b>TSO Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete

**Table 3**

<sup>14</sup> The Reference Numbers are taken from the MRA Readiness Metrics and Criteria document <http://www.sem-o.com/ISEM/General/I-SEM%20Readiness%20Metrics.pdf>

### 5.2.3 MARKET PARTICIPANT READINESS

In preparation for the live processes triggered by publication of the Initial T-1 Information Pack, Market Participants are progressing market registration activities and implementing business, organisational and system changes. The MRA process will be the primary vehicle for monitoring and reporting market participant progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of Initial T-1 Information Pack Publication</b>
<b>Market Participant Readiness</b>
<b>Registration</b>
CM8 – Expected participants have signed up to the CM Code
<b>Business Processes &amp; Procedures</b>
CM15 – Business Processes Identified
CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM20 – Management Team in place
CM21 – Staff in place
<b>Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete

**Table 4**

### 5.2.4 DECISION MAKING

Publication of the Initial T-1 Auction Information Pack by the TSOs (as CM Delivery Body) is the beginning of the “live” CM auction process.

However, as the Initial T-1 Information Pack begins the process leading to the first Capacity Market auction and includes a range of information and parameters which are subject to approval by the Regulatory Authorities, it is appropriate that publication is approved by the SEM Committee (SEMC).

Decision Maker	Decision Making Forum
Regulatory Authorities	SEM Committee

**Table 5**

### 5.3 CM STAGE GATE 2: THE MOCK AUCTION

In parallel with the “live” activities triggered by the Initial T-1 Information Pack, a number of project activities will continue which are required to prove systems and processes and conclude with the Mock Auction. These activities include:

- CM Engine Certification, and
- Training Delivery.

As well as these activities and milestones, the timetable and objectives of the Mock Auction will be progressed via the Market Trial Working Group<sup>15</sup>.

At the same time, the TSOs and Market Participants will continue to progress business, organisational and system changes ahead of the mock auction.

Evidence to inform the decision point, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- TSO Readiness, and
- Market Participant Readiness.

Each is outlined below.

#### 5.3.1 TSO READINESS

The following programme Milestones and MRA Criteria & Metrics will be monitored:

Activities ahead of the Mock Auction
<b>TSO Readiness</b>
<b>Programme Milestones</b>
Participant Interface Testing Complete (10)
Training delivery (78) (83)

<sup>15</sup> A Market Trial Working Group will be formed and will be open to representatives from all of the various participants in the Market Trial. Further detail is provided in the Market Trial Plan <http://www.sem-o.com/ISEM/General/Market%20Trial%20Plan.pdf>

CM Engine Certification Complete (173)
<b>TSO Business Processes &amp; Procedures</b>
CM15 – Business Processes Identified
CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM20 – Management Team in place
CM21 – Staff in place
<b>TSO Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete
<b>TSO Readiness for Mock Auction</b>
CM27 – Trialling / mock auction strategy and plan completed
CM29 – Parameters for mock auction published
CM30 – Plan completed
CM31 – Detailed Scripts Produced
CM32 – Staff, Processes & Procedures ready
CM33 – Systems & Data ready
CM34 – Pretrial Processes (including registration) completed
CM35 – Decision to start trial confirmed

**Table 6**

### 5.3.2 MARKET PARTICIPANT READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Mock Auction</b>
<b>Market Participant Readiness</b>
<b>Business Processes &amp; Procedures</b>
CM15 – Business Processes Identified
CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM20 – Management Team in place
CM21 – Staff in place
<b>Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete
<b>Readiness for Mock Auction</b>

CM30 – Auction Plan completed
CM31 – Internal Scripts Produced
CM32 – Staff, Processes & Procedures ready
CM33 – Systems & Data ready
CM34 – Pretrial Processes (including registration) completed
CM35 – Decision to start trial confirmed

**Table 7**

### 5.3.3 DECISION MAKING

The Mock Auction is an important phase of the overall I-SEM Programme and will provide participants with an environment to trial systems and processes. The decision to proceed with the mock auction is a programme decision and does not require the confirmation of any policy decisions.

The TSOs are best placed to make the decision to proceed. Progress and reporting will be tracked at the Joint Project Board before recommending a decision to the I-SEM Steering Group to publish shall be confirmed.

Decision Maker	Decision Making Forum
TSOs	I-SEM Steering Group

**Table 10**

### 5.4 CM GO-LIVE EVENT: THE INITIAL T-1 AUCTION

As described in 5.1, there is no formal “go” decision leading up to the Initial T-1 Auction. Publication of the Initial T-1 Information Pack sets out the timetable leading to the auction and so the only action available to the RAs is to postpone or cancel the Initial T-1 Auction.

A number of activities and milestones must be satisfactorily completed for the Initial Auction to commence. As well, the TSOs and market participants will need to be ready from an organisation and business perspective to commence the Initial T-1 Auction. These include:

- Completion of registration, qualification and other activities set out in the Information Pack;
- Notification of the results of Unit Specific Price Cap applications and Opt-Out applications;
- Successful completion of the mock auction confirmed by the TSOs and the



Auction Auditor, and

- Assurance from market participants and the TSOs that each is sufficiently ready to operate in the new CM arrangements.

Evidence to inform the decision point, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- Governance Readiness
- TSO Readiness, and
- Market Participant Readiness.

It is likely that there will also be direct engagement with participants (most likely via weekly/daily conference calls) on the run-up to the Initial T-1 Auction. These will be coordinated by the TSOs as part of the arrangements supporting the mock auction.

#### 5.4.1 GOVERNANCE READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial T-1 Auction</b>
<b>Governance Readiness</b>
<b>RA Decisions</b>
Approval of Intermediaries for CM Code (162)
Approval of Final CM Auction Qualifications (164)
Unit Specific Price Cap and Opt-Out notification complete
Auction Monitor Reports on Mock Auction
<b>TSO Deliverables</b>
Final Qualification Results Issued
Publication of the Final Capacity Auction Information Pack (165)

**Table 11**

#### 5.4.2 TSO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial T-1 Auction</b>
<b>TSO Readiness</b>
<b>Programme Milestones</b>
Mock Auction Complete (182)
<b>TSO Business Processes &amp; Procedures</b>
CM18 – Business Processes Ready
<b>TSO People &amp; Organisation</b>

CM21 – Staff in place
<b>TSO Readiness of Systems</b>
CM37 – Mock Auction Complete
<b>TSO Ready for Deployment, Transition &amp; Cutover</b>
CM38 – Deployment, transition & cutover plan complete
CM39 – Decision making process defined
CM40 – Data migration complete
CM41 – Pre-live processes complete
CM42 – Cutover complete

**Table 12**

#### 5.4.3 MARKET PARTICIPANT READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial T-1 Auction</b>
<b>Market Participant Readiness</b>
<b>Programme Milestones</b>
Qualification Complete
<b>Business Processes &amp; Procedures</b>
CM18 – Business Processes Ready
<b>People &amp; Organisation</b>
CM21 – Staff in place
<b>Readiness of Systems</b>
CM37 – Mock Auction complete
<b>Ready for Deployment, Transition &amp; Cutover</b>
CM43 – Deployment, transition & cutover plan complete
CM44 – Pre-live processes commence operation
CM45 – Cutover complete

**Table 13**

#### 5.4.4 DECISION MAKING

Activities and milestones described in the previous sections must be satisfactorily completed for the Initial T-1 Auction to commence. As well, confirmation that the TSOs and market participants are ready to execute the Initial T-1 Auction will be confirmed via the MRA process and if necessary through direct engagement with participants.

The Initial T-1 Auction is a critical event within the implementation of the I-SEM Programme. The decision to delay or cancel the Initial T-1 Auction rests with the Regulatory Authorities and would be confirmed at the SEM Committee.

Decision Maker	Decision Making Forum
Regulatory Authorities	SEM Committee

**Table 14**

## 5.5 CM STAGE GATE 3: THE T-4 AUCTION INFORMATION PACK

Ahead of the first T-4 Auction, the TSOs (as CM Delivery Body) will publish a T-4 Auction Information Pack (“the T-4 Information Pack”). The legal and regulatory framework for the T-4 auction is required ahead of the Initial T-1 Auction so the only additional activities are where the TSOs require RA approval, under the CM Code, of detailed technical data. Similarly, TSO and Market Participant readiness should have been confirmed ahead of the Initial T-1 Auction. However, some elements of the business, organisational and system changes may not have been sufficient to support a T-4 Auction.

Evidence to inform the publication of the T-4 Information Pack, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- Governance Readiness;
- TSO Readiness, and
- Market Participant Readiness.

Each is outlined below.

### 5.5.1 GOVERNANCE READINESS

The legal and regulatory framework for the T-4 auction is required ahead of the Initial T-1 Auction so the only additional activities are where the TSOs require RA approval of detailed technical data. This includes, but is not limited to:

- CM Parameters
- Indicative Demand Curve
- Local Capacity Constraints

The relevant Governance activities necessary for publication of the T-4 Information Pack are shown in Table 15 and where appropriate the Programme Milestone Reference has been included. These activities will be tracked in order to inform the

decision to publish the pack.

<b>Activities ahead of T-4 Information Pack Publication</b>
<b>Governance Readiness</b>
<b>CRM Parameters Decision</b>
CM Parameters Decision Published

**Table 15**

### 5.5.2 TSO READINESS

TSO readiness will have been confirmed ahead of the Initial T-1 Auction. However, some elements of the business, organisational and system changes may not have been sufficient to support a T-4 Auction. The MRA process will be the primary vehicle for monitoring and reporting TSO progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of T-4 Information Pack Publication</b>
<b>TSO Readiness</b>
<b>TSO Business Processes &amp; Procedures</b>
CM15 – Business Processes Identified
CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM21 – Staff in place
<b>TSO Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete

**Table 16**

### 5.5.3 MARKET PARTICIPANT READINESS

Market Participant readiness should have been confirmed ahead of the Initial T-1 Auction. However, some elements of the business, organisational and system changes may not have been sufficient to support a T-4 Auction. The MRA process will be the primary vehicle for monitoring and reporting Market Participant progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of T-4 Information Pack Publication</b>
<b>Market Participant Readiness</b>
<b>Business Processes &amp; Procedures</b>
CM15 – Business Processes Identified

CM16 – Design & Documentation Complete
CM17 – Draft Procedures Complete
CM18 – Business Processes Ready
<b>People &amp; Organisation</b>
CM19 – Staffing and Organisational Requirements Complete
CM21 – Staff in place
<b>Readiness of Systems</b>
CM12 – Requirements defined
CM13 – System design complete
CM14 – Testing complete

**Table 17**

#### 5.5.4 DECISION MAKING

Publication of the T-4 Information Pack is the responsibility of the TSOs (as CM Delivery Body). Progress and reporting will be tracked at the Joint Project Board before recommending a decision to the I-SEM Steering Group to publish shall be confirmed.

Decision Maker	Decision Making Forum
TSOs	I-SEM Steering Group

**Table 18**

#### 5.6 CM GO-LIVE EVENT: THE T-4 AUCTION

As described in 5.1, there is no formal “go” decision leading up to the T-4 Auction. Publication of the T-4 Information Pack set out the timetable leading to the auction and so the only action available to the RAs is to postpone or cancel the Auction.

Both the TSOs and market participants should have confirmed system and process readiness ahead of the Initial T-1 Auction. However, some elements of the business and organisational changes may not have been sufficient to support a T-4 Auction.

Evidence to inform the decision point, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- Governance Readiness;
- TSO Readiness, and
- Market Participant Readiness.

These are outlined below.

#### 5.6.1 GOVERNANCE READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the T-4 Auction</b>
<b>Governance Readiness</b>
<b>RA Decisions</b>
Approval of Final CM Auction Qualifications
Final CM Auction Parameters Approved

**Table 19**

#### 5.6.2 TSO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the T-4 Auction</b>
<b>TSO Readiness</b>
<b>TSO Business Processes &amp; Procedures</b>
CM18 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
CM21 – Staff in place

**Table 20**

#### 5.6.3 MARKET PARTICIPANT READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the T-4 Auction</b>
<b>Market Participant Readiness</b>
<b>Business Processes &amp; Procedures</b>
CM18 – Business Processes Ready
<b>People &amp; Organisation</b>
CM21 – Staff in place

**Table 21**

#### 5.6.4 DECISION MAKING

Activities and milestones described in the previous sections must be satisfactorily completed for the T-4 Auction to commence. As well, confirmation that the TSOs and market participants are ready to execute the T-4 Auction will be confirmed via the MRA process and if necessary through direct engagement with participants.

The T-4 Auction is a critical event within the implementation of the I-SEM Programme. The decision to delay or cancel the Auction rests with the Regulatory Authorities and would be confirmed at the SEM Committee.

Decision Maker	Decision Making Forum
Regulatory Authorities	SEM Committee

**Table 22**

## 5.7 CAPACITY MARKET CONTINGENCY CONSIDERATIONS

This section, consistent with 4.4, considers the contingency available should the Initial T-1 Information Pack, the Mock Auction, the Initial T-1 Auction, the T-4 Auction Information Pack or T-4 Auction be subject to delay.

### 5.7.1 THE INITIAL T-1 AUCTION INFORMATION PACK

Publication of the Initial T-1 Information Pack is dependent on the completion of a number of programme milestones and readiness criteria, as set out in Section 5.2. These activities and criteria will be monitored and reported as if any were to delay the Initial T-1 Information Pack there could be a consequential delay to the Initial T-1 Auction date.

As explained in 5.1 the Initial T-1 Information Pack defines the timetable and process leading to the Initial T-1 Auction and the timetable it will define has very little contingency within it (only a matter of days). As such any delay to publication of the Initial T-1 Information Pack, greater than five days, would cause a consequential delay to the Initial T-1 Auction.

The Initial T-1 Auction date has been set five months ahead of the Capacity Year which is aligned with the go-live date for I-SEM. This period was set during the replanning process and was informed by the Stocktake Report<sup>16</sup> which recognised that it would be beneficial for the first capacity auction to be further in advance of I-SEM Go Live than the two months provided for in the CRM3 decision<sup>17</sup> and draft CM Code<sup>18</sup>. This longer period allowed participants time to put in place Contracts for Difference (CfDs) following the auction but ahead of Go Live.

So, whilst it would be compliant with the draft CM Code<sup>18</sup> to delay the Initial T-1 Auction from five months to two months prior to the Capacity Year (a delay of three

<sup>16</sup> <https://www.semcommittee.com/publication/sem-16-078-i-sem-project-update-stocktake-report>

<sup>17</sup> <https://www.semcommittee.com/publication/sem-16-039-crm-decision-3>

<sup>18</sup> <https://www.semcommittee.com/publication/sem-17-004-crm-capacity-market-code-consultation>

months) this would place increasing risk on market participants.

This would mean that, in theory, publication of the Initial T-1 Information pack could be delayed for three months without impacting the I-SEM Go Live date.

---

### 5.7.2 THE MOCK AUCTION

The Mock Auction is a critical element of the I-SEM Programme and will provide participants with an environment to trial systems and processes. The Mock Auction is currently scheduled to take place a week ahead of the Initial T-1 Auction and therefore affords no scope for delay.

The programme has already considered whether the Mock Auction could be scheduled further ahead of the Initial Auction and this has not been considered feasible. As such any delay to a successful conclusion of the Mock Auction will cause a knock-on delay to the Initial Auction.

As explained in Section 5.7.1, in theory, a three-month delay to the Initial T-1 Auction would not impact the I-SEM Go Live date.

---

### 5.7.3 THE INITIAL T-1 CAPACITY MARKET AUCTION

The same considerations set out in Section 5.7.1 apply to the Initial T-1 Auction.

---

### 5.7.4 THE T-4 AUCTION INFORMATION PACK AND T-4 AUCTION

The indicative timetable for the T-4 Auction Information Pack and T-4 Auction was published within the CRM Parameters Decision <sup>19</sup>.

It states that the T-4 Auction will be held in August 2018 and that the T-4 Auction Information Pack will be published six months before.

The T-4 Auction applies to the Capacity Year 2022-2023<sup>20</sup>. The Draft CM Code<sup>13</sup>, states that a T-4 auction should take place no less than forty-two months prior to the start of the relevant Capacity Year. This means that the T-4 Auction could take place in April 2019 and still comply with the draft CM Code.

In theory therefore, the T-4 Auction could be delayed up to eight months without breaching the requirements of the draft CM Code.

---

<sup>19</sup> <https://www.semcommittee.com/publication/publication-crm-parameters-decision>

<sup>20</sup> October 1, 2022 – September 30, 2023



## 6 FINANCIAL TRANSMISSION RIGHT (FTR) AUCTIONS

### 6.1 OVERVIEW

Financial Transmission Rights (FTRs) are the hedging tool for cross border trading across the interconnectors with the GB market. The SEMC set out its decision to have FTRs in SEM-15-061. Their delivery relies on successful day-ahead market coupling and go live of the I-SEM energy trading arrangements (ETA), as well as the completion of some additional activities that are specific to the Forward Capacity Allocation (FCA) Network Code.

The go-live process for FTR auctions is unique amongst the I-SEM Go-Live Events in a number of ways, and this has implications for the process around FTR auction go-live and parties' own readiness activities:

- Regulatory approval of rules to facilitate the auctions is required from all European National Regulatory Authorities ("EU NRAs") in some cases, or from NRAs in the Ireland-UK region ("IU NRAs" which includes CER, UR and Ofgem) for others<sup>21</sup>;
- The FTR auction go-live date is yet to be confirmed. the Interconnector Owners (ICOs) will confirm the go-live date based on their product offerings, consultations with industry, the RAs and TSOs<sup>22</sup>;
- Responsibility for many of the activities that lead to the FTR auctions sit with the ICOs rather than the TSOs, including activities such as training and registration which are separate to those for the rest of the I-SEM markets, and
- FTR auction participation is optional for I-SEM participants, and open to non-I-SEM participants.

### 6.2 FTR MARKET READINESS

There are a number of programme level activities required to successfully implement the first FTR auction. In addition to milestones related to ETA Go Live and market coupling, there are a number of Level 1 & 2 Milestones that are specific to FTRs.

As well as these activities, a number of different parties will need to ensure their readiness:

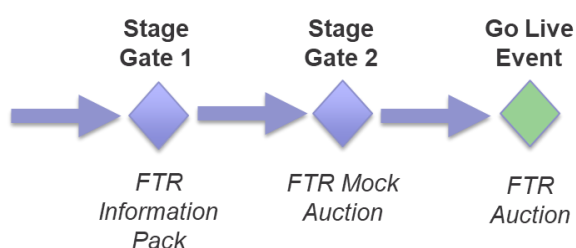
- ICOs need to ensure their own business and operational readiness, as well as the readiness of the Joint Allocation Office (JAO);

<sup>21</sup> Further, UREGNI and Ofgem will approval Moyle Interconnector's Access Rules, and CER and Ofgem will approve EWIC's Access Rules.

<sup>22</sup> Note, milestone 52 represents the earliest possible date for the first FTR auction.

- TSOs need to consider their readiness as interconnector administrator and provider of the Interconnector Management Platform;
- NEMOs need to consider their readiness related to the interim Coordinated Capacity Calculator (CCC) and shipping; and
- Market participants who intend to participate in the FTR auction will need to consider readiness across their business, processes and systems.

Stage Gates have been defined for the pathways leading to the go live of the Initial FTR Auction as shown below:



**Figure 2: FTR Stage Gates / Go Live Event**

The metrics, criteria, milestones and decision-making process for each Stage Gate and Go-Live Event are set out in the following sections.

### 6.3 FTR STAGE GATE 1: FTR TRADING INFORMATION PACK

The FTR trading information pack (milestone 195) will be published by the ICOs and will include indicative timings for the first FTR auction, product details, loss adjusted market spread calculations, and details on the FTR information to be produced as part of the central systems market trial.

The delivery of the trading information pack is dependent on the approvals of the Harmonised Access Rules (HAR) and associated documents, as underlined by the FCA network code. These documents contain rules about long term transmission rights and are submitted for regulatory approval by the ICOs. Some of these rules apply to all Member States so require approval of all European National Regulatory Authorities (EU NRAs), whereas others apply only to interconnectors in the Ireland-UK (IU) region so approval of these comes from UR, CER and Ofgem (IU NRAs). The content of the HAR will be reflected in the Access Rules for Moyle and EWIC, which are approved by UR and Ofgem, and CER and Ofgem, respectively.

In addition to the FCA deliverables, the trading information pack is dependent on the receipt of year ahead capacity from the interim (CCC).

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of FTR Trading Information Pack Publication</b>
<b>HAR and Access Rules</b>
HAR and Access Rule Submitted (190)
HAR and Access Rule Approval (51)
<b>Year Ahead Capacity</b>
Year Ahead Capacity Published (193)
<b>Readiness of Legal &amp; Contractual Framework</b>
Legislative changes (FTR5)
Licence changes (FTR6)
JAO Arrangements (FTR7)

**Table 23**

### 6.3.1 DECISION MAKING

Publication of the FTR Trading Information Pack is an important step in the implementation of the FTR market as it will provide participants with information on which to plan and develop systems and processes.

The ICOs are best placed to make the decision to proceed. Progress and reporting will be tracked at the Joint Project Board before a decision to publish is confirmed at the I-SEM Steering Group.

<b>Decision Maker</b>	<b>Decision Making Forum</b>
ICOs	I-SEM Steering Group

**Table 24**

### 6.4 FTR STAGE GATE 2: FTR MOCK AUCTION

Before the first auction there will be two periods of testing and trialling:

- Initial Trial and Participant Test period (192 start and 194 end); and
- Trial, Training and Participant Test period (196 start and 198 end)

In addition to trial and testing activities, the second test period contains market participant training and a mock auction for FTR users. While participation in the FTR test and trials is not mandatory, these are important readiness activities, and go live of the FTR auction relies on successful completion of both trial and test periods.

There are a number of activities which must be carried out in preparation for the FTR Mock Auction. The ICOs will engage with the JAO to ensure that EWIC and Moyle are ready to go live on the JAO platform. They will also implement business, organisational and system changes necessary for the FTR Mock Auction.

TSOs role as Interconnector Administrator provider of the IT systems that support interconnector processes, will need to consider necessary changes to support the FTR Mock Auction.

Similarly, Market Participants will need to consider necessary changes to their systems and businesses to be ready for the FTR Mock Auction.

Evidence to inform the decision point, which includes metrics, criteria and programme milestones, are considered under three broad headings:

- ICO Readiness;
- TSO Readiness, and
- Market Participant Readiness.

#### 6.4.1 ICO READINESS

In preparation for the FTR Mock Auction the ICOs are implementing agreements, and changes to business processes, organisational structure and systems. The MRA process will be the primary vehicle for monitoring and reporting ICO progress in these areas. Specifically, the following Milestones, Metrics and Criteria will be considered:

<b>Activities ahead of the FTR Mock Auction</b>
<b>ICO Readiness</b>
<b>Programme Milestones</b>
FTR Auction – Trial and Participant Test Plan (191)
FTR Auction – EWIC & Moyle service active with JAO (197)
FTR Auction – Initial Trial and Participant Test period start (192)
<b>ICO Business Processes &amp; Procedures</b>
FTR7 – JAO arrangements in place
FTR13 – Business Processes Identified
FTR14 – Design & Documentation Complete
FTR15 – Draft Procedures Complete
FTR16 – Business Processes Ready
<b>ICO People &amp; Organisation</b>
FTR17 – Staffing and Organisational Requirements Complete
FTR19 – Management Team in place
FTR20 – Staff in place
<b>ICO Readiness of Systems</b>
FTR10 – Requirements defined
FTR11 – System design complete
FTR12 – Testing complete
<b>ICO Readiness for Mock Auction</b>
FTR25 – Trialling / mock auction strategy and plan completed

FTR26 – Detailed activities for mock auction published
FTR27 – Plan completed
FTR28 – Systems & Data ready
FTR29 – Allocation of Staff complete
FTR30 – Users configured for Mock Auction

**Table 25**

#### 6.4.2 TSO READINESS

In preparation for the FTR Mock Auction the TSOs are implementing business, organisational and system changes. The MRA process will be the primary vehicle for monitoring and reporting TSO progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of the FTR Mock Auction</b>
<b>TSO Readiness</b>
<b>TSO Business Processes &amp; Procedures</b>
FTR13 – Business Processes Identified
FTR14 – Design & Documentation Complete
FTR15 – Draft Procedures Complete
FTR16 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
FTR17 – Staffing and Organisational Requirements Complete
FTR19 – Management Team in place
FTR20 – Staff in place
<b>TSO Readiness of Systems</b>
FTR10 – Requirements defined
FTR11 – System design complete
FTR12 – Testing complete

**Table 26**

#### 6.4.3 MARKET PARTICIPANT READINESS

In preparation for the FTR Mock Auction, Market Participants are progressing market registration activities and implementing business, organisational and system changes. The MRA process will be the primary vehicle for monitoring and reporting market participant progress in these areas. Specifically, the following Metrics and Criteria will be considered:

<b>Activities ahead of the FTR Mock Auction</b>
<b>Market Participant Readiness</b>
<b>Registration</b>
FTR8 – Expected participants have registered with JAO
<b>Business Processes &amp; Procedures</b>

FTR13 – Business Processes Identified
FTR14 – Design & Documentation Complete
FTR15 – Draft Procedures Complete
FTR16 – Business Processes Ready
<b>People &amp; Organisation</b>
FTR17 – Staffing and Organisational Requirements Complete
FTR19 – Management Team in place
FTR20 – Staff in place
<b>Readiness of Systems</b>
FTR10 – Requirements defined
FTR11 – System design complete
FTR12 – Testing complete

**Table 27**

#### 6.4.4 DECISION MAKING

The FTR Mock Auction is an important phase of the overall I-SEM Programme and will provide participants with an environment to trial systems and processes. The decision to proceed with the auction is a programme decision and does not require the confirmation of any policy decisions.

The ICOs are best placed to make the decision to proceed with the FTR Mock Auction. Progress and reporting will be tracked at the Joint Project Board before a decision is confirmed at the I-SEM Steering Group.

Decision Maker	Decision Making Forum
ICOs	I-SEM Steering Group

**Table 28**

#### 6.5 FTR GO-LIVE EVENT: INITIAL FTR AUCTION

The initial FTR Auction will require the readiness of regulations, agreements, IT systems and business processes across the ICOs, TSOs and Market Participants. When these are ready the initial FTR auction can take place immediately. However, it will be more efficient for all parties if this takes place when there is reasonable certainty that the I-SEM Go Live date will not change, so as to avoid unnecessary unwinding of any FTRs auctioned ahead of a subsequent delay. How this assurance will be provided to the ICOs is set out in Section 6.5.4.

Evidence to inform the decision point is considered under three broad headings:

- ICO Readiness;

- TSO Readiness, and
- Market Participant Readiness.

It is likely that there will also be direct engagement with participants (most likely via weekly/daily conference calls) on the run-up to the Initial FTR Auction. These will be coordinated by the ICOs.

### 6.5.1 ICO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial FTR Auction</b>
<b>ICO Readiness</b>
<b>Programme Milestones</b>
EWIC & Moyle Active with JAO (197)
FTR Mock Auction Complete (198)
<b>ICO Business Processes &amp; Procedures</b>
FTR16 – Business Processes Ready
<b>ICO People &amp; Organisation</b>
FTR20 – Staff in place
<b>ICO Readiness of Systems</b>
FTR12 – Mock Auction Complete
<b>ICO Ready for Deployment, Transition &amp; Cutover</b>
FTR37 – Data Deployment, transition & cutover plan complete
FTR38 – Data migration complete
FTR39 – Ready for Live Operation
FTR41 – Systems Deployment, transition/cutover plan complete
FTR42 – Pre-live processes complete
FTR43 – Cutover complete

**Table 29**

### 6.5.2 TSO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial FTR Auction</b>
<b>TSO Readiness</b>
<b>TSO Business Processes &amp; Procedures</b>
FTR16 – Business Processes Ready
<b>TSO People &amp; Organisation</b>
FTR20 – Staff in place
<b>TSO Readiness of Systems</b>
FTR12 – Testing & Trialling Complete
<b>TSO Ready for Deployment, Transition &amp; Cutover</b>

FTR41 – Systems Deployment, transition/cutover plan complete
FTR42 – Pre-live processes complete
FTR43 – Cutover complete

**Table 30**

### 6.5.3 MARKET PARTICIPANT READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of the Initial FTR Auction</b>
<b>Market Participant Readiness</b>
<b>Registration</b>
FTR8 -expected participants registered with JAO
<b>Business Processes &amp; Procedures</b>
FTR16 – Business Processes Ready
<b>People &amp; Organisation</b>
FTR20 – Staff in place
<b>Readiness of Systems</b>
FTR12 – Testing & Trialling Complete
<b>Ready for Deployment, Transition &amp; Cutover</b>
FTR41 – Systems Deployment, transition/cutover plan complete
FTR42 – Pre-live processes complete
FTR43 – Cutover complete

**Table 31**

### 6.5.4 DECISION MAKING

The initial FTR Auction requires readiness of regulations, agreements, IT systems and business processes across the ICOs, TSOs and Market Participants. When these are ready the initial FTR auction can, in principle, take place.

Timing of the initial FTR Auction is an operational decision for the ICOs. However, in order to ensure they have necessary assurance regarding the wider readiness of I-SEM to go live, it is proposed that progress and reporting be tracked at the Joint Project Board before a decision is confirmed at the I-SEM Steering Group.

This would ensure that the ICO decision is informed by their own readiness and those of the wider systems and activities. To this end, TSOs will be able to provide confirmation that central systems have been tested, and that the market trail is progressing as expected (i.e. there are no ‘red flags’). The RAs will be able to provide an update on market readiness more generally, as informed by the MRA, and other information.



Decision Maker	Decision Making Forum
ICOs	I-SEM Steering Group

**Table 32**

## 6.6 FTR CONTINGENCY CONSIDERATIONS

This section considers the contingency available should the FTR Trading Information Pack, the FTR Mock Auction or the Initial FTR Auction be subject to delay.

### 6.6.1 FTR TRADING INFORMATION PACK

The FTR Trading Information Pack (195) will contain all details relevant to the FTR Auction. It will include an indicative auction calendar with product details, loss adjusted spread calculations and details of the FTR information to be produced as part of the central systems market trial.

It is scheduled to be delivered approximately eight weeks ahead of the second period of FTR Trial, Training and Participant Testing (196), in order to allow participants to refine their own internal plans.

It is assumed that market participants will require the bulk of the scheduled eight weeks in order to prepare and plan for the Trial, Training and Participant Testing period. As such there is not considered, at this stage, to be any contingency within the eight-week period.

### 6.6.2 FTR MOCK AUCTION

The FTR Mock Auction is scheduled to take place within the FTR Trial, Training and Participant Testing period (196) which is scheduled to take eight weeks (198).

It is unlikely that the activities required in this period will take a full eight weeks; indeed, the JAO has completed similar exercises for other markets in one or two weeks.

As such it is considered that up to six weeks' contingency is available within this element of the plan.

### 6.6.3 INITIAL FTR AUCTION

The Initial FTR Auction can, in principle, take place once the regulatory framework, commercial agreements and the various IT systems have been through mock auction. This is currently scheduled approximately twelve weeks ahead of I-SEM Go Live.

However, it is the ICOs' view that the initial FTR Auction could take place up to two weeks ahead of delivery of the first FTR product which will align with the start of the month following I-SEM Go Live. As such, that would mean that contingency of approximately ten weeks is available within the current FTR Auction schedule.

### 6.6.4 FTR CONTINGENCY SUMMARY

The existing programme schedule affords approximately twenty-eight weeks between issuing the FTR Trading Information Pack and the first delivery/settlement period of an FTR product.

Examination of these timescales suggests that a total of sixteen weeks' contingency is available comprised of:

- Six weeks within the FTR Trial, Training and Participant Testing period (196) (198), and
- Ten weeks is available within the current FTR Auction schedule i.e. from EWIC & Moyle being live on JAO (199) and I-SEM Go Live (250).

## 7 ENERGY TRADING ARRANGEMENTS

### 7.1 ENERGY TRADING ARRANGEMENT READINESS

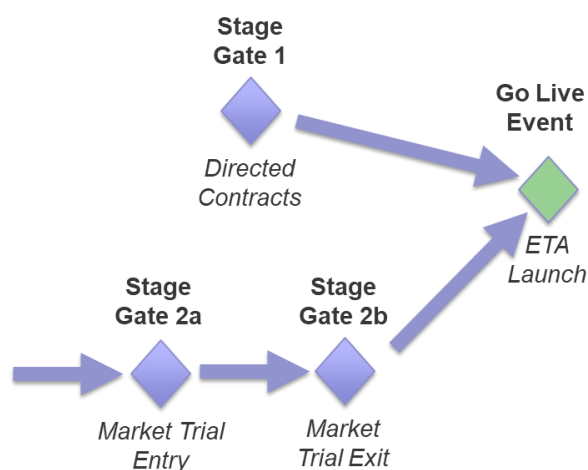
Go live of the energy trading arrangements is the most complex go live decision, bringing together all of the I-SEM markets.

The energy trading arrangements (ETA) comprise the ex-ante day-ahead and intra-day markets and the real-time market operations (the balancing market and imbalance settlement). But go live of the ETA will also trigger a number of related markets and services, specifically CM settlement and FTR pay-outs.

A core pillar of the RAs market power mitigation strategy will be the continued use of Directed Contracts (DC). It is essential that the appropriate quantity of generation from ESB has been contracted forward before the ETA Go Live.

Another key part of go-live readiness is the execution of the market trial. This is an 'as live' operational trial, which allows market participants to trial their systems, processes and operations before ETA Go Live. As such, most key deliverables are scheduled to be in place in time for the start of the market trial, and both central and participant systems testing must have met their criteria for successful exit.

Stage Gates have been defined for the pathways leading to ETA Go Live as shown below:



**Figure 3: ETA Stage Gates / Go Live Event**

The metrics, criteria, milestones and decision-making process for each Stage Gate and Go-Live Event are set out in the following sections.

## 7.2 ETA STAGE GATE 1: DIRECTED CONTRACT ARRANGEMENTS

The existing Directed Contract (DC) arrangements involve a rolling allocation process administered by the RAs that is held every quarter and typically looks five quarters ahead. The DC price is based upon a regression formula using forward fuel, carbon prices and FX rates. Allocation is based upon Supplier eligibility which is in turn based upon their historical Maximum Import Capacity (MIC), and, historical energy and load shape for each class of customer.

The decision document on measures to promote liquidity in the I-SEM forward market<sup>23</sup> recognised the importance of Directed Contracts as a pillar of the RAs on-going market power mitigation strategy. However, the document did not conclude on the best way to distribute DC volumes within I-SEM and instead committed to consult further on this matter.

Ensuring that fit-for-purpose DC arrangements are in place ahead of I-SEM go live will be an important aspect of the overall I-SEM Readiness. Relevant evidence is set out under the broad headings:

- RA Readiness, and
- Market Participant Readiness.

Each is detailed below.

### 7.2.1 RA READINESS

The following milestones and Criteria & Metrics will be monitored to ensure RA readiness with respect to Directed Contracts for I-SEM:

<b>Activities ahead of Directed Contracts</b>
<b>RA Readiness</b>
<b>Directed Contracts Distribution</b>
DC allocation completed ahead of I-SEM go live

**Table 33**

<sup>23</sup> <https://www.semcommittee.com/publication/measures-promote-liquidity-i-sem-forward-market-decision-paper>

### 7.2.2 MARKET PARTICIPANT READINESS

The following milestones and Criteria & Metrics will be monitored to ensure market participant readiness with respect to Directed Contracts:

<b>Activities ahead of Directed Contracts</b>
<b>Market Participant Readiness</b>
<b>Directed Contracts Distribution</b>
DC distribution process implemented ahead of I-SEM go live

**Table 3**

### 7.3 ETA STAGE GATE 2A: ENTRY TO THE MARKET TRIAL

The I-SEM market trial is a full-scale, 'as-live' operational trial of market systems and processes, including all the elements of the ETA, and the interactions with the other I-SEM markets and processes.

The market trial is an essential activity for central operational readiness, and is arguably the most important market participant readiness activity. Although not mandatory, we expect most market participants to participate in the market trial, and we understand that many participants are planning to be market ready in time for the start of market trials.

The decision to commence the market trial will be informed by market trial entry criteria. These are to be defined by the TSOs and are designed to measure the readiness of the central systems and market participants for the market trial. In addition to these, it is anticipated that relevant evidence will include metrics, criteria and programme milestones, set out under a number of broad headings:

- Governance Readiness;
- Systems Readiness;
- TSO and MO Readiness;
- NEMO readiness;
- Market Participant Readiness;
- Meter Data Provider (MDP) readiness, and
- Interconnector owner readiness.

Each is detailed below.

### 7.3.1 GOVERNANCE READINESS

The market trial has its own governance processes as set out in the TSO's market trial plan<sup>24</sup>, which broadly comprises:

- The Market Trial Working Group, which will be formed to provide input and feedback in key areas related to the market trial;
- Market Trial Entry and Exit criteria, which support a decision to commence and conclude the market trial, and will be developed in conjunction with market participants and the RAs, and
- Market Trial Agreement, which is a legal framework that parties must sign to participate in the market trial.

In addition, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of Market Trial</b>
<b>Governance Readiness</b>
<b>Market Rules and accession</b>
Publication of final TSC (68)
CMC and TSC Accession Complete (163)
Publish approved BMPS (15)
TSO and MO Licence Changes (second tranche) – effective date (108)
Generation and Supply Licence Changes – effective date (109)
Balancing Market applications complete (161)
<b>Market Coupling readiness</b>
Regulator approved Framework Agreement between TSOs, ICOs & NEMOs for Day Ahead Regional Coupling (212)
Regulator approved Framework Agreement between TSOs, ICOs & NEMOs for Intraday Regional Coupling (213)
Regulatory approval of Interim cross zonal arrangements and regulatory instruments (214)
<b>Market trial governance</b>
Establishment of the Market Trial Working Group (243)
Market Trial Entry/Exit Criteria Published (79)
Intraday Regional & Member Test complete (216)
DAM11 – Agreement for market trial enacted
BM10 – Agreement for market trial enacted
DAM29 – Decision making process for market trial complete
BM28 – Decision making process for market trial complete
DAM32 – Market trial detailed plans, data, and scripts produced
BM31 – Market trial detailed plans, data, and scripts produced

<sup>24</sup> <http://www.sem-o.com/ISEM/General/Market%20Trial%20Plan.pdf>

DAM35 – Pre-trial processes executed (including registration)
BM34 – Pre-trial processes executed (including registration)

**Table 35**

### 7.3.2 SYSTEMS READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of Market Trial</b>
<b>System readiness</b>
<b>Programme Milestones</b>
Central Systems Ready for Market Trial (174)
BM engine certification complete (9)
Participant Interface Testing Complete (10)

**Table 36**

### 7.3.3 TSO AND MO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Activities ahead of Market Trial</b>
<b>TSO Readiness</b>
<b>Programme Milestones</b>
Operational Readiness Complete (operational readiness of MOs/TSOs to commence Market Trail complete) (84)
<b>DAM – Business Processes &amp; Procedures</b>
DAM16 – Business Processes Identified
DAM17 – Design & Documentation Complete
DAM18 – Draft Procedures Complete
DAM19 – Processes ready for market trial
DAM35 – Pre-trial processes executed (including registration)
<b>DAM – People &amp; Organisation</b>
DAM23 – Staffing and Organisational Requirements Complete
DAM22 – Management team in place
DAM33 – Staff in place for market trial
<b>DAM – Readiness of Systems</b>
DAM13 – Requirements defined
DAM14 – System design complete
DAM15 – Testing complete
<b>BM – Business Process &amp; Procedures</b>
BM15 – Business Processes Identified
BM16 – Design & Documentation Complete
BM17 – Draft Procedures Complete
BM18 – Business Processes Ready

<b>BM – Staff &amp; Organisation</b>
BM19 – Staffing and Organisational Requirements Complete
BM21 – Management team in place
BM32 – Staff in place for market trial
<b>BM – Readiness of systems</b>
BM12 – Requirements defined
BM13 – Detailed Systems design completed
BM14 – Testing complete

**Table 37**

### 7.3.4 MARKET PARTICIPANT READINESS

In preparation for market trials, Market Participants will be progressing market registration activities and implementing business, organisational and system changes.

The following Metrics and Criteria will be considered:

<b>Activities ahead of market trial go live</b>
<b>Programme milestones</b>
Approval of Intermediaries under the TSC for the Balancing Market (if needed) (8)
DAM/IDM application deadline (for inclusion in Market Trial) (9)
Training Complete (18)
<b>Market Participant Readiness</b>
<b>DAM – Registration</b>
DAM9 – Expected market participants have signed up to market
DAM51 – SEMOpx application complete
DAM52 – ECC – Clearing: Entity Set Up decided
DAM53 – ECC – Clearing: KYC Process Complete
DAM54 – ECC – Clearing: ECC Application Approved
DAM55 – ECC – Clearing: 3rd Party Agreements
<b>DAM – Business Processes &amp; Procedures</b>
DAM16 – Business Processes Identified
DAM17 – Design & Documentation Complete
DAM18 – Draft Procedures Complete
DAM19 – Business Processes Ready
DAM35 – Pre-trial processes executed (including registration)
<b>DAM – People &amp; Organisation</b>
DAM23 – Staffing and Organisational Requirements Complete
DAM22 – Management team in place
DAM23 – Staff in place and training complete
<b>DAM – Readiness of Systems</b>
DAM13 – Requirements defined
DAM14 – System design complete
DAM15 – Testing complete



<b>BM – Registration</b>
BM54 – Accession to the TSC complete
BM55 – Participant and Unit Registration Complete
BM56 – Authorisations and User Access
BM57 – Intermediary Confirmation
<b>BM – Business Process &amp; Procedures</b>
BM15 – Business Processes Identified
BM16 – Design & Documentation Complete
BM17 – Draft Procedures Complete
BM18 – Business Processes Ready
BM34 – Pre-trial processes executed (including registration)
<b>BM – Staff &amp; Organisation</b>
BM19 – Staffing and Organisational Requirements Complete
BM21 – Management team in place
BM32 – Staff in place for market trial
<b>BM – Readiness of systems</b>
BM12 – Requirements defined
BM13 – Detailed Systems design completed
BM14 – Testing complete

**Table 38**

### 7.3.5 NEMO READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>DAM – Business Processes &amp; Procedures</b>
DAM16 – Business Processes Identified
DAM17 – Design & Documentation Complete
DAM18 – Draft Procedures Complete
DAM19 – Business Processes Ready
<b>DAM – People &amp; Organisation</b>
DAM23 – Staffing and Organisational Requirements Complete
DAM22 – Management team in place
DAM23 – Staff in place and training complete
<b>DAM – Readiness of Systems</b>
DAM13 – Requirements defined
DAM14 – System design complete
DAM15 – Testing complete

**Table 39**

### 7.3.6 METER DATA PROVIDER (MDP) READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>BM – Business Process &amp; Procedures</b>
---

BM15 – Business Processes Identified
BM16 – Design & Documentation Complete
BM17 – Draft Procedures Complete
BM18 – Business Processes Ready
<b>BM – Staff &amp; Organisation</b>
BM19 – Staffing and Organisational Requirements Complete
BM21 – Management team in place
BM32 – Staff in place for market trial
<b>BM – Readiness of systems</b>
BM12 – Requirements defined
BM13 – Detailed Systems design completed
BM14 – Testing complete

**Table 40**

7.3.7 INTERCONNECTOR OWNER READINESS

The following programme milestones and MRA Criteria & Metrics will be monitored:

<b>DAM – Business Processes &amp; Procedures</b>
DAM16 – Business Processes Identified
DAM17 – Design & Documentation Complete
DAM18 – Draft Procedures Complete
DAM19 – Business Processes Ready
<b>DAM – People &amp; Organisation</b>
DAM23 – Staffing and Organisational Requirements Complete
DAM22 – Management team in place
DAM23 – Staff in place and training complete
<b>DAM – Readiness of Systems</b>
DAM13 – Requirements defined
DAM14 – System design complete
DAM15 – Testing complete
<b>BM – Business Process &amp; Procedures</b>
BM15 – Business Processes Identified
BM16 – Design & Documentation Complete
BM17 – Draft Procedures Complete
BM18 – Business Processes Ready
<b>BM – Staff &amp; Organisation</b>
BM19 – Staffing and Organisational Requirements Complete
BM21 – Management team in place
BM32 – Staff in place for market trial
<b>BM – Readiness of systems</b>
BM12 – Requirements defined
BM13 – Detailed Systems design completed
BM14 – Testing complete

**Table 41****7.3.8 DECISION MAKING**

Decision to enter the market trial is ultimately the responsibility of the TSOs, based on the market entry criteria, which are to be developed in conjunction with the RAs and market participants.

Progress and reporting will be tracked at the Joint Project Board before a decision to proceed is confirmed at the I-SEM Steering Group.

Decision Maker	Decision Making Forum
TSOs	I-SEM Steering Group

**Table 42****7.4 ETA STAGE GATE 2B: MARKET TRIAL EXIT**

Readiness to exit the Market Trial will be a significant landmark in the implementation of I-SEM. At this point systems and processes across industry participants will have been proven and reached a point where they are sufficient to operate within the I-SEM arrangements. “Readiness to exit” the market trial environment is subtly different from the “Decision to exit”. The later will in effect trigger transition and cutover to live I-SEM operation and is covered in section 7.5.

The Market Trial Strategy<sup>25</sup> and Market Trial Plan<sup>26</sup> set out the approach to the market trial, and identify a number of “market trial exit criteria” - a range of technical, system and organisational capabilities which must have been successfully demonstrated in order to exit the Market Trial and begin the process of transition and cutover to I-SEM live operation. These will be further developed via the Market Trial Working Group and published later in 2017 (milestone 79).

Evidence to inform the Market Trial exit, which includes metrics, criteria and programme milestones, is considered under six headings:

- TSO & MO Readiness;
- Market Participant Readiness;
- Interconnector Readiness;

<sup>25</sup> <http://www.sem-o.com/ISEM/General/Market%20Trial%20Strategy.pdf>

<sup>26</sup> <http://www.sem-o.com/ISEM/General/Market%20Trial%20Plan.pdf>

- Meter Data Provider Readiness;
- NEMO Readiness, and
- Agent of Last Resort Readiness.

Each is detailed below.

#### 7.4.1 TSO & MO READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>TSO &amp; MO Readiness</b>
<b>Programme Milestones</b>
I-SEM Tech Spec 8.0 (7i)
I-SEM Data Publication Guide – Issue 2 (234)
MRC Approval (215)
Intraday Regional & Member Test Complete (216)
Day Ahead MRC, Regional & Member Test Complete (217)
<b>BM - Market Trial Execution</b>
BM39 – Market Trial Establishment complete
BM40 – Market Trial Scripted complete
BM41 – Market Trial Unscripted complete
BM42 – Transition/Cutover Strategy and Plan produced
<b>DAM &amp; IDM - Market Trial Execution</b>
DAM40 – Market Trial Establishment complete
DAM41 – Market Trial Scripted complete
DAM42 – Market Trial Unscripted complete
DAM43 – Transition/Cutover Strategy and Plan produced

**Table 43**

#### 7.4.2 MARKET PARTICIPANT READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>Market Participant Readiness</b>
<b>BM - Market Trial Execution</b>
BM39 – Market Trial Establishment complete
BM40 – Market Trial Scripted complete
BM41 – Market Trial Unscripted complete
BM42 – Transition/Cutover Strategy and Plan produced

<b>DAM &amp; IDM - Market Trial Execution</b>
DAM40 – Market Trial Establishment complete
DAM41 – Market Trial Scripted complete
DAM42 – Market Trial Unscripted complete
DAM43 – Transition/Cutover Strategy and Plan produced

**Table 44**

#### 7.4.3 INTERCONNECTOR OWNER READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>Interconnector Owner Readiness</b>
<b>BM - Market Trial Execution</b>
BM39 – Market Trial Establishment complete
BM40 – Market Trial Scripted complete
BM41 – Market Trial Unscripted complete
BM42 – Transition/Cutover Strategy and Plan produced
<b>DAM &amp; IDM - Market Trial Execution</b>
DAM40 – Market Trial Establishment complete
DAM41 – Market Trial Scripted complete
DAM42 – Market Trial Unscripted complete
DAM43 – Transition/Cutover Strategy and Plan produced

**Table 45**

#### 7.4.4 METER DATA PROVIDER READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>MDP Readiness</b>
<b>BM - Market Trial Execution</b>
BM39 – Market Trial Establishment complete
BM40 – Market Trial Scripted complete
BM41 – Market Trial Unscripted complete
BM42 – Transition/Cutover Strategy and Plan produced

**Table 46**

#### 7.4.5 NEMO READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA

Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>NEMO Readiness</b>
<b>DAM &amp; IDM - Market Trial Execution</b>
DAM40 – Market Trial Establishment complete
DAM41 – Market Trial Scripted complete
DAM42 – Market Trial Unscripted complete
DAM43 – Transition/Cutover Strategy and Plan produced

**Table 47**

#### 7.4.6 AGENT OF LAST RESORT READINESS

As well as the Market Trial Exit Criteria, the following programme milestones and MRA Criteria & Metrics will be monitored:

<b>Readiness to Exit the Market Trial</b>
<b>AoLR Readiness</b>
<b>DAM &amp; IDM - Market Trial Execution</b>
DAM40 – Market Trial Establishment complete
DAM41 – Market Trial Scripted complete
DAM42 – Market Trial Unscripted complete
DAM43 – Transition/Cutover Strategy and Plan produced

**Table 48**

#### 7.4.7 DECISION MAKING

Completion of the market trial is a critical milestone in the implementation of I-SEM and will mark the culmination of a significant effort across all stakeholders.

Exit from the market trial environment will depend on each organisation having adequately proven their systems and processes, and reaching sufficient readiness on which to exit the trial environment.

The TSOs are best placed to confirm the exit criteria have been met. Progress and reporting will be tracked at the Joint Project Board before a decision to proceed is confirmed at the I-SEM Steering Group.

<b>Decision Maker</b>	<b>Decision Making Forum</b>
TSOs	I-SEM Steering Group

**Table 49**

Readiness to exit the market trial environment is a critical input to the decision for I-SEM to go live which is covered in the next section.

---

### 7.5 ETA GO-LIVE EVENT: I-SEM GO LIVE

The decision to Go Live is the final programme decision point, which builds upon the incremental delivery of each I-SEM component and completion of the market trial.

As such, the decision to go live requires that:

- The Legal & Regulatory framework is in place;
- The Capacity Market is in place and functioning;
- Directed Contracts have been allocated;
- The FTR arrangements are in place and functioning;
- Regional market coupling is in place and functioning, and
- The Market Trial has successfully met its exit criteria.

The decision will also require final assurance from market participants (or their intermediaries), TSOs, NEMO(s), MOs, ICOs and MDPs that they have:

- Adequately proven their systems and processes;
- Made appropriate organisational and operational changes;
- Reached a sufficient state of readiness on which to operate within the I-SEM environment, and have
- Cutover plans in place.

Evidence to inform the decision point, which includes metrics, criteria, programme milestones and participant assurance, are considered under three broad headings:

- Governance Readiness;
- Participant Assurance, and
- Readiness to Exit Market Trial.

Each is detailed below.

---

#### 7.5.1 GOVERNANCE READINESS

Confirmation that the legislative and regulatory activities scheduled have been completed before the new processes go live.

This is particularly important in the context of Irish legislation as Section 8 of the Energy Act 2016 will need to be commenced at I-SEM go live.

These include:

<b>ETA Go Live Decision</b>
<b>Legislation Readiness</b>
Commencement Order drafted and ready for enactment (ROI)
<b>Governance Readiness</b>
<b>TSO &amp; MO Licence Modifications</b>
In effect (108)
<b>Generation &amp; Supply Licence Modifications</b>
In effect (109)
<b>CM Code</b>
CM Code Published (38)
<b>TSC Code</b>
TSC Published (68)
<b>Directed Contracts</b>
Directed contract arrangements in place
<b>Grid Code(s) Modifications</b>
Approved (94)
<b>Framework Agreements between TSOs, ICOs &amp; NEMOs for Regional Coupling</b>
Day Ahead Regional Coupling (210)
Intraday Regional Coupling (211)
<b>HAR and Access Rules</b>
Approved (190)
<b>NEMO Market Rules</b>
Published (118)
<b>MRC Approval</b>
Completed (215)

**Table 50**

## 7.5.2 PARTICIPANT ASSURANCE

Prior to the Go Live decision the RAs will require participants (or their intermediary) to provide assurance that they are operationally ready for I-SEM. It is expected that this self-certification will be required at least three weeks ahead of the target Go Live date.

The process by which self-certification will be provided will be agreed in due course.



### 7.5.3 READINESS TO EXIT THE MARKET TRIAL

The Market Trial will demonstrate, for each participant, the readiness of people, systems and processes to commence I-SEM operations and is part of the broader assessment of overall market readiness.

To support the I-SEM Go Live decision the TSOs will prepare a Market Trial Status Report which will provide assurance that the market trial exit criteria has been met and that the programme is in a position to begin the cutover processes.

The Market Trial Status Report will be required at least three weeks ahead of the target Go Live date.

### 7.5.4 DECISION MAKING

The decision to put I-SEM into live operation will be made by the Regulatory Authorities at the SEM Committee, supported by information provided by the RAs I-SEM Project Team.

The RAs I-SEM Project Team will prepare a report for the SEM Committee prior to the Go Live target date, providing an assessment of the achievement of the Go Live criteria. The report will be supplemented by a TSO report on the results of the Market Trial.

Decision Maker	Decision Making Forum
RAs	SEM Committee

**Table 51**

Any criterion that has not met an adequate state of readiness will be reviewed by the SEM Committee to assess the significance of the risk it poses to the Go Live date and determine what, if any contingencies can be implemented to mitigate the risk. The SEM Committee will assess if the risk can be mitigated or if the significance of the risk is sufficient to require a No-Go decision. If the risk cannot be mitigated and the criterion is considered to significantly impact the ability to Go Live, the SEM Committee will recommend a No-Go decision.

The SEM Committee will make an announcement at least two weeks prior to the Go Live date to confirm the intention to Go Live and initiate the cutover to the new arrangements. At this point the SEM Committee will confirm the intention to go live with the Departments and importantly in the context of Irish legislation ensure that Section 8 of the Energy Act can be commenced at I-SEM go live.

## 7.6 ETA CONTINGENCY CONSIDERATIONS

Delivery of the ETA is the final component of the I-SEM programme and includes a market trial period of approximately five months. This period was agreed following the programme stocktake and recognised that it “derisked” the overall programme by allowing participants to test their commercial, operational and system readiness.

The Stocktake Report<sup>16</sup> considered that three months was a typical minimum for programmes of this type with additional time provided should issues arise during the trial. Whilst some flexibility therefore exists within the market trial timeline, detailed planning will not commence until later in 2017.

Any delay that would affect the target Go Live date, will require a revised Go Live date to be developed through the existing programme management and change control process.

As described in 7.5.4, a Go Live announcement will be made at least two weeks ahead of the target Go Live date. Once the Go Live announcement has been made, it is not expected that the Go Live date would change except in the most exceptional of circumstances.

If this were to be the case a programme communication would be issued immediately and the I-SEM Programme Managers Group (PMG) convened at the earliest opportunity. Replanning activities would begin immediately to develop a revised Go Live date which would be confirmed by the SEM Committee.

### 7.6.1 IMPACT OF A DELAY TO ETA ON THE CAPACITY MARKET AND FTR ARRANGEMENTS

Any delay to the ETA Go Live will have consequences for both the Capacity Market and FTR arrangements which require the ETA to be in place so that they can function.

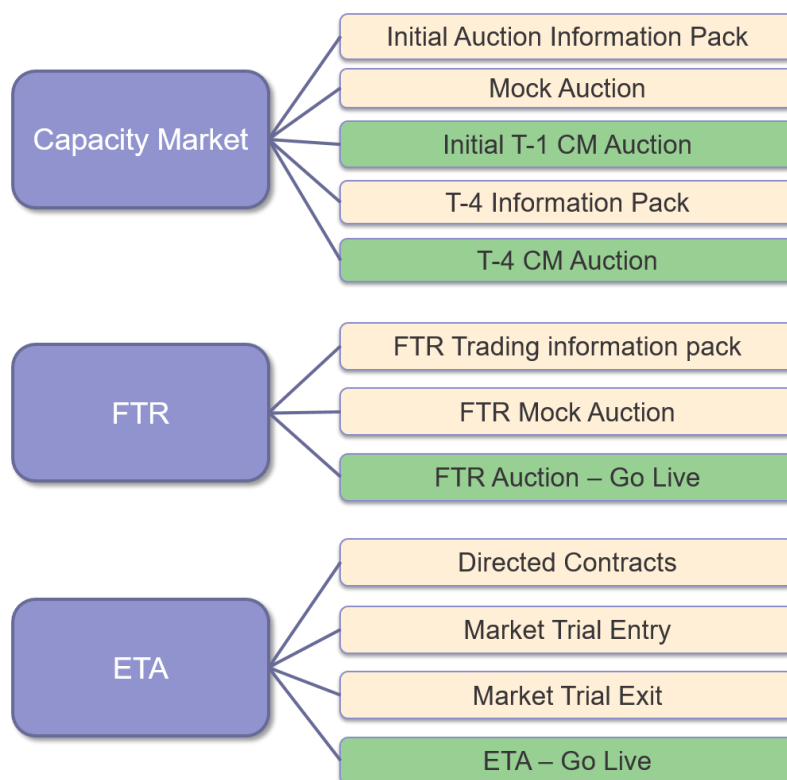
Whilst further work would be required in order to complete an impact assessment of the Capacity Market, at this stage it is assumed that settlement of the reliability options would be delayed until the new ETA Go Live date.

Similarly, further work would be required in order to assess the impact on the FTR arrangements. However, at this stage it is assumed that FTR products will be based on calendar months and that a revised ETA Go Live which was not at the start of a calendar month, would result in no FTR product being available for that month.

## 8 SUMMARY AND NEXT STEPS

### 8.1 SUMMARY

This document has set out the readiness framework to be applied across the I-SEM programme ahead of key Stage Gates and Go-Live Events, as shown in Figure 5:



**Figure 5: Go-Live Events and Stage Gates**

The document also sets out the decision-making organisation and programme forum at which decisions will be confirmed, as shown in Table 52:

		Decision Responsibility	Forum
CM	Initial Information Pack	RAs	SEM Committee
	Mock Auction	TSOs	I-SEM SG
	Initial T-1 CM Auction (No Go)	RAs	SEM Committee
	T-4 Auction Info Pack	TSOs	I-SEM SG
	T-4 CM Auction (No Go)	RAs	SEM Committee
FTRs	FTR Trading Information Pack	ICOs	I-SEM SG
	FTR Mock Auction	ICOs	I-SEM SG
	Initial FTR Auction	ICOs	I-SEM SG
ETA	Directed Contracts	RAs	SEM Committee
	Market Trial Entry	TSOs	I-SEM SG
	Market Trial Exit	TSOs	I-SEM SG
	ETA Go-Live	RAs	SEM Committee

**Table 52: Decision Making Summary**

## 8.2 NEXT STEPS

Building on this document, the RAs and EirGrid plc/SONI Ltd will continue to engage with all industry stakeholders in order to:

- Inform the SEM Committee and I-SEM Steering Group in preparation for Stage Gates and Go-Live Events;
- Report on detail of criteria that will feed into decisions;
- Develop the process for market participant self-certification, and
- Develop market cutover arrangements.

Details on the arrangements for cut-over will be set out in a paper to be published in due course.