

# Market Readiness Assessment Report 25-09-2017

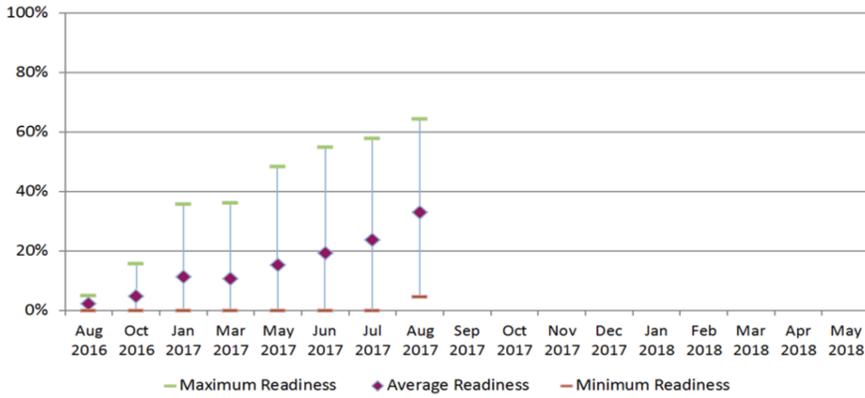
## Comment

Market Participant readiness continues to materially lag when compared to the readiness of the Central Markets. This must be concerning with less than three months to the start of the Market Trial, when operational readiness will need to be demonstrated. Market Participants continue to focus on uncertainties to their Projects - notably the outstanding policy decisions (e.g. REFIT), gaps in technical specifications, or the lack of an agreed Day-Ahead product set until the PCR EUPHEMIA Testing successfully concludes. Central Markets show progress since the previous report and is largely tracking to plan. The TSOs report some specific underlying issues and risks - notably the risks to system testing, some slippage in completing business procedures, and the later delivery of the Credit Settlement & Billing System, arising from essential changes to that system to align with the Trading and Settlement Code.

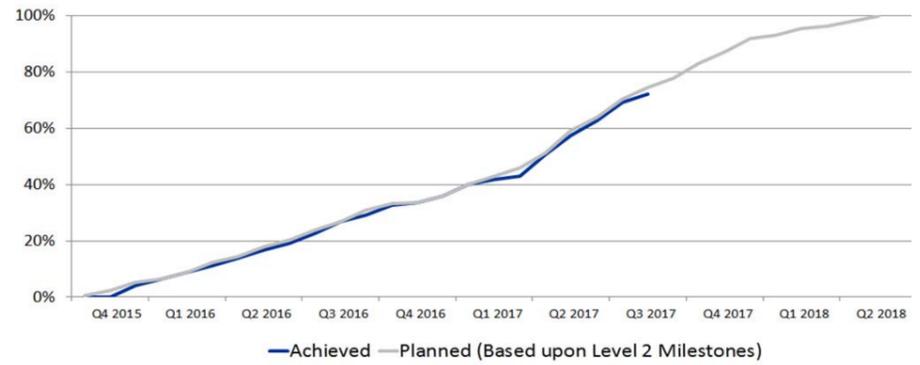
Data Collection Period: 11.08.2017 - 30.08.2017

## Progress

### Market Participant Comparative Readiness



### Central Markets Project Progress



## Readiness Status by Market and Participant Category

	Balancing Market & Imbalance Settlement	Day Ahead & Intraday Markets	Capacity Market	FTR Market
Market Participants (Unweighted Data)	4,5	4,5		
Market Participants (Weighted by Market Share)				
Interconnector Owners				
Meter Data Providers				
System Operators (incl. CM Delivery Body)	1,2,6	1,2,6		
Market Operator (incl. NEMOs)	1,2,3,6	1,2,3,6		
Agent of Last Resort (AoLR)				
Market Trial: Planning and Decision Making				

## Readiness of Legal and Contractual Framework: Central Components

Legislation	Licensing	Grid Code	Rules				
			TSC	AoLR	SEMOpX	CMC	HAR

## Notes

New Comments	Responses
<p>1) The TSOs report delayed starts to Site Acceptance Testing (SAT) of the Market Management System (MMS) and to End-to-End (E2E) Testing of all of the central market systems. The TSOs also report additional risk in their system delivery programme, given the need to make changes to the Credit Settlement and Billing (CSB) engine of MMS, in order to align it to the Trading &amp; Settlement Code (TSC).</p>	<p>E2E Testing is progressing, and to-be-expected early blocking issues have now been fixed. The focus is on driving out issues, fixing defects and improving quality in the first pass, in order to smooth progress in the subsequent two passes and bring back-in timelines. Given the number of systems, interfaces, and inherent complexity, E2E Testing is a major task which as a consequence inevitably brings a certain amount of risk, which the TSOs/SEMO/SEMOpX (referred to collectively as 'the TSOs' throughout this Report) are actively managing and, as of today, are confident that they can successfully mitigate in order to have systems ready for when required in Market Trial.</p> <p>Changes to the CSB system are progressing to plan, which sees system code designed, developed and tested in a number of parts so as to de-risk delivery and to reduce the overall timeline. The revised CSB engine is planned to be on site in Dublin by early November 2017, having completed Factory Acceptance Testing by the vendor. As per the plans discussed at the Market Trial Working Group in August 2017 to gradually add complexity into the Market Trial, the CSB engine is not going to be used before February 2018, allowing time to complete a regression test of the systems necessary to have the CSB engine ready for use by the end of January 2018. There is obvious risk in that timeline, which once again the TSOs are actively managing. This risk has been communicated at the Market Trial Working Group and is managed through the Project Managers' Group.</p>

New Comments		Responses
2)	The TSOs report some risks to their preparations for Market Trial due to slippages in completing drafting of a large suite of business procedures, and consequential impact on internal training.	The TSOs are managing these risks by re-prioritising procedure development to focus first on those procedures required for Market Trial and to delay others not needed until later. In addition, the TSOs have improved their management and co-ordination of business procedures, and brought on additional resources to assist in ensuring timely delivery. They have also sought to maximise the synergies between procedure development, drafting of training materials, system testing, and getting staff ready for roles, as well as recognising that the initial set of procedures will inevitably need to be refined and updated, once they are used - as is the case now, with those being used for registration. It is a significant task, but one which the TSOs remain confident that they can complete as required to meet the Market Trial timeline. Production of the internal training materials is proceeding in parallel with procedure development. Note that participant training is unaffected by any slippage to internal training, which only affects the detailed operational training being provided to selective internal staff (TSOs/MO/SEMOpX).
3)	SEMO reports some challenges to the participant registration process, caused by some poor quality applications characterised by missing or incomplete data.	SEMO reports good progress in registering participants. The challenges presented by the quality of data have been significant and have imposed considerable resource demand on SEMO, with knock-on impacts for processing SEMOpX and Capacity Market registrations. The TSOs' I-SEM Registration Team is continuing to follow up with participants to obtain any missing registration information for all necessary forms. Indeed, the majority of forms for the Balancing Market have now been received and are being processed; any potential slippage in the registration timeline has therefore been contained. The first batch of participants are undergoing CCQT; missing data for a second batch is being actively chased with the expectation that these will commence CCQT shortly. A third and final batch will be required. A critical mass of participants have submitted applications for the Intraday and Day-Ahead markets, including all of the larger participants. Although a large number of other parties have not applied, the expectation is that they will join via an intermediary. Some 8,700MW of de-rated capacity has been received for the Capacity Market; to date some 6,500MW has been approved for qualification and we remain on track for qualification results to be published on 6 October despite concerns over the quality of many of the DSU applications received.

Recurring Topics		Responses
4)	The current uncertainty with regards to the Day Ahead (DA) and Intraday (ID) market products, and interaction with GB markets creates risk around DA, ID and Balancing Market (BM) outcomes for a number of market participants. In addition, concerns continue to be raised by participants in regards to EUPHEMIA bid types and its interaction with the Price Coupling of Regions (PCR).	The TSOs acknowledge the concerns of participants in this regard and have been working to transparently progress this issue through communication at the Business Liaison Group (BLG) and Project Managers' Group (PMG) meetings. The dependency on the GB markets has been long noted as an external risk in the PMG meetings.  The TSOs are continuing to progress the necessary testing relating to confirming the DA market products in order to ensure a satisfactory outcome as soon as possible, and are communicating on this progress through the BLG. Similarly, this is a noted external dependency and the TSOs' I-SEM Project team are actively engaged with participants on the mitigation strategy for this risk.  While the risks and dependencies remain, the TSOs feel that all necessary controls are being implemented to mitigate these risks.
5)	The pending final decision on REFIT continues to be noted as presenting a risk to participant readiness, both large and small.	The REFIT decision rests with DCCAE, which plans to make its decision shortly. It is recognised that participants require clarity on the REFIT decision before they can decide how to position themselves in the market and, whilst not ideal, parties are having to proceed with registration in the absence of this clarity. Hence, they are having to register based upon assumptions which may well change once a REFIT decision is made. As such, registration is progressing to plan and therefore the absence of a REFIT decision will not stop readiness for Market Trial. It may, however, present a challenge later, if a REFIT decision drives parties to different conclusions to those which they have assumed. To facilitate this process, the TSOs' I-SEM Registration Team has committed to updating registration, if intermediaries are subsequently changed once the REFIT decision is announced. This will be done as quickly as possible, on a best endeavours basis and if it occurs, it will present a valuable learning experience in trialling and refining the associated process.
6)	The TSOs' infrastructure build is progressing well however slippages in testing phases and volumes of work are causing resource constraints putting implementation at risk.	The risk reported has diminished in recent weeks, given the commencement of E2E Testing and advancement of MMS SAT, following a significant focus of resources and management effort. As of now, it is not expected to present a material risk to the TSOs' readiness to commence Market Trial.

## Harvey Balls & Risk and Issue Status Explanation

Harvey Balls are used to provide a visual summary to rapidly communicate status. The current status of progress towards the achievement of each criterion / milestone is assessed as being at one of the following stages summarised below:

-  0% – Work not started
-  51% ≤ work complete < 76%
-  0% < work complete < 26%
-  76% ≤ work complete < 100%
-  26% ≤ work complete < 51%
-  100% – Criterion / milestone achieved – (i.e. no further work is needed)

Further, the Harvey Ball is coloured Green, Amber, or Red to summarise the severity of any risk or issues, either current or foreseen relating to the criterion: such issues might include, for example, concerns about the delivery schedule, or concerns about delivering the required functionality:

-  No issues / risks
-  The criterion / milestone is at risk (for example, work is behind schedule)
-  The criterion / milestone will not be met without remedial action

Readiness Status by Metric and Participant Category

Balancing Market & Imbalance Settlement		Market Participants	ICOs	MDPs	System Operators (incl. CM Delivery Body)	Market Operator (incl. Nemo)	EirGrid/SONI as AoLR
<b>Readiness Per Participant Category</b>					B4-8	B4-8	
A	Readiness of Business Strategy, Planning, and Financial Resources						
B	Readiness of Legal and Contractual Framework: Agreements and Contracts	B3					
C	Readiness of Systems	B2			B4	B4	
D	Readiness of Business Processes and Procedures	B1			B5	B5	
E	Readiness of People and Organisation				B5	B5	
F	Readiness of IT infrastructure and Other Facilities	B2			B6	B6	
G	Registration					B7	
H	Market Trial: Preparation				B8	B8	
I	Market Trial: Management & Reporting						
J	Market Trial: Execution						
K	Deployment of back-end systems to support FTR market						
L	Deployment and Transition to live: Planning & central market processes and systems						
M	Deployment and Transition to live: Participants						

Comments	Responses
B1 The current uncertainty with regards to the Day Ahead market and ID market products, and interaction with GB markets creates uncertainty and risk around BM outcomes for a number of market participants.	This is referenced under comment #4 in the summary on page 2. Please refer to the update provided.
B2 Most Market Participants report that they are progressing well with their systems design and implementation; however, a couple of participants advise that they are still awaiting practical working examples of the central market systems in order to determine how to interface with the proposed systems.	<p>The I-SEM Technical Specifications, Volumes B: Technical, C: Balancing Market, and D: SEMOpX, in Release 6 published on 17 July 2017, contain the necessary technical detail for market participants to connect with and exchange data with the central market systems. The next release of the I-SEM Technical Specifications will be published on the 13 Oct 2017, which will include the I-SEM Data Publication Guide and additional information which may be required for the Market Trial.</p> <p>Additionally, the I-SEM Project has recently published the Participant Interface Testing (PIT) guide on 1 Aug 2017 and the updated guide for Communication Channel Qualification Testing (CCQT) V2.0 on 7 Sep 2017 which includes revisions to section 4.4 on Certificate Request and Installation details. The Technical Liaison Group #12 on 01 Sep 2017 included additional demonstrations of the CCQT and PIT testing for the Balancing Market and SEMOpX. A recorded version is available to Participants in the Learning Management System. It is anticipated that the published materials thus far will allow participants to progress with their own systems readiness.</p> <p>A few queries from Market Participants that relate to central market systems remain open. These queries cover the following topics:</p> <ol style="list-style-type: none"> <li>1. Complete list of settlement Charge Types</li> <li>2. Complete list of settlement determinants for the Settlement Report</li> <li>3. Example Balancing Market, Capacity Market reports, with accompanying XML schema (.XSD files)</li> <li>4. Updated Data Publication Guide (Issue 1.1) with details of all reports that will be available to the General Public via the updated SEMO website</li> </ol> <p>The TSOs' I-SEM Project team is working on these items and will revert at the earliest opportunity to Market Participants, with query responses being sent to the entire TLG and included as updates to the appropriate volume of the I-SEM Technical Specification.</p>
B3 Market Participants, both large and small, continue to stress the need for a decision on REFIT as their trading strategies and contracts with 3rd parties are dependent on it.	This is referenced under comment #5 in the summary on page 2. Please refer to the update provided.
B4 The TSOs report delayed starts to Site Acceptance Testing (SAT) of the Market Management System (MMS) and to End-to-End (E2E) Testing of all of the central market systems. The TSOs also report additional risk in their system delivery programme, given the need to make changes to the Credit Settlement and Billing (CSB) engine of MMS, in order to align it to the Trading & Settlement Code (TSC).	This is referenced under comment #1 in the summary on page 1. Please refer to the update provided.

Comments		Responses
B5	The TSOs' progress on business processes and procedures is currently behind schedule, with consequential risk to internal training within the TSOs/MOs due to its dependency on those processes and procedures.	This is referenced under comment #2 in the summary on page 2. Please refer to the update provided.
B6	The TSOs' infrastructure build is progressing well; however, slippages in testing phases and volumes of work are causing resource constraints putting implementation at risk.	This is referenced under comment #6 in the summary on page 2. Please refer to the update provided.
B7	Validation of the submitted forms from Market Participants is well progressed, however missing information from the forms and some outstanding queries have delayed overall registration.	This is referenced under comment #3 in the summary on page 2. Please refer to the update provided.
B8	The TSOs report some slippage in their plans to prepare the necessary data required for Market Trial.	Whilst preparation of Market Trial plans, scenarios, metrics, and tools is advancing well to plan, a lack of resource has delayed progress on data preparation activities for the Market Trial. This resource issue has recently been addressed. The TSOs therefore expect that this issue and associated risk to the commencement of the Market Trial will quickly reduce in the coming weeks.

Readiness Status by Metric and Participant Category

Day-Ahead & Intraday Markets		Market Participants	ICOs	MDPs	System Operators (incl. CM Delivery Body)	Market Operator (incl. Nemo)	EirGrid/SONI as AoLR
<b>Readiness Per Participant Category</b>					D7-11	D6-11	
A	Readiness of Business Strategy, Planning, and Financial Resources	D1,2,3,4				D6	
B	Readiness of Legal and Contractual Framework: Agreements and Contracts	D3,4					
C	Readiness of Systems	D5			D7	D7	
D	Readiness of Business Processes and Procedures	D1			D8	D8	
E	Readiness of People and Organisation				D8	D8	
F	Readiness of IT infrastructure and Other Facilities				D9	D9	D9
G	Registration					D10	
H	Market Trial: Preparation				D11	D11	
I	Market Trial: Management & Reporting						
J	Market Trial: Execution						
K	Deployment of back-end systems to support FTR market						
L	Deployment and Transition to live: Planning & central market processes and systems						
M	Deployment and Transition to live: Participants						

Comments	Responses
D1 The current uncertainty with regards to the Day Ahead market and ID market products, and interaction with GB markets creates uncertainty and risk around DA, ID and BM outcomes for a number of market participants.	This is referenced under comment #4 in the summary on page 2. Please refer to the update provided.
D2 Concerns continue to be raised in regards to EUPHEMIA bid types and its interaction with PCR.	This is referenced under comment #4 in the summary on page 2. Please refer to the update provided.
D3 Market Participants, both large and small, continue to stress the need for a decision on REFIT as their trading strategies and contracts with 3rd parties are dependent on it.	This is referenced under comment #5 in the summary on page 2. Please refer to the update provided.
D4 Concerns were raised over the number of Clearing Banks available to participants as some Clearing banks appear uninterested in ISEM, putting a risk on some smaller participants' trading strategies and legal and contractual frameworks.	AIB is progressing further with the requirements of ECC and will announce its readiness as soon as the requirements are met. It is anticipated that AIB will have announced its commitment well in advance of the February 2018 extended deadline for participants to provide their bank account details.  Participants are advised to contact <a href="mailto:I-SEMregistration@sem-o.com">I-SEMregistration@sem-o.com</a> , or contact ECC directly if they continue to have any issues securing a clearing bank. Furthermore, it is noted that this is being tracked as a risk at the Project Managers' Group.
D5 A few participants have stated that the delay in receiving SEMOpx documentation (i.e. SEMOpx API definition) has affected the testing and development on their systems.	The I-SEM Technical Specifications, Volumes B: Technical, C: Balancing Market, and D: SEMOpx, in Release 6 published on 17 July 2017, contain the necessary technical detail for market participants to connect with and exchange data with the central market systems. The next release of the I-SEM Technical Specifications will be published on the 13 Oct 2017, which will include the I-SEM Data Publication Guide and additional information which may be required for the Market Trial.  Additionally, the I-SEM Project has recently published the Participant Interface Testing (PIT) guide on 1 Aug 2017 and the updated guide for Communication Channel Qualification Testing (CCQT) V2.0 on 7 Sep 2017 which includes revisions to section 4.4 on Certificate Request and Installation details. The Technical Liaison Group #12 on 01 Sep 2017 included additional demonstrations of the CCQT and PIT testing for the Balancing Market and SEMOpx. A recorded version is available to Participants in the Learning Management System. It is anticipated that the published materials thus far will allow participants to progress with their own systems readiness.  Finally, the I-SEM Project has confirmed that the SEMOpx API documents are complete with sufficient detail for market participants to connect and test their interfaces. This was communicated at Technical Liaison Group #12, 27 July 2017.  Following conversations with Market Participant at the Technical Liaison Group meetings, The I-SEM Project has released additional information to SEMOpx Members that will assist Members with the use of the SEMOpx APIs. The complete list of technical documentation for the SEMOpx platforms, which will be published to Members, has been posted on the SEMO website (18/9/17).  Additionally, Members who submitted SEMOpx Registration forms to the I-SEM Pre Go-Live Operations team have received: <ul style="list-style-type: none"> <li>• User ID &amp; password information for the ETS and M7 platforms to use for CCQT/PIT testing; and</li> <li>• URL (web addresses) for the ETS and M7 platforms to use for CCQT/PIT testing.</li> </ul>

Comments		Responses
D6	Multiple NEMOs interface in GB and multiple NEMOs in Ireland have been raised as risks.	The risk is noted.
D7	The TSO's deployment of systems is at risk due to the delayed start of SAT and End-to-End Testing.	This is referenced under comment #1 in the summary on page 1. Please refer to the update provided.
D8	The TSOs' progress on business processes and procedures is currently behind schedule. Internal training continues to be at risk due to its dependency on the business processes and procedures.	This is referenced under comment #2 in the summary on page 2. Please refer to the update provided.
D9	The TSOs' infrastructure build is progressing well however slippages in testing phases and volumes of work are causing resource constraints putting implementation at risk.	This is referenced under comment #6 in the summary on page 2. Please refer to the update provided.
D10	The I-SEM Registration Team has confirmed that all participants have completed paper work for SEMOpx and the data has been validated and forwarded to ECC and EPEX; however, some participants have not yet sent in the full KYC documentation to ECC, causing a delay in SEMOpx registration.	This is referenced under comment #3 in the summary on page 2. Please refer to the update provided.
D11	The TSOs report some slippage in their plans to prepare the necessary data required for Market Trial.	This is referenced under comment #B8 on page 4. Please refer to the update provided.

Readiness Status by Metric and Participant Category

Capacity Market		Market Participants	ICOs	MDPs	System Operators (incl. CM Delivery Body)	Market Operator (incl. Nemo)	EirGrid/SONI as AoLR
<b>Readiness Per Participant Category</b>							
A	Readiness of Business Strategy, Planning, and Financial Resources						
B	Readiness of Legal and Contractual Framework: Agreements and Contracts						
C	Readiness of Systems	c1			c2		
D	Readiness of Business Processes and Procedures	c1			c3		
E	Readiness of People and Organisation						
F	Readiness of IT infrastructure and Other Facilities				c4		
G	Registration						
H	Market Trial/Mock Auction: Preparation				c5		
I	Market Trial/Mock Auction: Management & Reporting						
J	Market Trial/Mock Auction: Execution						
K	Deployment of back-end systems to support FTR market						
L	Deployment and Transition to live: Planning & central market processes and systems						
M	Deployment and Transition to live: Participants						

Comments		Responses
C1	It was stated that there was some uncertainty around registration and qualification criteria for wind generators which would have delayed some participants' decision to enter the Capacity Market, causing some risk to readiness of systems and business processes.	Whether generators decide to register or not should have no bearing to systems and processes. The capacity market registration and qualification window closed on the 3rd of August.
C2	The TSOs' deployment of systems is at risk due to the delayed start of End-to-End Testing.	This is referenced under comment #1 in the summary on page 1. Please refer to the update provided.
C3	The TSOs' progress on business processes and procedures is currently behind schedule. However, in the Capacity Market, the impact on the internal training is not as severe as the Balancing Market and the Day-Ahead / Intraday Markets.	This is referenced under comment #2 in the summary on page 2. Please refer to the update provided.
C4	The TSOs' infrastructure build is progressing well; however, slippages in testing phases and volumes of work are causing resource constraints putting implementation at risk.	This is referenced under comment #6 in the summary on page 2. Please refer to the update provided.
C5	The TSOs report some slippage in their plans to prepare the necessary data required for Market Trial.	This is referenced under comment #B8 on page 4. Please refer to the update provided.

Readiness Status by Metric and Participant Category

Financial Transmission Rights Market		Market Participants	ICOs	MDPs	System Operators (incl. CM Delivery Body)	Market Operator (incl. Nemo)	EirGrid/SONI as AoLR
<b>Readiness Per Participant Category</b>							
A	Readiness of Business Strategy, Planning, and Financial Resources						
B	Readiness of Legal and Contractual Framework: Agreements and Contracts						
C	Readiness of Systems	F1			F2		
D	Readiness of Business Processes and Procedures				F3		
E	Readiness of People and Organisation				F3		
F	Readiness of IT infrastructure and Other Facilities				F4		
G	Registration						
H	Trial/Mock Auction: Preparation						
I	Trial/Mock Auction: Management & Reporting						
J	Trial/Mock Auction: Execution						
K	Deployment of back-end systems to support FTR market						
L	Deployment and Transition to live: Planning & central market processes and systems						
M	Deployment and Transition to live: Participants						

Comments	Responses
F1 Delays in JAO providing information to participants has affected participant readiness of systems and some vendor delays are still affecting participants' progress in systems development.	<p>The ICOs are surprised by this comment as information is available and has been provided to vendors. It is suggested that the delay is likely confined to the participant's vendor delivery.</p> <p>For reference, we have been supporting software vendors in a number of ways:</p> <ul style="list-style-type: none"> <li>- The JAO platform is running since 2015 and the interface information has been in the public domain. Regular test opportunities have also been available</li> <li>- The Moyle/EWIC team have been liaising with vendors on all queries raised</li> <li>- Software vendors were invited to participate in the Initial Trial but did not take part</li> <li>- A formal request to use web services has yet to be received, however we have made provision for JAO web service testing by participants/software vendors in early January 2018 in advance of the formal Trial</li> </ul> <p>Based on the MRA feedback the Moyle/EWIC team have also contacted the vendor to clarify this potential issue.</p>
F2 The TSOs' deployment of systems is at risk due to the delayed start of SAT and End-to-End Testing.	This is referenced under comment #1 in the summary on page 1. Please refer to the update provided.
F3 The TSOs' progress on business processes and procedures is currently behind schedule. Internal training continues to be at risk due to its dependency on the business processes and procedures.	This is referenced under comment #2 in the summary on page 2. Please refer to the update provided.
F4 The TSOs' infrastructure build is progressing well however slippages in testing phases and volumes of work are causing resource constraints putting implementation at risk.	This is referenced under comment #6 in the summary on page 2. Please refer to the update provided.