

I-SEM Programme

Communication Channel Qualification Test (CCQT) Market Participant Guide

V3.0



EirGrid plc The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4 Ireland

© EirGrid 2017. Confidential



Table of Contents

1	Int	roduction	4
	1.1	Overview of I-SEM	4
	1.2	Purpose of this document	4
	1.3	Structure of this document	5
2	СС	CQT Scope and Timeline	6
	2.1	Introduction	6
	2.2	CCQT Scope	6
	2.3	Market Participant CCQT Timeline	7
3	СС	CQT Process	8
	31	CCQT Process Introduction	8
		CCQT Process Overview	
4	CC	CQT Handbook12	2
4			
		Introduction12	
		Minimum System Pre-Requisites for Access	
		CCQT / PIT Technical Environments	
		Balancing Market14	
		Capacity Market	
	4.6	SEMOpx	5
5	СС	CQT Material	1
	5.1	CCQT Material Overview	1
6	Ap	pendix A – Sample Email	2
	61	Email Template 1: Query	2
		Email Template 2: Notification	
		Email Template 3: Issue	
		Email Template 4: Evidence	
	5		-



Document Version History

Version	Date	Author	Description of changes
1.0	17/07/2017	I-SEM Programme	Initial Release of I-SEM Market Participant CCQT Guide.
1.0			Cross-Reference : I-SEM Technical Specification 7F
2.0	06/09/2017	I-SEM Programme	Update to section 4.4 Certificate Request and Installation details
3.0	06/10/2017	I-SEM Programme	Updated to reflect the revised Capacity Market CCQT testing period and Capacity Market technical environment access details.

Table 1: CCQT Approach Document, Version History



1 Introduction

1.1 Overview of I-SEM

The Integrated Single Electricity Market (I-SEM) is a new wholesale electricity market arrangement for Ireland and Northern Ireland.

The new market arrangements are designed to integrate the all-island electricity market with European electricity markets, enabling the free flow of energy across borders, which, according to the SEM Committee, is expected to "deliver increased levels of competition which should help put a downward pressure on prices as well as encouraging greater levels of security and transparency". In addition to integration with Europe, some of the key considerations in the design of the I-SEM included how energy is bought and sold; how generators are remunerated for availability; forward trading arrangements and market liquidity; market power controls; and the systems, policies and procedures that are required to operate the market.

The increased complexity of the new market arrangements presents participants with many challenges, but it also offers participants many new opportunities. Broadly, the I-SEM arrangements are intended to:

- Enable broader participation in energy markets
- Increase the opportunities for participants to trade in different time frames
- Provide participant with a variety of arbitrage and hedging opportunities
- Maximise the efficient use of the interconnectors in system balancing
- Introduce cost drivers for system balancing
- Integrate balancing and system security actions with market operations

1.2 Purpose of this document

The Communication Channel Qualification Testing (CCQT) Participant Guide is intended to provide Market Participants with a detailed overview of the CCQT phase for the I-SEM go-live. The CCQT Guide defines the timeframe of CCQT, preparation and execution process, reporting guidelines, and supporting information. This document will be used by the Market Participants throughout the CCQT phase.

Specifically, the purpose of this document is to:

- 1. Outline the scope of CCQT for Market Participants and provide an overview of the key testing dates.
- 2. Summarise the process and support model for CCQT preparation, execution and close out.
- 3. Outline enough information to allow Market Participants to prepare for and execute CCQT
- 4. Define the evaluation criteria and reporting of results used for CCQT.



1.3 Structure of this document

This document is organised as follows:

ID	Section Name	Description
1.0	Introduction	This section provides an overview of the I-SEM programme, the purpose of
		the guide, and the structure of this document.
		This section provides a summary of the purpose of CCQT, the scope of
2.0	CCQT Scope and Timeline	testing to be completed during CCQT, and context on the CCQT timelines
		within the wider I-SEM delivery schedule.
		This section outlines the detailed CCQT process, which will help Market
		Participants to understand the various actions that will be conducted
		through the preparation, execution and close out phases of CCQT.
3.0	CCQT Process	This includes an overview of the touchpoints between the Market
5.0	COQT FIDCESS	Participants and the Market Operator, which will ensure the smooth
		running of the CCQT phase.
		Additional information regarding the I-SEM CSS Team support model is
		also provided in this section.
		The CCQT Handbook section provides the necessary details for
		participants in order to complete CCQT. The Handbook includes a
		subsection for each area (Balancing Market, Capacity Market and
		SEMOpx) detailing:
4.0	CCQT Handbook	How the Market Participant will access the systems
4.0	COQTITIANODOK	Detailed scripts to be executed
		The evidence packet to be provided to the I-SEM CSS Team
		following the completion of testing
		The evaluation criteria used by the I-SEM CSS Team to evaluate
		the CCQT outcome
		This section confirms the material covered in this document, as well as any
5.0	0 CCQT Material	other material the Market Participants can expect prior to the beginning of
		CCQT.
	Appondix A Comple	This appendix provides a sample email template for each of the
6.0	Appendix A – Sample Email	communication categories detailed in section 3.2.5, CCQT Reporting
		Guidelines.

Table 2: CCQT Approach Document Structure



2 CCQT Scope and Timeline

2.1 Introduction

CCQT is a mandatory activity for all Market Participants in order to register with and participate in the Balancing Market, Capacity Market, and SEMOpx. The purpose of CCQT is to verify that a Market Participant can successfully access the market systems. CCQT is a key step in the Registration process and is described in the Balancing Market Agreed Procedures, Capacity Market Agreed Procedures, and the SEMOpx Operating Procedures.

2.2 CCQT Scope

CCQT is the process by which the Market Operator verifies that a Market Participant can establish a connection with the Balancing Market, Capacity Market, and SEMOpx. CCQT is conducted separately for the Balancing Market, Capacity Market and SEMOpx, with an individual environment used per market.

To prove successful connection, the Market Participant will run scripts and confirm that they can access and interact with the market systems as outlined below.

For the Balancing Market (BM), this involves:

- Retrieval of Daily Trading Day Exchange Rate report (REPT_010) from the Market Participant Interface (MPI) via Type 2 communication; or
- Submission of Simple Demand or Generator Offer Data (as applicable to the Market Participant) via the MPI for Type 2 communication, followed by a query of the **same** Offer Data submitted via Type 3 communication.

For the Capacity Market (CM), this involves:

• Viewing and downloading the Market Participant Qualification Report from the Capacity Management Platform (CMP), via the CMP application (Type 2).

For **SEMOpx**, this involves:

• Testing connection to the Day-Ahead and Intraday Auction platform, and the Continuous Intraday trading platform as outlined below:

Type 2 communication:

- Day-Ahead and Intraday Auction Platform: EPEX Trading System (ETS)
 - Market Participant exports auction bids from the EPEX Trading System (ETS) client
- Intraday Continuous Trading Platform: M7 System
 - Market Participant exports orders from the M7 client

Type 3 communication:

 Type 3 communication is not covered by I-SEM CCQT testing. Market Participants who wish to interact with the ETS using the ETS Application Program Interface (API)



for Day-Ahead / Intraday Auctions, or partake in the Intraday Continuous Market using the M7 API, must complete a series of Conformance Tests. These tests are not part of CCQT

2.3 Market Participant CCQT Timeline

The CCQT phase opens on 7 September 2017 for the Balancing Market and SEMOpx and will run until 30 November 2017. For the Capacity Market, Market Participants can conduct CCQT from the 30 October 2017 until the 17 November, with a Mock Capacity Auction taking place on 4 December 2017.

The CCQT timeline is designed to allow Market Participants to undertake CCQT in line with their own I-SEM readiness, within the defined CCQT period. Market Participants may begin and complete the testing at any point throughout this period.

Upon successful completion of the CCQT scripts, the Market Participant will be eligible for participation in Participant Interface Testing (PIT) and can continue with the Registration process. The diagram below shows the timeline for CCQT and PIT, in the context of the I-SEM Go-Live date.

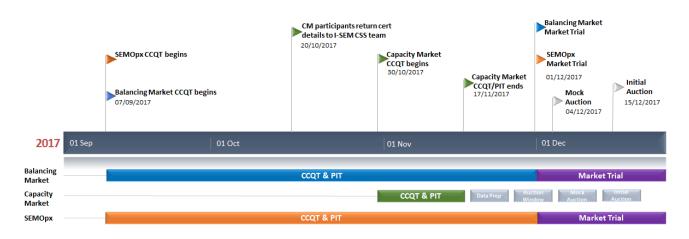


Figure 1: CCQT in I-SEM Context

3 CCQT Process

3.1 CCQT Process Introduction

The CCQT process is designed to facilitate the successful completion of connectivity testing in a flexible and self-directed manner. This process will be conducted using a deliberate and organised approach, of which the high-level view can be seen below:

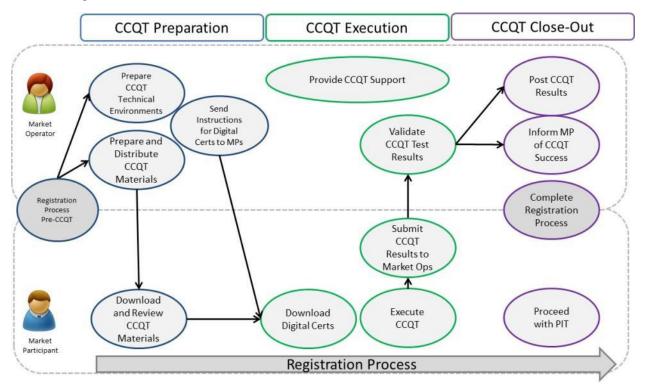


Figure 2: Overview of CCQT Process

Subsequent sections will outline the distinct process steps undertaken by Market Participants across CCQT preparation, execution and completion.

3.2 CCQT Process Overview

3.2.1. CCQT Preparation Phase

In order to qualify for CCQT, Market Participants must first complete the relevant qualifying Registration steps for each of the markets they wish to participate in, details of which can be viewed <u>here</u>. Market Participants will receive a notification when they have successfully progressed through registration in order to participate in CCQT.

For clarity, key dates regarding the registration process are outlined below:

• 16 June 2017: All Balancing Market registration forms to be returned to the I-SEM Programme team for processing.

- 28 July 2017: All Capacity Market registration forms to be returned to the I-SEM Programme team for processing.
- 7 August 2017: All SEMOpx applications to be returned to the I-SEM Programme team for processing.

Further details of the planned dates can be found on the SEMO website.

Upon successful completion of the relevant qualifying registration phase for the Balancing Market and Capacity Market, Market Participants will be issued instructions on how to download a digital certificate for the markets that are applicable to them, and any additional access details they will need to begin CCQT. For SEMOpx, the communication will come from SEMOpx to Market Participants directly.

3.2.2 CCQT Execution Phase

Throughout the CCQT Execution phase, a key principle is flexibility for Market Participants. In this respect, CCQT is planned to be a self-directed activity for Market Participants within the given timeframe. This allows each Market Participant to conduct CCQT within the allotted timeframe according to their own project resourcing preferences.

To ensure that the phase runs smoothly, each Market Participant should notify the I-SEM CSS Team, via the designated mailbox (<u>isemtesting@eirgrid.com</u>), two working days in advance of the day that the Market Participant wishes to execute the CCQT test and the associated market (see section 3.2.5 for reporting guidelines).

3.2.2.1 CCQT Execution Notification

To facilitate convenience and flexibility for Market Participants, testing can be completed during the period from Monday through Thursday, of any week during the CCQT / PIT testing phase. Friday is reserved for environmental maintenance, technical setup, and deployments. I-SEM Programme support will be available 9am – 5pm, Monday to Friday, as outlined in the diagram below:



Figure 3: CCQT Schedule – Weekly Breakdown

Prior to commencement of CCQT, each Market Participant should notify the project of their intended testing dates. Market Participants can inform the I-SEM CSS Team of their planned execution date via the designated mailbox (<u>isemtesting@eirgrid.com</u>), two working days in advance of the planned execution date. Market Participants may cancel/reschedule the notified date of execution at any point within the CCQT phase, by contacting the I-SEM CSS Team with update using the designated mailbox.



3.2.2.2 CCQT Execution

On the day of CCQT execution, a Market Participant should:

- 1. Connect to the Test environment and execute the CCQT Scripts. The CCQT Scripts for the different markets are outlined in Section 4 of this document.
- 2. Return validated test results to the I-SEM CSS Team with the successful completion of the test scripts in a single e-mail to the <u>isemtesting@eirgrid.com</u> address. Reporting Guidelines are covered in Section 3.2.5.

Following validation of results, each Market Participant will receive a notification from the I-SEM CSS Team of successful/unsuccessful completion CCQT Testing. On receipt of confirmation of successful testing, Market Participants may commence the PIT phase and continue to complete the registration process.

In the event of an issue whilst executing a CCQT script, the Market Participant can email the I-SEM CSS Team (at <u>isemtesting@eirgrid.com</u>) with a description of the issue and any relevant screen shots of the issue encountered which would aid resolution, using the Reporting Guidelines covered in Section 3.2.5.

3.2.3 CCQT Close-Out Phase

Upon successful completion of CCQT and receipt of a confirmation email from the I-SEM CSS team, Market Participants can:

- continue the registration process.
- continue to the Participant Interface Testing (PIT) phase.



3.2.4 CCQT Support

If any issues are encountered during preparation and/or execution of CCQT, Market Participants can contact the I-SEM CSS team (<u>isemtesting@eirgrid.com</u>) for support.

Any support request will be acknowledged by the I-SEM CSS Team via email within one working day. The I-SEM CSS Team will target resolution of issues within ten working days.

In order to facilitate resolution of support requests, Market Participants are asked to respond to any resolution offered to a query from the CCQT Testing Team within two working days to ensure effective issue resolution and retesting.

3.2.5 CCQT Reporting Guidelines

This section describes the methods by which Market Participants will contact the I-SEM Project throughout the CCQT phase. Table 3 below describes the different types of communications available to Market Participants. Sample emails for each category can be found in Appendix A (section 6) of the CCQT Market Participant Guide.

Category	Explanation	Email Subject Line	Email Subject Line - Example	Sample Email
Query	General CCQT queries not related to script execution	CCQT Query- Participant ID- Participant_Name	Query-PT_111 - Participant 1	Section 6.1
Notification	Notification of intent to begin script execution (+2 working days)	CCQT Notification- Participant ID- Participant_Name	CCQT Notification- PT_111 - Participant 1	Section 6.2
Issue	Issues with downloading digital cert. for a market, or issues encountered during script execution	CCQT Issue- Participant ID- Participant_Name	CCQT Issue-PT_111 - Participant 1	Section 6.3
Evidence	Evidence file to be provided to I-SEM CSS Team following successful test execution	CCQT Evidence- Participant ID- Participant_Name - SCRIPT_ID	CCQT Evidence- PT_111 -Participant 1 – CCQT_BM_01	Section 6.4

Table 3: CCQT Reporting Guidelines



4 CCQT Handbook

4.1 Introduction

The CCQT Handbook provides details of how Market Participants will establish a connection with the Balancing Market, Capacity Market and SEMOpx, and the required validation to prove this connection. To achieve this, this section provides an overview of minimum system pre-requisites, market access details (application passwords and Certificates), the required CCQT script to be executed for each area, along with the evaluation criteria to prove that the communication channel was established successfully.

Market	Area	Section
Balancing Market	Market Access	Section 4.4.1
	Test Environment	Section 4.4.2
	Certificate Request and Installation	Section 4.4.3
	BM scripts	Section 4.4.4
	BM Evaluation material	Section 4.4.5
Capacity Market	Market Access	Section 4.5.1
	Test Environment	Section 4.5.2
	Certificate Request and Installation	Section 4.5.3
	CM scripts	Section 4.5.4
	CM Evaluation material	Section 4.5.5
SEMOpx	Market Access	Section 4.6.1
	Test Environment	Section 4.6.2
	Certificate Request and Installation	Section 4.6.3
	SEMOpx scripts	Section 4.6.4
	SEMOpx Evaluation material	Section 4.6.5

CCQT Handbook Overview:

Table 4: CCQT Checklist and Quick Links

Please Note 1: Each Market Participant may register multiple users for Balancing Market system access; however CCQT is only required for each Market Participant once. It is at the Market Participant's discretion as to which user is to conduct CCQT for the Market Participant. This is for the purpose of CCQT & PIT testing **only**.

Please Note 2: A single technical environment (Production) is to be used by Market Participants for CCQT/PIT, Mock Auction and Live Auction for the Capacity Market.



4.2 Minimum System Pre-Requisites for Access

It is advised that Market Participants have the following minimum system pre-requisites for access to all markets for CCQT:

Area	Requirement
Internet Access	Market Participants must have internet access from their infrastructure
 Operating System Windows 7 - 64 bit Windows 10 (Except M7 which will not be supported on Windows of 2017) 	
Other Software • MS Excel 2007, 2010, 2013, Formats used .csv and .xlsx (Excel 2007 or later) • Adobe Reader • Java Version 1.8 _91 or higher	
Browsers	Internet Explorer 11 or higher
Minimum Hardware Specifications	 CPU: Intel i5 over 2GHz 8 GB RAM 6 GB Hard drive for installations

Table 5: Minimum System Pre-requisites

Further information can be found in I-SEM Technical Specification Volume B which has been published on the <u>SEMO website</u>.

4.3 CCQT / PIT Technical Environments

There will be 3 technical environments used for CCQT and PIT.

- 1) One for the Balancing Market (for both CCQT & PIT)
- 2) One for the Capacity Market (for both CCQT & PIT)
- 3) One for SEMOpx (for both CCQT & PIT)



4.4 Balancing Market

4.4.1 Market Access

Two independent forms of authentication (a valid digital certificate and an application password) are required to establish successful communication with the Balancing Market, via the Type 2 interface. Type 3 interfaces will not require an application password; however the certificate password will continue to be used for digitally signing market submissions.

Digital Certificates:

Market Participant digital certificates can be obtained by following the instructions set out in Section 4.4.3 (Certificate Request and Installation).

Note: For Type 3 communications an additional server certificate is required. This is published in the Balancing Market Toolkit in the certs directory. The implementation of the server cert is dependent on the software application/technology being used to generate the Type 3 access and hence is not covered within this guide. Details can also be found in I-SEM Technical Specification Volume B which has been published on the <u>SEMO website</u>.

Application Passwords:

Application user names will be issued to Market Participants following successful completion of the registration steps for CCQT. When logging onto the system for the first time, the system will send the user a system-generated code to their registered email address and a window will pop-up on the MPI for the user to enter the code. The user needs to enter this code within five minutes of receipt. If this period expires, please reattempt login to generate another code.

The code entered will be validated by the system, and upon successful validation a new window with "New Password" and "Verify New Password" will be displayed. The Market Participant will then need to enter a new password into this window. The password on the MPI URL will only be asked for once, during initial login.

Further technical setup information can be found in the I-SEM Technical Specification Volume B which has been published on the <u>SEMO website</u>.

4.4.2 Test Environment

All Balancing Market testing for CCQT and PIT is to be executed in the same environment.

4.4.3 Certificate Request and Installation

As mentioned throughout this document, it is only after successful progression of registration for the Balancing Market that Market Participants will be issued instructions to download their respective digital certificates. The subsequent section provides detailed instructions and screenshots for the certificate request and installation process.



Certificate Request and Installation (Page 1 / 8)		
Pre-requisites:	Certificate troubleshooting and FAQs:	
• The Market Participant has received a Certification Download email from the I-SEM CSS Team which contains the Enrolment Code , and an email with a Symantec URL which is used to download the PKI Client and Cert.	 If download fails, validate that the Symantec enrolment URL has been accessed within a period of 10 days from receipt. In the event that the enrolment code has expired please contact that I-SEM CSS Team to raised a new request. 	
 The Market Participant <u>must</u> have local administrative privileges on their test machine Market Participants should ensure appropriate settings are configured in the Spam and content filters to avoid disrupting I-SEM communications 	 Confirm access to Symantec website has not been restricted on your PC In the event that the PKI client fails to install automatically, please see the 'how to dowlonad Symantec PKI Client' guide demonstrated at the Technical Liaison Group meeting which can be found online here. Contact your IT administration if install fails to load to ensure you have necessary admin rights to install on your PC. Check that you have valid proxy settings for your IT network set within your browser. Please contact your IT administrator if you are unsure of how your network is configured for outbound communications to external sites. Confirm that the certificate name is set correctly <your name="" user="">@PY_<your name="" party="">. Please check the section on security in Volume B of ITS for details.</your></your> 	



Certificate Request and Installation (Page 2 / 8)		
Step 1:	Step 2:	
Step 1: • Open the Certification download email and click the Symantec URL link to open the PKI Certificate Service. Enter your Enrolment code and then click Continue. • Fired Certification Continue • Continue •	<text><text><image/></text></text>	



Certificate Request and Installation (Page 3 / 8)	
Step 3:	Step 4:
Step 3: • Click Run to start the installation process.	Step 4: • This will launch the Symantec PKI Client Setup Wizard. Click on Next to continue. Install Symantec PKI Client Vou reed to install Symantec PKI Client before you can enroll for your certificate. PKI Client lets you mange the certificates you () Symantec PKI Client Setup Welcome to the Symantec PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Dial PKI Client Setup Welcome to cancel to est the Setup Symantec Setup S
	Download



Certificate Re	Certificate Request and Installation (Page 4 / 8)		
Step 5:		Step 6:	
Accept the t Install Syma You need to install S the certificates you Prerequisites: You must have Your browser se Overview of S Overview of S Overview of S Overview of S	erms in the license agreement and then click Next.	Step 6: • Click on Next to accept the default installation directory for the Symantec PKI client. Image: the set of the s	
	Download		



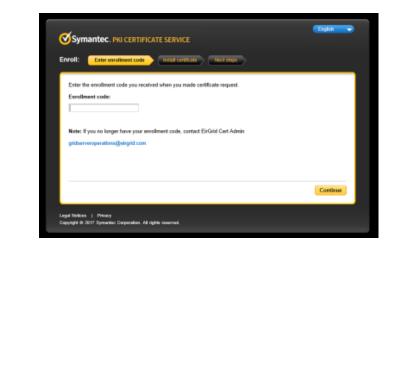
Certificate Request and Installation (Page 5 / 8)		
Step 7:	Step 8:	
Click on Install to start the installation.	A status bar will show the progress of the installation.	
Install Symantec PKI Client Seture Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Client Seture Image: Symantec PKI Seture Image: Syma	Install Symantee PKI Client Server and invited instale Symantee PKI Client fets you manage installing Symantee PKI Client Server installing Symantee PKI Client instale Symantee PKI Client installing Symantee PKI Clie	

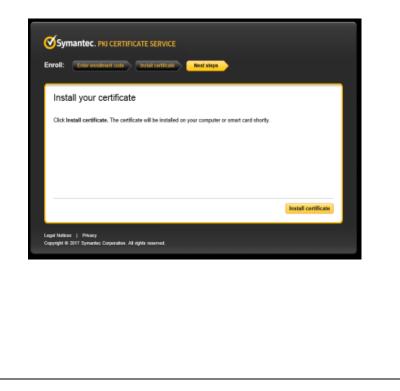


99:	Step 10:	
Click on Finish to complete the installation.	You will be prompted to restart your computer. Click Yes .	
<complex-block> Install Symantec PKI Client before your can enroll for your certificate. PKI Client lets you manage Torequisite: • Your branses Overview of S • Download P • Cick Down • Nathal PKI C • Cink Down • Sprantec PKI Client before your certificate of Symantec PKI Client lets you manage • Our branses • Our brans</complex-block>	Symantec PKI Client Installer Information Image: Symantec PKI Client Installer Information Image: Symantec PKI Client Installer Information changes made to Symantec PKI Client to take effect. Click Yes to restart now or No if you plan to restart later.	



Certificate Request and Installation (Page 7 / 8)			
Step 11:	Step 12:		
• Following successful restart, return to the Certification download email and click the Symantec URL link to open the Symantec PKI Certificate Service, enter your Enrolment code and then click Continue .	Click Install Certificate to begin the installation.		







Step 13:	Step 14:
 The certificate will begin to install. A Security Warning is displayed; click yes to confirm that the CA that issued the certificate is trusted. The Confirm Trusted CA dialogue box will close automatically and the installation will begin. 	The Market Participant will be notified once the installation is complete
<complex-block></complex-block>	<image/>



Optional: Root Cert Installation (Page 1 / 6)		
Overview:	Step 1:	
 Overview: Please follow this process in the event that the PKI Client has successfully installed the client cert but the root cert has not been installed. The root cert will normally be installed as part of the PKI Client Install A root cert will be provided to each Market Participant via email. 	 The root cert emailed to the Market Participant needs to installed as a Trusted Root Certification Authority on your device. Please check with your IT administrator that you have sufficient rights to do so. Rename the files and remove the .txt extension, if visible. If .txt is not visible, open the certificate, click file and "Save As". 	
	Page Setup Print Print Print Print Exit Toryxabstep3(2) Print Exit Programmer Strep3(2) Programmer Strep	



Root Cert Installation (Page 2 / 6)

tep 3:	Step 4:
Name the certificate root.cer or inter.cer , removing the txt extension, and change file type to 'All Files'	 This will turn it into a Certificate to be installed. Double click on the root certificate
Videos Vi	Inter.cer Toot.cer



Root Cert Installation (Page 3 / 6)			
Step 5:	Step 6:		
Click Install Certificate	Click Next		
Certificate General Details Certificate Information This certificate is intended for the following purpose(s): • Frows your identity to a remote computer • Proves your identity to a remote computer • Insure software came from alteration after publication Authority - G5 Valid from 08/ 11/ 2006 to 17/ 07/ 2036 Install Certificates (Metable)	✓ ✓ Certificate Import Wizard Method to be a certificate Import Wizard be a certificate trust lists, and certificate revocation lists from your disk to a certificate store. A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network corrections. A certificate store is the system area where certificates are kept. Store Location Occurrent User Local Machine Net Continue, dick Next.		



Root Cert Installation (Page 4 / 6)

Step 7: Step 8:			
Choose Place all certificates in the following store	Click on Browse and choose Trusted Root Certification Authorities and click OK		
✓ ✓ Certificate Import Wixard Certificate Stores Certificate stores are system areas where certificates are kept. Mindows can automatically select a certificate store, or you can specify a location for @ Automatically select the certificate store, or you can specify a location for @ Place all certificates in the following store Certificate store: Certificate store:			



Root Cert Installation (Page 5 / 6)			
Step 9:	Step 10:		
Click Next	Click Finish		
	✓ ✓ ✓ Certificate Import Wizard Completing the Certificate Import Wizard The certificate will be imported after you click Finish. You have specified the following setting: Content Certificates Store Selected by User Certificate		



Step 12:
Click OK
Certificate Import Wizard × The import was successful. OK



4.4.4 Balancing Market CCQT Scripts

All CCQT test script steps are mandatory and actual results should be recorded in the table provided below. Where outlined, test evidence (e.g. screenshots) should be captured and included as part of the CCQT evidence packet to be issued to I-SEM CSS Team. The required evidence for evaluation is noted in relevant script steps. Any deviations between expected and the actual results are to be documented and sent back to the I-SEM CSS Team for verification.

Scripts have been detailed for both Type 2 and Type 3 Market Access. For Type 2 submission, retrieval of a report from the Market Participant Interfaces (MPI) is sufficient to successfully progress from CCQT to the PIT phase.

For Type 3 communication, Market Participants will first need to submit simple Demand Offer Data or simple Generator Offer Data (as applicable to the Market Participant) via the MPI to ensure there is data available for the Type 3 query. Following successful submission to the system, the Market Participant can query the data via Type 3 communication.

This document will not provide sample values for submission or sample XML for Type 3 communication as part of this document. Data elements, validations and sample XML are detailed in section 5.5 of the I-SEM Technical Specification, Volume C.



4.4.4.1 Type 2 - CCQT_BM_01

Script details:

CCQT_BM_01: Retrieval of Daily Trading Day Exchange Rate report			
Market Participant Name:	<market include="" name="" participant="" to=""></market>		
Test Script ID:	CCQT_BM_01		
Test Script Title:	Retrieval of Daily Trading Day Exchange Rate Report from the Market Participant Interface (MPI)		
	Pre-Requisite Checklist	Pass / Fail	
	The Market Participant has been set up with appropriate system access. See section 4.4.1 for Market Access details.		
	The Market Participant has the required client requirements and configurations established	<mp to<br="">include></mp>	
Test Script Pre- requisites	The appropriate digital certificate for Market Participant user has been received.		
	Market Participant has successfully installed their digital certificate.		
	The Market Participant has previously logged into the MPI and validated the password code emailed to them.	<mp to<br="">include></mp>	

Test Script Execution status:

CCQT_BM_01: Retrieval of Daily Trading Day Exchange Rate Report			
Date of Execution: Status (Pass/Fail): Market Participant Signature:		Market Participant Signature:	
<market date="" include="" participant="" to=""></market>	<market include="" participant="" status="" to=""></market>	<market participant="" sign="" to=""></market>	



CCQT BM_01: Retrieval of Daily Trading Day Exchange Rate Report Evidence Step Step action: **Expected Result:** Actual Result: required No. Open a new Internet Explorer browser window. 1. A new Internet Explorer window has N/A been successfully opened. 2. Enter the MPI URL: https://mpc.sem-The Market Participant has successfully o.com/mpi/ logged into the MPI. N/A Select the Market Participant certificate previously installed following to log in on MPI. 3. Navigate to Menu on the top right of the screen The Market Participant is navigated to and select the **MP Reports** page from the drop the **MP Reports** display in the MPI. N/A down menu. 4. Select the desired Trade Date which you wish The desired Trade Day is selected to retrieve the report for. depending on the time of execution and the outline of the entry field will turn from N/A red to green when a valid date has been entered. Select the required participant name (for the The correct participant name is selected 5. for the Market Participant logged into the digital certificate used) in the Participant Name entry field. MPI and the outline of the entry field will N/A turn from red to green. Select MARKET from Report Type drop-down **MARKET** is selected from the **Report** 6. **Type** drop-down menu and the outline menu. N/A of the entry field will turn from red to green. **MISCELLANEOUS** is selected from the 7. Select MISCELLANEOUS from Report Sub **Report Sub Type** drop-down menu and **Type** drop-down menu. N/A the outline of the entry field will turn from red to green. **DAILY** is selected from the **Periodicity** Select DAILY from Periodicity drop-down 8. menu. drop-down menu and the outline of the N/A entry field will turn from red to green.

Test Script:



9.	Click the green List Reports button and wait for the following success message to be displayed below the input fields in green text: "Successfully processed the list report request"	The List Reports button is clicked successfully and the success message is displayed below the input fields.	Y (Screen Shot)	
10.	Verify PUB_DailyExchangeRate report is published as both a HTML and XML report in the Report List section	The PUB_DailyExchangeRate report is available on screen for as both a HTML and XML file type	N/A	
11.	Open the HTML report by clicking on the floppy disk icon on the right hand side of the screen beneath the Action column.	A new window is opened for the Market Participant displaying the PUB_DailyExchangeRate report on screen for the chosen trading day	Y (Screen Shot)	
12.	Close the HTML report on screen by clicking the 'X' on the top right of the window opened.	The Market Participant is returned to the List Reports display of the MPI.	N/A	
13.	Download PUB_DailyExchangeRate.xml by clicking on the save icon next to the XML report, and name the XML report with the following naming convention: <i>PUB_DailyExchangeRate-Participant_Name</i>	The PUB_DailyExchangeRate.xml file has been downloaded successfully to the Market Participant's desktop with the correct name.	Y (File)	



4.4.4.2 Type 2 / Type 3 - CCQT_BM_02

Script details:

CCQT_BM_02: Submission and retrieval of Simple Demand / Generator Offer Data			
Market Participant Name:	<market include="" name="" participant="" to=""></market>		
Test Script ID:	CCQT_BM_02		
Test Script Title:	Submission and retrieval of Simple Demand / Generator Offer Data		
	Pre-Requisite Checklist	Pass / Fail	
Test Script Pre- requisites	The Market Participant has been set up with appropriate system access. See section 4.4.1 for Market Access details.	<mp to<br="">include></mp>	
	The Market Participant has the required client requirements and configurations established	<mp to<br="">include></mp>	
	The appropriate digital certificate for Market Participant user has been received.	<mp to<br="">include></mp>	
	Market Participant has successfully installed their digital certificate.		
	The Market Participant has previously logged into the MPI and validated the password code emailed to them	<mp to<br="">include></mp>	
	The Market Participant has valid request XML previously prepared to query the data submitted via the MPI	<mp to<br="">include></mp>	

Test Script Execution status:

CCQT_BM_02: Submission and retrieval of S	Simple Demand / Generator Offer Data	
Date of Execution:	Status (Pass/Fail):	Market Participant Signature:
<market date="" include="" participant="" to=""></market>	<market include="" participant="" status="" to=""></market>	<market participant="" sign="" to=""></market>



Test Script:

CCQT	CQT_BM_02: Submission and retrieval of Simple Demand / Generator Offer Data						
Step No.	Step action:	Expected Result:	Evidence required	Actual Result:			
Туре	2 submission via the MPI:						
1	Open a new Internet Explorer browser window.	A new Internet Explorer window has been successfully opened.	N/A				
2	Enter the MPI URL: <u>https://mpc.sem-</u> o.com/mpi/ Select the Market Participant certificate previously installed following to log in on MPI.	The Market Participant has successfully logged into the MPI.	N/A				
3	Navigate to Menu on the top right of the screen and select the Simple Demand Offer or Simple Generator Offer page from the drop down menu as applicable to the Market Participant.	The Market Participant Market Participant is navigated to the desired display in the MPI	N/A				
4	Select the desired Trade Date which you wish to submit the offer for.	The desired Trade Date is selected depending on the date of execution and the outline of the entry field will turn from red to green when a valid date has been entered.	N/A				
5	Type the Market Participant name and resource name respectively in the Market Participant Name and Resource Name fields.	The desired Participant Name and Resource Name have been populated and the outline of the entry field will turn from red to green when a value has been entered.	N/A				
6	Input up to 10 intervals beneath the Intervals heading. Each interval can be added by clicking on the green plus icon.	The desired numbers of intervals have been selected added to the MPI display screen.	N/A				
7	Enter the desired Start Time and End Time for each interval.	The desired start time and end time has been selected for each interval	N/A				
8	For each interval added in step 6, enter the mandatory Price and Quantity values for the	The desired price and quantity values are inputted by the Market Participant.	N/A				



	incremental curve.			
9	For each interval added in step 6, enter the mandatory Price and Quantity values for the decremented curve.	The desired price and quantity values are inputted by the Market Participant.	N/A	
10	Complete additional non mandatory fields as desired.	As required	N/A	
11	Capture a screen shot of all the fields inputted and click the green Submit button	The Market Participant captures the screenshot to be included in the evidence packet and clicks the green submit button.	Y (Screen shot)	
12	Wait for the success message to be displayed on the MPI screen and capture a screen shot of the entire display	The success message is successfully displayed on screen and a screen shot has been captured.	Y (Screen shot)	
Туре	3 Request to the MMS system:			
1	Launch test application. Note: Requirements for Type 3 setup can be found in I-SEM Technical Specification Volume B which has been published on the <u>SEMO</u> website.	The Market Participant's application for type 3 communications has been launched successfully and the required XML has been previously prepared and is available to the Market Participant.	N/A	
2	Query the MMS to retrieve the simple Demand Offer Data or simple Generator Offer Data previously submitted via the MPI Note: Type 3 URL is: <u>https://mpc.sem- o.com/mws/</u>	The Market Participant utilises the market_query method and successfully retrieves the data previously submitted.	Y (XML query)	
3	Confirm that the MMS system has returned the queried data following successful utilisation of the market_query method in step 2.	The Market Participant confirms that they have received a successful response from the MMS system.	Y (XML response)	



4.4.5 Evaluation Criteria

Following successful execution and completion of all the steps in the test script, the test status is to be marked as 'Pass' by the Market Participant in addition to being signed and dated. The remaining test evidence is to be gathered by the Market Participant and included in a single email which will be issued to the I-SEM CSS Team for evaluation of success. See section 3.2.5 for CCQT reporting guidelines.

In the event of a test failure or any other issue preventing the test from successfully completing, please contact the I-SEM CSS Team (isemtesting@eirgrid.com) with details of the encountered issue.

1. CCQT_BM_01 - Retrieval of the Daily Trading Day Exchange Rate Report:

The Balancing Market evidence packet for Type 2 communication is to contain 4 items – the script itself which is signed and dated by the Market Participant, 2 screen shots (shown below), and the report downloaded.

• Executed test scripts signed and dated:

By signing and dating the scripts executed, the Market Participant is declaring that they have completed every step of the scripts successfully. Test scripts (section 4.4.4.1) are to be printed and signed (or signed electronically) and returned to I-SEM CSS Team as a Word or PDF document as a record of participation and completion. This is applicable to all CCQT scripts executed for all markets.

• Screen shot 1 – List Report Request:

The first screen shot <u>must</u> show fields the 4 fields inputted by the Market Participant to run the list report request and the following success message: *"Successfully processed the list report request"*

IP	REP	EPORTS				H5-10-10T22:22	EIRGRID		≣ Menu				
Tra	de Date	F	Participant Name	Report Type	•	Report Sub Type *		Periodicity *					
12/	08/2017		PT_400021	MARKET	2	MISCELLANEOUS	2	DAILY	V	Clat Reports	Hanv	13 First	a.
Me	essages	(1)											n.
8	Туре		Message										
	Inform	ation	Successfully processed the list report request.							~			
													~
Re	eport Lis Report		Descri	ption		Pa	e Name			File Typ	R.	Action	
Re	Report			ption rading Day Exchange	Rate (PUE			xchangeRate.htm	4	File Typ HTML	R	Action	



• Screen shot 2 – On screen report display:

The second screen shot <u>must</u> show the PUB_DailyExchangeRate Report displayed successfully in the browser window.

MP REPORTS Trade Date Participant Name*	Report Type *	Report Sub Type	PUB_DailyExch	angeRate			×
12/08/2017	MARKET	MISCELLANEOUS	# TRADE DATE	FROM CURRENCY	TO CURRENCY	EXCHANGE RATE	^
			1 2017-08-12	E	P	0.8447	
Messages (1)			2 2017-08-12	P	E	1,1839	
messages (1)			3 2017-08-13	E	P	0.8447	
			4 2017-08-13	P	E	1.1839	
# Type M	lessage						
1 Information 5	uccessfully processed the list n	eport request.					
Report List	_	-					
# Report Name Descrip	tion	_					
	rading Day Exchange Rate (PUB	LIC)					
	rading Day Exchange Rate (PUB						
							l
No of Records - 2			<		-		`

• The PUB_DailyExchangeRate XML report :

The PUB_DailyExchangeRate XML report is to be downloaded by the Market Participant as part of script execution. This report is to be saved locally by the Market Participant on their desktop in .xml format with the following naming convention: "*PUB_DailyExchangeRate-Participant_Name*". Please see example below.

Example: *PUB_DailyExchangeRate-Participant_Name.xml*

1. CCQT_BM_02 - Retrieval of the Daily Trading Day Exchange Rate report:

The Balancing Market evidence packet for Type 3 communication is to contain 5 items post-execution of test script CCQT_BM_02:

- Executed test scripts signed and dated
- Screen shot 1 Screen shot of MPI screen prior to submission displaying all input values
- Screen shot 2 Screen shot post-submission with the valid
- The XML request submitted by the Market Participant to retrieve the data submitted
- The XML response received from the MMS system following successful request



4.5 Capacity Market

4.5.1 Market Access

As per the Balancing Market, two independent forms of authentication (a valid digital certificate and an application password) are required to establish successful communication with the Capacity Market via Type 2 interface to the Capacity Market Platform (CMP).

Application passwords and usernames will be created for the relevant superusers **only** and issued to each superuser via their registered email address. The superuser will be responsible for granting access to other users. See section 4.5.3 for digital certificate request and installation details.

The same digital cert is used to access the Capacity Market as the Balancing Market. See section 4.5.3 for certification details.

The following steps are to be executed to gain access to the CMP system for the first time:

- 1. Open a new Internet Explorer browser window
- 2. Go to the CMP login page (URL to be published at a later date) and allow the browser to identify you via the certificate.
- 3. Confirm the request for permission to use the certificate.
 - Check "Grant permission".
 - Confirm by clicking the "OK" button
- 4. Continue with the Login Procedure
- 5. Enter your username.
- 6. Enter your password.
- 7. Click the Login button (or press the Enter key).

4.5.2 Test Environment

A single technical environment is to be used by Market Participants for CCQT/PIT, Mock Auction and Live Auction for the Capacity Market.

4.5.3 Certificate Request and Installation

The Capacity Market certificate request and installation details are consistent with the details set out in section 4.4.3 of this document.

Upon successful download of the cert, the Market Participant **must send** the following information to the I-SEM CSS team via email – Serial Number, username (i.e. <Your user name>@PY_<Your party name>), Valid From and Expiration (aka Valid Till).



Please note: The required certificate information must be proivided to the I-SEM CSS team no later than the 20 October for Market Access on the 30 October. No exceptions will be made to this date.

The required certificate details to be issued to the I-SEM CSS team can be found in found in the PKI client previously installed with the details set out in section 4.4.3 of this document.

• Step 1: Launch PKI Client and navigate to the certificate previously installed. Click on View certificate details on the right hand of the display



• Step 2: Click on the Details tab of the window displayed

Certifical	te Information
	is intended for the following purpose(s): r identity to a remote computer
Issued to:	AWOODS@PY_000021
Issued by:	SEMO-TEST - contractual joint venture between Eirgrid and SONI
Valid from	26/04/2017 to 27/04/2018
1.10	relations of relations

• Step 3: The required Certificate details can be obtained from the Details tab of the window opened

Version Serial r Signatu Signatu Issuer Valid fr	Value	^
Signati	n V3 number 16 52 c3 c6 7e 03 4	^
Subjed Public	ure hash alg sha256 SEMO-TEST - contr from 26 April 2017 01:0 o 27 April 2018 00:5 t Eirgrid PLC, SEMO	~
	Edit Properties	Copy to File



4.5.4 Capacity Market CCQT Script

All steps in the test script should be performed and actual results should be recorded in table provided below. Where necessary, test evidence (e.g. screenshots) should be captured and included as part of the CCQT evidence packet to be issued to I-SEM CSS Team. Any deviation between expected and the actual results are to be documented and sent back to the I-SEM CSS Team for verification.



Script details:

CCQT_CM_01: Market Participant Qualification Report Script Details					
Market Participant Name:	<pre><market include="" name="" participant="" to=""></market></pre>				
Test Script ID:	CCQT_CM_01				
Test Script Title:	View and download the Market Participant Qualification Report from the CMP system.				
	Pre-Requisite Checklist	Pass / Fail			
	The Market Participant has been set up with appropriate system access. See section 4.5.1 for Market Access details.	<mp to<br="">include></mp>			
	The Market Participant has the required client requirements and configurations established	<mp to<br="">include></mp>			
Test Script Pre-	Pre- The Market Participant has emailed the certificate details to I-SEM	<mp to<br="">include></mp>			
requisites	The appropriate digital certificate for Market Participant user has been received.				
	Market Participant has successfully installed their digital certificate.				
	The Market Participant has previously logged into the CMP system and validated their certificate and password for the first time as detailed in Section 4.5.1.	<mp to<br="">include></mp>			

Test Script Execution status:

CCQT_CM_01: Market Participant Qualification Report				
Date of Execution:	Status (Pass/Fail):	Market Participant Signature:		
<market date="" include="" participant="" to=""></market>	<market include="" participant="" status="" to=""></market>	<market participant="" sign="" to=""></market>		



CCQT	_CM_01: Market Participant Qualification Report					
Step No.	Step action:	Expected Result:	Evidence required	Actual Result:		
1.	Open a new Internet Explorer browser window.	A new Internet Explorer window has been successfully opened.	N/A			
2.	Enter the CMP Log In URL: <u>https://cmp.eirgrid.com/</u> Log into the CMP systems using the password and certificate previously authenticated.	The Market Participant is successfully logged into the CMP system	N/A			
3.	Click on the Menu button situated in the top-left corner of the screen.	Menu button on the top left corner of the screen has been selected.	N/A			
4.	Select Capacity Market Platform and Participant Qualification Report from the menu.	Capacity Market Platform and Participant Qualification Report has been selected from the menu	N/A			
5.	Filter the Market Participant Qualification Report form using the five ComboBoxes which are shown in the left hand side of the screen.	The Market Participant can see all five ComboBoxes on the left hand side of the screen which are to be used to filter the report.	N/A			
6.	Select Capacity Period ID in the first ComboBox of the filter.	Capacity Period ID has been selected for the first ComboBox	N/A			
7.	Select Primary Auction ID in the second ComboBox of the filter.	Primary Auction ID has been selected for the second ComboBox	N/A			
8.	Party Name in the third ComboBox will be pre-filled with Party associated with logged in Market Participant.	Party Name has been pre-filled with the correct party for the third ComboBox	N/A			
9.	Select Participant Name in the fourth ComboBox of the filter.	Participant Name has been selected for the fourth ComboBox	N/A			
10.	Select Report Type in the fifth ComboBox of the filter.	Report Type has been selected for the fifth ComboBox	N/A			
11.	Click on the Show data button to display the form according to the parameters selected.	The Show data button has been selected and the Market Participant Qualification Report according to selected parameters will be	Y (Screen Shot)			

Test Script:



		shown in the right side of the screen.		
12.	Hide the filter area in the left side of the screen clicking the arrow button which is on the border between the two areas. Note: To return to the filter, click the arrow button in the opposite direction	The entire screen is displayed successfully allowing the Market Participant to view the report displayed in the right side of the screen.	Y (Screen Shot)	
13.	Click on the Export to .CSV button below the report	CSV-file generated which is consistent with the data displayed on screen.	N/A	
14.	Select where do you want to save this CSV file a click Save button and name the CSV report with the following naming convention: <reporttype>_<status>_<participant_id>_<primary Auction ID>_<creation_date>_<creation_time>.csv</creation_time></creation_date></primary </participant_id></status></reporttype>	The <i>Market Participant</i> <i>Qualification Report-Participant</i> <i>Name.csv</i> file has been downloaded successfully to the Market Participant's desktop with the correct naming convention.	Y (File)	



4.5.5 Evaluation Criteria

Following successful execution and completion of all the steps in the test script executed, the test status is to be marked as 'Pass' by the Market Participant in addition to being signed and dated. The remaining test evidence is to be gathered by the Market Participant and included in a single email which will be issued to the I-SEM CSS Team for evaluation of success. See section 3.2.5 for CCQT reporting guidelines.

In the event of a test failure or any other issue preventing the test from successfully completing, please contact the I-SEM CSS Team (<u>isemtesting@eirgrid.com</u>) with details of the encountered issue.

1. CCQT_CM_01: Market Participant Qualification Report

Four items are required to be submitted as evidence post execution of this test script.

- Executed test scripts signed and dated
- Screen shot 1 Report parameters
- Screen shot 2 Participant Qualification Report on screen
- The Market Participant Qualification Report CSV report :

The Market Participant Qualification Report CSV report is to be downloaded by the Market Participant as part of script execution. This report is to be saved locally by the Market Participant on their desktop in .csv format with the following naming convention: "<Report_Type>_<Status>_<Participant_ID>_<Primary Auction ID>_<Creation_Date>_<Creation_Time>.csv". Please see example below.

Example: <*Report_Type>_<Status>_<Participant_ID>_<Primary Auction ID>_*<*Creation_Date>_<Creation_Time>.csv*



4.6 SEMOpx

4.6.1 Market Access

The market access process can be found below for both the M7 and ETS. Installation instruction can be found <u>here</u> having previously been discussed at the I-SEM Technical Liaison Group 8 – NEMO systems.

For Client setup, please ensure that you have necessary administration rights on your device to complete installation.

1. ETS-Client (Type 2)

Step	Action
1	The Market Participant is to fill in required forms and to submit them to the required entity (SEMOpx) as part of the pre-CCQT registration process.
2	SEMOpx sends the credentials (username/password) the day before the 1 st trading day of CCQT

2. M7 – Client (Type 2)

Step	Action
1	The Market Participant is to fill in required forms and to submit them to the required entity (SEMOpx) pre-CCQT registration process
2	SEMOpx sends the credentials (username/password) the day before the 1 st trading day of CCQT environment.

4.6.2 Test Environment

All SEMOpx testing for CCQT and PIT is to be executed in the same environment.

4.6.3 Certificate Request and Installation

See section 4.6.1 for the relevant market access process. Certificates are not required for access to the ETS or M7 clients (Type 2).

4.6.4 SEMOpx CCQT Script

All SEMOpx test scripts steps are mandatory and actual results should be recorded in table provided below. Where necessary, test evidence (e.g. screenshots) should be captured and included as part of the CCQT evidence packet to be issued to I-SEM CSS Team. Any deviation between expected and the actual results are to be documented and sent back to the I-SEM CSS Team for verification.



4.6.4.1 ETS - Client (Type 2)

Script details:

CCQT_SPX_01: ETS -	Client (Type 2)			
Market Participant Name:	<market include="" name="" participant="" to=""></market>	Market Participant to include name>		
Test Script ID:	RT_SPX_01			
Test Script Title:	Participant exports auction bids from the ETS client.			
	Pre-Requisite Checklist	Pass / Fail		
Test Script Pre- requisites	The Market Participant has been set up with appropriate system access. See Section 4.6.1 (Market Access)			
loquionoo	The Market Participant has the required client requirements and configurations established	<mp to<br="">include></mp>		

Test Script Execution status:

CCQT_SPX_01: Participant exports auction bids from the ETS client.				
Date of Execution:	Status (Pass/Fail):	Market Participant Signature:		
< Market Participant to include date>	< Market Participant to include status>	< Market Participant to sign>		



CCQT SPX 01: Participant exports auction bids from the ETS client. Evidence Step Step action: **Expected Result: Actual Result:** required No. The Market Participant logs into the ETS client 1. The Market Participant has successfully logged into the ETS with the correct credentials. client and they are presented with the home screen. SEMOPX 00 0 00 N/A Tool Winds SEMOPX Semo Single Electricity Market Operator Tool Window CINO Single Electricity Market Operator 20 Global View 🚾 🔂 💿 🗝 Not connected SEMO TRADER001@sepwets411:443 ₩ 10:55:40 2. The Market Participant navigates to the Global The Market Participant has navigated view screen by clicking on the Global View button to the Global view screen N/A successfully **Global View** 3. The Market Participant retrieves all the bids for a The file automatically opens on the specific by clicking on file button in the top left Market Participant desktop and a Υ corner of the Market Participant screen and by value of "none" is displayed for all (Screen following navigation path below: portfolios. shot) File \rightarrow Export to Excel \rightarrow Bids \rightarrow All 4. The Market Participant saves the exported file The Market locally with the following naming convention: Participant_Auction_Bids-Market Participant Auction Bids-Participant Name file has been Υ Participant Name downloaded successfully to the (File) Market Participant's desktop with the correct name.

Test Script:



4.6.4.2 M7 - Client (Type 2)

Script details:

CCQT_SPX_02: M7 – Client (Type 2)				
Market Participant Name:	<market include="" name="" participant="" to=""></market>	Market Participant to include name>		
Test Script ID:	QT_SPX_02			
Test Script Title:	Market Participant exports all own orders from the M7 client			
	Pre-Requisite Checklist	Pass / Fail		
Test Script Pre- requisites	The Market Participant has been set up with appropriate system access. See Section 4.6.1 for Market Access details	<mp to<br="">include></mp>		
104410100	The Market Participant has the required client requirements and configurations established	<mp to<br="">include></mp>		

Test Script Execution status:

CCQT_SPX_02: Market Participant exports all own orders from the M7 client							
Date of Execution: Status (Pass/Fail): Market Participant Signature:							
<market date="" include="" participant="" to=""></market>	<market include="" participant="" status="" to=""></market>	<market participant="" sign="" to=""></market>					



Test Script:

CCQ	CCQT_SPX_02: Market Participant exports all own orders from the M7 client									
Step No.	Step action:	Expected Result:	Evidence required	Actual Result:						
1.	<section-header></section-header>	Market Participant has successfully logged into the M7 client and they are presented with the home screen.	N/A							
2.	The Market Participant navigates to their " Own Order " panel of the M7 home screen in the lower right quadrant of the screen	The Market Participant is navigated to their " Own Order " panel of the M7 home screen in the lower right quadrant of the screen.	N/A							
3.	The Market Participant unfolds their " Own Order " panel by clicking on the white arrow on the left of the Own Order text	The Market Participant's " Own Order " panel is unfolded displaying a number of action commands	N/A							
4.	The Market Participant retrieves all the orders submitted by clicking on the "Export all to CSV file" command button.	The Market Participant is prompted to name the exported CSV file.	Y (Screen shot)							
5.	The Market Participant saves the exported file locally with the following naming convention: Market_Participant_Continuous_Orders- Participant_Name	The <i>Market_Participant_Continuous_Orders-</i> <i>Participant_Name</i> file has been downloaded successfully to the Market Participant's desktop with the correct name.	Y (File)							



4.6.5 Evaluation Criteria

Following successful execution and completion of all the steps in the test script executed, the test status is to be marked as 'Pass' by the Market Participant in addition to being signed and dated. See section 3.2.5, Reporting guidelines for further details.

In the event of a test failure or any other issue preventing the test from successfully completing, please contact the I-SEM CSS Team (isemtesting@eirgrid.com) with details of the encountered issue.

1 CCQT_SPX_01: ETS – Client (Type 2)

Three items are required to be submitted as evidence post execution of this test script;

- Executed test scripts signed and dated
- A screen shot of the Global View screen displaying the full navigation path

Manage Hopping Areas, Tercitory Hopping Transmity, Spreed	
The Part Setter Athen the	
Surgers Classifiers Note and No.	1.000
The Note of the second se	
1200/077 Taki) 02700 New	
Martin fact which an an an	
Negel	
Annual Content of the sector of	
Product Conductor	
	[the second sec

• The *Market Participant_Auction_Bids-Participant_Name* file downloaded to the Market Participant's desktop with the correct naming format

2 CCQT_SPX_02: M7 – Client (Type 2)

Three items are required to be submitted as evidence post execution of this test script;

- Executed test scripts signed and dated
- The Market Participant's "Own Order" panel unfolded displaying a number of action commands

UsrCode	Area	8/5	Ctra	FQEy	Qty	PQty	FPD	sqty	Prc
TRDOOL	Demo	25	1704	6.0	6.0			6.0	0.50
TRDOOL	= Demo	34 5	20-21		0.6				0.01
TRDOOL	Demo	12.2	20-21	1.2	1.2			1.2	0.30
TRDOOL	Demo	215	20-21	0.6	0.6				0.08

• The *Market Participant_Continuous_Orders-Participant_Name* file downloaded to the Market Participant's desktop with the correct naming format.



5 CCQT Material

5.1 CCQT Material Overview

The table below provides a view of the CCQT material published as part of the I-SEM CCQT Guide.

#	Name	Availability	Delivery Mechanism
1	CCQT Approach	Published	Now Available for Download via I-SEM Website
2	 CCQT Guide which contains: Scripts Instructions for downloading digital Certificates CCQT Evaluation Criteria 	Published	Now Available for Download via I-SEM Website
3	Digital Certificates (for Applicable Markets)	Before 7 th September 2017	Online via EirGrid security portal, with instructions from EirGrid email. (see Materials Item #3)
4	CCQT Test Results	End of CCQT for each Market Participant.	isemtesting@eirgrid.com

Table 6: Description of CCQT Material



6 Appendix A – Sample Email

This appendix provides a sample email template for each of the communication categories detailed in section 3.2.5, CCQT Reporting Guidelines.

6.1 Email Template 1: Query

🔊 I 🛃	5 C + 7	-	_	-		_	_	Query	/-PT_111-Participant 1 - Message (HTML)
File	Message	Insert Options	Format Text	Review					
Paste	K Cut Copy ✓ Format Painte ipboard	TD 7 TT ab	 A A I A I Basic Text 		Address Check Book Names Names	Attach File Attach Signature Include	 Follow Up High Importance Low Importance Tags G 	Q Zoom Zoom	
	To <u>.</u>	isemtesting@eirgrid.co	ml						
	<u></u>								
Send	S <u>u</u> bject: Q	uery-PT_111-Participan	t 1						
Hi, I wo	uld like to ra	ise a the below	CCQT related	general que	ery.				
Qu	ery#Q	luery							
Kind	regards,								

6.2 Email Template 2: Notification

🚽 🕫 🏷 🗣 🔻			_		CCQT Notification-PT_111-Participant 1 - Message (H
File Message Insert	Options Format Text Review				
Ste Cut Copy Ste Format Painter Clipboard	 11 → A[*] A[*] 三、三、 E I 型 砂 → A → 臣 吾 国 彦 印 Basic Text 	· · ·	Attach Attach Signature Include	 Follow Up High Importance Low Importance Tags Importance 	Q Zoom Zoom
	ter Østerstil son			_	
	ing@eirgrid.com				
nd					
Subject: CCQT Noti	fication-PT_111-Participant 1				
i,					
l,					
lease accept this ema	il as notification that we intend t	o begin CCQT te	sting on the below (dates:	
Environment	CCQT Execution				
	Date				
Balancing Market	10/09/17				
Capacity Market	10/09/17				
SEMOpx	10/09/17				
-					
egards					
CBUIUS					



6.3 Email Template 3: Issue

3 - 17 (* 4 * I=	CCQT issue-PT_J11-Participant 1 ~ Message (HTML)
File Message Insert	Options FormatText Review
Paste Copy Paste Format Painter Clipboard G	· II. · A. A. E - E - ≫ III. · A. A. E - E - ≫ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - E - ∞ III. · A. A. E - ∞ III. · A. A. A. A. E - ∞ III. · A. A. A. A. ∞ </th
To Semtestin	ngBetarid.com
<u></u>	
Zeug	-PT 111-Participant 1
Hi,	
Dia secondaria da la construcción de	
Please note we have ex	perienced the below issue(s) during CCQT Prep / Execution:
Environment	Issue Type (Cert., Script Execution, other) Issue Details
Balancing Market	
Capacity Market	
SEMOpx	
Technical Details:	Details
Log Files	
	's that would assist with issue resolution. For issues encountered during script execution please clearly detail how actual results differ from expected results and return the script executed]

6.4 Email Template 4: Evidence

🗐 🖬 🤊	C + 4	-						CCQT	Evidence	-PT_111-Participant 1-CCQT_BM_01 - Message (HTML)
File	Message	Insert	Options Fo	rmat Text	Review					
Paste	Cut Copy Format Pain	er B 2		- = =	- 三 / 号 = 三 / 译 伊 5	Address Check Book Names Names	Attach Attach Signature File Item •	 Follow Up * High Importance Low Importance Tags 	R Zoom Zoom	
<u>S</u> end	To ₂		1@eirgrid.com ce-PT_111-Particip	ant 1-CCQT_E	BM_01					
			hat I have su packet attac				M_01 on the 13 th of	June 2017 as no	iified. N	No issues were encountered as all actual results were as per the expected result .
	2. 3.	Execute Screen s Screen s	d steps signe hot 1 – Succe hot 2 – on sc	essfully p reen repo	rocessed the ort display	e list report re retrieved fron				
	let me kı egards,	now if ar	ything furthe	er is requi	ired.					