

Capacity Market Code

Agreed
Procedure 4
Communication
Channel
Qualification

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Version 1.0

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RELATED DOCUMENTS

| Document Title | Version | Date | By |
|---|---------|------|----|
| Capacity Market Code | | | |
| Agreed Procedure 1 “Registration” | | | |
| Agreed Procedure 6 “System and Communication Failures” | | | |

1. INTRODUCTION

1.1 Background and Purpose

This Agreed Procedure supplements the rules set out in the Capacity Market Code (hereinafter referred as the “**Code**”) relating to the qualification, setup and maintenance of Communication Channels. It sets out procedures with which Parties to the Code must comply.

1.2 Scope of Agreed Procedure

This Agreed Procedure sets out procedures in relation to:

- (a) Obtaining a Digital Certificate;
- (b) Communication Channel qualification
- (c) Digital Certificate cancellation; and
- (d) Communication Channel suspension

This Agreed Procedure forms an annex to, and is governed by the Code. It sets out procedures to be followed, subject to the rights and obligations of Parties under the Code. In the event of any conflict between a Party’s obligations set out in the Code and this Agreed Procedure, the Code shall take precedence.

It is not intended that there be any inconsistency or conflict between section 2 “Overview” and section 3 “Procedural Steps”. However, in the event of any inconsistency or conflict, section 3 “Procedural Steps” shall take precedence.

In section 3 “Procedural Steps” a corresponding process flow diagram is included for each procedural steps table. Process flow diagrams are for illustrative purposes. It is not intended that there be any inconsistency or conflict between any procedural steps table and process flow diagram however, in the event of any inconsistency or conflict, a procedural steps table shall take precedence.

1.3 Definitions and Interpretation

Words and expressions defined in the Code shall, unless the context otherwise requires or unless otherwise defined herein at Appendix 1 “Definitions”, have the same meanings when used in this Agreed Procedure.

References to particular sections relate internally to this Agreed Procedure unless specifically noted.

1.4 Compliance with Agreed Procedure

Compliance with this Agreed Procedure is required under the terms of the Code.

2. OVERVIEW

2.1 Qualification for Communication Channels

To qualify for access to the Capacity Market Platform through Type 2 Channel communication, a Participant shall:

- (a) obtain a Digital Certificate for the Test Environment and perform a series of data transfer tests in the non-production environment using Type 2 Channel communication;
- (b) obtain a Digital Certificate for the production environment; and
- (c) obtain full access to the production Capacity Market Platform.

Type 1 Channel shall be used:

- (a) during the initial registration as set out in Agreed Procedure 1 “Registration”;
- (b) where there is problem with the use of Type 2 Channel as set out in Agreed Procedure 6 “System and Communication Failures”; and
- (c) for all Data Transactions not supported by Type 2 Channel.

2.2 Obtaining a Digital Certificate

The procedural steps in relation to obtaining a Digital Certificate are set out at section 3.1 below. This procedure applies to Parties, via Participant Users, seeking to access the Capacity Market Platform through Type 2 Channel.

A Digital Certificate obtained under the Trading and Settlement Code for access to the Balancing Market shall also provide certification for access to the Capacity Market Interface. One Digital Certificate is required for access to both the Balancing Market and Capacity Market.

Digital Certificates issued by the System Operators for the purposes of Communication Channel Qualification relate only to the System Operators’ Participant Certification Environment.

2.3 Guidelines Governing Digital Certificate Use

One Digital Certificate is required for each Party User and is associated with that User’s profile.

A single Digital Certificate can allow the Party User to access any or all of the Functional Areas specified when the User is set-up for access to the Capacity Market Platform.

A Party User is given system access at a Participant level (as set out in Agreed Procedure 1 “Registration”). A Party User can be associated with the Units of one Participant or multiple Participants, depending on their allocated system access.

Digital Certificates are environment specific i.e. a separate Digital Certificate is required when accessing test and production environments.

2.4 Communication Channel Testing

The procedural steps in relation to Communication Channel Qualification are set out at section 3.2 below. Communication Channel testing can only begin when the Participant is in possession of a valid Digital Certificate and has been granted read/write access to the relevant Functional Areas.

As part of the procedure, the Participant connects to the System Operator's Participant Certification Environment. This involves accessing a web-based portal. Note that this Participant Certification Environment is a Test Environment distinct from the Capacity Market Platform.

A number of tests must be successfully performed. Where appropriate these may include:

- (a) Uploading / submitting Capacity Auction Offers, Secondary Auction Bids and Secondary Auction Offers;
- (b) Downloading / requesting data in relation to Capacity Auction Offers, Secondary Auction Bids and Secondary Auction Offers; or
- (c) Downloading a report.

2.5 Guidelines Governing Communication Channel Testing

The Communication Channel testing procedure set out at section 3.2 below shall only be conducted once per Party for Type 2 Channel. If a Participant User is added at a later date, Communication Channel testing shall not be repeated.

2.6 Accessing the Capacity Market Platform

In order to obtain full access to the Capacity Market Platform, the System Operators shall verify:

- (a) that Communication Channel testing has been completed successfully; and
- (b) that the Participant has demonstrated compliance through self-certification with the IT security guidelines set out in the Code.

The System Operators shall allow access to the Capacity Market Platform once it is satisfied that these steps are complete. The Participant shall be notified by email that they are granted access to the Capacity Market Platform via the Communication Channel for which testing has been successfully completed.

2.7 Maintaining A Communication Channel

2.7.1 IT Security Requirements

Parties shall ensure that interfaces to their Type 2 Channels comply with the IT security requirements under the Code. Any significant deviation from these requirements may result in a Communication Channel suspension in accordance with section 3.4 below.

2.7.2 Maintaining a Type 2 Channel

In order for a Participant to maintain a Type 2 Channel, the Participant shall satisfy the following requirements:

- (a) there must be a valid Participant User per Functional Area, with access to administer the required functionality;
- (b) a valid Digital Certificate is required per Participant User;
- (c) each Participant User shall obtain a valid Capacity Market Interface password (as enforced by the Capacity Market Platform);
- (d) adequate internet access is required;
- (e) each Participant User shall access the production Capacity Market Platform using their assigned Digital Certificate and Capacity Market Interface password; and
- (f) Participants are required to notify the System Operators, via the Helpdesk in accordance with Agreed Procedure 5 "System Operation, Testing, Upgrading and Support", of transaction malfunction issues due to Communication Channel failure.

A Participant is obliged to remain qualified for Type 2 Channel for the duration of its participation in the Capacity Market. The System Operators may instruct a Participant to perform a Communication Channel Qualification retest at any time in accordance with the IT security guidelines set out in the Code.

2.8 Communication Channel Suspension

The procedural steps in relation to Communication Channel Suspension are set out at section 3.4 below.

A Participant may be suspended from using Type 2 Channel by the System Operators. This shall be a temporary measure that shall be reversed once the System Operators are satisfied that appropriate action has been taken towards re-qualification. The following circumstances may lead to Communication Channel suspension:

- (a) The Participant requests for a particular Communication Channel to be temporarily suspended. This could arise when the Participant becomes aware of a security breach.
- (b) The Participant does not have valid users with the appropriate access rights to operate in the SEM.
- (c) The Participant Type 2 Channel password has expired.
- (d) The Participant is deemed by the System Operators to be non-compliant with the required IT standards as specified in the Code and this could affect the security / performance of the Capacity Market Platform.
- (e) The System Operators have evidence of an IT security breach in the Participant's systems and this could affect the security / performance of the Capacity Market Platform.
- (f) The System Operators have evidence that a Participant's interaction with the Capacity Market Platform is having a performance impact.

Where the System Operators have suspended a Communication Channel for a particular Participant, the Participant will be immediately notified by email and provided with the reason(s) for the suspension. The System Operators may specify the steps for that Participant to take to resolve the issue. Due to the time restrictions involved it is not possible to make the suspension dependent on an appeals process. Any disagreement with a temporary suspension must be dealt with through the Disputes process under the Code. A Participant shall inform the System Operators of any security breach of its systems as soon as it becomes aware of such breach.

2.9 Authorised Persons

Wherever Parties communicate with the System Operators via Type 1 Channel or other communication required under Agreed Procedures, then that communication must be from staff duly authorised. To be an Authorised Person, Party staff must first be registered as a User via the Capacity Market Interface. A User can then be authorised under one or more Authorisation Categories.

A Party Administrative User is permitted to nominate and change the authorisations of other staff from that Party. As this role is administered via the Capacity Market Interface, no other type of User is permitted to perform this function. At least one Party Administrative User must be registered during the process of Party registration. Where a Party does not have any valid Party Administrative User(s) then a new nomination must be submitted accompanied by a letter on the company stationery and signed by a registered company director or administrator for the company.

2.9.1 Authentication

As part of the Authorisation process for performing the tasks, authentication information is required by the System Operators to verify the Authorised Person. When a communication is received from the Authorised Person the authentication information provided is dependent on the mode of communication and is described below:

- (a) Full Name
- (b) Signature
- (c) Email address

| Mode of Communication | Authentication information |
|-----------------------|--|
| Post | Full Name, Signature |
| E-Fax | Full Name, Signature |
| Email | Full Name, Originate from registered email address |

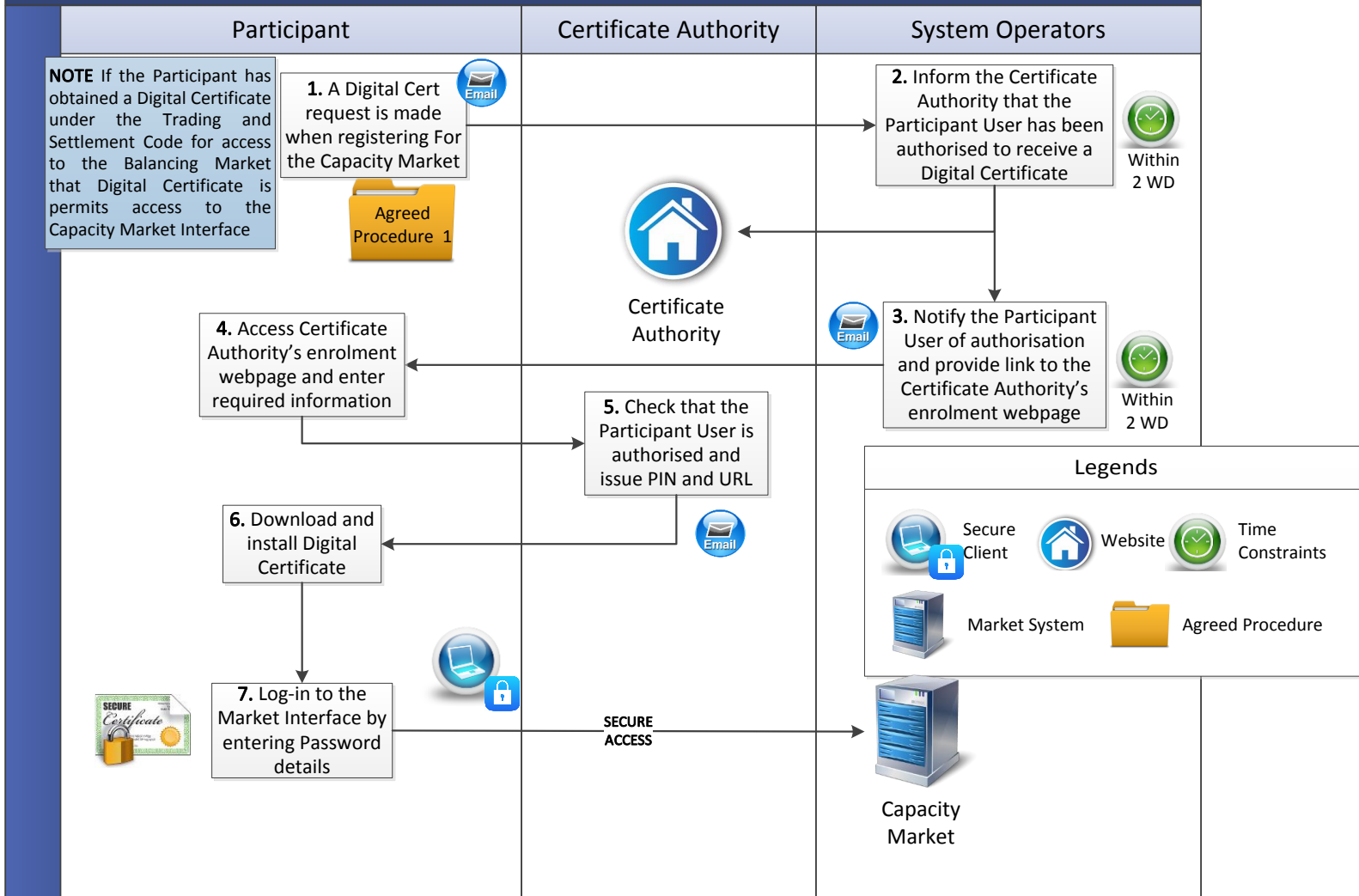
To authenticate the communication, the System Operators shall request, via the telephone, the Authorised Person to provide their Authentication Code; or combination of confidential questions specific to the User; and provided as part of the User registration process.

3. PROCEDURAL STEPS

3.1 Obtaining A Digital Certificate

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|---|-------------------------------------|---|-----------------------|-----------------------|
| 1 | A Digital Certificate request is made during registration for the Capacity Market NOTE: If the Participant has obtained a Digital Certificate under the Trading and Settlement Code for access to the Balancing Market that Digital Certificate is permits access to the Capacity Market Interface. | As required | - | - | - |
| 2 | Inform the Certificate Authority that the Participant User has been authorised to receive a Digital Certificate | Within 2 WD | Certificate Authority website | System Operators | Certificate Authority |
| 3 | Notify the Participant User of authorisation to obtain a Digital Certificate and provide link to the Certificate Authority's enrolment webpage | Within 2 WD | Email | System Operators | Participant |
| 4 | Access Certificate Authority's enrolment webpage and enter required information | As required | Certificate Authority website | Participant | - |
| 5 | Check that the Participant User is authorised and issue PIN and URL | Within 1 WD of completion of step 4 | Email | Certificate Authority | Participant |
| 6 | Download and install Digital Certificate using URL and PIN | As required | Certificate Authority website | Participant | - |
| 7 | Log-in to the Capacity Market Interface and change password as prompted. | | Certificate Authority website / Capacity Market Interface | Participant | - |

Obtaining A Digital Certificate

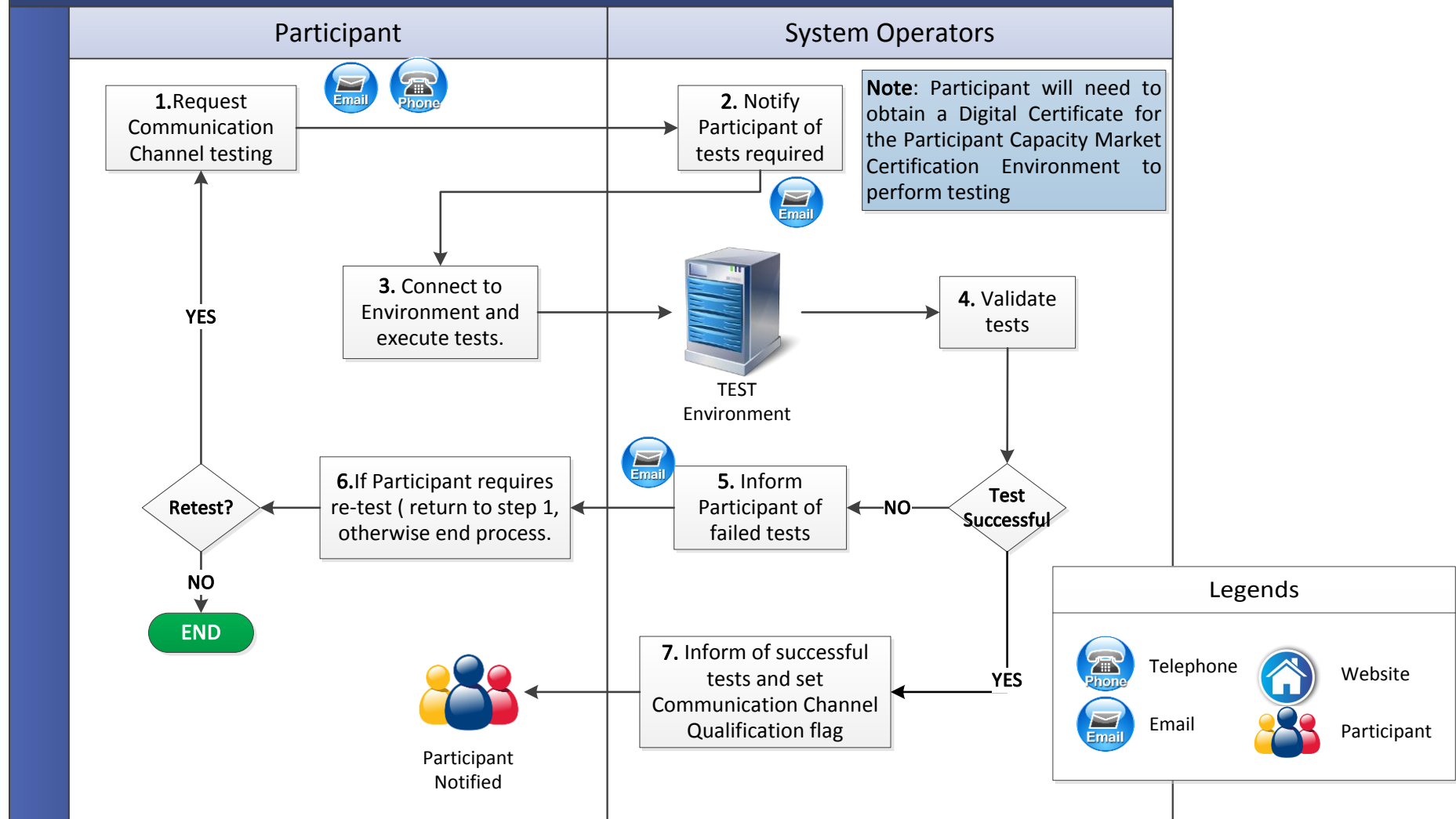


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3.2 Communication Channel Qualification

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|--|------------------------------|---|------------------|------------------|
| 1 | Request Communication Channel testing. (Note: Participant will need to obtain a Digital Certificate for the Participant Capacity Market Certification Environment to perform testing (see section 3.1 above)) | As required | Email, Phone | Participant | System Operators |
| 2 | Notify Participant of tests required and fixed scripted schedule of test | Within 3 WD | Email | System Operators | Participant |
| 3 | Prepare tests, connect to Participant Capacity Market Certification Environment and execute tests | Under fixed script in step 2 | Participant Certification Environment website | Participant | - |
| 4 | Validate tests. If acceptable go to step 7, otherwise continue to step 5 | Under fixed script in step 2 | - | System Operators | - |
| 5 | Inform Participant of failed tests | Within 3 WD | Email | System Operators | Participant |
| 6 | If Participant requires re-test (after correction of Participant's systems complete) return to step 1, otherwise end process | As required | - | Participant | - |
| 7 | Inform of successful tests and set Communication Channel Qualification flag | Within 3 WD | Email | System Operators | Participant |

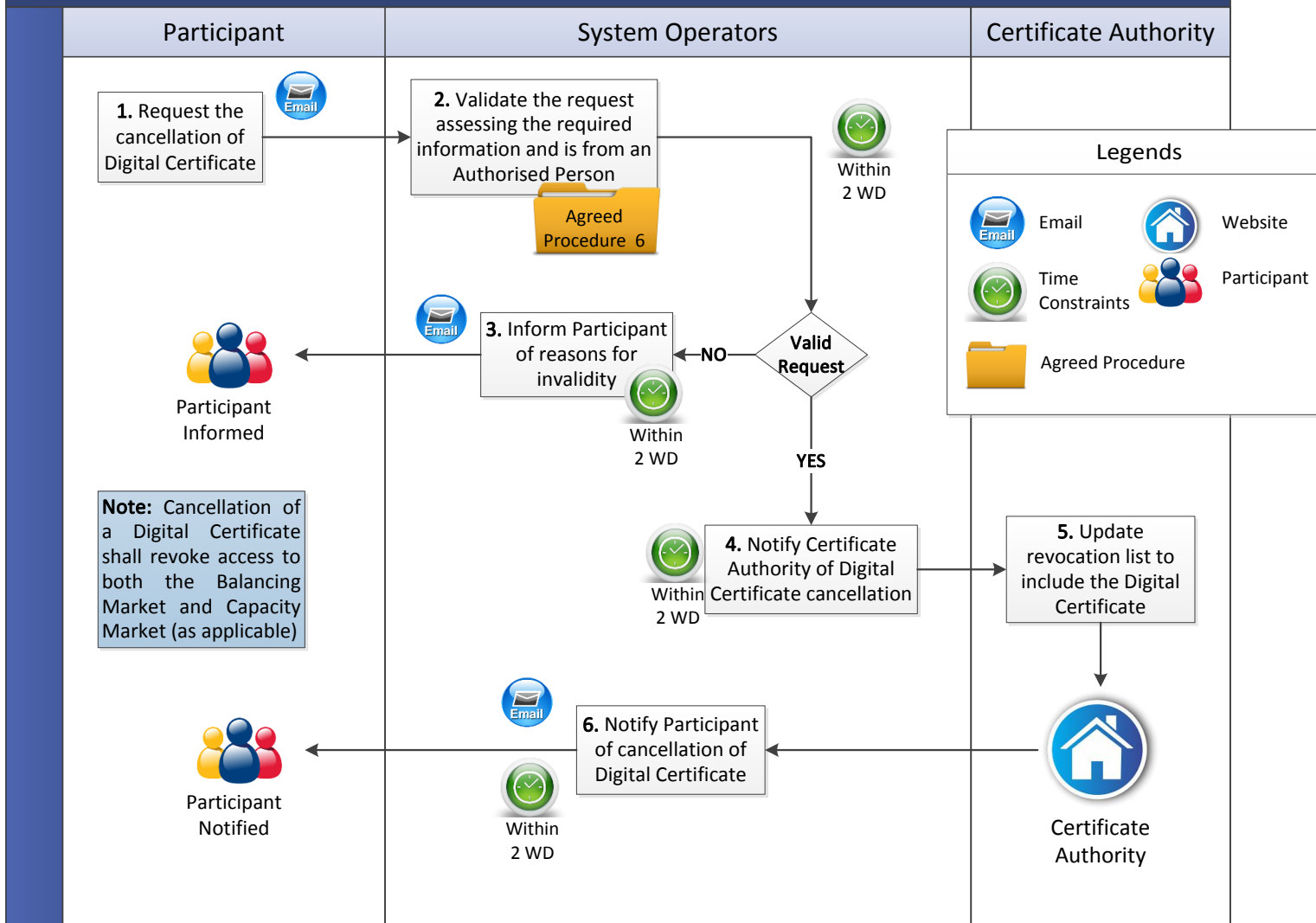
Communication Channel Qualification



3.3 Digital Certificate Cancellation

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|--|-------------|-------------------------------|-----------------------|-----------------------|
| 1 | Request the cancellation of Digital Certificate Note: Cancellation of a Digital Certificate shall revoke access to both the Balancing Market and Capacity Market (as applicable) | As required | Email | Participant | System Operators |
| 2 | Validate the request assessing whether it has all the required information and is from an appropriate Authorised Person (see Agreed Procedure 5 "System Operation, Testing, Upgrading and Support"). If valid go to step 4, otherwise continue to step 3 | Within 2 WD | - | System Operators | - |
| 3 | Inform Participant of reasons for invalidity, end process | Within 2 WD | Email | System Operators | Participant |
| 4 | Notify Certificate Authority of Digital Certificate cancellation | Within 2 WD | Certificate Authority website | System Operators | Certificate Authority |
| 5 | Update revocation list to include the Digital Certificate | - | Certificate Authority website | Certificate Authority | - |
| 6 | Notify Participant of cancellation of Digital Certificate | Within 2 WD | Email | System Operators | Participant |

Digital Certificate Cancellation



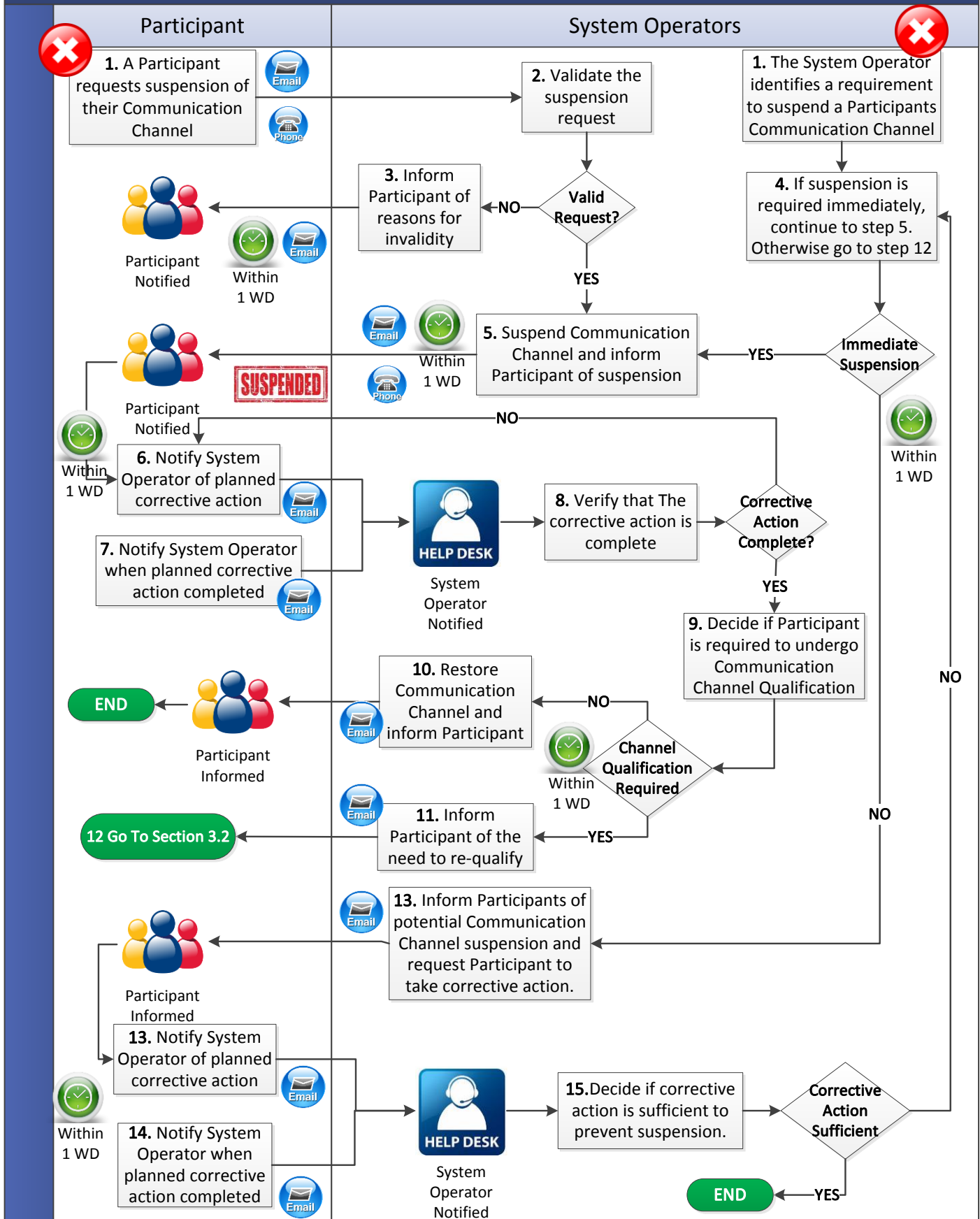
3.4 Communication Channel Suspension

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|--|----------------------------------|---------------------|-------------------------------------|------------------|
| 1 | <p>If:</p> <p>(a) a Participant requests suspension of Communication Channel, go to step 2; or</p> <p>(b) the System Operators identify a requirement to suspend a Participants Communication Channel, go to step 4.</p> | As required | Email and Telephone | Participant System Operators | System Operators |
| 2 | Validate the suspension request assessing whether it has the required information is from an appropriate Authorised Person (see Agreed Procedure 5 "Market System Operation, Testing, Upgrading and Support"). If valid go to step 5, otherwise continue to step 3 | - | - | System Operators | - |
| 3 | Inform Participant of reasons for invalidity, end process | Within 1 WD | Email | System Operators | Participant |
| 4 | If suspension is required immediately, continue to step 5. Otherwise go to step 13 | - | - | System Operators | - |
| 5 | Suspend Communication Channel and inform Participant of suspension | Within 1 WD | Email and Telephone | System Operators | Participant |
| 6 | Notify System Operators of planned corrective action | Within 1 WD | Email | Participant | System Operators |
| 7 | Notify System Operators when planned corrective action completed | Within timelines notified to the | Email | Participant | System Operators |

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|--|----------------------------|--------|------------------|------------------|
| | | System Operators in step 6 | | | |
| 8 | Verify that corrective action is complete. If corrective action is not complete, notify Participant and return to step 6. If corrective action is complete continue to step 9. | - | - | System Operators | - |
| 9 | Decide if Participant is required to undergo Communication Channel Qualification. If no re-qualification is necessary continue to step 10. If qualification is required, go to step 11 | - | - | System Operators | - |
| 10 | Restore Communication Channel and inform Participant, end process | Within 1 WD | Email | System Operators | Participant |
| 11 | Inform Participant of the need to re-qualify for Communication Channel | Within 1 WD | Email | System Operators | Participant |
| 12 | Commence Communication Channel Qualification procedure at section 3.2 | - | - | Participant | - |
| 13 | Inform Participants of potential Communication Channel suspension and request Participant to take corrective action | Within 1 WD | Email | System Operators | Participant |
| 14 | Notify System Operators of planned corrective action | Within 1 WD | Email | Participant | System Operators |
| 15 | Notify System Operators when planned corrective action completed | As specified in step 14 | Email | Participant | System Operators |

| Step | Procedural Step Description | Timing | Method | By / From | To |
|------|---|--------|--------|------------------|----|
| 16 | Decide if Participant corrective action is sufficient to prevent suspension. If corrective action sufficient, end process . If corrective action is insufficient then return to step 4 | - | - | System Operators | - |

Communication Channel Suspension



APPENDIX 1: DEFINITIONS

DEFINITIONS

Words and expressions used herein shall have the same meaning given to them in the Code, unless otherwise specified here.

| | |
|--|--|
| Authorised Person | means the representative of a Party who is authorised by that Party to communicate with the System Operators. |
| Capacity Market Interface | means the function within the Capacity Market Platform that interfaces to the Type 2 Channel communications in accordance with the Code. |
| Certificate Authority | means an entity which issues Digital Certificates for use by other parties. The Certificate Authority validates the data contained in the Digital Certificate and correctly identifies the party to which it issues the Digital Certificate. |
| Digital Certificate | means an electronic credential issued and digitally signed by a Certificate Authority. The international standard upon which most commercial certificates are based is the ITU-T X.509 certificate. The digital certificate represents the certification of an individual, business, or organizational public key. |
| Functional Area | means the different parts of the Capacity Market Platform that Users may be provided access to as set out in in Agreed Procedure 1 "Registration". |
| Participant Certification Environment | means a test environment which allows the Participant to test their ability to interact with Capacity Market Platform functionality. |
| Party Administrative User | means the person who creates and maintains the User information pertaining to a Party. |
| Test Environment | means a non-production version of a Capacity Market Platform used for test purposes prior to an update to the Capacity Market Platform. |
| User | means: (a) in relation to a Participant: a nominated member of the Participant staff who is authorised to utilise qualified communication facilities that interact with the Capacity Market Platform; and |

| | |
|---------------------|---|
| | <p>(b) in relation to the System Operators: a member of the System Operators' staff who has been authorised to access specific parts of the Capacity Market Platform.</p> <p>The procedure in relation to registration of User access rights is set out in Agreed Procedure 1 "Registration".</p> |
| Web Services | <p>means the automated communication consisting of an XML-based programmatic interface.</p> |