

The Single Electricity Market (SEM)

Agreed Procedure 3 Communication Channel Qualification

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DOCUMENT HISTORY

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RELATED DOCUMENTS

Document Title	Version	Date	By
Trading and Settlement Code			
Agreed Procedure 1 "Registration"			
Agreed Procedure 4 "Transaction Submission and Validation"			
Agreed Procedure 5 "Data Storage and IT Security"			
Agreed Procedure 7 "Emergency Communications"			
Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support"			
Agreed Procedure 14 "Disputes"			

1. INTRODUCTION

1.1 Background and Purpose

This Agreed Procedure supplements the rules set out in the Trading and Settlement Code (hereinafter referred as the “**Code**”) relating to the qualification, setup and maintenance of Type 2 Channels and Type 3 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 is a statement of process and procedure. Parties’ rights and obligations are set out in 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.

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 and Abbreviations”, 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

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

2.1 Qualification for Communication Channels

To qualify for access to the Market Operator Isolated System through Type 2 Channel or Type 3 Channel communication, a Participant must:

- (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 or Type 3 Channel communication (as applicable);
- (b) obtain a Digital Certificate for the production environment; and
- (c) obtain full access to the production Market Operator Isolated Market System.

Type 1 Channel is defined in the Code. Type 1 Channel is 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 and Type 3 Channel Communication as set out in Agreed Procedure 7 “Emergency Communications”; and
- (c) for all Data Transactions not supported by Type 2 Channel or Type 3 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 Market Operator Isolated Market System through Type 2 Channel and Type 3 Channel only.

Digital Certificates issued by the Market Operator for the purposes of Communication Channel Qualification relate only to the Market Operator’s 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. For Type 3 Channel communications, note that a Party User may represent a machine rather than an individual person.

A single Digital Certificate can allow the Party User to access any or all of the Functional Areas specified when the User was set-up for access to the Market Operator’s Isolated Market System.

A Party User is given system access at a Participant level (defined 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. These steps apply for both Type 2 Channel and Type 3 Channel testing. 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 Market Operator's Participant Certification Environment. In the case of a Type 2 Channel this involves accessing a web-based portal, whereas a Type 3 Channel involves Web Services interaction. Note that this Participant Certification Environment is a Test Environment distinct from the Market Operator's Isolated Market System.

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

- (i) Upload/submit bid data / Offer Data;
- (ii) Download/request bid data / Offer Data;
- (iii) Download a report;
- (iv) Update Registration Data; or
- (v) The Market Operator evaluates all the transaction results.

2.5 Guidelines Governing Communication Channel Testing

It is envisaged that this Communication Channel testing procedure set out at section 3.2 below will only be conducted once per Party per Communication Channel. If a Participant User is added at a later date, Communication Channel testing will not be repeated.

Testing is Communication Channel specific. Separate tests are required for each Communication Channel.

2.6 Accessing the Market Operator Isolated Market System

In order to obtain full access to the Market Operator Isolated Market System, the Market Operator must 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 Agreed Procedure 5 "Data Storage and IT Security".

The Market Operator shall allow access to the Market Operator Isolated Market System once it is satisfied that these steps are complete. The Participant shall be notified by e-mail that they will be granted access to the Market Operator's Isolated Market System 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 and Type 3 Channels comply with the IT security requirements set out in Agreed Procedure 5 "Data Storage and IT Security" as required under the Code. Any significant deviation from these requirements could affect a Communication Channel suspension in accordance with section 2.8 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, except where this access to this Functional Area is covered under a qualified Type 3 Channel;
- (b) a valid Digital Certificate is required per Participant User;
- (c) each Participant User shall obtain a valid Balancing Market application password (as enforced by the Market Operator's systems);
- (d) adequate internet access is required;
- (e) each Participant User shall access the production Market Operator's Isolated Market System using their assigned Digital Certificate and Balancing Market application password; and
- (f) Participants are required to notify the Market Operator, via the Helpdesk in accordance with Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support", of transaction malfunction issues due to Communication Channel failure.

A Participant that has qualified for Type 2 Channel communications is obliged to remain qualified for the duration of its participation in the Balancing Market.

2.7.3 Maintaining a Type 3 Channel

In order for a Party to maintain a Type 3 Channel, the Participant shall satisfy the following requirements:

- (a) there must be a valid Party User per Functional Area, with required access to administer the required functionality, except where this access to this Functional Area is covered under a qualified Type 2 Channel;
- (b) a valid Digital Certificate is required per Party user;
- (c) adequate internet access is required;
- (d) Participants are to notify the Market Operator, via the Helpdesk in accordance with Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support", of transaction malfunction issues due to Communication Channel failure; and
- (e) Participants shall monitor their operations to ensure that required submissions are made, and error messages are acted upon in an appropriate and timely manner.

A Participant that has qualified for Type 3 Channel communications is obliged to remain qualified for the duration of its participation in the Balancing Market unless the Participant has also qualified for Type 2 Channel communications.

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 or Type 3 Channel by the Market Operator. This will be a temporary measure that shall be reversed once the Market

Operator is 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 (this only relates to Type 2 Channel access. If the Participant also has Type 3 Channel access, this is not affected).
- (d) The Participant is deemed by the Market Operator to be non-compliant with the required IT standards as specified in Agreed Procedure 5 "Data Storage and IT Security" and this could affect the security / performance of the Market Operator's Isolated Market Systems.
- (e) The Market Operator has evidence of an IT security breach in the Participant's Isolated Market Systems and this could affect the security / performance of the Market Operator's Isolated Market Systems.
- (f) The Market Operator has evidence that a Participant's interaction with the Market Operator's Isolated Market Systems is having a performance impact.

Where the Market Operator has suspended a Communication Channel for a particular Participant, the Participant will be immediately notified by e-mail and provided with the reason(s) for the suspension. The Market Operator 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 Dispute process under Agreed Procedure

3. PROCEDURAL STEPS

3.1 Obtaining A Digital Certificate

Step	Procedural Step Description	Timing	Method	By / From	To
1	This procedure shall be commenced following: (a) a Digital Certificate request during a Unit Registration application in accordance with Agreed Procedure 1 "Registration"; or (b) the creation of a new User via the Balancing Market Interface and requesting a Digital Certificate for the new User in accordance with Agreed Procedure 1 "Registration"; or (c) successful completion of Communication Channel Qualification and setting up of authorising Digital Certificates for Users requested during the registration process set out in Agreed Procedure 1 "Registration"	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	Market Operator	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	E-fax	Market Operator	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	Email	Certificate Authority	Participant

Step	Procedural Step Description	Timing	Method	By / From	To
		of step 4			
6	Download and install Digital Certificate using URL and PIN	As required	Certificate Authority website	Participant	-
7	Send a link to Balancing Market Interface and the random system generated string.		Email	Certificate Authority	Participant
8	After accessing the link provided at step 7, enter random system generated string in the Balancing Market Interface window displayed.		Certificate Authority website	Participant	-
9	Validate string entered at step 8.		Certificate Authority website / Balancing Market Interface	Certificate Authority	-
10	Log-in to the Balancing Market Interface by entering a new password and verify the password as prompted.		Certificate Authority website / Balancing Market Interface	Participant	-

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 Certification Environment to perform testing (see section 3.1 above)).	As required	E-fax / Post	Participant	Market Operator
2	Notify Participant of tests required and fixed scripted schedule of test.	Within 3 WD	E-fax / Email	Market Operator	Participant
3	Prepare tests, connect to Participant 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	-	Market Operator	-
5	Inform Participant of failed tests.	Within 3 WD	E-fax / Email	Market Operator	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	E-fax / Email	Market Operator	Participant
8	Go to procedural steps 1 of section 3.1 above to obtain a Digital Certificate in the production environment.	Within 3 WD	E-fax / Email	Market Operator	Participant

3.3 Digital Certificate Cancellation

Step	Procedural Step Description	Timing	Method	By / From	To
1	Request the cancellation of Digital Certificate.	As required	E-fax / Post	Participant	Market Operator
2	Validate the request assessing whether it has all the required information and is from an appropriate Authorised Person (see Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support"). If valid go to step 4, otherwise continue to step 3	Within 2 WD	-	Market Operator	-
3	Inform Participant of reasons for invalidity, end process.	Within 2 WD	E-fax / Email	Market Operator	Participant
4	Notify Certificate Authority of Digital Certificate cancellation	Within 2 WD	Certificate Authority Website	Market Operator	Certificate Authority
5	Place Digital Certificate on revocation list	-	Certificate Authority Website	Certificate Authority	-
6	Notify Participant of cancellation of Digital Certificate	Within 2 WD	E-fax / Email	Market Operator	Participant

3.4 Communication Channel Suspension

Step	Procedural Step Description	Timing	Method	By / From	To
1	If: (a) a Participant requests suspension of Communication Channel, go to step 2; or (b) the Market Operator identifies a requirement to suspend a Participants Communication Channel, go to step 4.	As required	E-fax / Post	Participant Market Operator	Market Operator
2	Validate the suspension request assessing whether it has the required information is from an appropriate Authorised Person (see Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support"). If valid go to step 5, otherwise continue to step 3.	-	-	Market Operator	-
3	Inform Participant of reasons for invalidity, end process.	Within 1 WD	E-fax / Email	Market Operator	Participant
4	If suspension is required immediately, continue to step 5. Otherwise go to step 12.	-	-	Market Operator	-
5	Suspend Communication Channel and inform Participant of suspension.	Within 1 WD	E-fax / Email and Telephone	Market Operator	Participant
6	Notify Market Operator of planned corrective action.	Within 1 WD	E-fax / Email	Participant	Market Operator
7	Notify Market Operator when planned corrective action completed.	Within timelines notified to the Market	E-fax / Email	Participant	Market Operator

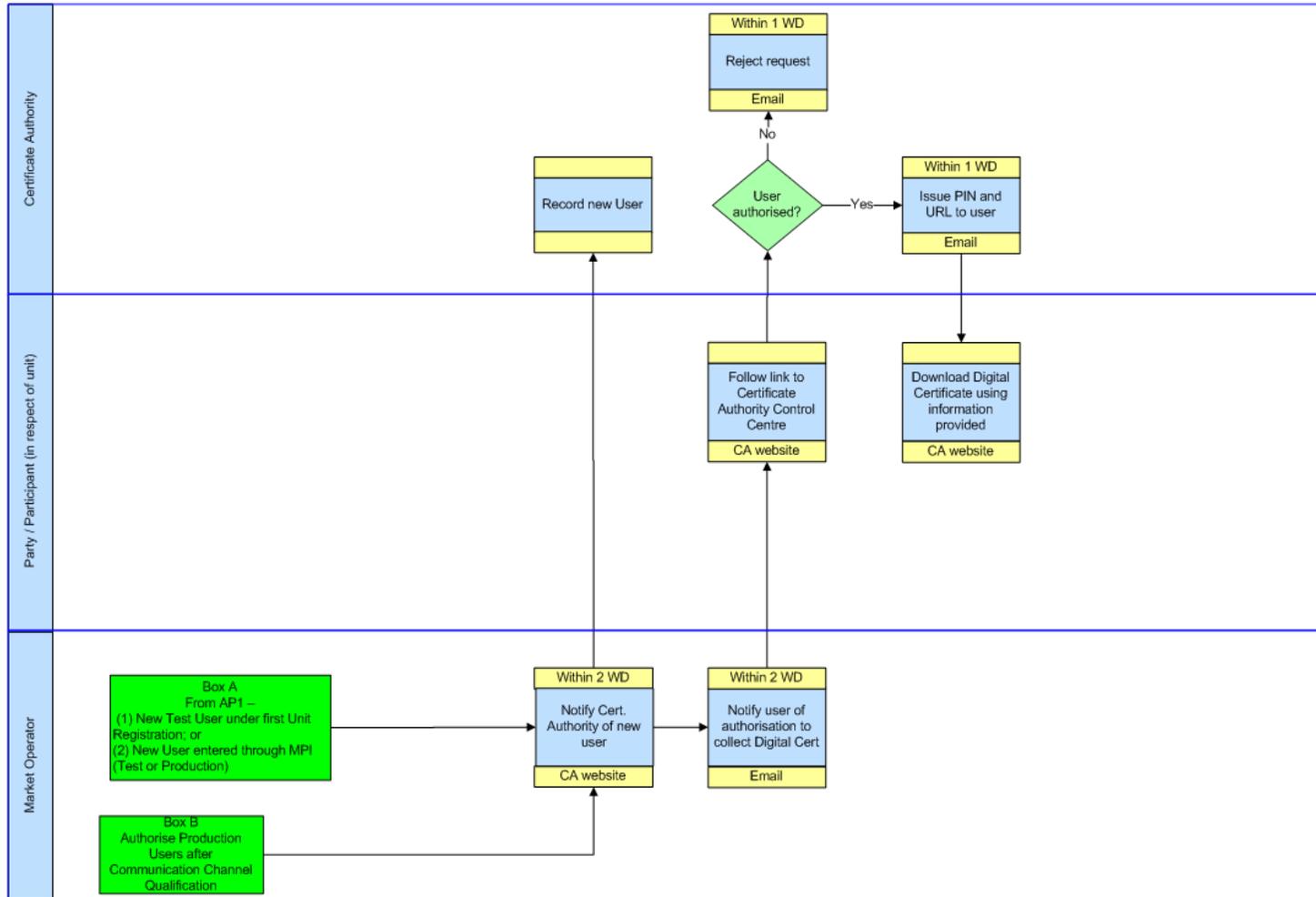
		Operator in step 6			
8	Decide if Participant is required to undergo Communication Channel Qualification. If no re-qualification is necessary continue to step 9. If qualification is required, go to step 10	-	-	Market Operator	-
9	Restore Communication Channel and inform Participant, end process.	Within 1 WD	E-fax / Email	Market Operator	Participant
10	Inform Participant of the need to re-qualify.	Within 1 WD	E-fax / Email	Market Operator	Participant
11	Go to step 1 of section 1.1 of this Agreed Procedure to commence Communication Channel Qualification procedure.	-	-	Participant	-
12	Inform Participants of potential Communication Channel suspension and request Participant to take corrective action.	Within 1 WD	E-fax / Email	Market Operator	Participant
13	Notify Market Operator of planned corrective action.	Within 1 WD	E-fax / Email	Participant	Market Operator
14	Notify Market Operator when planned corrective action completed.	As planned in step 13	E-fax / Email	Participant	Market Operator
15	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.	-	-	Market Operator	-

4. SWIMLANES

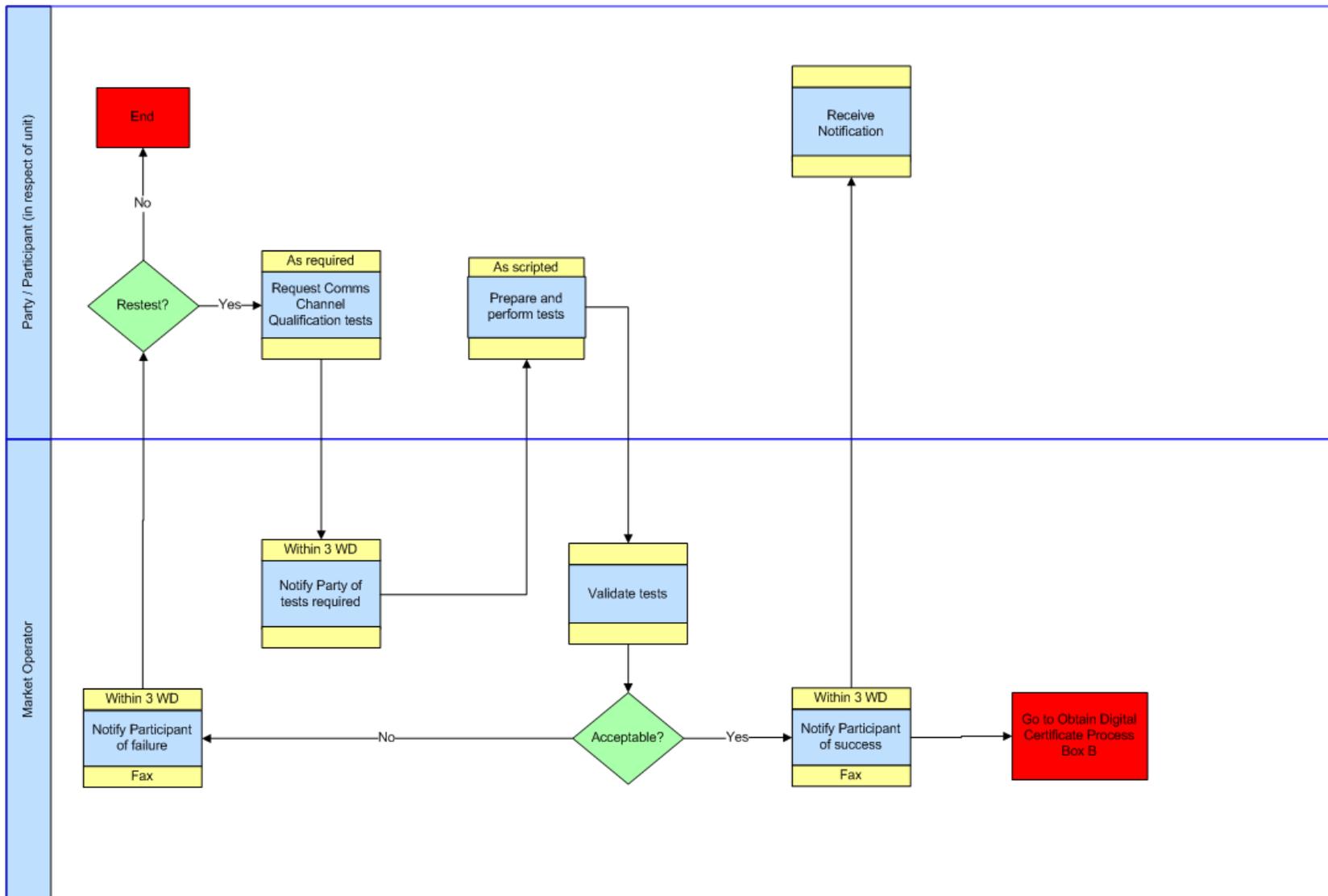
It is not intended that there be any inconsistency or conflict between this section 4 “Swimlanes” and section 3 “Procedural Steps”. However, in the event of any inconsistency or conflict, section 3 “Procedural Steps” shall take precedence.

Note: All swimlanes in this section 4 shall be updated in accordance with changes to Agreed Procedure 3 “Communication Channel Qualification”

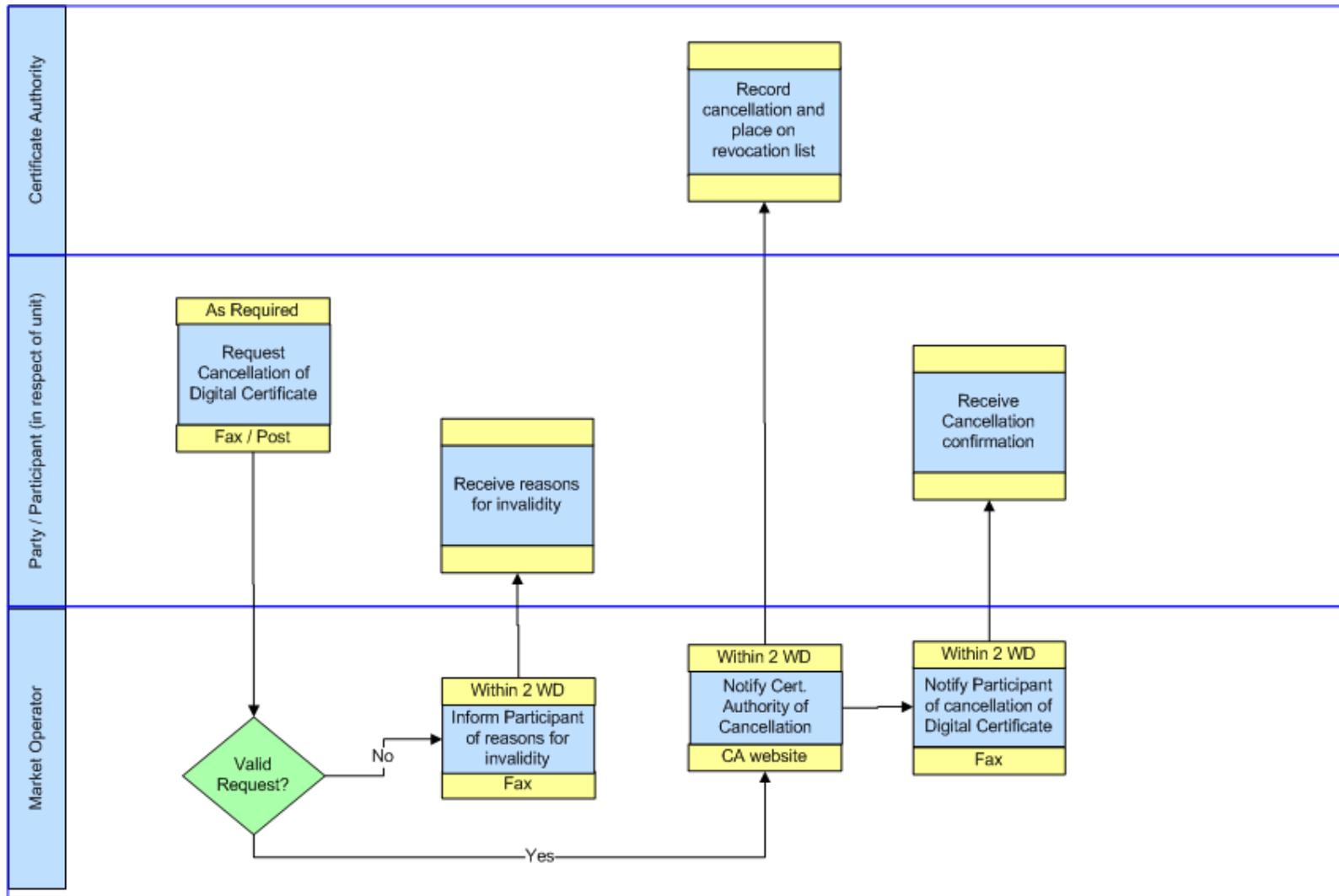
4.1 Obtaining a Digital Certificate



4.2 Communication Channel Qualification



4.3 Digital Certificate Cancellation



APPENDIX 1: DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

Balancing Market Interface	means the function within the Market Operator's systems that interfaces to the Type 2 Channel and Type 3 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 Balancing Market Interface 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 Market Operator Isolated Market System functionality.
Test Environment	means a non-production version of a Market Operator's Isolated Market System used for test purposes prior to an update to the Market Operator's Isolated Market System.
User	means: <ul style="list-style-type: none"> (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 Market Operator's Isolated Market System; and (b) in relation to the Market Operator: a member of the Market Operator staff who has been authorised to access specific parts of the Market Operator Isolated Market System.
Web Services	means the automated communication

	consisting of an XML-based programmatic interface.
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ABBREVIATIONS

WD	Working Day
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