RETAIL ENERGY CODE

Central Switching Service

RETAIL ENERGY CODE

Contents

1 Introduction 4
2 Becoming a CSS User 5
3 Process for Establishing Public and Private Keys 6
4 Revocation of CSS Certificates 11
5 Expiry of CSS Certificates 12
6 Process for Establishing Webhooks 12
7 Process for CSS Testing 14
8 Undertakings by CSS Users 15
9 Ceasing to be a CSS User 17
10 Switching Operator and CSS Provider responsibilities for Test Environments and Test Data 18

 Copyright 2024 Retail Energy Code Company

RETAIL ENERGY CODE

SCHEDULE 25

Central Switching Service Schedule

Version: 1.3 Effective Date: 28 June 2024

Electricity Suppliers	Mandatory
Gas Suppliers	Mandatory
Distribution Network Operators	Mandatory
Gas Transporters	Mandatory
DCC	Mandatory
Metering Equipment Manager	Mandatory for CSS Users
Non-Party REC Service User	Mandatory for CSS Users

Change History

Version Number	Implementation Date	Reason for Change
0.1	N/A	Initial draft for November 2020 publication
0.2	N/A	Draft for Spring 2021 Switching Consultation
1.0	18 July 2022	Switching SCR Modification R0041
1.1	4 November 2022	R0036
1.2	23 February 2024	R0103
1.3	28 June 2024	R0070

 Copyright 2024 Retail Energy Code Company

RETAIL ENERGY CODE

1 Introduction

1.1. Organisations wishing to exchange Market Messages with the Central Switching Service (CSS) must first become a CSS User in accordance with the process in the Qualification and Maintenance Schedule and this REC Schedule.

1.2. Becoming a CSS User is optional for Metering Equipment Managers, Data Aggregators, Data Collectors, Meter Asset Providers and Shippers, as they only receive Market Messages from the CSS Provider.

1.3. Once an organisation has become a CSS User, all rights and obligations set out in this REC Schedule shall apply until such time as the organisation ceases to be a CSS User in accordance with Paragraph 8.

1.4. CSS Users are categorised as follows:

(a) Energy Suppliers;

(b) Electricity Retail Data Agents;

(c) the Gas Retail Data Agent;

(d) Metering Equipment Managers;

(e) Data Aggregators;

(f) Data Collectors;

(g) Meter Asset Providers;

(h) Shippers;

(i) CSS Interface Providers;

(j) the Electricity Enquiry Service Provider;

(k) the Gas Enquiry Service Provider;

(l) the Code Manager;

(m) the Smart Meter Data Service Provider; and

(n) the Enduring Change of Supplier Service Provider.

 Copyright 2024 Retail Energy Code Company

1.5. A Market Participant and / or Switching Data Service Provider may appoint a CSS Interface Provider to exchange Market Messages on behalf of the Market Participant/Switching Data Service Provider. Where this is the case, dual-responsibility for compliance shall apply as follows:

(a) the Market Participant / Switching Data Service Provider shall remain responsible for compliance with all of its obligations as such under this Code (and shall remain liable for the acts and omissions of its appointed CSS Interface Provider); and

(b) in addition, the CSS Interface Provider shall be directly liable and accountable for complying with its obligations as a CSS User.

1.6. This REC Schedule describes the process that organisations shall follow when applying to become a CSS User.

2 Becoming a CSS User

2.1. An application to become a CSS User will be initiated in accordance with the Qualification and Maintenance Schedule and shall include:

(a) for an organisation that is not eligible to become a Party to this Code, entry into an Access Agreement;

(b) undergoing an Information Security and Data Protection Assessment;

(c) becoming a Switching Portal User in accordance with the Switching Service Management Schedule ;

(d) establishing the required public and private keys to enable secure messaging in accordance with Paragraph 3;

(e) establishing the required webhooks to enable the CSS to route messages to the correct recipient in accordance with Paragraph 5; and

(f) completing CSS Testing to demonstrate that messages can be exchanged with the CSS Provider in accordance with Paragraph 6.

2.2. The Code Manager shall only approve an application from an organisation applying to become a CSS User if, at the date of its completed application:

(a) in the case of admission as an Energy Supplier or Metering Equipment Manager, that the applicant has been Qualified in accordance with the Qualification and Maintenance Schedule;

 Copyright 2024 Retail Energy Code Company

(b) in the case of admission as an Electricity Retail Data Agent, that the relevant Distribution Network Operator that is responsible for the provision of the Electricity Retail Data Service has been Qualified in accordance with the Qualification and Maintenance Schedule; and

(c) in the case of admission as a Data Aggregator, Data Collector, Meter Asset Provider or Shipper, that the applicant has an associated Energy Company and Market Participant Role recorded within CSS based on the gas and/or electricity Market Participant Data provided by the GRDA or the BSCCo.

2.3. For clarity, a single entity is assigned to each of the following roles (and therefore this REC Schedule does not deal with new applications to those roles): Gas Retail Data Agent, Electricity Enquiry Service Provider, Gas Enquiry Service Provider, Code Manager and Smart Meter Data Service Provider. These entities will have obtained certificates and completed testing prior to the CSS Go-Live Date under the Transition Schedule.

2.4. The Enduring Change of Supplier Service Provider will not obtain certificates or complete testing prior to the CSS Go-Live Date. Prior to receiving data from the CSS Provider in accordance with the Registration Services Schedule and RMP Lifecycle Schedule, the Enduring Change of Supplier Service Provider shall provide written confirmation to the Code Manager that all appropriate testing required under the SEC has been completed and systems and processes are in place to securely manage data provided by the CSS Provider.

3 Process for Establishing Public and Private Keys

3.1. Each applicant wishing to become a CSS User, shall obtain from the CSS Certificate Authority, the following digital certificates, to be used for the exchange of Market Messages via the CSS:

(a) Transport Layer Security (TLS) Certificates to secure either end of the network connection, ensuring the transfer of Market Messages across the communication channel is via a secure encrypted channel. A TLS Certificate shall not be required by a Market Participant if they are using a CSS Interface Provider to communicate with the CSS on their behalf as set out in Paragraph 3.3; and

(b) For CSS Users, excluding CSS Interface Providers, Message Signing Certificates for each Market Participant Identifier, to authenticate individual Market Messages sent across the communication channel through the application of a digital signature.

3.2. These certificates will be digitally signed by the CSS Certificate Authority to bind certificate owners with their public keys.

 Copyright 2024 Retail Energy Code Company

3.3. A single TLS Certificate can be used by a CSS Interface Provider to send and receive Market Messages on behalf of multiple Market Participants/Switching Data Service Providers on whose behalf the CSS Interface Provider acts. A CSS User which relies on a CSS Interface Provider will not obtain a separate TLS Certificate, but will have its own Message Signing Certificate (which could be obtained by an employee of the CSS Interface Provider acting as the Technical Contact).

3.4. It is the responsibility of each CSS User (or an organisation applying to become a CSS User) in possession of TLS Certificates and / or Message Signing Certificates to ensure they comply with the obligations in Paragraph 8.1.

3.5. The process detailed in this Paragraph 3 can only be initiated following confirmation by the Code Manager to the CSS Certificate Authority that the applicant has become a Party or signed an Access Agreement and successfully completed the Information Security and Data Protection Assessment in accordance with the Qualification and Maintenance Schedule. An applicant must successfully complete testing before it can apply for production certificates.

3.6. Each CSS User (or applicant to become a CSS User) shall provide to the CSS Certificate Authority details of a Nominating Officer who can appoint individuals responsible for managing security certificates on behalf of their organisation. The Nominating Officer shall appoint a single Senior Responsible Officer with responsibility for all activities relating to CSS security certificates on behalf of the CSS User. The Senior Responsible Officer may at any time nominate individuals to become Appointed Responsible Officers or Technical Contacts. The Nominating Officer may at any time appoint a new Senior Responsible Officer by raising a Switching Service Request.

3.7. The roles of Senior Responsible Officer, Appointed Responsible Officer and Technical Contact are further described in Appendix 1. Appendix 1 also describes the process by which the CSS Certificate Authority shall validate nominations for the roles of Senior Responsible Officer, Appointed Responsible Officer and Technical Contact. The Switching Operator may also appoint Technical Contacts for a CSS User, as described in Paragraph 3.9.

3.8. Each applicant to become a CSS User shall request TLS Certificates and Message Signing Certificates in accordance with the process set out below, which covers the provision of test security certificates for testing and additionally the provision of production security certificates for enduring use:

 Copyright 2024 Retail Energy Code Company

Ref	When	Action	From	To	Interface	Means
3.8.1	Following confirmation from the Code Manager that CSS User onboarding can commence and prior to initiation of external CSS Testing.	Submit details of Nominating Officer (NO) and signed validation form.	Lead Contact (details provided by Code Manager)	CSS Certificate Authority	Officer Nomination Switching Service Request	Switching Portal
3.8.2	Following receipt of the Nominating Officer details in 3.8.1.	Validate the Nominating Officer request and schedule call with Nominating Officer to validate and verify identification and proof of address documents.	CSS Certificate Authority	Nominating Officer	Not defined	Not defined
3.8.3	Following 3.8.2 where the Nominating Officer is rejected.	Contact the applicant to discuss the reason for the rejection.	CSS Certificate Authority	Lead Contact	Not defined	Switching Portal
3.8.4	Following 3.8.2 where the Nominating Officer is accepted.	Add Nominating Officer to the relevant account and update the applicant.	CSS Certificate Authority	Lead Contact	Not defined	Switching Portal
3.8.5	At any time following 3.8.4	Submit details of Senior Responsible Officer (SRO) and signed employment validation form.	Nominating Officer	CSS Certificate Authority	Officer Nomination Switching Service Request	Switching Portal
3.8.6	Following receipt of the Senior Responsible Officer details in 3.8.5.	Validate the Senior Responsible Officer request.	CSS Certificate Authority		Internal process	N/A
3.8.7	Following 3.8.6 where the Senior Responsible Officer is rejected.	Contact the applicant to discuss the reason for the rejection.	CSS Certificate Authority	Nominating Officer	Not defined	Switching Portal
3.8.8	Following 3.8.6 where the	Add Senior Responsible Officer to	CSS Certificate	Nominating	Not defined	Switching

 Copyright 2024 Retail Energy Code Company

	Senior Responsible Officer is accepted.	the relevant account and update the applicant.	Authority	Officer		Portal
3.8.9	Following 3.8.8 where a separate Appointed Responsible Officer (ARO) and / or Technical Contact (TC) is required.	Submit details of Appointed Responsible Officer and / or Technical Contact and signed employment validation form where required.	Senior Responsible Officer	CSS Certificate Authority	Officer Nomination Switching Service Request	Switching Portal
3.8.10	Following receipt of the Appointed Responsible Officer and / or Technical Contact details in 3.8.9.	Validate the Appointed Responsible Officer / Technical Contact request.	CSS Certificate Authority		Internal process	N/A
3.8.11	Following 3.8.10 where the Appointed Responsible Officer and / or Technical Contact is rejected.	Contact the applicant to discuss the reason for the rejection.	CSS Certificate Authority	Senior Responsible Officer	Not defined	Switching Portal
3.8.12	Following 3.8.10 where the Appointed Responsible Officer and / or Technical Contact is accepted.	Add Appointed Responsible Officer / Technical Contact to the relevant account and update the applicant.	CSS Certificate Authority	Senior Responsible Officer	Not defined	Switching Portal
3.8.13	At any time following 3.8.12.	Submit the Certificate Signing Request for test certificates.	Applicant (SRO, ARO or TC)	CSS Certificate Authority	Certificate Signing Request	Switching Portal
3.8.14	Following receipt of the Certificate Signing Request in 3.8.13.	Validate the request confirming that the request relates to an organisation that has been approved for CSS User onboarding by the Code Manager.	CSS Certificate Authority		Internal process	N/A

 Copyright 2024 Retail Energy Code Company

3.8.15	Following 3.8.14 where the Certificate Signing Request is rejected.	Contact the applicant to discuss the reason for the rejection.	CSS Certificate Authority	Applicant (SRO, ARO or TC)	Not defined	Switching Portal
3.8.16	Following receipt of a valid Certificate Signing Request.	Sign certificate and issue signed certificate.	CSS Certificate Authority	Applicant (SRO, ARO or TC)	Signed Certificate	Switching Portal
3.8.17	Following receipt of the signed certificate in 3.8.16	Install security certificates and store details securely.	Applicant (SRO, ARO or TC)		Internal process	N/A
3.8.18	Following successful completion of external CSS Testing or at any future point where new production certificates are required.	Submit the Certificate Signing Request for production certificates.	Applicant (SRO, ARO or TC)	CSS Certificate Authority	Certificate Signing Request	Switching Portal
3.8.19	Following receipt of the Certificate Signing Request in 3.8.18.	Validate the request confirming that the request relates to an organisation that has successfully completed testing in accordance with Paragraph 7 and progress with 3.8.15 to 3.8.17.	CSS Certificate Authority		Internal process	N/A

 Copyright 2024 Retail Energy Code Company

3.9. The Switching Operator may appoint one or more Technical Contact(s) for any CSS User, for the sole purpose of requesting test security certificates for connecting to the CSS test environments which emulate that CSS User during testing. The Switching Operator is responsible for maintaining the Technical Contacts registered for this purpose and for ensuring that the appropriate controls are in place to prevent any other actions being taken by the Switching Operator-appointed Technical Contacts. The Switching Operator shall be liable for the acts and omissions of each Technical Contact appointed for a CSS User by the Switching Operator, and shall ensure that such Technical Contacts only request test security certificates.

3.10. As set out in Appendix 2, each CSS User's Senior Responsible Officer has the right to remove a Technical Contact appointed for that CSS User. This shall include the right to remove one or more of the Technical Contacts appointed for that CSS User by the Switching Operator, but without prejudice to the ability of the Switching Operator to thereafter appoint another Technical Contact for testing purposes.

4 Revocation of CSS Certificates

4.1. A certificate which has been issued by the CSS Certificate Authority shall be treated as valid for its stated purpose until such time as it is revoked in accordance with this Paragraph 4 or expires in accordance with Paragraph 5.

4.2. The CSS Certificate Authority shall revoke a CSS User's certificate:

(a) where requested by the Senior Responsible Officer or Appointed Responsible Officer;

(b) where any information in the certificate is known or suspected to be inaccurate;

(c) on suspected or known compromise of the private keys associated with the certificate;

(d) on suspected or known compromise of the media holding the private keys associated with the certificate;

(e) on instruction from the REC PAB (via the Code Manager), where the CSS User fails to comply with its obligations under this Code and / or its Access Agreement; or

(f) on instruction from the Code Manager, where the CSS User ceases to be a CSS User.

4.3. In addition, the CSS Certificate Authority may revoke a certificate in its sole

 Copyright 2024 Retail Energy Code Company

discretion, to mitigate risk to the Switching Arrangements. Where this occurs, a report will be provided to the Code Manager within five Working Days.

4.4. Where certificates are revoked, the CSS Certificate Authority shall inform the relevant Nominating Officer, Senior Responsible Officer and Appointed Responsible Officer; and include the relevant details on the Certificate Revocation List.

4.5. Where a CSS User who uses a CSS Interface Provider has their certificate revoked, the CSS Certificate Authority shall ensure that only the Message Signing Certificate for the CSS User is revoked.

5 Expiry of CSS Certificates

5.1. The expiration period for each certificate is as follows:

(a) TLS Certificates will expire after 12 months; and

(b) Message Signing Certificates will expire after 24 months.

5.2. CSS Users may request new certificates in advance of the expiry date to replace existing certificates.

5.3. An expiry warning will be issued to the Senior Responsible Officer, Appointed Responsible Officer and Technical Contact 90, 60, 30 and 1 day in advance of the certificate expiration date.

6 Process for Establishing Webhooks

6.1. The messaging functionality within the CSS is based on real-time events triggered by action within the CSS, and these events are then pushed out to the relevant CSS Users who are subscribed to those events.

6.2. Prior to becoming a CSS User, an applicant shall subscribe to the events relevant to its role. This process may be completed by a CSS Interface Provider acting on behalf of the organisation. Some event types are mandatory for certain roles where a Market Participant is required to send a Market Message in accordance with a REC Schedule; therefore, an applicant must subscribe to all of these and failure to do so will result in an error response. A request will be validated by the CSS Provider, making sure that it is eligible to be given access to the relevant event. Then a subscription key will be issued to the applicant and also stored within CSS.

6.3. In order to establish webhooks and subscribe to the relevant events for testing and separately for production, applicants shall follow the process in the interface table below:

 Copyright 2024 Retail Energy Code Company

Ref	When	Action	From	To	Interface	Means
6.3.1	As required, following establishment of public and private keys.	Request details of the available event types and whether those event types have already been subscribed to.	Applicant	CSS Provider	Retrieve Webhook Services	CSS API
6.3.2	Following 6.3.1 where the message passes synchronous validation.	Provide details of the available event types.	CSS Provider	Applicant	Available Webhook Services	CSS API
6.3.3	Following receipt of the event details in 6.3.2.	Subscribe to the required event types.	Applicant	CSS Provider	Webhook Subscription	CSS API
6.3.4	Following 6.3.3 where the message passes synchronous validation.	Store details within the CSS.	CSS Provider		Internal Process	
6.3.5	At any time, following 6.3.4 if a change to subscriptions is required.	Update subscription to required event types.	Applicant	CSS Provider	Webhook Subscription	CSS API
6.3.6	Following 6.3.5 where the message passes synchronous validation	Store details within the CSS.	CSS Provider		Internal Process	

 Copyright 2024 Retail Energy Code Company

7 Process for CSS Testing

7.1. The high-level arrangements for external CSS Testing are set out in the Qualification and Maintenance Schedule. The Switching Operator shall develop and maintain a CSS testing procedure document, setting out the detailed external CSS Testing arrangements including, as a minimum, details regarding exit criteria, defect management and test data management.

7.2. External CSS Testing shall be initiated following confirmation from the Code Manager that external CSS Testing can commence, with details of any specific test scenarios to be applied, and provision of the required security certificates in accordance with the process in Paragraph 3.8.

7.3. Each applicant shall ensure the test Systems it plans to use for constructing Market Messages, sending Market Messages and receiving responses over the CSS interface can detect any unauthorised software that has been installed or executed on them and any unauthorised attempt to install or execute software on them. If unauthorised software is detected or any attempt to install or execute unauthorised software, the installation or execution of that software shall be prevented; and where any such unauthorised software has been installed or executed, the applicants shall take remedial action.

7.4. Where a Market Participant or Switching Data Service Provider intends to use a CSS Interface Provider, the CSS Interface Provider may undertake testing on behalf of the applicant, or the applicant can place reliance on the testing executed by the CSS Interface Provider. The extent to which this is permissible will be determined by the Code Manager based on the overall business solution and the previously tested scenarios.

7.5. Before commencing external CSS Testing the applicant shall:

(a) produce relevant test artefacts and ensure these have been approved by the Switching Operator (which includes notification of intention to undertake testing, test readiness report, and a test plan incorporating the test schedule);

(b) provide confirmation to the Switching Operator that an appropriate level of resource is available to support the CSS Testing process;

(c) successfully complete connectivity testing to validate that the environment and test data are in place and that the applicant has implemented sufficient technology to support synchronous messaging;

(d) ensure test data is in place and been verified; and

 Copyright 2024 Retail Energy Code Company

(e) all required test tooling is in place and is available for the applicant as needed.

7.6. Where the Switching Operator is not satisfied that the applicant has met the criteria set out in Paragraph 6.4 it may:

(a) prevent the applicant from undertaking external CSS Testing until such time as Switching Operator is satisfied that the applicant meets the criteria;

(b) provide provisional approval of the test readiness report (and approval to proceed) with an understanding that the outstanding documentation shall be provided before the start of testing, otherwise testing will not commence; or

(c) refer the matter to the Code Manager. Where the Code Manager determines that the applicant has met the criteria, the Switching Operator shall schedule the start of testing as soon as reasonably practicable.

7.7. The Switching Operator shall make the test environments available and provide a test support service from 09:00 to 17:00 on each Working Day. The test environment may be used for testing outside these hours but will be unsupported.

7.8. Following completion of external CSS Testing, the applicant shall provide a test completion report to the Switching Operator. The Switching Operator shall review test evidence and determine whether to approve the test completion report.

7.9. Within 10 Working Days of receipt of the test completion report, the Switching Operator shall provide test evidence to the Code Manager identifying whether the applicant has successfully completed testing. Where the Switching Operator considers that the applicant has not successfully completed testing, the applicant may appeal the decision to the Code Manager.

7.10. Following successful completion of external CSS Testing, the Code Manager shall inform the CSS Certificate Authority that the applicant is authorised to install production security certificates in accordance with Paragraph 3.8.

8 Undertakings by CSS Users

8.1. Each CSS User shall:

(a) comply with the CSS Certificate Policy published on the Switching Portal by the CSS Certificate Authority[1];

[1] The CSS Certificate Authority is obliged by this Code to ensure that the CSS Certificate Policy remains consistent with this Code. In the event of any inconsistency with this Code, the requirements of this Code shall prevail.

 Copyright 2024 Retail Energy Code Company

(b) ensure all information submitted in support of a certificate application is true, accurate and that they hold such rights as necessary to any trademarks or other such information submitted during the application for a certificate;

(c) ensure that each Senior Responsible Officer, Appointed Responsible Officer and Technical Contact it appoints complies with the obligations expressed to be placed on him or her, and shall be liable for any failure by such Senior Responsible Officer, Appointed Responsible Officer and Technical Contact to so comply (provided that a CSS User is not responsible for Technical Contacts appointed by the Switching Operator for testing purposes);

(d) review the issued certificate to confirm the accuracy of the information contained within it before installation and first use;

(e) ensure the System used for generating or obtaining a key pair is sufficiently secure to prevent any loss, disclosure, or unauthorised use of the private key;

(f) keep confidential, any passwords, passphrases, PINs, private keys or other personal secrets used in obtaining authenticated access to certificates and CSS Certificate Authority facilities until it is securely destroyed or deleted. This does not prevent the CSS User sharing details with third party service providers, including CSS Interface Providers;

(g) make only true and accurate representations to the CSS Certificate Authority as to the information required to determine eligibility for a certificate and for information contained within the certificate; and

(h) exclusively use the certificate for legal purposes and restricted to those authorised purposes detailed within this REC Schedule.

8.2. Each CSS User shall:

(a) retain all audit logs of basic user activities (e.g. logon, logoff, failed attempts) and security events for all information systems and services that interact with the CSS, within legal constraints, for a minimum of 15 months with live data available for three months and archived data available for a further 12 months.

(b) have a logical network schematic of the information systems and services in scope that interact with the CSS, and include:

(i) services and functionality; and

(ii) gateway / boundaries functionality;

(c) ensure that the edge routers and switches in the data centres are physically

 Copyright 2024 Retail Energy Code Company

secured with direct access only being granted to staff who have a demonstrable and approved need for access; and

(d) use its own time source for time synchronisation with its organisation and that time does not need to be synchronised across organisational boundaries.

8.3. CSS Users must report to the CSS Certificate Authority (via the Switching Portal) any compromise or suspected compromise of the private keys associated with any of their certificates as soon as they become aware of such breach or suspected breach, providing the 'Certificate Distinguished Name' and the 'Certificate Serial Number' to enable certificates to be revoked.

8.4. Where a CSS User is relying on a certificate to authenticate another organisation named in the certificate, it shall ensure the Certificate Revocation List is checked to confirm that the relevant certificate has not been revoked.

8.5. CSS Users shall maintain their CSS subscriptions in relation to mandatory event types at all times. Where a CSS User attempts to delete a subscription in relation to a mandatory event type, the CSS will reject the request.

8.6. Each CSS User shall ensure that it carries out assessments that are designed to identify any vulnerability of its Systems prior to accessing any testing services using such Systems and on at least an annual basis.

8.7. Where a CSS User detects a material vulnerability that impacts the Systems that are part of the Switching process, the CSS User shall take reasonable steps to ensure that the cause of the vulnerability is rectified, or the potential impact of the vulnerability is mitigated, as soon as is reasonably practicable. The CSS User shall also promptly notify the Code Manager and the Switching Operator, of the steps being taken to rectify its cause or mitigate its potential impact on CSS Systems and the timescales for rectification.

8.8. CSS Users shall comply with ongoing assurance requirements in accordance with the Qualification and Maintenance Schedule.

8.9. A CSS User's breach of this Paragraph 7 shall constitute an Event of Default for the purposes of Clause 16 of the main body of this Code.

9 Ceasing to be a CSS User

9.1. An organisation shall cease to be a CSS User where its Access Agreement is terminated (or ends in so far as applicable to the CSS arrangements); or it ceases to be a Party in accordance with the Market Exit and Supplier of Last Resort Schedule.

 Copyright 2024 Retail Energy Code Company

9.2. Where an organisation ceases to be a CSS User, the Code Manager shall notify the CSS Certificate Authority who will revoke the relevant security certificates.

9.3. Where a CSS User who uses a CSS Interface Provider ceases to be a CSS User, the CSS Certificate Authority shall ensure that only the Message Signing Certificate for the CSS User is revoked.

9.4. Following removal of a Market Participant Role within the Market Participant Data provided by the Code Manager to the CSS Provider in accordance with the Switching Data Management Schedule, the CSS Provider will remove associated webhooks.

10 Switching Operator and CSS Provider responsibilities for Test Environments and Test Data

10.1. For any Test Environments the CSS Provider provides, the Switching Operator shall maintain detailed Test Data Management Plan and Environment Management Plan documents, which describe how each Test Environment interacts with CSS Users and the Switching Data Service Providers, what data will be used in each environment and how and when this data is to be refreshed. Responsibilities on all parties should be clearly identified, and must be in accordance with the obligations in the REC.

10.2. The CSS Provider shall provide relevant test streams to manage the appropriate testing and release of operational changes, defects, hot fixes and security patching as well as functional changes. The CSS environments within the test streams should be managed to ensure they are appropriately populated with required data and parties can access them when required.

10.3. Where possible the CSS Provider will employ simulators to emulate other CSS Users and Switching Data Service Providers to minimise the connectivity and test requirements on other parties when appropriate.

10.4. In order to facilitate incident free release implementation, the CSS Provider will maintain appropriate environments for its provided CSS systems in alignment with production environments and data in alignment with the Test Data Management Plan. The implementation path for all changes should be appropriate to best safeguard the integrity of the production environment.

 Copyright 2024 Retail Energy Code Company

RETAIL ENERGY CODE

Appendix 1 Senior Responsible Officer / Appointed Responsible Officer / Technical Contact Validation Procedures

1 Senior Responsible Officer

1.1 The Senior Responsible Officer is an executive or senior individual within the CSS User (or applicant) organisation who has the authority to make decisions for or on behalf of the organisation.

1.2 The Senior Responsible Officer is ultimately responsible, on behalf of the organisation, for all activities associated with the management of CSS security certificates (except for those requested by Technical Contacts nominated by the Switching Operator for testing purposes), including:

(a) appointment of an Appointed Responsible Officer;

(b) appointment of a Technical Contact (except for those appointed by the Switching Operator for testing purposes);

(c) ensuring the appointment of an Appointed Responsible Officer is validated in accordance with paragraph 4 of this Appendix 1;

(d) ensuring the Appointed Responsible Officer and Technical Contact agree to the terms of usage as defined in Paragraph 3.4 of this REC Schedule;

(e) if an employee of a CSS Interface Provider is appointed as the Technical Contact for the Market Participant, ensuring that the CSS User has appropriate security controls in place with the CSS Interface Provider for the management of security credentials;

(f) ensuring they are aware of certificate activities such as Certificate Signing Requests where the Senior Responsible Officer is not directly engaged in the process;

(g) issuing requests for revocation certificates to the CSS Certificate Authority; and

(h) establishing effective communication between the Senior Responsible Officer, Appointed Responsible Officer and Technical Contact to ensure their awareness of certificate activities and that duplicate requests for certificates are not being submitted to the Switching Operator.

1.3 It is a mandatory requirement that each CSS User (or applicant) seeking to obtain certificates appoints a Senior Responsible Officer.

 Copyright 2024 Retail Energy Code Company

2 Appointed Responsible Officer

2.1 The Senior Responsible Officer may at any time nominate an individual to become an Appointed Responsible Officer. It is not mandatory to appoint an Appointed Responsible Officer.

2.2 The Appointed Responsible Officer will have the key responsibilities of requesting certificates on behalf of the organisation. Broader responsibilities, as defined above for the Senior Responsible Officer, are at the discretion of the organisation.

2.3 The level of seniority of each CSS User's Appointed Responsible Officer is at the discretion of the CSS User or organisation applying to become a CSS User.

2.4 The term or duration of time the Appointed Responsible Officer will serve in this capacity is at the discretion of the Senior Responsible Officer.

2.5 The Appointed Responsible Officer should ensure the Senior Responsible Officer is aware of all activities relating to certificates. The method by which this is achieved is the responsibility of the organisation, not the CSS Certificate Authority.

2.6 An Appointed Responsible Officer, if appointed, must be validated in accordance with employment validation procedures detailed in Paragraph 4 of this Appendix 1.

3 Technical Contact

3.1 The Technical Contact is an individual who has the technical knowledge and capability to create Certificate Signing Requests and address all technical matters associated with the certificates on behalf of the organisation.

3.2 Where a named Technical Contact is not provided (or, if the only Technical Contact is one appointed by the Switching Operator for testing purposes), then the Senior Responsible Officer will perform the Technical Contact role.

3.3 A CSS User's Technical Contact does not need to be an employee of the CSS User.

3.4 It is not a requirement for the appointment of the Technical Contact that his / her employment by the appointing organisation is validated. This is because a Technical Contact may be an employee of a different organisation such as a service provider. In this case it is expected that there will be a commercial agreement between the employer of the Technical Contact and the CSS User. It is the responsibility of the CSS User (via its Senior Responsible Officer) to ensure that there is effective communication between the Senior Responsible Officer, Appointed Responsible Officer and Technical Contact.

 Copyright 2024 Retail Energy Code Company

3.5 For clarity, Technical Contacts appointed for a CSS User by the Switching Operator for testing purposes do not represent the CSS User and will not address technical matters on behalf of the CSS User.

4 Employee Validation

4.1 The requesting organisation must validate the Senior Responsible Officer and Appointed Responsible Officer (if one is appointed) and the Technical Contact (if he / she is an employee of their organisation).

4.2 The following list of roles (in order of priority) will be accepted by the CSS Certificate Authority to confirm employment:

(a) any officer that is identified in Companies House as an officer of the requesting organisation;

(b) the executive of human resources of the requesting organisation; or

(c) the Chief Executive Officer, Chief Operating Officer or Chief Technical Officer of the requesting organisation.

4.3 The appropriate officer shall send the forms and confirmations required by the CSS Certificate Authority in accordance with the process defined in Paragraph 3.8 of this REC Schedule.

4.4 Once a CSS User has received a letter of confirmation from the CSS Certificate Authority, the CSS User can create its Certificate Signing Requests.

Appendix 2 Roles Privilege Table

Privilege	Lead/ Backup Contact	Nom. Officer	SRO	ARO	Tech Contact*
Submit a request to appoint the Nominating Officer (with letter signed by Nom. Officer)	x				
Submit a request to appoint/ replace the SRO (with letter signed by Nom. Officer)	x				
Submit a request to appoint/ remove the ARO			x		
Submit a request to appoint/ remove a Technical Contact			x		
Submit a CSR (Certificate Signing Request)			x	x	x
Access certificate from the Switching Portal			x	x	x
Access public certificates from the Switching Portal			x	x	x

 Copyright 2024 Retail Energy Code Company

Submit a request with a CRR (Certificate Revocation Request)			x	x	
Get notified when certificates nearing expiry (90, 60, 30, 1 days)			x	x	x
Get notified whenever a change of SRO		x			
Get notified whenever a change of ARO			x		
Get notified whenever a change of Technical Contact			x	x	
Get notified on lifecycle status change of CSR Service Request			x	x	x
Get notified on lifecycle status change of CRR Service Request		x	x	x	
Get notified when certificate available for download			x	x	x
Able to download certificate			x	x	x

* This includes Technical Contacts appointed for a CSS User by the Switching Operator for testing purposes, but only in respect of testing certificates.

 Copyright 2024 Retail Energy Code Company