

# Smart Metering Implementation Programme

## A Guide to the SMKI and Repository Entry Process Tests (SREPT)

<b>Version: 1.01</b>
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## Revision History

Revision Number	Revision Date	Summary of Changes	Name	Changes Marked
0.1	17/07/2015	First draft following submission of the SRTS document to the Secretary of State	Paul Evans	No
0.2	22/07/2015	Updates following internal DCC review	Paul Evans	Yes
0.3	06/08/2015	Updated following review and discussion	Phillip Twiddy	Yes
1.0	14/08/2015	Updated following further comment and review	Paul Evans	Yes
1,01	18/08/2015	Minor updates to improve comprehension	Paul Evans	Yes

## Related Documents

	Document	Version / Status	Author	Date
1	Smart Energy Code <sup>1</sup>	4.3 & Draft legal text	DECC	01/07/2015 & July 2015
2	SRT Approach Document	3.0	DCC	29/05/2015
3	SMKI Registration Authority Policies and Procedures (SMKI RAPP) Document	Submitted to Secretary of State	DCC	08/07/2015
4	SMKI Code of Connection	Submitted to Secretary of State	DCC	29/07/2015
5	SMKI Repository Code of Connection	Submitted to Secretary of State	DCC	29/07/2015
6	SMKI Repository Interface Design Specification	Submitted to Secretary of State	DCC	29/07/2015
7	SMKI Interface Design Specification	Submitted to Secretary of State	DCC	29/07/2015
8	SMKI and SMKI Repository Test Scenarios Document (SRTSD)	1.8.1 Submitted to Secretary of State	DCC	15/07/2015
9	Enduring Test Approach Document (Part 1)	0.12 Consultation draft	DCC	12/06/2015

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<sup>1</sup> SEC Version 4.3 designated on 1st July 2015 and the draft legal text from July 2015 forms the basis of this guidance document.

## Contents

Related Documents.....	3
1 Introduction.....	5
2 Background to SMKI and Repository Entry Process Tests (SREPT) .....	6
3 Access to the SMKI and SMKI Repository Interfaces.....	7
4 Preparing for SREPT - Sequence of Events.....	8
5 Applying to the DCC to undertake SREPT .....	9
6 Determining Which Test Scenarios to Undertake.....	10
7 Preparing to access SMKI and Repository Test Services.....	11
8 Test Plans and other Artefacts for SREPT .....	13
9 Test Data.....	14
10 Evidence of Test Completion .....	15
11 Appendix A: FORMS .....	16
12 Appendix B: SREPT Initiation.....	17
13 Appendix C: Test Stage Supporting Document List .....	19
14 Appendix D: IKI and Access to the SMKI Interfaces .....	21
15 Appendix E: SREPT Test Scenarios Applicability Matrix .....	22
16 Appendix F: DEFINITIONS .....	26

## 1 Introduction

In accordance with Section 7.1 of the Code, this document sets out the information that a Party is required to provide in support of its application to complete the SMKI and Repository Entry Process Tests (SREPT).

Secondly, this document provides further explanation of the testing approach set out in the SMKI and Repository Entry Process Test Approach and SMKI and Repository Entry Process Test Scenarios documents.

Successful completion of the SREPT is a requirement before a Party or RDP is entitled to:

- (a) apply to become an Authorised Subscriber for the purposes of any Certificate Policy<sup>2</sup>; or
- (b) access the SMKI Repository.

In the event of any inconsistency between this guide and the requirements set out in the documents listed as Related Documents, the requirements of the Related Documents take precedence.

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<sup>2</sup> That is to say, be issued with IKI Certificates, SMKI Device Certificates or SMKI Organisation Certificates for use in 'live'.

## 2 Background to SMKI and Repository Entry Process Tests (SREPT)

As set out in Section L7.1 of the Code, a Party shall not be entitled to:

- (a) apply to become an Authorised Subscriber for the purposes of any Certificate Policy;  
or
- (b) access the SMKI Repository,

until that Party has successfully completed the SMKI and Repository Entry Process Tests for the purposes of paragraph (a) or (b) above (as applicable).

The SREPT demonstrates that the Party's or RDP's systems, personnel and processes are able to successfully use the SMKI and SMKI Repository interfaces according to the specifications set out in the SMKI Repository Interface Design Specification (doc ref: 6) and the SMKI Interface Design Specification (doc ref: 7).

Once this has been completed, Parties and RDPs can be issued with SMKI Certificates for use in live operations.

### 3 Access to the SMKI and SMKI Repository Interfaces

Successful completion of the Test Scenarios for a specific SMKI or SMKI Repository Interface will result in the issuance of an IKI Credential for that interface in the live SMKI Service by the DCC to the Party's or RDP's Authorised Responsible Officer(s) – (please see the SMKI Registration Authority Processes and Procedures, doc ref: 3, for further details on these roles).

Credentials are issued for access through a DCC Gateway Connection and for access through the internet (that is, for Parties that do not have a DCC Gateway Connection). A Party or RDP that has a DCC Gateway Connection is expected to use this connection to access the SMKI Services.

Further information on IKI Credentials and their relation to each of the SMKI Interfaces is set out in Appendix D of this guide.

## 4 Preparing for SREPT - Sequence of Events

The relative sequence of events for Parties or RDPs wishing to conduct SREPT is as below.

1. The DCC will announce its readiness for Parties and RDPs to commence SREPT.
2. A Party or RDP will inform the DCC of its intention to commence SREPT using the processes as described in section 5 of this guide, and set out in the SMKI and Repository Test Scenarios Document (doc ref: 8). This includes the User Role(s) (e.g. Supplier, RDP, non-Supplier Party) that the Party or RDP will operate under In live operations.
3. DCC and Party / RDP work together according to the SMKI and Repository Test Scenarios Document to complete the activities in “Appendix B: SREPT Initiation” of this guide. This includes agreeing which Test Scenarios the Party / RDP needs to complete. Guidance on which Test Scenarios are applicable is set out in section 6 of this guide, but in summary a Party or RDP is permitted to choose to undertake all or a subset of the Test Scenarios relating to the SMKI Interfaces that it is entitled to use (based on its User Role(s), please see Appendix E of this guide).

During this stage, the Party or RDP will develop those documents in the Test Stage Documents set that it is responsible for. This is set out in “Appendix C: Test Stage Supporting Document List” of this guide.

Concurrent with step 3, the Party works through the verification and nomination of officers that will access the test SMKI Services (and may access the live SMKI Services) as set out in section 7 of this guide.

Further information will be provided by the DCC in advance of or during the SREPT Initiation Meeting. Please see SMKI and Repository Test Scenarios Document (doc ref: 8) for more information on the SREPT Initiation Meeting.



## 5 Applying to the DCC to undertake SREPT

The DCC will inform Parties or RDPs through the DCC website of the DCC's planned readiness for Parties or RDPs to commence.

Following the DCC's publication of its readiness for Parties and RDPs to commence SREPT, a Party or RDP wishing to undertake SREPT is required to give notice to the DCC of their intention to do so. Parties or RDPs must use the "Party Notification of Intention to Undertake Testing" form provided at

[https://www.smartdcc.co.uk/media/316144/party\\_rdp\\_notification\\_of\\_intention\\_to\\_undertake\\_testing\\_v2.docx](https://www.smartdcc.co.uk/media/316144/party_rdp_notification_of_intention_to_undertake_testing_v2.docx)

In order to determine which Test Scenarios the Party or RDP must successfully complete, the Party or RDP shall indicate on the form whether they will test as a Party or RDP.

The form should be submitted to the DCC at [testing.notices@smartdcc.co.uk](mailto:testing.notices@smartdcc.co.uk) at least 60 working days in advance of the proposed start date for SREPT. The timing of activities ahead of the SREPT proposed commencement date is set out in Appendix B of this guide.

Note, the form should **not** be sent to the DCC Service Desk.

## 6 Determining Which Test Scenarios to Undertake

Section L3.16 of the SEC (not yet designated text from July 2015 draft legal text) sets out in which Parties and in which circumstances a Party is an Eligible Subscriber for Device Certificates. RDPs are not Eligible Subscribers for Device Certificates. Certain Non-Supplier Parties (see Section L3.16 of the SEC) are not ordinarily Eligible Subscribers for Device Certificates (but may be entitled to do so if demonstration can be made as to why they need to be issued with Device Certificates).

Those Parties that are not eligible for Device Certificates or RDPs need not undertake the Test Scenarios applicable to Device SMKI interfaces.

All Parties and RDPs are Eligible Subscribers for Organisation Certificates<sup>3</sup> and to be able to access the SMKI Repository. All Parties and RDPs are expected to undertake the Test Scenarios applicable to Organisation Certificates and the SMKI Repository for the method of connection (DCC Gateway Connection or internet) that they will use to access SMKI Services.

A Party or RDP need only complete each Test Scenario once, irrespective of the number of User Roles.

Please note that a Party or RDP without a DCC Gateway Connection at the time of testing cannot undertake the Test Scenarios applicable to SMKI Services access through a DCC Gateway Connection.

A Party or RDP is only required to conduct the Test Scenarios relevant to the interfaces they wish to access. However, access to an interface which a Party or RDP is entitled to use will only be granted on successful completion of all Test Scenarios applicable to that interface.

The final column of the SREPT Test Scenarios Matrix (set out in Appendix E of this guide) is intended to help Parties and RDPs identify which scenarios should be tested, by referencing to the information submitted by a Party or RDP when completing the forms in the SMKI RAPP (doc ref: 3).

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<sup>3</sup> And therefore eligible to access the SMKI Interfaces relevant to Organisation Certificates. Section L3.18 of the SEC sets out Organisation Certificates with which Remote Party Role an Eligible Subscriber may be issued with.

## 7 Preparing to access SMKI and Repository Test Services

In order to access the live SMKI Services, the Registration Authority Policies and Procedures (RAPP) document sets out a number of steps that the DCC and the Party / RDP are required to take before access can be granted.

Access to the SMKI and Repository Test Services has similar arrangements. These arrangements are set out in the Enduring Test Approach Document (ETAD, doc ref: 9). They are broadly similar to those required for access to the SMKI Services themselves, and as such refer out to the SMKI RAPP<sup>4</sup>.

In summary, following notification to the DCC of the Party's or RDP's intention to commence SMKI and Repository Entry Process Testing, the Party or RDP in readiness for SREPT will need to (in order):

- Verify the organisation identity (ETAD / SMKI RAPP step 5.1)
- Establish a Nominating Officer (ETAD / SMKI RAPP step 5.1)
- Nominate and have verified the identity of a Senior Responsible Officer (SRO) (ETAD / SMKI RAPP step 5.2)
- Nominate and have verified the identity of one or more Authorised Responsible Officer(s) (ARO) (ETAD / SMKI RAPP step 5.3)
- Receive credentials from the DCC that will authenticate access to the Test SMKI Service interfaces<sup>5</sup>. The ARO(s) will be the recipient of these credentials (ETAD / SMKI RAPP step 5.4)
- Following receipt of credentials, install as necessary on systems, including installation of the PKI Client software supplied by the DCC onto workstations as required. The instructions for doing this will be supplied by the DCC before or during the SREPT Initiation Meeting with the Party or RDP. The timetable for doing so is set out in Appendix B of this guide

Organisation identity validation completed for SREPT need not be undertaken again for live SMKI Service access. Where a Party or RDP chooses to nominate the same individuals for the roles of Nominating Officer, SRO and ARO for accessing live and testing SMKI Services, those individuals need not go through identity validation again.

Where the Party or RDP wishes to nominate additional or replacement SRP / AROs, the identity of those individuals will need to be validated as set out in the SMKI RAPP (doc ref 3)

of course if the Party or RDP wishes to nominate new SRO or AROs to access live SMKI Services, the identity verification of new personnel will be required.

New IKI credentials will be issued by the DCC to AROs and SROs nominated for live SMKI Service access once SREPT is complete. IKI Credentials used to access Test SMKI Services will not work for accessing live SMKI Services and vice versa. .

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<sup>4</sup> When reading the RAPP in the context of testing references to any office, function, role, system, process or other thing should be construed as being a reference to the corresponding equivalent of that office, function, role, system, process or thing which is established, undertaken, operated or given effect (as the case may be) for the purposes of the Testing Services

<sup>5</sup> The DCC will issue IKI Credentials to access Test SMKI Services. IKI Credentials to access live SMKI Services will be issued following successful completion of SREPT by the Party or RDP



## 8 Test Plans and other Artefacts for SREPT

The Party or RDP is responsible for developing a number of documents and artefacts ahead of and during SREPT. Appendix C of this guide sets out the artefacts to be produced – those highlighted in bold text are to be produced by the Party or RDP.

The time-frames in relation to the commencement of testing in which these documents are required is set out in Appendix B of this guide.

## 9 Test Data

A Party or RDP must develop a Test Data Plan as part of their preparation for SREPT. The Test Data plan will be agreed with the DCC at least 25 days ahead of the start of testing. The time table and sequence of events ahead of a Party or RDP commencing SREPT is detailed in Appendix B: SREPT Initiation of this guide.

The DCC will make available a number of Device Certificate Signing Requests (CSRs) for those Parties that require them for the purposes of conducting SREPT. Device CSRs are usually created by devices and testing that a Party's Devices can do so is not a requirement for SREPT. Parties that require Device CSRs should request them in their Test Data Plan.

The DCC will not provide Device CSRs in the batched file format; Parties will need to create the Batch Device CSR from individual CSRs as the ability of a Party to be able to do so is an import step of the SREPT.

The DCC will not provide Organisation CSRs. Parties or RDPs must provide Organisation CSRs; the ability of a Party or RDP to be able to do is an important step of the SREPT.

## 10 Evidence of Test Completion

As part of their Test Completion Report, Parties are required to submit evidence of successful Test Completion in order to exit. There is no set format for this evidence. Any reasonable format will be acceptable – for example, Test software package exports or screen-shots.

Please see section 6.1.5 of the SRTSD for further details of the Test Completion Report.

## 11 Appendix A: FORMS

### Party / RDP Notification of Intention to Undertake Testing Template

This form can be found at:

[https://www.smartdcc.co.uk/media/316144/party\\_rdp\\_notification\\_of\\_intention\\_to\\_undertake\\_testing\\_v2.docx](https://www.smartdcc.co.uk/media/316144/party_rdp_notification_of_intention_to_undertake_testing_v2.docx)



## 12 Appendix B: SREPT Initiation

The table below sets out the steps that must be undertaken during Initiation of the SREPT by both the DCC and the Party or RDP seeking to undertake SREPT and the timeframes within which such steps must be complete. This table is replicated from the SRTSD (doc ref: 8). Templates and forms can be accessed on the DCC website / SharePoint site.

Ref	When	Action	From	To	Information Required	Method
5.3.1.1	60 working days (WD) prior to commencement of SREPT	Notify DCC of intention to undertake SREPT	Party / RDP	DCC	Party / RDP notification of intention to undertake testing <ul style="list-style-type: none"> <li>• Party / RDP id (s)</li> <li>• Test start date</li> <li>• Identity of Test Manager and contact details</li> </ul>	By email attachment
5.3.1.2	Within 2 WD of receipt of the notification 5.3.1.1	Acknowledge request	DCC	Party / RDP	Confirmation of Party / RDP notification: <ul style="list-style-type: none"> <li>• Party / RDP id (s)</li> <li>• Test start date</li> <li>• DCC Test Manager contact</li> <li>• Date for SREPT initiation meeting</li> </ul>	By email as attachment
5.3.1.3	Within 5 WD of receipt of the notification 5.3.1.2	Conduct SREPT Initiation Meeting	DCC	Party / RDP	DCC to provide guidance information on conducting SREPT, via the guide to the SMKI and Repository Entry Process Tests.	Meeting
5.3.1.4	In each week occurring within the period from 40 WD prior to start of testing	Provide progress report, demonstrating readiness to begin tests	Party / RDP	DCC	Test Readiness Report	By email as attachments
5.3.1.5	25 WD prior to start of testing	Provide test artefacts to support conduct of SREPT	Party / RDP	DCC	As agreed with DCC to include: <ul style="list-style-type: none"> <li>• Test Plan incorporating the Test Schedule</li> <li>• Requirements Traceability Matrix</li> <li>• Test Scripts</li> <li>• Test Data Plan</li> </ul>	By email as attachments

Ref	When	Action	From	To	Information Required	Method
5.3.1.6	By 20 WD prior to start of testing	DCC complete review of test artefacts	DCC	Party / RDP	Details regarding any deficiencies in the test artefacts and a potential revised start date for testing provided – continue from 5.3.1.7  Or confirmation that test artefacts accepted – continue from 5.3.1.9	By email as attachments
5.3.1.7	By 10 WD prior to start of testing	Party / RDP to provide revised documents	Party / RDP	DCC	Revised documents	By email as attachments
5.3.1.8	By 7 WD prior to start of testing	DCC complete review of revised test artefacts	DCC	Party / RDP	Details regarding any deficiencies in the test artefacts and a revised start date for testing provided – Regress and continue from 5.3.1.7  Or confirmation that test artefacts accepted – continue from 5.3.1.9	By email as attachments
5.3.1.9	By 5 WD prior to start of testing	<ol style="list-style-type: none"> <li>Review Test Readiness Report and confirm the Entry Criteria for commencing testing in relation to Party have been met</li> <li>Confirm Start Date and Test Schedule for execution of tests by Party</li> </ol>	DCC  Quality Gate meeting	Party / RDP	Source: Test Readiness Report, Test Schedule  Output: Confirmation of Party readiness to proceed	Quality Gate Review meeting
	If there is any outstanding documentation presented at the Quality Gate Review the DCC could either: <ul style="list-style-type: none"> <li>Not provide approval of the Test Readiness Report and provide revised start date for testing (Regress in the process to 5.3.1.7); or</li> <li>Provide provisional approval of the Test Readiness Report (and approval to proceed) with an understanding that the outstanding documentation would be provided before the start of testing.</li> </ul>					

Table 1 SREPT Initiation: Procedural Steps

### 13 Appendix C: Test Stage Supporting Document List

Documents that a Party or RDP produce are high-lighted in **bold text**

For further details on the description and purpose of each document, please see section 6.1 of the SRTSD Document.

Test Stage Supporting Documentation Set								
No	Phase	Description	DCC Responsibility	Party / RDP Responsibility	When/Frequency	Entry Criteria	Exit Criteria	Sign-Off Authority
1	Initiation	Guide to the SMKI and Repository Entry Process Tests	Produce and maintain	None	Prior to commencement of SREPT	N	N	DCC
2	Initiation	Test Data Plan (Device CSRs)	Produce	Use, if required	Prior to commencement of SREPT	N	N	DCC
<b>3</b>	<b>Initiation</b>	<b>Test Plan including Test Schedule</b>	<b>Review and Approve</b>	<b>Produce and maintain</b>	<b>Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate</b>	<b>Y</b>	<b>Y</b>	<b>DCC</b>
<b>4</b>	<b>Initiation</b>	<b>Requirements Traceability Matrix</b>	<b>Review and Approve</b>	<b>Produce and maintain</b>	<b>Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate</b>	<b>Y</b>	<b>Y</b>	<b>DCC</b>
<b>5</b>	<b>Initiation</b>	<b>Test Scripts</b>	<b>Review and Approve</b>	<b>Produce and maintain</b>	<b>Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate</b>	<b>Y</b>	<b>Y</b>	<b>DCC</b>
<b>6</b>	<b>Initiation</b>	<b>Test Data Plan</b>	<b>Review</b>	<b>Produce and maintain</b>	<b>Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate</b>	<b>Y</b>	<b>N</b>	<b>DCC</b>
<b>7</b>	<b>Initiation</b>	<b>Test Readiness Review Checklist</b>	<b>Provide Template Review and Approve</b>	<b>Produce and maintain</b>	<b>Test Stage Entry Quality Gate</b>	<b>Y</b>	<b>N</b>	<b>DCC</b>

Test Stage Supporting Documentation Set								
No	Phase	Description	DCC Responsibility	Party / RDP Responsibility	When/Frequency	Entry Criteria	Exit Criteria	Sign-Off Authority
8	Initiation	Test Stage Entry Criteria (part of final Test Readiness Report)	Review and Approve	Produce	Test Stage Entry Quality Gate	Y	N	DCC
9	Execution	Test Execution Dashboard	Review	Produce and maintain	Produced and updated daily (or other schedule agreed with the DCC) during execution in preparation for Test Stage Exit Quality Gate	N	Y	DCC
10	Execution	Testing Issue Report (part of the Test execution dashboard)	Review	Produce and maintain	Produced and updated daily (or other schedule agreed with the DCC) during execution in preparation for Test Stage Exit Quality Gate	N	Y	DCC
11	Execution	Test Completion Report	Provide Template Review and Approve	Produce and file	Test Stage during execution in preparation for Test Stage Exit Quality Gate	N	Y	DCC
12	Execution	Test Stage Quality Gate Exit Criteria (part of Test Completion Report)	Review and Approve	Produce	Test Stage Exit Quality Gate	N	Y	DCC

## 14 Appendix D: IKI and Access to the SMKI Interfaces

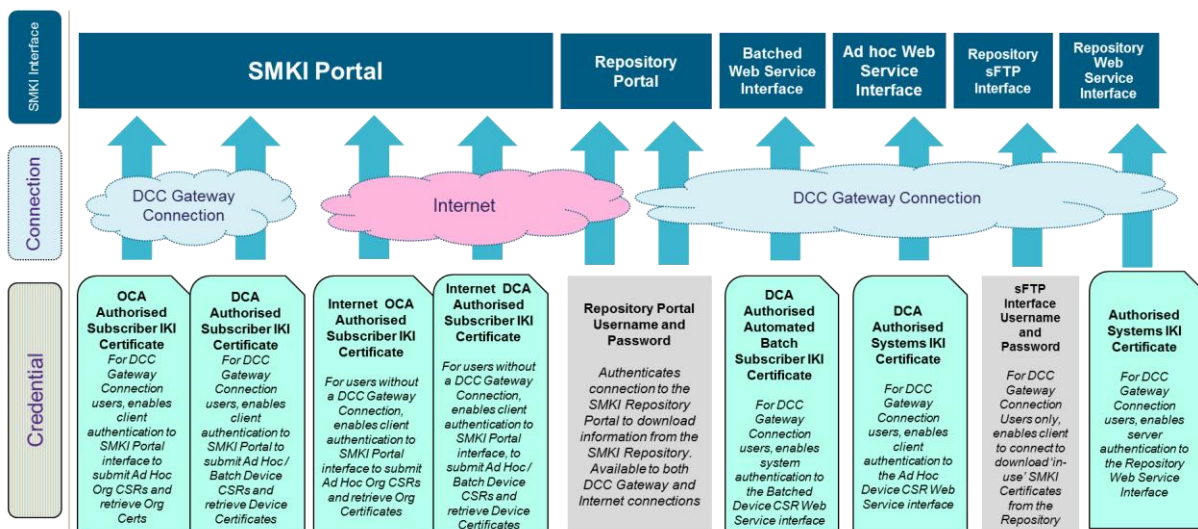
The Infrastructure Key Infrastructure (IKI) is similar in concept to the SMKI in that it is a PKI which issues Certificates (Credentials) to systems and people.

Unlike SMKI Certificates which are used to secure communications between Parties and Smart Metering Devices, IKI Certificates are used by a person to authenticate themselves to the Smart Metering Key Infrastructure (SMKI) portal, or by a system to authenticate itself to the SMKI web services interface.

The figure below shows the relationship between interface and proposed credentials. Note, that the credentials comprise IKI Certificates, and a Username and Password. Usernames and Passwords are used to access the Repository sFTP interface and SMKI Repository.

For further information about the SMKI Interfaces refer to the SMKI Code of Connection and SMKI Interfaces Design Specification documents. For information about the SMKI Repository interfaces refer to the SMKI Repository Code of Connection and SMKI Repository Interface Design Specification documents.

SMKI Interfaces and Credentials



## 15 Appendix E: SREPT Test Scenarios Applicability Matrix

These tables are modified version of the Tables in Section 5.2 of the SREPT Test Scenarios Document, but arranged to show Test Scenarios by SMKI Interfaces

Unless indicated otherwise, an IKI Credential is required to access an interface

### Test Scenarios for Parties or RDPs with a DCC Gateway Connection

SMKI SRTSD Scenario Reference	Headline Scenario Title	DCC (DCC Service Provider)	Supplier	RDP	Non-Supplier Party	SMKI RAPP Ref
<b>SMKI Portal<sup>6</sup></b>						
SMKI 02	Access the test SMKI Service, through the SMKI Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.1
SMKI 22	Submit Organisation Certificate Signing Requests and receive Organisation Certificates, through the SMKI Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.1
SMKI 23	Submit a Device Certificate Signing Request and receive a Device Certificate through the SMKI Portal interface over a DCC Gateway Connection	✓	✓		✓*	5.4.2
SMKI 24	Submit Batched Device Certificate Signing Request and receive Device Certificates through the SMKI Portal interface over a DCC Gateway Connection	✓	✓		✓*	5.4.2
<b>SMKI Repository Portal<sup>7</sup></b>						
SMKI 05	Access the test SMKI Repository through the SMKI Repository Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.5

<sup>6</sup> Credentials for these interfaces are a) IKI Certificate for SMKI Portal and b) Username and Password for the SMKI Repository Interface

<sup>7</sup> A Username and Password is required to access this interface

SMKI SRTSD Scenario Reference	Headline Scenario Title	DCC (DCC Service Provider)	Supplier	RDP	Non-Supplier Party	SMKI RAPP Ref
SMKI 31	Query the test SMKI Repository for Organisation Certificates through the SMKI Repository Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.5
SMKI 33	Query the test SMKI Repository for Device Certificates through the SMKI Repository Portal interface over a DCC Gateway Connection	✓	✓		✓	5.4.5
SMKI 48	Obtain the latest Organisation CRL and Organisation ARL through the SMKI Repository Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.5
SMKI 49	Obtain the latest Certificate Policies and other documents from the test SMKI Repository through the SMKI Repository Portal interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.5
<b>Repository Web Service Interface<sup>8</sup></b>						
SMKI 06	Access the test SMKI Repository via the SMKI Repository Web Service interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.6
SMKI 32	Query the test SMKI Repository for Organisation Certificates through the SMKI Repository Web Service interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.6
SMKI 34	Query test SMKI Repository for Device Certificates through the SMKI Repository Web Service interface over a DCC Gateway Connection	✓	✓		✓	5.4.6
SMKI 50	Obtain the latest Organisation CRL and Organisation ARL through the SMKI Repository Web Service interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.6
<b>Ad Hoc Device Web Service Interface</b>						
SMKI 03	Access the test SMKI Service, through the Ad Hoc Device CSR Web Service interface and the Batched Device CSR Web Service interface, over a DCC Gateway Connection	✓	✓		✓*	5.4.4
SMKI 25	Submit a Device Certificate Signing Request and receive Device Certificate through the Ad Hoc Device Web Service interface over a DCC Gateway Connection	✓	✓			5.4.3
<b>SSH File Transfer Protocol (SFTP) Interface<sup>7</sup></b>						

<sup>8</sup> A Server side certificate and API key are required to access this interface. The API key is managed through the SMKI Portal account for the ARO / Organisation

SMKI SRTSD Scenario Reference	Headline Scenario Title	DCC (DCC Service Provider)	Supplier	RDP	Non-Supplier Party	SMKI RAPP Ref
SMKI 07	Access the test SMKI Repository through the SSH File Transfer Protocol (SFTP) interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.7
SMKI 29	Download a copy of all 'In Use' SMKI Test Certificates from the test SMKI Repository through the SFTP (SSH File Transfer Protocol) interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.7
SMKI 30	Download a daily delta file of SMKI Test Certificates through the SFTP interface over a DCC Gateway Connection	✓	✓	✓	✓	5.4.7
<b>Batched Device CSR Web Service Interface</b>						
SMKI 57	Submit a Batched Device Certificate Signing Request and receive Certificates for Devices through the Batched Device CSR Web Service interface over a DCC Gateway Connection <sup>9</sup>	✓	✓		✓*	5.4.4

Key

- ✓ Organisation required to undertake this test if they wish to receive credentials for this service / access to this interface
- ✓\* Organisation required to undertake this test if they wish to access to this interface and can provide reasonable evidence to suggest that it is necessary for the applicant organisation to become an Authorised Subscriber for Device Certificates in order for them to carry out business processes that will, or are likely to, lead to the installation of Devices in premises

<sup>9</sup> Subject to delivery of the Change Request to deliver this functionality



Test Scenarios for Parties without a DCC Gateway Connection

SMKI SRTSD Scenario Reference	Headline Scenario Title	Applicable Organisations		
		Supplier	Non-Supplier Party	SMKI RAPP Ref
<b>SMKI Portal Interface</b>				
SMKI 04	Access the test SMKI Services for (i) Organisation Certificates and (ii) Device Certificates, through the SMKI Portal interface over the internet	✓ ✓	✓ ✓*	5.4.1, 5.4.2
SMKI 08	Submit Requests for Repository Content using the SMKI Portal interface over the internet	✓ ✓	✓ ✓*	5.4.1, 5.4.2
SMKI 26	Submit Organisation Certificate Signing Request (CSR) and receive Organisation Certificates through the SMKI Portal interface over the internet	✓	✓	5.4.1
SMKI 27	Submit a Device Certificate Signing Request (CSR) through the SMKI Portal interface over the internet	✓	✓*	5.4.2
SMKI 28	Submit a Batched Certificate Signing Request (Batched CSR) through the SMKI Portal interface over the internet	✓	✓*	5.4.2
SMKI 38	Download Certificates required to be placed on Devices ahead of installation through the SMKI Portal interface over the internet	✓ ✓	✓ ✓*	5.4.1, 5.4.2

Key

- ✓
- ✓\*

Organisation required to undertake this test if they wish to receive credentials for this service / access to this interface

Organisation required to undertake this test if they wish to access to this interface and can provide reasonable evidence reasonable evidence to suggest that it is necessary for the applicant organisation to become an Authorised Subscriber for Device Certificates in order for them to carry out business processes that will, or are likely to, lead to the installation of Devices in premises

## 16 Appendix F: DEFINITIONS

Term	Definition	Source
ARL	Authority Revocation List	SEC
Authorised Subscriber	means a Party which is an Authorised Subscriber for the purposes (and in accordance with the meaning given to that expression in Annex A [of the SEC]) of either or both of the Certificate Policies	SEC
Daily Testing Issue Report	The document reporting on the status of any testing issues identified (part of the Test Execution Dashboard)	This document
Certificate Policy	The terms and conditions under which a Certificate is issued. For the purposes of this document, Certificate Policy refers to the Device Certificate Policy (as set out in Appendix A of the SEC) and under which Device Certificates are issued and the Organisation Certificate Policy (as set out in Appendix B of the SEC) and under which Organisation Certificates are issued.	This document
CRL	Certificate Revocation List	SEC
CSR	Certificate Signing Request	SEC
DCA	Device Certificate Authority	SEC
(DCC) User	A Party that has completed the User Entry Process (and, in respect of Services available in accordance with this Code to Users acting only in one or more User Roles, a Party that has completed the User Entry Process for that User Role)	SEC
Eligible Subscriber	See Section L3.15 of the Code	SEC
Exit Criteria	The criteria that must be satisfied before testing can be considered complete	SEC
FIPS token	Cryptographic Credential Token issued in accordance with the SMKI RAPP	This document
OCA	Organisation Certificate Authority	SEC
Regression Testing	Testing of a previously tested program following modification to ensure that defects have not been introduced or uncovered in unchanged areas of the software, as a result of the changes made (and Regression Test shall be construed accordingly)	International Software Testing Qualifications Board
SMKI RAPP	SMKI Registration Authority Policies and Procedures	SEC

Term	Definition	Source
(Requirements) Traceability Matrix	A matrix of defined requirements that provides traceability (linkage) to Test Scripts for the purpose of providing a measurement of test coverage as intended in the relevant specification.	International Software Testing Qualifications Board
SMKI	Smart Metering Key Infrastructure	SEC
SREPT	SMKI and Repository Entry Process Tests	SEC
SRT	SMKI and Repository Testing – A test stage that will commence prior to Interface Testing Stage	Derived from SEC
SRTSD	SMKI and Repository Test Scenarios Document	SEC
Test Completion Certificate	Issued by the DCC to the Party when the Party has met the SREPT Exit Criteria	This document
Test Data	Any data constructed for the purposes of undertaking SMKI and Repository Entry Process Testing	This document
Test Data Plan	The document that sets out: the size and type/format of data, who is responsible for providing the data; and when the data is required to be available to support test activities in a Test Plan	This document
Test Execution Dashboard	The document summarising testing activities and results, produced at regular intervals, to report progress of testing activities against a baseline (such as the original test plan) and to communicate risks and alternatives requiring a decision to management	This document
Test Management Tool	A tool that has the ability to log and track Testing Issues	This document
Test Plan	A document describing the scope, approach, resources and schedule of intended test activities within a Test Stage that will be produced as set out in Section <b>Error! Reference source not found..</b>	This document
Test Result	The consequence/outcome of the execution of a Test Script	This document
Test Readiness Report	A report that when completed provides the capability to assess the status of test preparation and determine the readiness to proceed into test execution	This document
Test Schedule	A list of test process activities, tasks or events identifying their intended start and finish dates and/or times and interdependencies	This document
Test Script	A document specifying a sequence of actions for the execution of a test	This document
Test SMKI Repository Services	Test versions of the SMKI Repository Services (see definition in SEC) provisioned for the purposes of SREPT	This document
Test SMKI Services	Test versions of the SMKI Services (see definition in SEC) provisioned for the purposes of SREPT	This document

Term	Definition	Source
Test Stage	A group of test activities that are organised and managed together	This document
WD	Working Day	SEC