Version R1.5

Appendix R

Common Test Scenarios Document

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1 Introduction

1.1 Purpose

The purpose of this document is to:

- Define the procedural steps to be undertaken by a Party wishing to complete User Entry Process Tests (UEPT) in accordance with SEC Section H14;
- Set out the User Entry Process Tests that must be conducted by the Relevant Party with regard to each User Role that it may want to fulfil; and
- Describe the role and responsibilities with regard to the conduct of UEPT, including;
    - Entry and exit requirements
    - Defining Test Scripts
    - Defining Test Data
    - Planning the manner in which tests will be undertaken
    - Executing the tests
    - Reporting the results of those tests to the Data Communications Company (DCC) for approval.

Additionally, this document sets out the above for a Testing Participant wishing to complete:

- Additive UEPT in respect of R2.0 Functionality; and
- Eligibility Testing in accordance with the User Testing Services Approach Document under the SVTAD for SMETS1.

1.2 Types of Testing Required

Clause 8 sets out the specific tests that are required to be performed:

- For a new Party seeking to undertake User Entry Process Testing;
- For an existing User seeking to send Service Requests in respect of SMETS1 Devices (Eligibility Testing); and
- For an existing User seeking to access R2.0 functionality (Additive UEPT).

1.3 Eligibility Testing

Where a Party has completed UEPT and is seeking to undertake Eligibility Testing, all clauses of this CTSD shall apply to the undertaking of Eligibility Testing except for the following and subject to the following variations:

- any part of a Clause that relates to SMETS2+ only or Additive UEPT only shall not apply;
- Except in clauses 8.1.4 - 8.1.26, as if references to UEPT were references to Eligibility Testing
- Clause 5.1 (SMETS2+ Install and Commission) shall not apply;
- Clause 5.3 (Self Service Interface testing) and Clause 8.1.27 shall not apply;

- Clause 5.4 (Additive UEPT for R2.0) shall not apply;
- **t**he first row of the Table 1 in Clause 5.4.2 shall be varied so that notification of intent to commence must be provided by Parties 50 Working Days prior to commencement of Eligibility Testing. Any notice of intent provided prior to this variation coming into effect shall be valid for the purposes of this Clause.

2 Scope

Section 8 Annex C: Test Scenarios of this document sets out the User Entry Process Tests as required by SEC Section H14, the tests required for Additive UEPT (R2.0) and the tests required for Eligibility Testing (SMETS1).

3 Test Sequence

The Relevant Party may undertake the test scenarios that are set out in this document in any sequence. The testing of the constituent Service Requests that comprise the SMETS2+ Install and Commission test scenario shall be undertaken in a sequence that is set out in Section C clause 8.1.2.

4 Test Certificates & Security Requirements

For the purposes of gaining IKI, SMKI and DCCKI Test Certificates Testing Participants should refer to the Enduring Testing Approach Document.

Each Testing Participant must comply with the Security Requirements set out in the Enduring Testing Approach Document.

5 UEPT Procedure

This section describes the procedure that must be completed in order for Parties to complete UEPT.

5.1 SMETS2+ Install and Commission

The SMETS2+ Install and Commission test scenario test the Relevant Party's ability to send Service Requests to support the installation and commissioning of SMETS2+ Devices, and to receive the consequential communications and alerts. Service Requests are set out in a specific order within the test scenarios for this purpose and the Relevant Party must execute Test Scripts in that order set out in the test scenario in Section C clause 8.1.2

5.2 DUIS Service Requests

Clause 8.1.5 sets out the Service Requests that a Party is required to have tested prior to it being eligible to send those Service Requests in a particular User Role. The full list of Service Requests is set out in Section 8.1.5 (8.1.4 DUIS Matrix) together with the type of testing that they apply to.

5.3 Self-Service Interface (SSI)

For the purpose of UEPT a Relevant Party must produce and execute Test Scripts that demonstrate that the Relevant Party can access the SSI system to the extent permitted by its User Role and to the extent set out in the SSI Interface Specification as defined in SEC Section H8.15.

5.4 Completing Additive UEPT for Release 2.0

Testing Participants that have completed UEPT prior to the release of R2.0 functionality into the production environment have the option of executing R2.0 Service Requests by the following routes:

- Completing UEPT style testing through the formal process as stated in this document; or
- Successfully executing the R2.0 Service Request in end to end Testing In accordance with the provision of the SEC Variation Testing Approach Document for Release 2.0.

Testing Participants will submit evidence of successful execution of R2.0 Service Requests to the DCC. After DCC accepts this evidence, the Testing Participant will be Eligible Users of those Service Requests.

5.4.1 User Entry Process Tests Initiation

The Relevant Party and the DCC shall each use reasonable steps to comply with the timescales that are defined within the procedures in Table 1, Table 2 & Table 3.

In the event that the Relevant Party or the DCC does not comply with the timescales in Table 1, Table 2 & Table 3, the DCC will reschedule subsequent activities to occur as soon as reasonably practicable and the DCC may reschedule that Party's test execution date.

5.4.2 Procedural Steps

The table below sets out the steps that must be undertaken during Initiation of the UEPT by both the DCC and the Relevant Party seeking to undertake UEPT and the timeframes within which such steps must be complete.

Ref	When	Action	From	To	Information Required	Method
5.4.2.1	60 Working Days (WD) prior to commencement of User Entry Process Tests	Notify DCC of intention to undertake User Entry Process Tests	Relevant Party	DCC	Party notification of intention to undertake testing, including • Name of Party • Confirmation that notification provided to the Code Administrator, User Role(s) • Test start date • Identity of test manager and contact details	By email as attachment
5.4.2.2	Within 2 WD of receipt of the notification 5.4.2.1	Acknowledge request	DCC	Relevant Party	Confirmation of Party notification including: • Name of Party • User Roles and test start date • DCC User Entry Process Tests test manager contact • Date for User Entry Process Tests initiation meeting	By email as attachment
5.4.2.3	Within 5 WD of receipt of the notification 5.4.2.2	Conduct User Entry Process Tests Initiation Meeting	DCC	Relevant Party	DCC to provide guidance information on conducting User Entry Process Tests, including clarification of test artefacts requirements and access to test environments	Meeting

Ref	When	Action	From	To	Information Required	Method
5.4.2.4	In each week occurring within the period from 40 WD prior to start of testing	Provide progress report, demonstrating readiness to begin tests	Relevant Party	DCC	Test Readiness Report	By email as attachment
5.4.2.5	25 WD prior to start of testing	Provide test artefacts to support conduct of User Entry Process Tests	Relevant Party	DCC	• Test Plan incorporating the Test Schedule • Requirements Traceability Matrix (see clause 0) • Test Scripts (see clause 0) • Test Data Plan (see clause 7)	By email as attachments
5.4.2.6	By 20 WD prior to start of testing	DCC complete review of test artefacts	DCC	Relevant Party	Details regarding any deficiencies in the test artefacts provided, and a revised start date for testing, where necessary – continue from 5.4.2.7 Or confirmation that test artefacts accepted – continue from 5.4.2.9	By email as attachments
5.4.2.7	By 10 WD prior to start of testing	Relevant Party to provide revised documents	Relevant Party	DCC	Revised documents	By email as attachments
5.4.2.8	By 7 WD prior to start of testing	DCC complete review of revised test artefacts	DCC	Relevant Party	Details regarding any deficiencies in the test artefacts and a revised start date for testing provided where necessary – Regress and continue from 5.4.2.7 Or confirmation that test artefacts accepted – continue from 5.4.2.9	By email as attachments

Ref	When	Action	From	To	Information Required	Method
5.4.2.9	By 5 WD prior to start of testing	1. Review Test Readiness Report and confirm the Entry Criteria for commencing testing in relation to the relevant User Role has been met 2. Confirm Start Date and Test Schedule for execution of tests by Relevant Party	DCC Quality Gate meeting	Relevant Party	**Source:** Test Readiness Report, Test Schedule **Output:** Confirmation of Relevant party readiness to proceed	Quality Gate review meeting Published via secure communications
	If there is any outstanding documentation presented at the Quality Gate Review the DCC shall assess it as part of its assessment of the entry criteria under clause 5.4.2.					

Table 1 UEPT Initiation: Procedural Steps

5.4.3 UEPT Entry Criteria

Each Party wishing to undertake UEPT must comply with (and, where specified below, provide evidence of complying with) the following criteria prior to entry into UEPT:

- Prior to start of test execution, the DCC must confirm with the Code Administrator that the person requesting to commence testing has acceded to the SEC;

- The Relevant Party must have identified the User Roles for which it wishes to undertake UEPT;

- All relevant test artefacts (as agreed with the DCC and set out in clause 5.4.2. 5.4.5, and 5.4.11) must have been produced by the Relevant Party and approved by the DCC. This includes:

    - Party Notification of Intention to Undertake Testing
    - Test Readiness Report
    - Test Plan incorporating the Test Schedule
    - Requirements Traceability Matrix
    - Test Scripts
    - Test Data Plan;

- The Relevant Party has provided evidence to the DCC that a test environment capable of supporting the planned testing has been established and is available;

- The Relevant Party has provided evidence to the DCC that an appropriate level of resources are available to support the UEPT process; and

- The Relevant Party has provided confirmation that the Security Requirements set out in the Enduring Testing Approach Document have been met.

Pursuant to H14.15 where the DCC considers that the Relevant Party has not met the Entry Criteria for the User Role for which it is seeking to undertake testing, the DCC may:

- Prevent the Relevant Party from undertaking UEPT for a particular User Role until such time as the DCC is satisfied that the Relevant Party meets the Entry Criteria; and
- Reschedule the test start date for the Relevant Party for that particular User Role. In so doing, the DCC shall provide the earliest practicable alternative date; or
- 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 otherwise testing will not commence.

Where the DCC is not satisfied that a Relevant Party meets the Entry Criteria to commence testing, the Relevant Party may refer the matter to the Panel, pursuant to SEC Section H14.16. Where the Panel determines that the Relevant Party has met the entry criteria the DCC shall schedule the start of testing as soon as reasonably practical.

5.4.4 User Entry Process Tests Execution

5.4.5 Procedural Steps

The table below sets out the steps that must be undertaken during test execution by either the DCC or Relevant Party seeking to undertake User Entry Process Tests and the timeframes within which such steps must be complete as set out in the Test Schedule which will be updated by the Relevant Party from time to time to reflect test progress.

Ref	When	Action	From	To	Information Required	Method
5.4.5.1	User Entry Process Tests Start Date	Confirm connectivity (of Relevant Party's test environment) to DCC test environment where this has not already happened as a result of earlier testing.	Relevant Party	DCC	Test Results achieved	As directed by DCC
5.4.5.2	In accordance with Test Schedule and completion of 5.4.5.1	Conduct User Entry Process Tests	Relevant Party		Approved test artefacts.	As per test artefacts
5.4.5.3	Daily Basis, or alternative schedule agreed with DCC	Provide progress report to DCC	Relevant Party	DCC	Test Execution Dashboard, including details of testing issues identified	By email as attachment
5.4.5.4	User Entry Process Tests execution complete	Provide Test Completion report	Relevant Party	DCC	User Entry Process Tests completion report including: details of Test Scripts executed and testing issues resolved	By email as attachment

Table 2 UEPT Execution: Procedural Steps

Note: Confirming connectivity is to verify that the Testing Participant's system can connect to the DCC test environment and that the Testing Participant's system is capable of successfully sending Service Requests to and receiving Acknowledgements from the DCC System. The DUIS Connectivity Test consists of up to three test scenarios: one for each test webservice available to the Testing Participant*. This comprises:

- Sending a DCC-only Service Request and receiving an Acknowledgement/Response;
- Sending a Critical pre-command and receiving the Transformed message; and
- Sending a Non-Critical Service Request and receiving an Acknowledgement.

This test does not need to be repeated as a subsequent part of UEPT.

* Note: If the Testing Participant would not have access to a particular webservice once it has qualified in the User Role for which it is undertaking UEPT the test will not be required.

5.4.6 UEPT Test Suspension/Resumption

During the execution of tests, the DCC or the Relevant Party each have the right to suspend testing where it considers that this is reasonably necessary.

Testing will only recommence when agreed by both the DCC and the Relevant Party.

5.4.7 Possible Suspension Criteria

Reasonable grounds for suspending testing may include any of the following:

- Application components are not available as scheduled;
- A Testing Issue prevents further useful testing from proceeding;
- A significant percentage of planned Test Scripts for a given day fail, taking Testing Issue severity and volume of tests into consideration which would generate root cause analysis to be undertaken to establish the cause. Testing Issues trending should also be used to determine any recommendation. The outcome of any root cause analysis activity may result in testing being suspended;
- Test Scripts to be executed are in a "blocked" status due to an identified Testing Issue; or
- The Relevant Party has failed to comply with the procedural steps in Table 2 for executing UEPT.

5.4.8 Test Resumption Criteria

Where testing has been suspended, either the DCC or the Relevant Party as appropriate shall produce a test suspension report reflecting the cause of the suspension, and what actions are to be taken by whom and when in order for testing to resume – the Test Resumption Criteria. The DCC and the Relevant Party shall take reasonable steps to support each other to achieve the Test Resumption Criteria.

Testing will only resume once the DCC or Relevant Party has demonstrated to the other Party's satisfaction that the Test Resumption Criteria have been met.

5.4.9 Disputes regarding Test Suspension/Resumption

Any dispute regarding the suspension or resumption of testing shall be heard in accordance with Section H14.18A of the SEC. Where a dispute regarding the suspension/resumption of testing is made, testing will not resume whilst the dispute is being heard, or until the Test Resumption Criteria are met by the DCC or the Relevant Party.

5.4.10 User Entry Process Tests Completion

5.4.11 Procedural Steps

The table below sets out the steps that must be undertaken during test completion by either the DCC or Relevant Party and the timeframes within which such steps must be complete.

Ref	When	Action	From	To	Information Required	Method
5.4.11.1	Within 2 WD of receipt of the report in 5.4.5.4	Confirm receipt of notification of Test complete (Test Completion Report)	DCC	Relevant Party	User Entry Process Tests Test Completion Report	By email
5.4.11.2	Within 5 WD of receipt of the notification 5.4.11.1	DCC review completion report and confirm that User Entry Process Tests concluded, or further testing required	DCC	Relevant Party	User Entry Process Tests completion report and supporting artefacts as requested by DCC set out in 5.4.5.4 refers	Quality Gate review meeting (see clause 0)
5.4.11.3	Within 2 WD of successful quality gate review meeting	Confirm Test Complete	DCC	Relevant Party	Issue Test Completion Certificate (see clause 10)	By email as attachment

Table 3 UEPT Completion: Procedural Steps

Notwithstanding 5.4.11.3 above pursuant to H14.19 the DCC shall confirm on request by the Relevant Party whether or not it considers that the Relevant Party has successfully completed UEPT.

5.4.12 UEPT Exit Criteria

The following Exit Criteria are to be met prior to a Relevant Party's completion of and exit from UEPT:

- All Test have been executed and results have been documented by the Relevant Party and evidence captured in the Relevant Party's Test Management Tool and available to be provided to the DCC;

- All testing issues identified during a Relevant Party's test execution have been recorded in the Test Management Tool. Of those Testing Issues either:

    - the Testing Issue generated by the Relevant Party as a result of its UEPT has been fixed and verified by retest; or

    - Where outstanding, the Testing Issue has been reviewed and documented, and been included as part of a remediation plan that outlines the next steps to be taken, including estimated timescales required to resolve each of their outstanding Testing Issues. The remediation plan must be agreed by the DCC;

- any outstanding Testing Issue count must not exceed those defined in Table 4, below:

Severity***	Threshold for Outstanding Testing Issues
1	0
2	0
3	5*
4	10*
5	As agreed**

Table 4 Testing Issue Threshold

* - Work around and remediation plan to be agreed with the DCC for each issue that ensures no impact on other Users or the DCC
** - As agreed with the DCC,
*** - Refer to Appendix G for definitions of Issue severities.

- A Test Completion Report has been created by the Relevant Party and approved by the DCC;

- A Quality Gate Review meeting has been held between the Relevant Party and the DCC, with progress approved by the DCC.

Upon completion of the criteria above a Test Completion Certificate will be issued to the Relevant Party by the DCC. Where test completion criteria have not been met the Relevant Party will need to reschedule testing with the DCC subject to the availability of the DCC test environment.

Pursuant to SEC Section H14.21, where the DCC considers that a Party has not met the Exit Criteria, that Party may refer the matter to the Panel.

Where a dispute regarding whether a Party has met the UEPT Exit Criteria occurs, the UEPT completion process will not resume whilst the dispute is being heard by the Panel, or until the UEPT Exit Criteria are met by the Relevant Party.

Where the Panel decided that the Exit Criteria have been met the DCC shall supply a Test Completion Certificate to the Relevant Party.

5.4.13 Quality Gate Review

A final decision regarding whether a Party has successfully completed UEPT will be provided to the Relevant Party no later than 2 Working Days after the date on which quality gate review meeting is held.

In addition, pursuant to H14.19, the DCC shall confirm on request by the Relevant Party whether or not it considers that the Relevant Party has successfully completed UEPT.

5.4.14 UEPT Test Completion Certificate

The UEPT Test Completion Certificate shall be issued by the DCC to the Relevant Party for a specified User Role once the quality gate review has concluded that the Relevant Party has met the UEPT Exit Criteria for the specified User Role.

6 Annex A: Test Artefacts

The DCC and each Relevant Party will be required to produce and maintain a number of documents, dashboards and reports during the testing lifecycle as depicted in Figure 1 Test Documentation Hierarchy, below.

Figure 1 Test Documentation Hierarchy

6.1.1 Party Documents & Reports

6.1.2 Test Preparation Document Set

The following documentation must be produced by a Relevant Party before Testing commences:

- Test Plan including Test Schedule;
- Test Data (see clause 7);
- Requirements Traceability Matrix (see clause 0); and
- Test Scripts (see clause 0).

6.1.3 Reports and Dashboard

Table 5 Test Stage Supporting Documentation Set sets out the Reports and Dashboard that a Party must produce to demonstrate progress in preparing for and executing testing.

6.1.4 Test Readiness Report (TRR)

The Test Readiness Report shall be produced by the Relevant Party.

A Test Readiness Report template shall be provided by the DCC.

The report must be provided to the DCC by the Relevant Party on a weekly basis, commencing 40 Working Days prior to the start of Testing and must indicate progress against the following criteria:

- Previous Test Stage Exit Criteria (if appropriate);
- Relevant Party Test tool selected and available;
- Relevant Party key RAID (Risk, Assumption, Issue and Dependency) items, including, for each key item that has the potential to cause significant disruption to the commencement and / or completion of User Entry Process Tests:
    - Priority (High, Medium, Low)
    - Severities of open issues
    - Action taken
    - Target close date
    - Overall RAG status (based on progress to plan)
- Relevant Party Test Plan produced;
- Relevant Party Test Schedule produced;

- Relevant Party Requirements Traceability Matrix % complete to date
    - Total numbers of requirements identified
        - Actual number of testable requirements in progress
        - Actual number of testable requirements not started
    - Actual number of requirements deemed not testable;
- Relevant Party Test Script % complete to date – to reflect the following breakdown
    - Planned number of Test Scripts
    - Actual number of Test Scripts produced to date
    - Actual number of Test Scripts in progress
    - Actual number of Test Scripts not started;
- % Test Data readiness by Relevant Party against planned Test Scripts;
- Readiness of Relevant Party test resources and technical (support) resource;
- Relevant Party test environment readiness – to include
    - User Roles identified,
    - Environment configuration approved as suitable – to include
        - Breakdown and description of hardware.

6.1.5 Test Plan

The Test Plan shall be produced by the Relevant Party.

A Test Plan template shall be provided by the DCC.

The report must be provided to the DCC by the Relevant Party 25 Working Days prior to the start of Testing and will include:

- Scope of testing;
- Any items out of scope of testing;
- Features to be tested (referencing relevant sub-clauses within clause 8 of the Common Test Scenarios Document);
- Approach to testing;
- Test Schedule to include tests planned for each day;

- Resources.

6.1.6 Test Execution Dashboard

The Test Execution Dashboard will identify the Relevant Party's progress when executing testing and will be provided in a reasonable format specified by the DCC. The dashboard must be updated by the Party and provided to the DCC on a daily basis once testing commences, or per an alternative schedule agreed with the DCC.

The dashboard will include the following details:

- Name of Relevant Party under test;
- Relevant Party Location of testing;
- Date and time test execution dashboard updated by Relevant Party;
- Total number of tests Relevant Party scheduled for execution and projected as a test execution glide path;
- Actual number of tests executed by Relevant Party (by test run) to date reflected on an incremental daily count including Test Results (passed, failed, blocked, not run, ready for test);
- Relevant Party summary of Testing Issues to include;
    - Total number of Testing Issues generated
        - Counts by status Open, Fixed, Closed etc
        - Counts by Severity 1, 2, 3 etc
- Relevant Party Regression Test execution results;
- Relevant Party summary progress against Exit Criteria;
- Relevant Party Top 5 risks and issues - to include any environment concerns; and
- Relevant Party Overall RAG status (based on progress against test schedule).

6.1.7 Test Completion Report

The Relevant Party shall produce a Test Completion Report and submit the draft to the DCC 10 Working Days prior to the test completion date. The finalised version of the Test Completion Report will be submitted to the DCC on completion of each test execution activity.

A Test Completion Report template shall be provided by the DCC to ensure that all Party reports contain the same level of detail. The report will include:

- Relevant Party Test approach and Scope of Testing Undertaken;

- Details of updates made to the test environment during the course of testing;
- Relevant Party Summary of the Test Results
    - Total number of tests originally scheduled for execution
    - Total number of tests executed
        - Displayed by test run to include
            - Overall results achieved
                - Passed, Failed, Blocked, Not Run;

Any tests not run, blocked or not successfully executed must be supported by an explanation.

- Relevant Party Summary of Testing Issues
    - Total number of Testing Issues generated
        - Total counts by status Open, Fixed, Closed etc
        - Total counts by Severity.

6.1.8 Test Traceability

To provide the DCC with a sufficient level of test assurance, all tests executed by each Party undertaking UEPT will be required to demonstrate full traceability as follows:

- Each requirement captured in the Requirements Traceability Matrix that can be tested during UEPT must be linked to one or many Test Scripts;
- Each Test Script executed must be reflected in one or many test execution cycles;
- A record of each test executed and the results of that test;
- Where an executed test generates a Testing Issue;
    - Each Testing Issue must be linked to the test that generated the Testing Issue
    - Any subsequent retesting to validate a fix of Testing Issue carried out must be linked to the Testing Issue
    - Each retest executed must reflect a result achieved as a result of execution.

6.1.9 Test Scripts

A Relevant Party shall develop its own test scripts and demonstrate how those test scripts meet the requirements in accordance with SEC Section H14.17.

Test Stage Supporting Documentation Set								
No	**Phase**	**Description**	**DCC Responsibility**	**Party Responsibility**	**When/Frequency**	**Entry Criteria**	**Exit Criteria**	**Sign-Off Authority**
1	**Initiation**	**Test Plan including Test Schedule**	**Review and Approve**	**Produce and maintain**	**Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate**	**Y**	**Y**	**DCC**
2	**Initiation**	**Requirements Traceability Matrix**	**Review and Approve**	**Produce and maintain**	**Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate**	**Y**	**Y**	**DCC**
3	**Initiation**	**Test Scripts**	**Review and Approve**	**Produce and maintain**	**Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate**	**Y**	**Y**	**DCC**
4	**Initiation**	**Test Data Plan**	**Review**	**Produce and maintain**	**Test Stage Entry Quality Gate and updated during execution as required in preparation for Test Stage Exit Quality Gate**	**Y**	**N**	**DCC**
5	**Initiation**	**Test Readiness Review Report**	**Provide Template** **Review and Approve**	**Produce and maintain**	**Test Stage Entry Quality Gate**	**Y**	**N**	**DCC**
6	**Initiation**	**Test Stage Entry Criteria (part of final Test Readiness Report)**	**Review and Approve**	**Produce**	**Test Stage Entry Quality Gate**	**Y**	**N**	**DCC**

Test Stage Supporting Documentation Set								
7	**Execution**	**Test Execution Dashboard**	**Review**	**Produce and maintain**	**Produced and updated daily (or other scheduled agreed with the DCC) during execution in preparation for Test Stage Exit Quality Gate**	**N**	**Y**	**DCC**
8	**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**
9	**Execution**	**Test Stage Quality Gate Exit Criteria (part of Test Completion Report)**	**Review and Approve**	**Produce**	**Test Stage Exit Quality Gate**	**N**	**Y**	**DCC**

Table 5 Test Stage Supporting Documentation Set

Once these steps are complete the DCC will issue a Test Completion Certificate (see clause 10).

7 Annex B: Test Data

A Test Data Plan will be developed by the Relevant Party and coordinated with DCC in accordance with clause 5.4.1.5. The DCC and Relevant Party will be responsible for set up of Test Data on their respective system which must be defined in the Relevant Party Test Data Plan. The Data defined will be based on the following principles:

- No personal data which identifies any individual will be used for testing, but anonymised live Data is acceptable;
- Test Data will be representative of data likely to be used in the live environment once the Relevant Party is eligible to send the Service Request in the relevant User Role;
- A full range of Test Data covering all services to be tested will be used.

Co-ordination/Segregation of data usage between Relevant Parties testing during the same period will be managed by the DCC.

Table 6 Test Data Responsibilities below outlines the responsibilities in regard to preparing Test Data required to support UEPT.

Deliverable / Activity	Accountable / Responsible	Support
Test Data Preparation	DCC Licensee, Relevant Party	DSP

Table 6 Test Data Responsibilities

8 Annex C: Test Scenarios

8.1.1 Test Scenarios

The following sub clauses contain the test scenarios that reflect the Service Requests applicable to each prospective User Role.

8.1.2 SMETS2+ Install and Commission

ID	IC01*
Title:	**Install & Commission the following devices, when the Relevant Party will be supplying Gas:** • **Communication Hub specified for Region** • **Gas Meter**
Prerequisite:	• **Relevant Party holds a Gas Supply Licence** • **Connection to DCC Test Laboratory** • **Appropriate data** • **Available Meter and Communication Hubs** • **SM WAN Available** • **Appropriate Security Keys have been installed in the available metering equipment** • **Required security credentials are present on the Communications Hub**

* Note: the scope of this test is intentionally limited to only those activities where there is a prescribed order for the submission Service Requests and where failure to follow this order will lead to a failed installation.

Steps	Description	Objective	Actions	Acceptance Criteria
1	Pre-Installation	• Notify DCC of Device ID and device details • Ascertain the security credentials are installed on the devices	The following Service Requests have been designed to support Pre-Installation: • DUIS SR 12.2 – Device Pre-notification * (n) devices	• The DCC has received notification of the Device ID • Acknowledgement received for relevant Service Request sent

Steps	Description	Objective	Actions	Acceptance Criteria
2	White List Device	• Identify the Communication Hub to Meter device relationship by: ○ Add the HAN device to HAN device log, by including the MAC addresses and the install codes	Complete the following Service Request to support white listing of device: • DUIS SR 8.11- Update HAN Device Log * (n) devices	• Service Responses received for all Service Requests sent • Service User will receive the following Alert code when the device has been added to the white list: DCC Alert N24
3	Commission	• Send response to commission device service request • to Service User • Update inventory status • Configure the Meter: ○ Set Time	Complete the following Service Request to support device commission: • DUIS SR 8.1.1 – Commission Device * (n) devices	• • Acknowledgement received for all Service Requests sent
4	Commission Gas Proxy	To hand over Gas Proxy Function from DSP to the Relevant Party, complete the following: • Send Service Request to change credentials to Relevant Party's credentials • Ensure Relevant Party can update other credentials as required	Complete the following Service Request to support Commission Gas Proxy Function: • DUIS SR 6.21 – Request Handover of DCC Controlled Device * (n) devices	• Relevant Party receives an Service Response to confirm the credentials have been changed from the DSP to Relevant Party
5	Join Device	• Join Gas meter to GPF	The following Service Requests have been designed to support joining HAN devices: • DUIS SR 8.7.2 – Join Service (Non-Critical) **Note:** The following DUIS SRs can be sent during this step, should they not have been sent during steps 1 to 3: • DUIS SR 12.2 – Device Pre-notification * (n) devices • DUIS SR 8.11- Update HAN Device Log * (n) devices	• Relevant Party receives acknowledgement to confirm the HAN devices are joined • Acknowledgement received for all Service Requests sent
6	Set MPxN on GSME for display purposes	• Set MPxN on GSME for display purposes	Complete the following Service Request to support setting the MPxN on the GSME for display purposes • DUIS SR 6.20.1 – Set Device Configuration (Import MPxN)	• Relevant party receives a service response to confirm successful execution of the Service Request.

ID	IC02*
Title:	**Install & Commission the following devices, when the Relevant Party will be supplying Electricity:** • **Communication Hub specified for Region** • **Electricity Meter**
	• **Relevant Party holds an Electricity Supply Licence** • **Connection to DCC Test Laboratory** • **Appropriate data** • **Available Meter and Communication Hubs** • **SM WAN Available** • **Appropriate Security Keys have been installed in the available metering equipment** • **Required security credentials are present on the Communications Hub**

* Note: the scope of this test is intentionally limited to only those activities where there is a prescribed order for the submission Service Requests and where failure to follow this order will lead to a failed installation.

Steps	Description	Objective	Actions	Acceptance Criteria
1	Pre-Installation	• Notify DCC of Device ID and device details • Ascertain the security credentials are installed on the devices	The following Service Requests and Self-Service Interface Use Cases have been designed to support Pre-Installation: • DUIS SR 12.2 – Device Pre-notification * (n) devices	• The DCC has received notification of the Device ID • Acknowledgement received for relevant Service Requests sent
2	White List Device	• Identify the Communication Hub to Meter device relationship by: ○ Add the HAN device to HAN device log, by including the MAC addresses and the install codes	Complete the following Service Request to support white listing of device: • DUIS SR 8.11 - Update HAN Device Log * (n) devices	• Service Responses received for all Service Requests sent • Service User will receive the following Alert code when the device has been added to the white list: DCC Alert N24

Steps	Description	Objective	Actions	Acceptance Criteria
3	Commission	• Send response to commission device Service Request to Service User • Update Smart Metering Inventory status • Configure the Meter: ○ Set Time	Complete the following Service Request to support device commission: • DUIS SR 8.1.1 – Commission Device * (n) devices	• • Acknowledgement received for all Service Requests sent
4	Set MPxN on ESME for display purposes	• Set MPxN on ESME for display purposes	Complete the following Service Request to support setting the MPxN on the ESME for display purposes • DUIS SR 6.20.1 – Set Device Configuration (Import MPxN)	• Relevant party receives a service response to confirm successful execution of the Service Request.

8.1.3 DUIS

The scenarios outlined in this clause are the high-level Test scenarios which are supported by the DUIS Test Matrix in clause 8.1.5. For example, Scenario SR01 refers to all Tests mandated in column CV1 – On Demand in the DUIS Matrix.

ID	SR01
Title:	Non-Critical Command with a command variant of CV1 and a Mode of Operation of On Demand
Scenario	Exercise Non-Critical On Demand Service Requests using Command Variant CV1 applicable to the User Role

ID	SR02
Title:	Non-Critical Command with a command variant of CV1 and a Mode of Operation of Future Dated (either DCC or Device, as determined by DUIS)
Scenario	Exercise Non-Critical Future Dated Service Requests using Command Variant CV1 applicable to the User Role

ID	SR03
Title:	Non-Critical Command with a command variant of CV2 and a Mode of Operation of On Demand
Scenario	Exercise Non-Critical On Demand Service Requests using Command Variant CV2 applicable to the User Role

ID	SR04
Title:	Non-Critical Command with a command variant of CV3 and a Mode of Operation of On Demand
Scenario	Exercise Non-Critical On Demand Service Requests using Command Variant CV3 applicable to the User Role

ID	SR05
Title:	Critical Command with a command variant of CV4 and a Mode of Operation of On Demand
Scenario	Exercise Critical On Demand Service Requests using Command Variant CV4 applicable to the User Role

ID	SR06
Title:	Critical Command with a command variant of CV5 and a Mode of Operation of On Demand
Scenario	Exercise Critical On Demand Service Requests using Command Variant CV5 applicable to the User Role

ID	SR07
Title:	Critical Command with a command variant of CV5 and a Mode of Operation of Future Dated (either DCC or Device, as determined by DUIS)
Scenario	Exercise Critical Future Dated Service Request using Command Variant CV5 applicable to the User Role

ID	SR08
Title:	Critical Command with a command variant of CV6 and a Mode of Operation of On Demand
Scenario	Exercise Critical On Demand Service Request using Command Variant CV6 applicable to the User Role

ID	SR09
Title:	Critical Command with a command variant of CV7 and a Mode of Operation of On Demand
Scenario	Exercise Critical On Demand Service Request using Command Variant CV7 applicable to the User Role

ID	SR010
Title:	Service Requests with a command variant of CV8
Scenario	Exercise Service Request using Command Variant CV8 applicable to the User Role

8.1.4 DUIS Matrix

New User

The following User Role tables reflect the test Service Requests that must be executed by a new Party seeking to undertake UEPT. The tests are those indicated as 'Mandatory, Mandatory SMETS1 and Mandatory SMETS2+' in the CV column, for which they must be executed for each specific User Role. Those indicated as 'Mandatory' must be executed in respect of a SMETS1 Device and a SMETS2+ Device. Those indicated as 'Mandatory SMETS1' must be executed in respect of a SMETS1 Device. Those indicated as 'Mandatory SMETS2+' must be executed in respect of a SMETS2+ Device. Where the test Service Requests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Existing User seeking to send Service Request to SMETS1 Devices

The Service Request tests that must be executed if a Testing Participant has already completed UEPT and is seeking to send Service Requests to SMETS 1 Devices in a particular User Role (Eligibility Testing), as set out in clause 4.3 of the UTSAD, are those indicated as 'Mandatory or Mandatory SMETS1 ' in the CV column for the relevant User Role. Those indicated as 'Mandatory' must only be executed in respect of a SMETS1 Device and those indicated as 'Mandatory SMETS1' must only be executed in respect of a SMETS1 Device. Where the test Service Requests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Existing User seeking to send Service Requests that access R2.0 functionality

For SMETS2+ when executing Additive UEPT for R2.0, the Service Requests that must be executed are as listed below and need to be executed where indicated by User Role and 'Mandatory' or 'Mandatory SMETS2+' in the CV column:

- Service Requests for Single Band Comms Hub – 2.1, 6.2.2, 6.2.3, 6.2.10, 6.5, 6.8, 6.15.1, 6.21, 6.22, 6.23, 6.26, 6.27, 14.1
- Service Requests for Dual Band Comms Hub – 6.28, 6.29, 6.30, 6.31, 6.32
- Service Requests which are not mandatory but can be executed by a User for that User Role if they wish are indicated by 'N/A' in the DUIS Matrix.

Those indicated as 'Mandatory' must only be executed in respect of a SMETS2+ Device.

8.1.5 Import Supplier (IS) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	IS
1.1	1.1.1	Update Import Tariff (Primary Element)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
1.1	1.1.2	Update Import Tariff (Secondary Element)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	N/A	Mandatory SMETS 2	N/A	N/A	N/A	IS
1.2	1.2.1	Update Price (Primary Element)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
1.2	1.2.2	Update Price (Secondary Element)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	N/A	Mandatory SMETS 2	N/A	N/A	N/A	IS
1.5	1.5	Update Meter Balance	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	N/A	N/A	Mandatory SMETS 2	N/A	IS
1.6	1.6	Update Payment Mode	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	IS
1.7	1.7	Reset Tariff Block Counter Matrix	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	N/A	N/A	Mandatory SMETS 2	N/A	N/A	IS
2.1	2.1	Update Prepay Configuration	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
2.2	2.2	Top Up Device	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	IS
2.3	2.3	Update Debt	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
2.5	2.5	Activate Emergency Credit	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
3.1	3.1	Display Message	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
3.2	3.2	Restrict Access For Change Of Tenancy	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS

3.3	3.3	Clear Event Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
3.4	3.4	Update Supplier Name	N	N/A	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	IS
3.5	3.5	Disable Privacy PIN	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.1	4.1.1	Read Instantaneous Import Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.1	4.1.2	Read Instantaneous Import TOU Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.1	4.1.3	Read Instantaneous Import TOU With Blocks Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.3	4.3	Read Instantaneous Prepay Values	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.4	4.4.2	Retrieve Change Of Mode / Tariff Triggered Billing Data Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.4	4.4.3	Retrieve Billing Calendar Triggered Billing Data Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.4	4.4.4	Retrieve Billing Data Log (Payment Based Debt Payments)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.4	4.4.5	Retrieve Billing Data Log (Prepayment Credits)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.6	4.6.1	Retrieve Import Daily Read Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.8	4.8.1	Read Active Import Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.8	4.8.2	Read Reactive Import Profile Data	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.10	4.10	Read Network Data	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.11	4.11.1	Read Tariff (Primary Element)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.11	4.11.2	Read Tariff (Secondary Element)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS

4.12	4.12.1	Read Maximum Demand Import Registers	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.13	4.13	Read Prepayment Configuration	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.14	4.14	Read Prepayment Daily Read Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.15	4.15	Read Load Limit Data	N	Mandatory	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.16	4.16	Read Active Power Import	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.17	4.17	Retrieve Daily Consumption Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
4.18	4.18	Read Meter Balance	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
6.2	6.2.1	Read Device Configuration (Voltage)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.2	Read Device Configuration (Randomisation)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.3	Read Device Configuration (Billing Calendar)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.5	Read Device Configuration (Instantaneous Power Thresholds)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.9	Read Device Configuration (Payment Mode)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.2	6.2.10	Read Device Configuration (Event Alert Behaviours)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS

6.4	6.4.1	Update Device Configuration (Load Limiting General Settings)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.4	6.4.2	Update Device Configuration (Load Limiting Counter Reset)	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.8	6.8	Update Device Configuration (Billing Calendar)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.11	6.11	Synchronise Clock	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.12	6.12	Update Device Configuration (Instantaneous Power Threshold)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.13	6.13	Read Event Or Security Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.14	6.14.1	Update Device Configuration (Auxiliary Load Control Description)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.14	6.14.2	Update Device Configuration (Auxiliary Load Control Scheduler)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	N/A	Mandatory SMETS 2	N/A	N/A	N/A	IS
6.15	6.15.1	Update Security Credentials (KRP)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.15	6.15.2	Update Security Credentials (Device)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.17	6.17	Issue Security Credentials	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.20	6.20.1	Set Device Configuration (Import MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.21	6.21	Request Handover Of DCC Controlled Device	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.22	6.22	Configure Alert Behaviour	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.23	6.23	Update Security Credentials (CoS)	N	N/A	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS

6.24	6.24.1	Retrieve Device Security Credentials (KRP)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.24	6.24.2	Retrieve Device Security Credentials (Device)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.25	6.25	Set Electricity Supply Tamper State	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.26	6.26	Update Device Configuration (Daily Resetting Of Tariff Block Counter)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
6.28	6.28	Set CHF Sub GHz Configuration	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.29	6.29	Request CHF Sub GHz Channel Scan	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.30	6.30	Read CHF Sub GHz Configuration	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.31	6.31	Read CHF Sub GHz Channel	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
6.32	6.32	Read CHF Sub GHz Channel Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
7.1	7.1	Enable Supply	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
7.2	7.2	Disable Supply	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
7.3	7.3	Arm Supply	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
7.5	7.5	Activate Auxiliary Load	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
7.6	7.6	Deactivate Auxiliary Load	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	Mandatory SMETS 2	N/A	IS
7.7	7.7	Read Auxiliary Load Control Switch Data	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
7.8	7.8	Reset Auxiliary Load	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
7.9	7.9	Add Auxiliary Load To Boost Button	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS

7.10	7.10	Remove Auxiliary Load From Boost Button	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
7.11	7.11	Read Boost Button Details	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
7.10	7.12	Set Randomised Offset Limit	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
8.1	8.1.1	Commission Device	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
8.3	8.3	Decommission Device	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
8.7	8.7.1	Join Service (Critical)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
8.7	8.7.2	Join Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.8	8.8.1	Unjoin Service (Critical)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
8.8	8.8.2	Unjoin Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.9	8.9	Read Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.11	8.11	Update HAN Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.12	8.12.1	Restore HAN Device Log	N	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.12	8.12.2	Restore Gas Proxy Function Device Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
8.13	8.13	Return Local Command Response	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS
8.14	8.14.1	Communications Hub Status Update- Install Success	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS
8.14	8.14.2	Communications Hub Status Update- No SMWAN	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS
8.14	8.14.3	Communications Hub Status Update- Fault Return	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS
8.14	8.14.4	Communications Hub Status Update- No Fault Return	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS

11.1	11.1	Update Firmware	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	IS
11.3	11.3	Activate Firmware	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	IS
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	IS
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	IS
		Count of N/A		52	102	100	101	74	81	102	105	104	92	
		Count of Mandatory		36	2	0	0	19	0	0	0	0	8	65
		Count of Mandatory SMETS 2		18	3	6	5	13	25	4	1	2	6	83
												Total Tests	148	

8.1.6 Gas Supplier (GS) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	GS
1.1	1.1.1	Update Import Tariff (Primary Element)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
1.2	1.2.1	Update Price (Primary Element)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
1.5	1.5	Update Meter Balance	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	N/A	N/A	Mandatory SMETS 2	N/A	GS
1.6	1.6	Update Payment Mode	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	GS
2.1	2.1	Update Prepay Configuration	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
2.2	2.2	Top Up Device	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
2.3	2.3	Update Debt	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS

2.5	2.5	Activate Emergency Credit	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
3.1	3.1	Display Message	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
3.2	3.2	Restrict Access For Change Of Tenancy	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
3.3	3.3	Clear Event Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
3.4	3.4	Update Supplier Name	N	N/A	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	GS
3.5	3.5	Disable Privacy PIN	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.1	4.1.1	Read Instantaneous Import Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.1	4.1.2	Read Instantaneous Import TOU Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.1	4.1.4	Read Instantaneous Import Block Counters	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.3	4.3	Read Instantaneous Prepay Values	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.4	4.4.2	Retrieve Change Of Mode / Tariff Triggered Billing Data Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.4	4.4.3	Retrieve Billing Calendar Triggered Billing Data Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.4	4.4.4	Retrieve Billing Data Log (Payment Based Debt Payments)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.4	4.4.5	Retrieve Billing Data Log (Prepayment Credits)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.6	4.6.1	Retrieve Import Daily Read Log	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.8	4.8.1	Read Active Import Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.10	4.10	Read Network Data	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.11	4.11.1	Read Tariff (Primary Element)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS

4.13	4.13	Read Prepayment Configuration	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.14	4.14	Read Prepayment Daily Read Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.17	4.17	Retrieve Daily Consumption Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
4.18	4.18	Read Meter Balance	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
6.2	6.2.3	Read Device Configuration (Billing Calendar)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.2	6.2.8	Read Device Configuration (Gas)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.2	6.2.9	Read Device Configuration (Payment Mode)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.2	6.2.10	Read Device Configuration (Event Alert Behaviours)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.6	6.6	Update Device Configuration (Gas Conversion)	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	N/A	N/A	N/A	N/A	GS
6.7	6.7	Update Device Configuration (Gas Flow)	Y	N/A	N/A	N/A	N/A	Mandatory	N/A	N/A	N/A	N/A	N/A	GS
6.8	6.8	Update Device Configuration (Billing Calendar)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
6.11	6.11	Synchronise Clock	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
6.13	6.13	Read Event Or Security Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.15	6.15.1	Update Security Credentials (KRP)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
6.15	6.15.2	Update Security Credentials (Device)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS

6.17	6.17	Issue Security Credentials	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
6.20	6.20.1	Set Device Configuration (Import MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.21	6.21	Request Handover Of DCC Controlled Device	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.22	6.22	Configure Alert Behaviour	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.23	6.23	Update Security Credentials (CoS)	N	N/A	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.24	6.24.1	Retrieve Device Security Credentials (KRP)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.24	6.24.2	Retrieve Device Security Credentials (Device)	Y	N/A	N/A	N/A	N/A	Mandatory SMETS 2	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
6.28	6.28	Set CHF Sub GHz Configuration	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.29	6.29	Request CHF Sub GHz Channel Scan	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.30	6.30	Read CHF Sub GHz Configuration	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.31	6.31	Read CHF Sub GHz Channel	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
6.32	6.32	Read CHF Sub GHz Channel Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
7.2	7.2	Disable Supply	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
7.3	7.3	Arm Supply	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.1	8.1.1	Commission Device	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
8.3	8.3	Decommission Device	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
8.7	8.7.1	Join Service (Critical)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
8.7	8.7.2	Join Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS

8.8	8.8.1	Unjoin Service (Critical)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
8.8	8.8.2	Unjoin Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.9	8.9	Read Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.11	8.11	Update HAN Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.12	8.12.1	Restore HAN Device Log	N	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.12	8.12.2	Restore Gas Proxy Function Device Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
8.13	8.13	**Return** Local Command Response	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
8.14	8.14.1	Communications Hub Status Update- Install Success	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
8.14	8.14.2	Communications Hub Status Update-	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
8.14	8.14.3	Communications Hub Status Update- Fault Return	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
8.14	8.14.4	Communications Hub Status Update- No Fault Return	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
11.1	11.1	Update Firmware	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GS
11.3	11.3	Activate Firmware	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GS
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GS
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GS
		Count of N/A		38	81	77	79	61	65	81	82	81	68	
		Count of Mandatory		30	0	0	0	18	0	0	0	0	8	56
		Count of Mandatory SMETS 2		14	1	5	3	3	17	1	0	1	6	51
												Total Tests		107

8.1.7 Export Supplier (ES) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	ES
4.2	4.2	Read Instantaneous Export Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
4.6	4.6.2	Retrieve Export Daily Read Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
4.8	4.8.3	Read Export Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
4.12	4.12.2	Read Maximum Demand Export Registers	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES
5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
6.2	6.20.2	Set Device Configuration (Export MPAN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ES
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	ES
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ES

Count of N/A	7	16	16	16	16	16	16	16	16	9	
Count of Mandatory	5	0	0	0	0	0	0	0	0	6	11
Count of Mandatory SMETS 2	4	0	0	0	0	0	0	0	0	1	5
									Total Tests		16

8.1.8 Electricity Distributor (ED) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	ED
4.1	4.1.1	Read Instantaneous Import Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.1	4.1.2	Read Instantaneous Import TOU Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.1	4.1.3	Read Instantaneous Import TOU With Blocks Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.2	4.2	Read Instantaneous Export Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.8	4.8.1	Read Active Import Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.8	4.8.2	Read Reactive Import Profile Data	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.8	4.8.3	Read Export Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.10	4.10	Read Network Data	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.12	4.12.1	Read Maximum Demand Import Registers	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.12	4.12.2	Read Maximum Demand Export Registers	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED

4.15	4.15	Read Load Limit Data	N	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.16	4.16	Read Active Power Import	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	ED
4.17	4.17	Retrieve Daily Consumption Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
6.2	6.2.1	Read Device Configuration (Voltage)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.2	6.2.2	Read Device Configuration (Randomisation)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.2	6.2.10	Read Device Configuration (Event Alert Behaviours)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.5	6.5	Update Device Configuration (Voltage)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.13	6.13	Read Event Or Security Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.15	6.15.1	Update Security Credentials (KRP)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	ED
6.18	6.18.1	Set Maximum Demand Configurable Time Period	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.18	6.18.2	Reset Maximum Demand Registers	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.22	6.22	Configure Alert Behaviour	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.24	6.24.1	Retrieve Device Security Credentials (KRP)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
6.27	6.27	Update Device Configuration (Daily Resetting Of Tariff Block Counter)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED

7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ED
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	ED
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	ED
		Count of N/A		10	32	34	33	34	34	35	35	35	28	
		Count of Mandatory		18	0	0	0	1	0	0	0	0	6	25
		Count of Mandatory SMETS 2		7	3	1	2	0	1	0	0	0	1	15
												Total Tests		40

8.1.9 Gas Transporter (GT) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	GT
4.1	4.1.1	Read Instantaneous Import Registers	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
4.1	4.1.2	Read Instantaneous Import TOU Matrices	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
4.8	4.8.1	Read Active Import Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
4.10	4.10	Read Network Data	N	Mandatory	N/A	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	GT
4.17	4.17	Retrieve Daily Consumption Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT

5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
6.2	6.2.8	Read Device Configuration (Gas)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
6.13	6.13	Read Event Or Security Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
6.15	6.15.1	Update Security Credentials (KRP)	Y	N/A	N/A	N/A	N/A	Mandatory	Mandatory SMETS 2	N/A	N/A	N/A	N/A	GT
6.24	6.24.1	Retrieve Device Security Credentials (KRP)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	GT
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	GT
14.1	14.1	Record Network Data (GAS)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GT
		Count of N/A		8	21	21	20	20	20	21	21	21	14	
		Count of Mandatory		10	0	0	0	1	0	0	0	0	6	17
		Count of Mandatory SMETS 2		3	0	0	1	0	1	0	0	0	1	6
												Total Tests		23

8.1.10 Registered Supplier Agent (RSA) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	RSA
6.2	6.2.1	Read Device Configuration (Voltage)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.2	Read Device Configuration (Randomisation)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.3	Read Device Configuration (Billing Calendar)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.5	Read Device Configuration (Instantaneous Power Thresholds)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.8	Read Device Configuration (Gas)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.2	6.2.9	Read Device Configuration (Payment Mode)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.13	6.13	Read Event Or Security Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.3	6.3	Read CHF Sub GHz Configuration	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.31	6.31	Read CHF Sub GHz Channel	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
6.32	6.32	Read CHF Sub GHz Channel Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
7.4	7.4	Read Supply Status	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	RSA

8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	RSA
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RSA
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	RSA
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	RSA
		Count of N/A		4	18	18	18	18	18	18	18	18	14	
		Count of Mandatory		9	0	0	0	0	0	0	0	0	3	16
		Count of Mandatory SMETS 2		5	0	0	0	0	0	0	0	0	1	6
												Total Tests		23

8.1.11 Other User (OU) User Role

Service Reference	Service Reference Variant	Name	Critical	CV1 – On Demand	CV1 – Future Dated	CV2 – On Demand	CV3 – On Demand	CV4 – On Demand	CV5 – On Demand	CV5 – Future Dated	CV6 – On Demand	CV7 – On Demand	CV8 – DCC Only	OU
4.8	4.8.1	Read Active Import Profile Data	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
4.8	4.8.2	Read Reactive Import Profile Data	N	Mandatory	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
4.8	4.8.3	Read Export Profile Data	N	N/A	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
4.11	4.11.1	Read Tariff (Primary Element)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
4.11	4.11.2	Read Tariff (Secondary Element)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
4.17	4.17	Retrieve Daily Consumption Log	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
5.1	5.1	Create Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU

5.2	5.2	Read Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU
5.3	5.3	Delete Schedule	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU
6.2	6.2.4	Read Device Configuration (Identity Exc MPxN)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
6.2	6.2.7	Read Device Configuration (MPxN)	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
7.7	7.7	Read Auxiliary Load Control Switch Data	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
7.11	7.11	Read Boost Button Details	N	N/A	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
8.2	8.2	Read Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU
8.4	8.4	Update Inventory	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU
8.7	8.7.2	Join Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
8.8	8.8.2	Unjoin Service (Non Critical)	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
8.9	8.9	Read Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
8.11	8.11	Update HAN Device Log	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
9.1	9.1	Request Customer Identification Number	N	Mandatory SMETS 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
11.2	11.2	Read Firmware Version	N	Mandatory	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	OU
12.1	12.1	Request WAN Matrix	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory SMETS 2	OU
12.2	12.2	Device Pre-notification	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mandatory	OU
		Count of N/A		9	22	22	23	23	23	23	23	23	16	
		Count of Mandatory		9	0	0	0	0	0	0	0	0	6	15
		Count of Mandatory SMETS 2		5	1	1	0	0	0	0	0	0	1	8
												Total Tests		23

8.1.12 Device Alert Tests

The following table outlines the Device Alert tests required to be executed by User Role. The purpose of these tests is to prove that a party can receive a subset of Device Alerts based on the differing types of Alerts that can be received.

New User

The following User Role tables reflect the Device Alerts that must be executed by a new Party seeking to undertake UEPT. The tests are those indicated as 'Mandatory, Mandatory SMETS1 and Mandatory SMETS2+ ' in the test scenario column, for which they must be executed for each specific User Role. Those indicated as 'Mandatory' must be executed in respect of a SMETS1 Device and a SMETS2+ Device. Those indicated as 'Mandatory SMETS1' must be executed in respect of a SMETS1 Device. Those indicated as 'Mandatory SMETS2+' must be executed in respect of a SMETS2+ Device. Where the Device Alert tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Existing User seeking to send Service Request to SMETS1 Devices

The tests that must be executed if a Testing Participant has already completed UEPT and is seeking to test Device Alerts for SMETS 1 Devices in a particular User Role (Eligibility Testing), as set out in clause 4.3 of the UTSAD, are those indicated as 'Mandatory or Mandatory SMETS1' in the test scenario column for the relevant User Role. Those indicated as 'Mandatory' must only be executed in respect of a SMETS1 Device and those indicated as 'Mandatory SMETS1' must only be executed in respect of a SMETS1 Device. Where the Device Alert tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Existing User seeking to send Service Requests that access R2.0 functionality

For SMETS2+ when executing Additive UEPT for R2.0, the Alerts as listed below need to be executed where indicated by User Role and 'Mandatory' or 'Mandatory SMETS2+' the test scenario column:

- Device Alerts IS - Ox81A0 Smart Meter Integrity Issue Warning (Optional)
- Device Alerts GS - Ox81A0 Smart Meter Integrity Issue Warning (Optional)

Those indicated as 'Mandatory' must only be executed in respect of a SMETS2+ Device.

The Alerts highlighted in Blue are Device Alert Tests to be executed against Dual Band Communications Hub by User Role.

8.1.13 Device Alert Tests – IS

Event / Alert Code	Event / Alert Code Meaning	Device Alert Variant	Critical	Test Scenario	User Role
0x8F32**	Supply Armed	Device Alert - Type 1 (Alert Code and Timestamp) DLMS	Y	Mandatory	IS
0x8183	Device joined SMHAN	Device Alert - Type 1 (Alert Code and Timestamp) DLMS	N	Mandatory SMETS2+	IS
0x8F66	Future – date HAN Interface Command Successfully Actioned	Device Alert - Type 2 (Alert Code, Timestamp and Specific Data) DLMS	Y	Mandatory SMETS2+	IS

**Where the Device being used in testing is not able to support the generation of this Alert, the DCC shall notify the Testing Participant of a different Alert that needs to be tested.

8.1.14 Device Alert Tests – GS

Event / Alert Code	Event / Alert Code Meaning	Device Alert Variant	Critical	Test Scenario	User Role
0x8F32**	Supply Armed	Device Alert - Type 1 (Alert Code and Timestamp) Zigbee	Y	Mandatory	GS
0x8183	Device joined SMHAN	Device Alert - Type 1 (Alert Code and Timestamp) Zigbee	N	Mandatory SMETS2+	GS
0x8F66	Future – date HAN Interface Command Successfully Actioned	Device Alert - Type 2 (Alert Code, Timestamp and Specific Data) Zigbee	Y	Mandatory SMETS2+	GS

**Where the Device being used in testing is not able to support the generation of this Alert, the DCC shall notify the Testing Participant of a different Alert that needs to be tested.

8.1.15 Device Alert Tests – ES

Event / Alert Code	Event / Alert Code Meaning	Device Alert Variant	Critical	CTS Test Scenario	User Role
No alerts identified from Device to Export Supplier					

8.1.16 Device Alert Tests – ED

Event / Alert Code	Event / Alert Code Meaning	Device Alert Variant	Critical	Test Scenario	User Role
0x8002	Average RMS Voltage above Average RMS Over Voltage Threshold (current value	Device Alert - Type 1 (Alert Code and Timestamp) DLMS	N	Mandatory SMETS2+	ED

	above threshold; previous value below threshold)				
0x8F35	Supply Outage Restored	Device Alert - Type 2 (Alert Code, Timestamp and Specific Data) DLMS	Y	Mandatory SMETS2+	ED
0x8F36	Supply Outage Restored - Outage >= 3 minutes	Device Alert - Type 2 (Alert Code, Timestamp and Specific Data) DLMS	Y	Mandatory SMETS2+	ED
0x8F40	Average RMS Voltage above Average RMS Over Voltage Threshold (current value above threshold; previous value below threshold)	Device Alert - Type 1 (Alert Code and Timestamp) DLMS	N	Mandatory SMETS1	ED
0x8F411	SMETS1 Average RMS Voltage below Average RMS Under Voltage Threshold (current value below threshold; previous value above threshold)	Device Alert - Type 1 (Alert Code and Timestamp) DLMS	N	Mandatory SMETS1	ED

8.1.17 Device Alert Tests – GT

Event / Alert Code	Event / Alert Code Meaning	Device Alert Variant	Critical	Test Scenario	User Role
No alerts identified from Device to Gas Transporter					

8.1.18 DCC Alert Tests

The following table outlines the DCC Alert tests required to be executed by User Role. The purpose of these tests is to prove that a party can receive a subset of DCC Alerts based on the differing types of Alerts that can be received.

<u>New User</u>

The following User Role tables reflect the DCC Alert Tests that must be executed by a new Party seeking to undertake UEPT. The tests are those indicated as ‘Mandatory, Mandatory SMETS1 and Mandatory SMETS2+‘ in the test scenario column, for which they must be executed for each specific User Role. Those indicated as ‘Mandatory’ must be executed in respect of a SMETS1 Device and a SMETS2+ Device. Those indicated as ‘Mandatory SMETS1’ must be executed in respect of a SMETS1 Device. Those indicated as ‘Mandatory SMETS2+’ must be executed in respect of a SMETS2+ Device. Where the DCC Alert Tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

<u>Existing User seeking to send Service Requests that access R2.0 functionality</u>

For SMETS2+ when executing Additive UEPT for R2.0, the Alerts as listed below need to be executed where indicated by User Role and ‘Mandatory’ or ‘Mandatory SMETS2+’ the test scenario column:

- DCC Alert Tests IS
  N54 Dual Band Communication Hub Sub GHz Alert (Mandatory SMETS2+)
  N49 / N50 / N51 / N52 Firmware Version Mismatch (Optional)
- DCC Alert Tests GS
  N54 Dual Band Communication Hub Sub GHz Alert (Mandatory SMETS2+)
  N49 / N50 / N51 / N52 Firmware Version Mismatch (Optional)

Those indicated as 'Mandatory' must only be executed in respect of a SMETS2+ Device.

The Alerts highlighted in Blue are Device Alert Tests to be executed against Dual Band Communications Hub by User Role.

Existing User seeking to send Service Request to SMETS1 Devices

The tests that must be executed if a Testing Participant has already completed UEPT and is seeking to test Response Codes for SMETS 1 Devices in a particular User Role (Eligibility Testing), as set out in clause 4.3 of the UTSAD, are those indicated as 'Mandatory or Mandatory SMETS1' in the test scenario column for the relevant User Role. Those indicated as 'Mandatory' must only be executed in respect of a SMETS1 Device and those indicated as 'Mandatory SMETS1' must only be executed in respect of a SMETS1 Device. Where the Response Code Tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

8.1.19 DCC Alert Tests - IS

Reference	Name	Test Scenario	Applicable User Role
N17	DSP Schedule Removal - Schedule removal due to Change of Supplier	Mandatory	Previously Registered IS
N24	Update HAN Device Log Result - Successful Communications Hub Function Whitelist Update	Mandatory SMETS2+	IS
N27	Change of Supplier - Device Change of Supplier	Mandatory	Previously Registered IS
N49, N50, N51, N52	Firmware Version Mismatch	Optional	IS
N53	Command Not Delivered To ESME	Mandatory SMETS2+	IS
N54	Dual Band CH Sub GHz Alert	Mandatory SMETS2+	IS
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	IS
N56	SMETS1 Service Provider Provision of prepayment top-up UTRN	Mandatory SMETS1	IS

8.1.20 DCC Alert Tests - GS

Reference	Name	Test Scenario	Applicable User Role

N17	DSP Schedule Removal - Schedule removal due to Change of Supplier	Mandatory	Previously Registered GS
N24	Update HAN Device Log Result - Successful Communications Hub Function Whitelist Update	Mandatory SMETS2+	GS
N27	Change of Supplier - Device Change of Supplier	Mandatory SMETS2+	Previously Registered GS
N49, N50, N51, N52	Firmware Version Mismatch	Optional SMETS2+	GS
N54	Dual Band CH Sub GHz Alert	Mandatory SMETS2+	GS
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	GS
N56	SMETS1 Service Provider Provision of prepayment top-up UTRN	Mandatory SMETS1	GS
N57	SMETS1 CH Firmware notification	Mandatory SMETS1	GS

8.1.21 DCC Alert Tests - ES

Reference	Name	CTS Test Scenario	Applicable User Role
N1	Device Status Change - Electricity Smart Meter Decommission or Withdrawal	Mandatory SMETS2+	Registered ES
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	Registered ES

8.1.22 DCC Alert Tests – ED

Reference	Name	Test Scenario	Applicable User Role
AD1	Power Outage Event	Mandatory SMETS2+	Registered ED
N1	Device Status Change - Electricity Smart Meter Decommission or Withdrawal	Mandatory SMETS2+	Registered ED
N16	Device Identity Confirmation	Mandatory SMETS2+	Registered ED
N53	Command Not Delivered To ESME	Mandatory SMETS2+	Registered ED
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	Registered ED

8.1.23 DCC Alert Tests – GT

Reference	Name	Test Scenario	Applicable User Role
AD1	Power Outage Event	Mandatory SMETS2+	Registered GT
N2	Device Status Change - Gas Smart Meter Decommission or Withdrawal	Mandatory SMETS2+	Registered GT
N16	Device Identity Confirmation	Mandatory SMETS2+	Registered GT
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	Registered GT

8.1.24 DCC Alert Tests - RSA

Reference	Name	Test Scenario	Applicable User Role
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	RSA

8.1.25 DCC Alert Tests - OU

Reference	Name	Test Scenario	Applicable User Role
N24	Update HAN Device Log Result - Successful Communications Hub Function Whitelist Update	Mandatory SMETS2+	OU
N55	SMETS1 Service Provider Alert	Mandatory SMETS1	OU

8.1.26 Response Code Tests

The following table outlines the Response Code Tests required to be executed by User Role. The purpose of these tests is to prove that a party can receive a subset of Response Code messages based on the differing types of response codes that can be received.

New User

The following User Role tables reflect the test Response Codes that must be executed by a new Party seeking to undertake UEPT. The tests are those indicated as 'Mandatory, Mandatory SMETS1 and Mandatory SMETS2+ ' in the test scenario column, for which they must be executed for each specific User Role. Those indicated as 'Mandatory' must be executed in respect of a SMETS1 Device and a SMETS2+ Device. Those indicated as 'Mandatory SMETS1' must be executed in respect of a SMETS1 Device. Those indicated as 'Mandatory SMETS2+' must be executed in respect of a SMETS2+ Device. Where the Response Code Tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Existing User seeking to send Service Request that access R2.0 functionality

In the case of R2.0 there are no specific Response Codes that require testing.

Existing User seeking to send Service Request to SMETS1 Devices

The tests that must be executed if a Testing Participant has already completed UEPT and is seeking to test Response Codes for SMETS 1 Devices in a particular User Role (Eligibility Testing), as set out in clause 4.3 of the UTSAD, are those indicated as 'Mandatory or Mandatory SMETS1' in the test scenario column for the relevant User Role. Those indicated as 'Mandatory' must only be executed in respect of a SMETS1 Device and those indicated as 'Mandatory SMETS1' must only be executed in respect of a SMETS1 Device. Where the Response Code Tests are indicated as N/A there is no requirement to test during execution of the test scenarios.

Reference	Name	Test Scenario	User Role
E11	Failed Validation - Invalid Service Request / Device Type combination	Mandatory	IS ES GS ED GT RSA OU
E13	Failed Validation – Invalid Request Type for URL	Mandatory	IS ES GS ED GT RSA OU
E19	Failed Validation – Device doesn't exist	Mandatory	IS ES GS ED GT RSA OU
E60	Failed Validation – Invalid Service Request for SMETS1 Devices	Mandatory SMETS1	IS ES GS ED GT RSA OU
E61	Failed Validation – Invalid Command Variant for SMETS1 Service Request	Mandatory SMETS1	IS ES GS ED GT RSA OU

8.1.27 Self Service Interface Test

The following tables outline the test required to be executed by a Testing Participant to determine whether the prospective User can access the SSI.

	Test Scenario
Title:	Testing Participant can successfully log into and access the Self Service Interface.
Prerequisite:	• Testing Participant holds the role of IS, IS, ES, ED, GT, RSA or OU for testing purposes. • Connection to DCC System. • Party SSI login authentication via DCC or own IDP.

Steps	Description	Objective	Actions	Acceptance Criteria
1	Login via IDP	Authenticate via IDP	Party to open the web service for SSI logon and complete Party login via DCC or own IDP.	Login success and the authenticating SEC Party will be presented with Self Service Interface.

9 Annex D: Forms and Templates

Extant versions of templates for the following documents will be maintained on the DCC Website or SharePoint.

DCC Acknowledgement of Intention to Undertake Testing template
Test Readiness Report template
Test Plan template
Test Execution Dashboard template
Test Completion Report template

Template

10 Annex E: TEST COMPLETION CERTIFICATE

TEST COMPLETION CERTIFICATE

To: [Party]

From: [DCC]

[Date]

Dear Sir or Madam,

TEST COMPLETE CERTIFICATE

[TEST]: [***insert description, to correspond with relevant description, insert list of Service Requests for which testing has been completed]***

We confirm that the relevant Exit Criteria have been achieved in respect of: [TEST]

Party: [Party]
User Role: [User Role]

Yours faithfully

[Name]

[Position]

Acting on behalf of the DCC

11 Annex F: DEFINITIONS

Term	Definition	Source
Entry Criteria	The criteria that must be satisfied before testing can commence	Clause 5.4.2 of this document
Exit Criteria	The criteria that must be satisfied before testing can be considered complete	Clause 5.6.2 of this document
SMETS2+ Install and Commission	The process of installing and commissioning a SMEST2+ Communications Hub Function, a SMETS+ Gas Proxy Function (in the case of Gas Smart Meters) and SMETS2+ Smart Meters with the DCC.	Clause 5.1 of this document
Regression Testing	Testing of a previously tested programme following modification of that programme 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
Relevant Party	The Party which is undertaking the necessary steps for the purposes of User Entry Process Tests	This document
(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.	International Software Testing Qualifications Board
Test Completion Certificate	A certificate issued by the DCC to a Party in a particular User Role upon request and in any event in accordance with 5.6.1.3 when that Party successfully completes UEPT.	Clause 10 of this document
Test Completion Report	A document summarising testing activities and results. It also contains an evaluation against Exit Criteria.	Clause 6.1.6 of this document
Test Data	The data constructed for the purposes of undertaking User Entry Process Tests	Clause 7 of 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	Clause 7 of 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.	Clause 6.1.5 of this document
Test Management Tool	A tool that has the ability to log and track Testing Issues.	Clause 5.6.2 of 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 clause 6.1.4	Clause 6.1.4 of this document
Test Result	The consequence/outcome of the execution of a test script	Clause 6.1.5 of 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	Clause 6.1.3 of this document

Term	Definition	Source
Test Schedule	A list of test process activities, tasks or events identifying their intended start and finish dates and/or times and interdependencies.	Clause 6.1.4 of this document
Test Script	A document specifying a sequence of actions for the execution of a test	Clause 6.1.8 of this document

References

Abbreviation	Title & Originator's Reference
SEC	Smart Energy Code
DUIS	DCC User Interface Specification
ETAD	Enduring Testing Approach Document
E2EAD	End to End Testing Approach Document
None	Guide for Testing Participants

12 Annex G: Testing Issue Severity Descriptions

Severity	Description
Severity 1	An Issue which in relation to the Relevant Party: • would prevent user from using their systems • would have a critical adverse impact on business activities • would cause significant financial loss • would result in any material loss or corruption of Data. Non-exhaustive examples: • an Issue leading to non-availability of systems • all test progress is blocked.
Severity 2	An Issue which in relation to the Relevant Party: • would have a major (but not critical) adverse impact on use of systems • would cause limited financial loss Non-exhaustive examples: • an Issue leading to non-availability of or to loss of resilience of a material part of their systems • large areas of functionality will not be able to be tested • testing not completely blocked but has been significantly impacted.
Severity 3	An Issue which in relation to the Relevant Party: • would have a major adverse impact on business activities but which can be reduced to a moderate adverse impact through a work-around • would have a moderate adverse impact on the business activities Non-exhaustive examples: • testing can progress but the work-around will impact test progress.
Severity 4	An Issue which in relation to the Relevant Party: • would have a minor adverse impact on business activities Non-exhaustive examples: • minor service interruptions in the business process
Severity 5	An Issue which in relation to the Relevant Party: • would have minimal impact on business activities Non-exhaustive examples: • trivial Issues with work-arounds which are noted for future releases but minimal impact of running existing activities • tests can still pass but there are cosmetic issues.