User Testing Services Approach Document for SMETS1 Services

1   Definitions and Interpretation:

1.1 In this document, except where the context otherwise requires, the expressions in the left-hand column below shall have the meanings given to them in the right-hand column below. Where not defined in this document, capitalised terms used in this document are set out in Section A of the Amended SMETS1 SEC (as defined in the SMETS1 SVTAD).

1.2 Where there are conflicts between the SEC Variation Test Approach Document for SMETS1 Services and this Test Approach Document, the SEC Variation Test Approach Document for SMETS1 Services shall take precedence.

1.3 Where obligations are expressed in respect of DCC Service Providers in this document, these shall be construed as obligations on the DCC. Where text is included in this document which does not explicitly place obligations on a Party, the SEC Panel or a Testing Participant, these shall be construed as obligations on the DCC.

Eligibility Testing Services	means the provision of services by the DCC to enable Parties to undertake Eligibility Testing.
SMETS1 SVTAD	Appendix [xx]AK to the Code ("The SEC Variation Testing Approach Document for SMETS1 Services").
Test Data	any data constructed for the purposes of undertaking Eligibility Testing.

2 Introduction

2.1 The SMETS1 SVTAD refers to the User Testing Services Approach Document for SMETS1 Services. This document is the User Testing Services Approach Document for SMETS1 Services ("SMETS 1 UTSAD").

2.2 The purpose of this SMETS1 UTSAD is to set out:

(a) supplementary rights and obligations with respect to the provision of Eligibility Testing Services by the DCC and the undertaking of Eligibility Testing by Parties;

~~(b)~~ (b) the criteria that need to be met prior to the point from which the DCC shall provide Eligibility Testing Services;

(c) supplementary arrangements governing SMETS 1 Interface Testing; and

(d) any steps that must be completed prior to being eligible to undertake Device and User System Testing in respect of SMETS1 Devices.

2.3 This document may only be modified pursuant to Clause 4 of the SEC Variation Testing Approach Document for SMETS1 Services. The SMETS1 Testing Objective and the role that the User Testing Services Phase plays in demonstrating this is set out in Clause 5 of the SVTAD. Obligations to comply with the SMETS1 UTSAD are set out in Clause 3 of the SVTAD.

3 Matters covered in the User Testing Services Approach Document for SMETS1 Services

3.1 This SMETS1 UTSAD provides for the following:

(a) the test activities that are undertaken during the User Testing Services Test Phase;

(b) the testing environment(s) used for the undertaking of Eligibility Testing;

(c) rights to participate in Eligibility Testing and Device and User System Testing in respect of ~~the~~ SMETS1 Devices;

(d) the Entry Criteria to be satisfied prior to the commencement of the User Testing Services Test Phase;

(e) the Exit Criteria to be satisfied for the completion of SMETS1 Interface Testing;

(f) supplementary roles, responsibilities and obligations of the DCC and of a Party in respect of SMETS1 Interface Testing and Eligibility Testing;

(g) the details of the evidence to be presented to the Panel in respect of SMETS1 Interface Testing completion and the process for determining SMETS1 Interface Testing completion; and

(h) reporting requirements relating to Eligibility Testing and SMETS1 Interface Testing.

3.2 The SMETS1 SVTAD also contains provisions that apply to the UTS Test Phase, including the following:

(a)   Clause 5.7 (**Overlapping of SMETS1 Testing**);

(b)   Clauses 7.1 to 7.5 (**Approach to Testing**)

(c)   Clause 9 (**General Requirements for SMETS1 Testing**);

(d)   Table 10.1 (**SMETS1 Interface Test Completion Report**);

(e)   Clause 8.7 (**Timetable for Testing**);

(f)   Clauses 13.1 to 13.9 (**DMC Selection and De-selection**);

(g)   Clauses 13.18 to 13.23 (**Testing Issue Thresholds**);

(h)   Clauses 13.24 to 13.26 (**Eligibility Testing**);

(i)   Clauses 14.1 to 14.5 (**Testing Issue resolution**); and

(j)   Clause 16.5 (**Completion Reports**).

4   Eligibility Testing and Device and User System Testing in respect of SMETS1 Devices

4.1   Clause 13.24 of the SMETS1 SVTAD sets out that each Party that has completed User Entry Process Testing for a particular User Role must successfully complete Eligibility Testing in respect of that User Role prior to being eligible to send Service Requests in respect of SMETS1 Devices in that User Role. Parties that start User Entry Process Tests prior to Eligibility Testing Services being made available may undertake (and be able to successfully complete) the User Entry Process Tests without reference to Eligibility Testing. However, a Party that completes User Entry Process Tests in respect of a User Role that did not include Eligibility Testing shall (notwithstanding any other provision of this Code) not be eligible to send Service Requests in respect of SMETS1 Devices in that User Role.

4.2   In accordance with Section X11.8 of the Code, Eligibility Testing Services shall be subject to the provisions of Section H14 (Testing Services) of the Code and the Enduring Testing Approach Document. In accordance with Section X11.8 of the Code, each Party (other than the DCC) participating in Eligibility Testing shall be deemed to be a Testing Participant for the purposes of the Code. Eligibility Testing shall also be subject to the provisions of the SMETS1 SVTAD and this SMETS1 UTSAD.

4.3   Sections H14.12 to H14.21 (User Entry Process Tests) of the Code shall apply to Eligibility Testing subject to the variations set out below:

(a)   as if references to UEPT were references to Eligibility Testing and as if references to Parties seeking to become eligible as a User in a particular User Role were references to Parties seeking to send Service Requests to SMETS1 Device(s) in a particular User Role;

(b)   the purpose of the tests shall be to demonstrate that the Party can use the DCC User Interface for the purposes set out in Section H3.3 in respect of SMETS1 Devices;

(c) Eligibility Testing shall comprise the ~~testing~~execution of the Service Reference Variants, Device Alerts, DCC Alerts and Response Code tests ~~set out~~ in ~~Annex C~~respect of ~~the CTSD~~SMETS1 Devices where it has been indicated in Clauses 8.1.4 – 8.1.26 of the CTSD that the test is applicable for SMETS1 for the User Role for which Eligibility Testing is being undertaken~~;~~ (either indicated as 'Mandatory' or 'Mandatory SMETS1'); and

(d) where a Party has previously completed UEPT, Section H14.13(a) and Section H14.13(c) shall not apply in respect of Eligibility Testing.

4.4 The final sentence of the opening paragraph of Section H14.32 of the Code shall apply to Eligibility Testing ~~subject to the following variation:~~

~~(a)~~ as if references to User Entry Process Tests were references to Eligibility Test~~s~~ing.

4.5 Appendix R of the Code (the Common Test Scenarios Document "CTSD") shall apply to Eligibility Testing ~~subject to the following variations:~~.

~~(a) as if references to UEPT were references to Eligibility Testing and as if references to Parties seeking to become eligible as a User in a particular User Role were references to Parties seeking to send Service Requests to SMETS1 Device(s) in a particular User Role;~~

~~(b) where a Party has previously completed UEPT, Clause 5.3 (Self Service Interface testing) of the CTSD shall not apply in respect of Eligibility Testing; and~~

~~(c) the first row of the Table 1 in Clause 5.4.2 is 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 SMETS1 UTSAD coming into effect shall be valid for the purposes of this Clause.~~

4.6 Appendix J of the Code (The Enduring Testing Approach Document "ETAD") shall apply to ~~–~~ Eligibility Testing and Device and User System Testing in respect of SMETS1 Devices subject to the following variations:

(a) as if references to User Entry Process Testing were references to Eligibility Testing;

~~(b) Eligibility Testing shall only be conducted in a DCC test laboratory;~~

~~(c)~~(b) Clause 8 of the ETAD shall be varied so that where a Testing Participant has completed User Entry Process Testing without having undertaken Eligibility Testing, that Testing Participant:

(i) shall not be eligible to undertake the user system element of Device and User System Testing in respect of SMETS1 Devices until it has completed Eligibility Testing;

(ii) shall not be eligible to undertake the device testing element of Device and User System Testing in respect of SMETS1 Devices until it has either:

(A) completed Eligibility Testing in respect of the User Role(s) that ~~its intend~~it intends to participate in when undertaking the SMETS1 testing; or

(B)　where the Testing Participant is not eligible to undertake Eligibility Testing, provide evidence to the DCC that all Service Requests to SMETS1 Devices can be generated in accordance with the DCC User Interface Specification (DUIS);

(c)　Where a Testing Participant ~~that~~ has completed Eligibility Testing on the basis of another Party's systems having completed Eligibility Testing or tests equivalent to Eligibility Testing, and that Testing Participant is seeking to undertake Device and User System Testing in respect of SMETS1 Devices, that Testing Participant~~s~~ shall follow a reasonable process specified by the DCC, which may include early connectivity testing, prior to being able to undertake Device and User System Testing in respect of SMETS1 Devices~~.~~;

(d)　Clauses 7.1(b), 8.3 and 8.4(c) of the ETAD shall be varied so that:

(i)　prior to a Device Model Combination being added to the list of Eligible Product Combinations, references to a Device Model Combination that is on the list of Eligible Product Combinations shall include a Device Model Combination against which SIT has completed or, where SIT has not completed, a Device Model Combination against which all relevant SIT tests in respect of that DMC have been successfully concluded; and

(ii)　the DCC shall only be required to provide DMCs of the type listed in Clauses 7,1(b) and 8.3, and a Testing Participant shall only be entitled to supply its own DMCs in a DCC test lab of the type set out in Clauses 8.4(c), where SIT has completed against such a type~~s~~ of DMC or, where SIT has not completed, all relevant SIT tests in respect of such a type of DMC have been successfully concluded; and

(e)　Clause 7.2 of the ETAD shall be varied so that where a Testing Participant is undertaking Eligibility Testing, the DCC shall not be required to provide SMETS2+ Device sets.

5　UTS Test Phase Environments, Test Activities and Entry & Exit Criteria for SMETS1 Interface Testing

UTS Test Phase Environment

5.1　The environment provided by the DCC for the undertaking of Eligibility Testing (and therefore SMETS1 Interface Testing) shall support the effective testing of the Service ~~Requests and~~Reference Variants, Service Responses and the generation of Alerts that are required to be tested as part of Eligibility Testing ~~and the DCC shall ensure that, should it need to make any changes to the environment part way through a Testing Participant's testing, such changes do not invalidate tests previously run by that Testing Participant.~~. In assessing the results of Eligibility Testing, the DCC will assess the results presented by the Testing Participant(s) against those expected from the test DCC systems and Device Model Combinations in use at the time that the Testing Participant(s) completed their Eligibility Testing. Should the DCC make a change to the environment in which a Testing Participant(s) is undertaking testing, the DCC shall provide to the Testing Participant(s) a testing notice specifying the change and the impact on testing. Where a Testing Participant has not completed Eligibility Testing prior to the change being

introduced, then the DCC shall identify any tests that could be impacted by the change, which shall need to be (re-)run against the changed environment by that Testing Participant. Where the Testing Participant is of the opinion that it should not have to re-run any or all of the tests identified, the Testing Participant may refer the matter to TAG. Where the TAG agrees with the Testing Participant, the DCC may refer the matter to the Secretary of State for determination, whose decision shall be final and binding for the purposes of this Code. Where a Testing Participant has completed Eligibility Testing than the DCC shall make a recommendation to the TAG as to whether or not the Testing Participant(s) should be required to re-run any of the tests comprising Eligibility Testing, together with the associated rationale. The DCC shall present its recommendation to the TAG, who shall determine whether or not any tests are required to be re-run by Testing Participant(s). Where the DCC disagrees with the determination of the TAG on whether Test Participants should be required to re-run any testing that has been previously completed, the DCC may refer the matter to the Secretary of State for determination, whose decision shall be final and binding for the purposes of this Code. Where it has been determined that test(s) need to be re-run in respect of a Testing Participant, that Testing Participant cannot complete Eligibility Testing without re-running those test(s).

5.2   The DCC shall only make the UTS Test Phase environment available for use by a Testing Participant for the undertaking of Eligibility Testing (and therefore SMETS1 Interface Testing) once the entry criteria in Table 5.1 of this SMETS1 UTSAD have been met. The DCC shall undertake a test phase entry gate to assess whether the entry criteria set out in Table 5.1 have been met.

5.3   The DCC shall provide, for information, the Panel's Testing Advisory Group with the outcome of the entry gate for Eligibility Testing after the entry gate assessment has been performed.

5.4   Following DCC's assessment that the entry gate criteria set out in Table 5.1 have been met, the DCC shall make the Eligibility Testing Service available and any Party shall be entitled to commence Eligibility Testing from that point, subject to it having met the entry requirements set out in the CTSD. The DCC shall notify Parties when the Eligibility Testing Service is available.

DCC Service Provider Support

5.5 5.5   The DCC shall ensure that, where requested by a Testing Participant, it provides reasonable assistance and support to that Testing Participant in resolving testing issues associated with SMETS1 Devices. In support of the test activities detailed in this document the DCC Service Providers shall provide support which shall include inter alia:

(a)   the installation and removal of SMETS1 Device Model Combinations (including SMETS1 IHDs) from DCC test laboratories;

(b)   capturing and analysis of logs for test issue resolution; and

(c)   representation on daily calls for Parties' a Testing Participant's test planning.

SMETS1 UTS Test Phase Environment Entry Criteria

5.6 In addition to the generic Entry Criteria set out in section 12.5 of the of the SMETS1 SVTAD, the Entry Criteria set out in Table 5.1 shall apply for making available the UTS Test Phase environment for the undertaking of Eligibility Testing.

Table 5.1 _UTS Test Phase Environment Entry Criteria

Criteria Number	Entry Criteria	Evidence
En1	Completion of SMETS1 SIT for IOC except where the Panel agree that SIT and SMETS1 Interface Testing can overlap	(i) Completion Report issued by DCC and approved by Panel, or where SIT and SMETS1 Interface Testing overlap a report of the outstanding tests yet to be run in SIT and any Testing Issues that, were they to remain at SIT completion, would prevent exit from SIT.
En2	SMETS1 code base approved for release into the relevant environment by TAB	(i) 'Approval to proceed' certificate issued by TAB in respect of all code for SIT.
~~En3~~	~~SMETS1 Devices~~	~~(i) At least one DMC which has not been de-selected from SIT is capable of deployment into the UTS Test Phase environment~~
En~~4~~3	SMETS1 Eligibility Testing supporting documents ready	(i) "User Testing Services Guidance" for UTS Participants sent to the Panel's TAG for information and published on the DCC Website~~.~~ one month prior to the start of UTS Test Phase.
En~~5~~4	Resources & Processes in place to support testing and testing issue resolution	(i) Statement of resources available to support Eligibility Testing and triage activities provided to DCC by each relevant DCC Service Provider.
		(ii) Testing Issues management process updated and triage guide and defect management tool provided by the DCC to each Party that has notified the DCC of their intention to undertake Eligibility Testing.
		(iii) Confirmation from each relevant DCC Service Provider that Eligibility Testing Services availability is 08:00 – 18:00 on Working Days.

		(iv) Confirmation from DCC that test support availability is provided from 08:00-18-:00 on Working Days.
~~En6~~	~~DCC Device Inventory Management Process~~	~~(i) Device inventory management process for DCC laboratory approved by DCC.~~
		~~(ii) Confirmation provided to DCC by each relevant DCC Service Provider that the DCC device inventory management process has been implemented by it.~~
En~~7~~5	Provision of Device Test Data	(i) Test Data reviewed by the DCC and able to be provided to Testing Participants as required.
		(iii) Written notification from all relevant DCC Service Providers that the necessary data has been loaded into the systems used in the test environment.
		(iv) Spot check of data load conducted by the DCC testing services and confirmation provided that data has been loaded correctly.
En~~8~~6	Test laboratories	(i) Test laboratory commissioned for testing by DCC's laboratory provider has been approved by the DCC (including via test laboratory site visit).
		(ii) Confirmation from the DCC's test laboratory provider to the DCC that it has DCC's SMETS 1 Device management process in place.
		(iii) Confirmation provided by the DCC's test laboratory provider to the DCC that the DMC(s) required to support Eligibility Testing have been commissioned for testing as requested by the DCC.
En~~9~~7	Relevant environment uplifted to SMETS1	(i) Written confirmation from the DCC's systems integrator to DCC that the UTS Test Phase environment uplift has been successful, including information on the manner in which the uplift has been tested and assured.
En~~10~~8	DCC Service Provider deliverables prior to UTS Test Phase commencement	(i) Environment proving and UTS Test Phase preparatory activity conducted and completed by the relevant DCC Service Providers.

6   SMETS1 Interface Testing Completion

6.1   SMETS1 Interface Testing shall only complete when the Panel determines that the Exit Criteria for SMETS1 Interface Testing have been met.

6.2   The Exit Criteria to apply to SMETS1 Interface Testing is that SMETS1 Interface Testing can only be considered to have completed when:

    (a)   a minimum of two non-Affiliated parties in the role of Import Supplier, and two non-Affiliated parties in the role of Gas Supplier, have successfully completed Eligibility Testing; and

    (b)   any extant Testing Issues are within the Testing Issue Thresholds (per DCC Service Provider) set out in Table 13.2 of the SVTAD. For the purposes of SMETS1 Interface Testing, the open Testing Issues or open production issues that are assessed to determine if they should count for the purposes of determining whether the Testing Issues Threshold for SMETS1 Interface Testing has been exceeded are set out in Clauses 13.18-13.23 of the SMETS1 SVTAD.

6.3   ~~Whether the DCC considers that the Exit Criteria for SMETS1 Interface Testing have been met shall be subject to a DCC Test Assurance Board gate review and Clause 16.5 of the SVTAD sets out the requirement for the DCC to produce a Completion Report and send it to the TAG for information where it considers that SMETS1 Interface Testing has been completed.~~

~~6.4~~6.3   When the DCC considers that SMETS1 Interface Testing is complete, the DCC shall produce a Completion Report (and send it to the TAG for information) pursuant to Clause 16.5 of the SVTAD that shall include:

    (a)   information on the number of tests run (planned and actual), passed, failed and mapped to the tests set out in Appendix R of this Code (the CTSD) that comprise Eligibility Testing for any parties that have completed Eligibility Testing in the role of Import Supplier and in the role of Gas Supplier;

    (b)   the details of any failed tests, including any outstanding Testing Issues their impact, severity, and quantity together with the analysis of open issues as detailed in Clauses 13.22 and 13.23 of the SMETS1 SVTAD; and

    (c)   details of the test assurance activities undertaken by the DCC for the Eligibility Testing completed that is deemed to meet the Interface Testing Exit Criteria. ~~and send it to the TAG for information.~~

6.~~5~~4   Following the production of the SMETS1 Interface Testing Completion Report the DCC shall then:

    (a)   notify the Secretary of State, the Authority, the Panel and the Parties that the DCC considers that SMETS1 Interface Testing has completed;

    (b)   provide the Authority, the Panel, and the Secretary of State with copies of the SMETS1 Interface Testing Completion Report and a list of the sections of such report that the DCC considers should be

redacted; and

(c)   review the supporting documentation and evidence with regards to the relevant Entry and Exit Criteria with the TAG.

6.65   The Panel shall confirm the completion of SMETS1 Interface Testing, or shall highlight where it believes the Exit Criteria have not been met. Where the Panel believes the Exit Criteria have not been met, it shall direct the DCC to continue SMETS1 Interface Testing and to address outstanding matters and submit further documentation and evidence to support the completion of SMETS1 Interface Testing, following which the Panel shall determine whether or not SMETS1 Interface Testing has completed (and this Clause 6.65 shall apply again).

6.76   On direction from the Panel, the DCC shall provide the Parties with copies of the SMETS1 Interface Testing Completion Report having first redacted any sections specified by the Panel.

7   Deliverables

7.1   The DCC shall be accountable and responsible for the following deliverables in Eligibility Testing:

(a)   general administration

(b)   the environment plan;

(c)   DCC test infrastructure and environments;

(d)   DCC test laboratory premises and the provision of SMETS1 Devices;

(e)   Test Data plan; and

(f)   the SMETS1 Interface Testing Completion Report.

7.2   Parties shall be accountable and responsible for their test infrastructure and their environments

Release management (DCC Systems)

7.3   The introduction of fixes for the current code set into the UTS Test Phase Environment shall be conducted and managed in accordance with Good Industry Practice. and the User Testing Services Guidance

8   Test Data for Eligibility Testing

8.1   For each Party undertaking Eligibility Testing, the DCC shall provide the Test Data to be used by that Party when undertaking Eligibility Testing.

9   Additional Obligations

9.1   The DCC shall:

(a)   notify Parties of outages and other matters affecting their testing;

(b)   support Parties undertaking Eligibility Testing; and

(c)   assure the evidence provided by Parties to demonstrate the successful completion of their Eligibility Testing.

9.2   The DCC Systems Integrator shall:

(a)   be responsible for management and delivery of the UTS Test Phase environment (including planning, control and tracking for SMETS1 Interface Testing);

(b)   support Parties undertaking Eligibility Testing;

(c)   provide test execution and environment usage schedules;

(d)   provide the Test Data plan;

(e)   administer the Testing Issue Resolution process and provide the testing issue management tool; and

(f)   operate the master configuration management plan.

9.3   The DCC DSP shall:

(a)   provide the DSP component of the relevant test environment and related data;

(b)   provide support for DSP solution elements and DSP component of the relevant test environment;

(c)   provide fixes required in DSP solution elements; and

(d)   provide resource to support Parties undertaking Eligibility Testing.

9.4   Other DCC SMETS1 Service Providers shall:

(a)   provide relevant components of or connections to the relevant test environment and related data;

(b)   provide support for relevant solution elements and components of the relevant test environment;

(c)   provide fixes required in relevant solution elements;

(d)   provide support for SMETS1 testing capability;

(e)   provide support to the DCC Systems Integrator by:

(i)   assisting in the administration of SMETS1 Eligibility Testing;

(ii)   designing and creating test scenarios, test scripts, test data and test environments;

(iii)   preparing test execution and environment usage schedules; and

(iv)   providing resource to triage and fix Testing Issues;

(f)   create and operate the master release schedule.

10 Governance and Communication

10.1 The DCC shall report progress during SMETS1 Interface Testing at the monthly Testing Advisory Group meeting of the Panel.