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APPENDIX AN

**SEC Variation Testing Approach Document for BEIS Changes
included in the November 2020 SEC Release**

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1 Definitions and Interpretations

- 1.1 In this SEC Variation Testing Approach Document for BEIS Q4 2020 SEC Variations (th~~is~~e “November 2020 SVTAD”), except where the context otherwise requires, the expressions in the left-hand column within Table 1.1 shall have the meanings given to them in the right-hand column within Table 1.1. Where not defined in this November 2020 SVTAD, words beginning with a capitalised letter~~terms~~ used in this document are defined~~set out~~ in Section A of the SEC ~~or in Schedules or Appendices of the SEC~~.
- 1.2 Where there are conflicts between this November 2020 SVTAD and the related, November 2020 DCC Testing Approach Document, this November 2020 SVTAD shall take precedence ~~in respect of BEIS Q4 2020 SEC Variations~~.
- 1.3 Where obligations are expressed in respect of DCC Service Providers in this November 2020 SVTAD, these shall be construed as obligations on the DCC. Where text is included in this November 2020 SVTAD which does not explicitly place obligations on a Party, the Panel, or Testing Participant, these shall be construed as obligations on the DCC.

Table 1.1 NOVEMBER 2020 SVTAD Definitions

Term	Meaning
BEIS Q4 2020 SEC Variations	means <u>the</u> variations to the SEC that are planned as part of the BEIS Q4 2020 package of changes referred to in the direction contained in Annex A.
Completion Report	means a report that is produced — setting out evidence demonstrating how the criteria for the completion of the testing has been met.
Exit Criteria	means the criteria that must be met in order for testing (<u>or a phase of testing</u>) to complete.
Modified DCC Total System	means the DCC Total System as will be modified to enable the delivery of Services as set out for the November 2020 SEC Release.
November 2020 SEC Release	<u>means the c</u> Changes to the DCC Total System and processes arising as a result of <u>the BEIS Q4 2020 SEC Variations and other contemporaneous</u> Modifications and/or variations to this Code currently planned to be implemented together in November 2020.

Term	Meaning
TAG	means t The Panel’s Testing Advisory Group.
November 2020 DCC Testing Approach Document	means the t Testing a Approach d Document produced pursuant to Clause [3.3] for the November 2020 SEC Release containing the approach for testing by the DCC of the BEIS Q4 2020 SEC Variations and which may also include testing for SEC Modifications in scope of the release.
Testing Issue Thresholds	means the maximum number of extant Testing Issues that may be permitted at test completion.
User Testing	means testing by one or more Users of all or part of any changes to the DCC Total System that form part of the November 2020 SEC Release that occur as a result of the BEIS Q4 2020 SEC Variations.
November 2020 Mandated User Testing Document	means any document prepared pursuant to Clause 3 that sets out the approach to mandatory User Testing.

2 General

- 2.1 This document is the SEC Variation Testing Approach Document for the BEIS Q4 2020 SEC Variations.
- 2.2 Section X11.7 of the Code requires that the DCC and each person other than the DCC that participates in (or is required to participate in) testing under a SEC Variation Testing Approach Document shall comply with the SEC Variation Testing Approach Document.
- 2.3 Section X11.8 of the Code specifies that Section H14 of the Code (Testing Services) and the Enduring Testing Approach Document shall apply in respect of testing under a SEC Variation Testing Approach Document as if such testing was a Testing Service under Section H14.34 (Modification Implementation Testing); and each participant in such testing shall be deemed to be a Testing Participant for such purposes.
- 2.4 This November 2020 SVTAD sets out:
 - (a) the framework for the testing that is required to be undertaken for BEIS Q4 2020 SEC Variations as part of the November 2020 SEC Release;
 - (b) the arrangements that apply to the development of the November 2020 DCC

Testing Approach Document; and

- (c) the rules to apply to the development of any November 2020 Mandated User Testing Document.

3 November 2020 Testing Approach Documents

3.1 Testing undertaken pursuant to this November 2020 SVTAD shall be performed by the DCC and any other Party that participates in it in accordance with Good Industry Practice.

3.2 It is acknowledged that the BEIS Q4 2020 SEC Variations ~~to this Code~~ are planned to be implemented as part of ~~the~~ November 2020 SEC Release. The DCC shall prepare a draft November 2020 DCC Testing Approach Document, which may include the approach to testing where it is required for Modifications that comprise part of the November 2020 SEC Release, and which shall set out the DCC's proposals for testing where it is required to support the BEIS Q4 2020 SEC Variations including:

- (a) the proposed amendments to this Code that are the subject of the testing, an explanation of the associated changes to the DCC Total System, and the testing objective;
- (b) the testing environments to be used;
- (c) the requirements (if any) for security testing;
- (d) the requirements (if any) for system capacity testing;
- (e) the testing that shall be undertaken, both in terms of the scope of testing and the extent of testing (including negative tests) and the approach to regression testing;
- (f) the applicable Testing Issue Thresholds and the process for excluding Testing Issues;
- (g) the exit criteria for testing to complete successfully;
- (h) any perceived risks associated with the approach to testing and the proposed mitigations;
- (i) the approach to providing for assurance of the testing undertaken; and

(j) matters to be included in the November 2020 SEC Release Testing Completion Report (to be prepared pursuant to Clause ~~4.13.10~~~~3.63.6~~).

3.3 The DCC shall submit the draft November 2020 DCC Testing Approach Document to the TAG for review (and such submission by the DCC and review by the TAG may take place prior to this Clause 3.3 coming into effect); ~~and~~:

(a) where the TAG and the DCC can reach an agreement, the relevant draft November 2020 DCC Testing Approach Document shall be updated by the DCC as necessary and deemed to be final; or

(b) where the TAG and the DCC cannot reach an agreement on the approach to testing for the BEIS Q4 2020 SEC Variations, the matters of disagreement shall be referred by the DCC to the Secretary of State for determination. The Secretary of State's decision on such matters shall be final and binding for the purposes of this Code and the relevant draft November 2020 DCC Testing Approach Document shall be updated by the DCC as necessary and deemed to be final.

3.4 The DCC ~~shall comply with the November 2020 DCC Testing Approach Document,~~ ~~and~~ shall take all reasonable steps to complete the tests set out in ~~the~~~~each~~ November 2020 DCC Testing Approach Document in accordance with the milestone plan published by the DCC for the relevant November 2020 SEC Release.

3.5 Revisions to ~~the~~ November 2020 DCC Testing Approach Document finalised pursuant to Clause 3.3 may, from time to time, be submitted by the DCC to the TAG for agreement in accordance with the provisions of Clause 3.3, and the provisions of Clause 3.4 shall apply (again) to the revised version of the document.

~~3.6~~ The November 2020 DCC Test Approach Document shall set out the Devices to be used for testing. Where there is a disagreement between DCC and the TAG on Devices to be used for testing in respect of the BEIS Q4 2020 SEC Variations, it shall be referred to the Secretary of State for determination whose decision shall be final and binding.

~~3.63.7~~ Where the DCC considers that User testing is required prior to implementation of the BEIS Q4 2020 SEC Variations it shall set out its proposals for User testing in a draft November 2020 Mandated User Testing Document, including those Users that should be required to participate in the testing and the User Role in which they are required to

~~participate~~ which proposals shall include ~~ing: identification of those Users that should be required to participate in the testing;~~ the approach to testing; the arrangements for test completion; the process for resolving testing disputes; and notification of test completion. In developing ~~the~~ November 2020 Mandated User Testing Document, the DCC shall consult with the TAG, Parties and other relevant stakeholders prior to the submission of the document to the Secretary of State.

3.73.8 Following consultation under Clause 3.67, ~~the~~ DCC shall submit ~~where required at the~~ draft November 2020 Mandated User Testing Document to the Secretary of State, indicating:

- (a) why the DCC considers the draft to be fit for purpose;
- (b) copies of the consultation responses received; and
- (c) any areas of disagreement that arose during the consultation process and that have not been resolved.

3.83.9 The DCC shall comply with any direction given by the Secretary of State to re-consider, re-consult, and/or re-submit the draft document.

3.10 Should a November 2020 Mandated User Testing Document be approved by the Secretary of State, the DCC and each Party other than the DCC that participates in (or is required to participate in) testing, as set out in such approved document, shall comply with that November 2020 Mandated User Testing Document.

4 Test Completion

4.1 Completion of the testing for the BEIS Q4 2020 SEC Variations set out in the November 2020 DCC Testing Approach Document shall only complete when the Panel determines that the Exit Criteria set out in that document for that testing have been met. When the DCC considers that such completion ought to occur, the DCC shall prepare a Completion Report (which may comprise part of a November 2020 SEC Release Completion Report) as provided for in the November 2020 DCC Testing Approach Document. The DCC shall:

- (a) notify the Secretary of State, the Authority, the Panel, and the Parties that the DCC considers that testing has been completed;

- (b) provide the Authority, the Panel, and the Secretary of State with copies of the Completion Report ~~{(or where one exists, the November 2020 SEC Release Completion Report)}~~, and a list of the sections of such report that the DCC considers should be redacted prior to publication; and
- (c) review the supporting documentation and evidence with regards to the relevant Exit Criteria with the TAG.

4.2 The Panel shall confirm the completion of testing for the BEIS Q4 2020 SEC Variations set out in the November 2020 DCC Testing Approach Document, or shall highlight where it believes the Exit Criteria have not been met.

4.3 Where the Panel confirms the completion of testing for the BEIS Q4 2020 SEC Variations (subject to the Panel and the DCC reaching an agreement regarding resolution of any issues raised by the Panel) the Completion Report (or where one exists, the November 2020 SEC Release Completion Report) shall be updated by the DCC as necessary and deemed to be final.

4.4 Where the Panel declines to confirm the completion of testing for the BEIS Q4 2020 SEC Variations-, the DCC shall ~~,if necessary,~~ update the Completion Report (or where one exists, the November 2020 SEC Release Completion Report) to reflect resolution of any issues where the DCC and the Panel reached an agreement, and the DCC shall then either:

- (a) refer the matters where the Panel and the DCC are in disagreement with respect to the BEIS Q4 2020 SEC Variations to the Secretary of State for determination; or
- (b) continue with testing (and Clause 3.10 onwards shall apply again).

4.5 Where a referral has been made by the DCC ~~{pursuant to Clause ~~{3.13}~~}~~, the determination of the Secretary of State shall be final and binding for the purposes of this Code as follows:

- (a) where the Secretary of State agrees that testing for the BEIS Q4 2020 SEC Variations is complete, the relevant ~~{Completion Report (or where one exists, the November 2020 SEC Release Completion Report)}~~ shall be updated by the DCC

as necessary and the contents relating to the BEIS Q4 2020 SEC Variations shall be deemed to be final; or

- (b) where the Secretary of State disagrees that testing for the BEIS Q4 2020 SEC Variations is complete, the DCC shall continue with testing (and Clause [3.10] onwards shall apply again).

4.6 The DCC shall publish the final ~~±~~Completion Report (or where one exists, the November 2020 SEC Release Completion Report)~~±~~, which shall be anonymised and redacted where directed by the Panel, on the DCC Website. The DCC shall notify the Panel, the Secretary of State, the Authority and the SEC Parties of the publication of the report.

5 Annex A – Direction Pursuant to Section X11.4 of the SEC

1. This direction is made for the purposes of the Smart Energy Code designated by the Secretary of State pursuant to the smart meter communication licences granted under the Electricity Act 1989 and the Gas Act 1986 (such code being the "SEC").
2. Words and expressions used in this direction shall be interpreted in accordance with Section A (Definitions and Interpretation) of the SEC.
3. Pursuant to Section X11.4 (SEC Variation Testing Approach Document) of the SEC, the Secretary of State hereby directs the DCC to develop a draft SEC Variation Testing Approach Document in respect of those variations to the SEC proposed to be made for the purposes of the “BEIS Q4 2020 Package”, which are currently planned to be given legal effect on a planned go-live date of 29 November 2020.
4. For the purposes of this direction, the “BEIS Q4 2020 Package” means changes to gas and electricity supply licences, the Smart Meter Communication Licences and to the Smart Energy Code (including Schedules and SEC Subsidiary Documents) that are required to support the following:
 - i) the changes referred to in section 7 of the BEIS consultation on “changes to Standard Conditions of Gas and Electricity Supply Licences, conditions of the DCC Licence, the SEC, the UNC and the MRA”, published on 14 January 2020¹ (which essentially propose to amend the SEC to introduce a new type of Organisation Certificate with a Remote Party Role of “xmlSign”);
 - ii) the changes referred to in chapters 3 and 4 of the BEIS consultation on “the DCC’s provision of an enrolment service for EDMI SMETS1 meters; changes to DCC, Electricity and Gas Supply Licence Conditions; and changes to the SEC, BSC and UNC”, published on 6 April 2020 (which propose to amend the SEC to introduce functionality to support Standalone Auxiliary Proportional Controllers (SAPCs) and Auxiliary Proportional Control (APC) functionality for Electricity Smart Metering Equipment (ESME) and further arrangements relating to the

¹ <https://smartenergycodecompany.co.uk/latest-news/consultation-on-changes-to-standard-conditions-of-gas-and-electricity-supply-licenses-conditions-of-the-dcc-licence-the-sec-the-unc-and-the-mra/>

Issuing of Organisation Certificates with a Remote Party Role of “xmlSign”);

iii) the associated changes to SEC Schedules and Appendices required to support the above changes. This includes an additional SMETS document as well as additional Versions of CHTS and GBCS, respective draft versions 5.0², 1.4 and 2.1, which have been consulted upon by BEIS and are available on the SECAS website³. It also includes modified versions of:

- SEC Appendix B (SMKI Organisation Certificate Policy) a draft of which was included in the Government consultation of 6 April 2020⁴.
- SEC Appendix D (SMKI Registration Authority Policies and Procedures) a draft of which was included in the Government consultation of 6 April 2020.
- SEC Appendix E (DCC User Interface Services Schedule) A draft of which the Government plans to consult upon in May 2020. It is expected that this will simply reflect the DCC User eligibility rules set out in DUIS Draft 4.0 published for consultation by the DCC.
- SEC Appendix J (Enduring Testing Approach Document) - changes to which are being developed by the DCC.
- SEC Appendix K (SMKI and Repository Test Scenarios Document) – it is yet to be confirmed whether any changes are needed to this document to support the introduction of the XML signing certificates. If they are, we are expecting DCC to lead on developing any necessary changes to this document in conjunction with its development of changes to CTSD and ETAD).
- SEC Appendix M (SMKI Interface Design Specification) a draft of which was included in the Government consultation of 6 April 2020.
- SEC Appendix R (Common Test Scenarios Document) - changes to which are being developed by the DCC.

² Please note that BEIS intends to further consult on a device-level-versioning version of this document in May. This will not include any proposals for functional change.

³ <https://smartenergycodecompany.co.uk/the-developing-sec/>

⁴ <https://smartenergycodecompany.co.uk/latest-news/beis-consultation-on-the-dccs-provision-of-an-enrolment-service-for-edmi-smets1-meters-changes-to-dcc-electricity-and-gas-supply-licence-conditions-and-changes-to-the-sec-bscs-and-unc/>

- SEC Appendix AB (Service Request Processing Document) – minor changes to which the Government proposes to consult upon in May 2020. The changes will simply reflect the fact that SAPCs are treated as if they are ESMEs for the purposes of this document.
- SEC Appendix AC (Inventory, Enrolment and Decommissioning Procedures) – changes to which the Government proposes to consult on in May 2020. Again, these changes will reflect the fact that SAPCs are treated as if they are ESMEs.

There are also new versions of the following (which include Government driven changes):

- SEC Appendix AD (DCC User Interface Services Schedule) – DCC is currently consulting on draft version 4.0 of this document.
- SEC Appendix AF (Message Mapping Catalogue) – again DCC is currently consulting on draft version 4.0 of this document.

iv) the release will also include the following Government led changes:

- changes set out in DCC CR 1277 to reinstate validation of install code lengths for SMETS1 and SMETS2+ Devices included in Service Reference Variant (SRV) 8.11; and
- changes set out in CR 1233 relating to the capture in the service audit trail of out of sequence Responses for future dated commands.

5. There may be changes to the detailed scope of the BEIS Q4 2020 Package as the project to implement it progresses and the Government will discuss any such changes with DCC. It may consequently be necessary for DCC to update the SEC Variation Testing Approach Document and/or the Testing Approach Document in accordance with the processes for the modification of those documents.
6. The Secretary of State notes that a number of other government-directed changes will be made to the SEC and licences in September 2020 but that these changes do not require changes to the DCC Total System. This includes, for example changes to support the

introduction of Device-specific Technical Specification versioning.

7. Section X11.5 of the SEC sets out the required content for the draft SEC Variation Testing Approach Document, and Section X11.6 of the SEC sets out the procedures that the DCC should follow in developing it to support an approval decision by the Secretary of State.
8. The SEC Variation Testing Approach Document shall provide for the detailed test approach to be set out in an associated Testing Approach Document (TAD) to be developed by the DCC. It is acknowledged that the scope of the tests described in the TAD may also include tests that are required to support SEC Modifications that are planned to be introduced into the SEC at the same time as the BEIS Q4 2020 Release changes are to be made. The SEC Variation Testing Approach Document shall provide for the TAD to be submitted to the SEC Panel's Testing Advisory Group (TAG) for approval and, insofar as it relates to the testing of the BEIS Q4 2020 Package, for any disagreements between TAG and the DCC over the content of the TAD to be submitted for a final and binding determination by the Secretary of State.
9. A draft of the SEC Variation Testing Approach Document should be submitted by the DCC to the Secretary of State in accordance with the requirements of Section X11.6 of the SEC on or before 30 June 2020.
10. This direction is also being notified to the SEC Administrator.