



Department
of Energy &
Climate Change

**Department of Energy & Climate
Change**

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The Authority (Ofgem), the SEC Panel,
SEC Parties and other interested parties

28 September 2015

**DESIGNATION OF ENDURING TESTING APPROACH DOCUMENT AND ITS
INCORPORATION INTO THE SMART ENERGY CODE.**

Dear Colleague,

This direction is made for the purposes of the smart meter communication licences granted under the Electricity Act 1989 and the Gas Act 1986 (such licences being the "**DCC Licence**") and the smart energy code designated by the Secretary of State pursuant to the DCC Licence (such code being the "**SEC**").

Pursuant to Condition 22.27 of the DCC Licence and Section X5.4 of the SEC, the Secretary of State hereby directs that the document set out at Enclosure 1 to this letter is hereby designated as the Enduring Testing Approach Document, and shall be incorporated into the SEC as Appendix J with effect from 28 September 2015.

Pursuant to Condition 22.29 of the DCC Licence and Section X5.6 of the SEC, the definition of Enduring Testing Approach Document set out in Section A1.1 of the SEC is hereby amended to read "means the SEC Subsidiary Document set out in Appendix J".

Yours faithfully

T J Guy

DECC Delivery
DECC Smart Metering Implementation Programme (SMIP)

(an official of the Department of Energy & Climate Change
authorised to act on behalf of the Secretary of State)

Enclosure:

1. Appendix J (to the SEC) – Enduring Testing Approach Document

Appendix J – Enduring Testing Approach Document

1 Introduction

Scope

- 1.1 The Enduring Testing Approach Document (ETAD) describes the detailed procedural and technical requirements for the Testing Services, as defined in Section H14.1, that the DCC will make available to Testing Participants on an enduring basis. The security requirements and requirements for provision of Test Certificates will also be applicable for RDPs for the purpose of participating in Systems Integration Testing, as signalled in the Systems Integration Testing Approach Document.
- 1.2 This document is a subsidiary document of the Smart Energy Code (SEC).

2 Security requirements

2.1 For the purposes of this document, “Testing Participant Systems” means:

- (a) any Systems (excluding any Devices) that are operated by or on behalf of a Testing Participant and used in whole or in part for the testing equivalent of:
 - (i) constructing Service Requests;
 - (ii) sending Service Requests over the DCC User Interface;
 - (iii) receiving, sending, storing, using or otherwise carrying out any processing in respect of any Pre-Command or Signed Pre-Command;
 - (iv) receiving Service Responses or Alerts over the DCC User Interface;
 - (v) generating Data for communication to the OCA, DCA or ICA, or receiving Data from the OCA, DCA or ICA (including any Systems which store or use Secret Key Material for such purposes);
 - (vi) generating Data for the purposes of lodging in the SMKI Repository, or retrieving Data from the SMKI Repository;
 - (vii) providing (or procuring the provision of) Registration Data in respect of a particular MPAN or MPRN; and/or
 - (viii) the collection, storage or communication of the Registration Data referred to in sub-clause vii) above prior to, or for the purposes of, its provision to DCC over the Registration Data Interface; and
- (b) any other Systems from which the Systems used in whole or in part for the *purposes* set out in clause (a) are not Separate.

2.2 Each Testing Participant shall ensure that its Testing Participant Systems are Separate from:

- (a) its RDP Systems or User Systems, as appropriate; and
- (b) any other Systems not used for the purposes of carrying out tests using the Testing Services.

2.3 Each Testing Participant shall use its reasonable endeavours:

- (a) to ensure that its Testing Participant Systems are capable of detecting any unauthorised software that has been installed or executed on them and any unauthorised attempt to install or execute software on them;
- (b) if those Testing Participant Systems detect any such software or such attempt to install or execute software, to ensure that the installation or execution of that software is prevented; and
- (c) where any such software has been installed or executed, to take appropriate remedial action.

2.4 Each Testing Participant shall ensure that it carries out assessments that are designed to identify any vulnerability of its Testing Participant Systems to Compromise:

- (a) prior to accessing any Testing Services using such Testing Participant Systems and on at least an annual basis thereafter;
- (b) in respect of each new or materially changed component or functionality of its Testing Participant Systems, prior to that component or functionality becoming operational; and
- (c) on the occurrence of any security issue in relation to its Testing Participant Systems.

2.5 Where, following any assessment of its Testing Participant Systems in accordance with clause 2.4 or otherwise, any material vulnerability has been detected, the Testing Participant shall:

- (a) use its reasonable endeavours to ensure that the cause of the vulnerability

is rectified, or the potential impact of the vulnerability is mitigated, as soon as is reasonably practicable; and

- (b) promptly notify the DCC of the steps being taken to rectify its cause or mitigate its potential impact (as the case may be) on DCC Systems and the time within which they are intended to be completed, and comply with any reasonable request from the DCC to mitigate or prevent any potential adverse impact on the DCC Systems arising from such vulnerability.

3 IKI and SMKI Test Certificates

- 3.1 The DCC shall issue Test Certificates simulating the function of Organisation Certificates, OCA Certificates, Device Certificates, DCA Certificates, IKI Certificates and ICA Certificates in accordance with the relevant provisions of the “Test Documents”.
- 3.2 For the purposes of clause 3.1, the Test Documents means:
- (a) the Test Certificate Policy, which shall be a document published by the DCC and approved by the SMKI PMA which corresponds (insofar as relevant in respect of the Testing Services) in purpose, content and effect to the Organisation Certificate Policy, the Device Certificate Policy and the IKI Certificate Policy; and
 - (b) subject to clause 3.4:
 - (i) the SMKI RAPP;
 - (ii) the SMKI Interface Design Specification;
 - (iii) the SMKI Code of Connection;
 - (iv) the SMKI Repository Interface Design Specification; and
 - (v) the SMKI Repository Code of Connection.
- 3.3 For the purposes of clause 3.2(b) (i), each Testing Participant shall, when completing the forms in the appendices of the SMKI RAPP for test purposes, clearly mark each page with the text, “For Testing Purposes” and submit the completed forms to the SMKI Registration Authority, in writing, as directed on the DCC Website.
- 3.4 For the purposes of clause 3.2(b):
- (a) each of the documents there specified as Test Documents shall, if no such document has yet have been incorporated into the SEC, be interpreted as meaning the draft of that document most recently published on the DCC Website;
 - (b) any reference in such documents to any office, function, role, system, process or other thing shall be construed as being a reference to the

corresponding equivalent of that office, function, role, system, process or thing which is established, undertaken, operated or given effect (as the case may be) for the purposes of the Testing Services;

- (c) Testing Participants shall not be required to complete SMKI and Repository Entry Process Tests to become eligible to obtain IKI and SMKI Test Certificates;
- (d) where agreed by the DCC and a Testing Participant, any of the requirements that a Testing Participant must satisfy in order to be entitled to become an Authorised Subscriber for a Test Certificate may be disregarded for the purposes of such entitlement;
- (e) the DCC shall publish on the DCC Website, and from time to time update, limits on the number of Certificate Signing Requests that each Testing Participant may submit in any particular time period over any relevant interface for testing purposes;
- (f) each Testing Participant shall use all reasonable endeavours to ensure it does not submit certificate signing requests for testing purposes in excess of any limit published (or updated) in accordance with clause (e) above;
- (g) the DCC shall publish on the DCC Website, and from time to time update, limits on the total number of Certificate Signing Requests across all Testing Participants that can be processed each day. The DCC shall not be required to process any Certificate Signing Request in excess of such limits that is submitted by any Testing Participant.

4 DCCKI Test Certificates

- 4.1 The DCC shall issue DCCKI Test Certificates simulating the function of DCCKI Certificates in accordance with the relevant provisions of the “DCCKI Test Documents”.
- 4.2 For the purposes of clause 4.1, the DCCKI Test Documents means, subject to clauses 4.3 to 4.5:
- (a) the Test DCCKI Certificate Policy;
 - (b) the DCCKI RAPP;
 - (c) the DCCKI Interface Design Specification and DCCKI Repository Interface Design Specification; and
 - (d) the DCCKI Interface Code of Connection and DCCKI Repository Code of Connection.
- 4.3 For the purposes of clause 4.2 (a) and for issuing Test DCCKI Certificates, the Test DCCKI Certificate Policy shall be the most recently published draft of the DCCKI Certificate Policy at that date, modified such that:
- (a) the OID in clause 1.2 is replaced by 1.2.826.0.1.8641679.1.2.1.12
 - (b) the modifications identified in clause 4.5 below apply; and
 - (c) any changes that:
 - (i) have been approved by the DCCKI PMA function prior to taking effect; and
 - (ii) do not directly affect any rights or obligations of Parties (other than the DCC) or RDPs,apply.

4.4 For the purposes of identifying the DCCKI Certificate Policy referred to in clause 4.3 and the documents specified as DCCKI Test Documents in clause 4.2 (b), (c) and (d), if no such document has yet been incorporated into the SEC, be interpreted as meaning the draft of that document most recently published on the DCC Website.

4.5 For the purposes of clause 4.2:

- (a) any reference in such documents to any office, function, role, system, process or other thing shall be construed as being a reference to the corresponding equivalent of that office, function, role, system, process or thing which is established, undertaken, operated or given effect (as the case may be) for the purposes of the Testing Services;
- (b) Parties and RDPs shall be considered to be DCCKI Authorised Subscribers for testing purposes where they have appointed at least one DCCKI SRO and at least one DCCKI ARO;
- (c) any reference to lodging of information in the DCCKI Repository, including DCCKI Certificates, EII DCCKICA CRL and DCCKI ARL, shall be modified such that the DCC may, where the DCCKI Repository is not available, provide such information via an alternative means to be notified to DCCKI Authorised Subscribers, and where approved in advance by the DCCKI PMA function;
- (d) all obligations on the DCC in respect of timescales associated with the delivery of DCCKI Services or DCCKI Repository Services, shall be modified so that any such timescales shall be replaced with “as soon as reasonably practicable, having regard to the requirement to provide DCCKI Services and DCCKI Repository Services”;
- (e) any reference to raising Incidents and Major Security Incidents shall not apply and the provisions of the Testing Issue Resolution Process shall apply; and
- (f) the following provisions of the documents shall be disregarded and treated as forming no part of the DCCKI Test Documents:

- (i) references to interactions with the Service Desk processes shall not apply, except to the extent that such processes are required to support the identity verification of individuals nominated to become DCCKI SROs or DCCKI AROs for testing purposes; and
- (ii) clauses 3.2 (b); 3.15; 3.16; and 4.4 to 4.12; in the DCCKI RAPP shall not apply.

4.6 For the purposes of clause 4.2(b), each Testing Participant shall, when completing the forms in the annexes of the DCCKI RAPP for testing purposes, clearly mark each page with the text, “For Testing Purposes” and submit the completed forms to the DCCKI Registration Authority, in writing, as directed on the DCC Website.

5 Obligations on Testing Participants using Remote Test Labs

- 5.1 In accordance with Section H14.31 Testing Participants are eligible to connect to a simulation of the SM WAN (“ a test SM WAN”) for the purposes of conducting Device and User System Tests remotely at premises of their choice. As well as providing the necessary Test Communications Hubs, Smart Meters and any other Devices which they choose to test, the Testing Participant may need to establish a connection to the test SM WAN in the chosen Region(s).
- 5.2 The DCC shall include a description of the equipment that will be provided to enable connection to and use of a test SM WAN for the purposes set out above in the guide for Testing Participants which the DCC is obliged to publish under Section H14.3.
- 5.3 Where a Testing Participant is considering ordering a connection to the test SM WAN, the Testing Participant shall first contact the DCC via the Service Desk to request a site survey and resulting quotation setting out the charges to apply.
- 5.4 On receiving a request for a site survey and a quotation of the charges to apply, the DCC shall undertake the steps detailed below as soon as is reasonably practicable:
 - (a) Conduct a site survey to assess the equipment that needs to be provided by the DCC, and any specific requirements to be fulfilled by the DCC for the premises at which the equipment is to be installed; and
 - (b) set out the charges to apply, which may comprise:
 - i) a connection charge for standard connection equipment;
 - ii) an additional charge for additional, non-standard connection equipment; and
 - iii) a monthly operating charge.

- 5.5 Upon receipt of the details of the site survey and the charges which will apply, the Testing Participant shall, if it wishes to place an order, notify the DCC accordingly.
- 5.6 Where the Testing Participant notifies the DCC that it wishes to place an order under clause 5.5, the DCC shall provide the connection as soon as is reasonably practicable, and in any event within 6 months of the order being placed.
- 5.7 The DCC shall provide reasonable notice to the Testing Participant of the planned date of installation of the connection equipment and the establishment of the connection to the test SM WAN.
- 5.8 Where the Testing Participant requests a change to the planned date of installation advised by the DCC, that planned date of installation shall be amended, subject to the Testing Participant agreeing to pay for any additional charges notified by the DCC to cover the additional reasonable costs incurred by the DCC resulting from the change of date. In first providing the connection at the premises, the DCC shall procure that the test SM WAN connection equipment is installed at the premises and that it is done so in accordance with Good Industry Practice and all applicable Laws and Directives.
- 5.9 A Testing Participant at whose premises test SM WAN connection equipment has been installed shall ensure that no damage is deliberately or negligently caused to that equipment (save that such a Party may take emergency action in accordance with Good Industry Practice to protect the health and safety of persons or to prevent imminent damage to property).
- 5.10 The test SM WAN connection equipment shall (as between the DCC and the Testing Participant) remain the property of the DCC. No Testing Participant shall hold itself out as the owner of such connection equipment, or purport to sell or otherwise dispose of such connection equipment. Such equipment is installed at the DCC's risk and no Testing Participant shall have liability for any loss or damage to the equipment unless and to the extent that such loss or damage arose as a result of that Testing Participant's breach of this Code.

5.11 Where test SM WAN connection equipment is to be installed at a Testing Participant's premises, the Testing Participant shall:

- (a) provide a suitably prepared area, with suitable power feeds prior to the installation of any equipment by the DCC, as specified by the DCC as part of the site survey ahead of an order being confirmed;
- (b) provide a dedicated phone connection over which an ADSL connection can be established to the data centre for the relevant CSP Region, as required, which enables transmission of data between the Testing Participant's test laboratory and the DCC; and
- (c) carry out routine inspection of the equipment supplied by the DCC and maintenance of the environment in which the equipment is located.

5.12 The Testing Participant shall be entitled to and shall only use the connection to the test SM WAN for the purposes of undertaking the tests set out in Section H14.31 and shall not use it for any other purpose.

Maintenance and Removal of Test SM WAN Connection Equipment

5.13 The DCC shall undertake the following in relation to the test SM WAN connection equipment that the DCC provides:

- (a) provide remote assistance to the Testing Participant to diagnose faults with any connection to the test SM WAN, including faults with any test SM WAN connection equipment supplied by the DCC;
- (b) rectify any faults with the connection to the test SM WAN, including faults with any test SM WAN connection equipment supplied by the DCC;
- (c) provide ongoing configuration management of test SM WAN connection equipment; and
- (d) manage and implement firmware and hardware upgrades associated with the test SM WAN connection equipment.

- 5.14 The Testing Participant, at whose premises the test SM WAN connection equipment is (or is to be) installed, shall provide the DCC with such access to that premises as the DCC may reasonably require in order to allow it to undertake the installation, maintenance or removal of the test SM WAN connection equipment. The DCC shall ensure that all persons exercising such rights of access do so in compliance with the site rules and reasonable instructions of the Testing Participant.
- 5.15 A Testing Participant using its own test laboratory shall meet all applicable security requirements that are set out in this Enduring Testing Approach Document when accessing and using the Testing Services from that laboratory.
- 5.16 Where the Testing Participant notifies the DCC that it no longer requires the connection to the test SM WAN (on not less than 1 month's prior notice), then the DCC shall within 30 days of that notice period ending, remove the test SM WAN connection equipment from the relevant premises in accordance with Good Industry Practice and all applicable Laws and Directives.
- 5.17 In the event that test SM WAN connection equipment is not removed within 30 days, the Testing Participant may dispose of that equipment and shall notify the DCC at least 5 days prior to disposing of the test SM WAN connection equipment, provided that the DCC shall have the right to remove the equipment prior to the end of that 5 day period.