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MP179 'DCC Boxed'

Modification Report

Version 1.0

22 December 2021



About this document

This document is a Modification Report. It sets out the background, issue, solution, impacts, costs, implementation approach, and progression timetable for this modification, along with any relevant discussions, views and conclusions.

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This document also has two annexes:

- **Annex A** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex B** contains the collated responses to the Refinement Consultation.

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1. Summary

This proposal has been raised by Tom Rothery from the Data Communications Company (DCC).

Currently, a User wishing to test its systems or Devices against the DCC Systems must do so through remote or in-situ testing as set out in SEC Section H 'Testing Services' and SEC Appendix J 'Enduring Testing Approach Document' (ETAD). These include a range of associated User-entry and connectivity steps which take time and incur cost.

The DCC has developed an end-to-end testing tool, known as 'DCC Boxed', which replicates the end-to-end DCC system, as an expansion from the existing Great Britain Companion Specification (GBCS) for Industry (GFI) toolset. DCC Boxed was developed to meet the need to enhance the existing GFI tool to provide a holistic testing environment beyond the Home Area Network (HAN).

The DCC has undertaken a cost benefit analysis of making the tool available through an Explicit Charge, which has the potential to recover the development costs and potentially, over time, provide a means for the DCC to reduce its fixed costs to its customers.

The purpose of this modification is to add the necessary wording to the SEC to allow the DCC Boxed product to be provided through an Explicit Charge to those Parties that wish to purchase it. This modification will impact the DCC and will make this service available to other SEC Parties. There are no costs to implement this change and no DCC System impacts. If approved this modification is targeted for the February 2022 SEC Release. This is a Self-Governance Modification.

2. Issue

What are the current arrangements?

Currently, a User wishing to test its systems or Devices against the DCC Systems must do so through remote or in-situ testing as set out in SEC Section H 'Testing Services' and SEC Appendix J 'Enduring Testing Approach Document', with a range of associated User-entry and connectivity steps which take time and incur cost.

DCC Boxed is an end-to-end testing tool developed by the DCC which replicates the end-to-end DCC system. Whilst DCC Boxed can be utilised for internal testing and could be used to support programme testing, several parties (including Suppliers, Device Manufacturers, and other SEC and non-SEC Parties) have requested DCC Boxed be made available as a testing product. The DCC has engaged with stakeholders through industry forums and a survey on the requirements and the regulatory and funding options.

What is the issue?

The DCC currently offer several testing products to its customers, which are set out in SEC Section H and Appendix J. There are currently no explicit provisions within the SEC for the DCC to provide DCC Boxed as a testing product to its customers. Similarly, there is currently no Explicit Charge in SEC Section K 'Charging Methodology' that is specific to the charging for DCC Boxed.

As a result of the costs involved, and due to the nature of the DCC's release schedule, it is often the case that there is limited time available in the regulated User Integration Testing (UIT) environment for the development of new products and services.

The Proposer believes that making DCC Boxed available for early testing will increase the quality of any new products and services because they will have been more rigorously tested over a longer timeframe. The Proposer believes a SEC modification is the correct route to deliver this product as it doesn't meet the scope of existing Elective Communication Services, and to be implemented as a 'value-added service' a product must sit outside of the energy sector¹.

What is the impact this is having?

The DCC has conducted a survey to understand the appetite for DCC Boxed to be made available as a testing product, and received interest from several parties including Suppliers, Device Manufacturers, and other SEC and non-SEC Parties. A summary of these survey responses is available on [the DCC's website](#).

The DCC's survey results provided several examples of issues with time and cost-effectiveness for testing, defect resolution and Device proving under the approaches currently available. These include:

- For organisations without access to test environments provided under the SEC, early development of HAN Connected Auxiliary Load Control Switches (HCALCS) or Standalone Auxiliary Proportional Controllers (SAPCs) is currently unavailable.
- Testing participants without access to Remote Testing Labs (RTLs) are unable to undertake testing outside of scheduled testing hours at DCC test labs.
- For Device manufacturers, Device proving with smaller Supplier Parties is difficult when relying only on GFI and RTLs available under the SEC.

Without more accessible and robust testing of new products and Devices in a realistic simulation of a live environment, design issues will continue to go unidentified prior to implementation, resulting in lower performance and higher costs to resolve across all industry Parties.

It is also the DCC's view that doing nothing would inhibit its ability to comply at all times with the DCC Licence Conditions, primarily its first General Objective, which is outlined in the Smart Meter Communication Licence. This requires that the DCC carries on the Mandatory Business in the manner that is most likely to ensure the development, operation, and maintenance of an efficient, economical, co-ordinated, and secure system for the provision of Mandatory Business Services under the SEC². This also relates to SEC Objective (a)³. This is because the use of DCC Boxed as a saleable tool for SEC Parties and Testing Participants should enable the DCC to reduce its overall fixed cost charges to SEC Parties.

Impact on consumers

Limitations in access to an end-to-end testing environment for some Users can lead to new products going live without a full understanding of how they will interact in a live environment. Many issues that

¹ Value Added Services are defined in the DCC's Licence as services that 'are not related solely to the Supply of Energy (or its use) under the Principal Energy Legislation'

² [Smart Meter Communication Licence Condition 5.9](#)

³ Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain.

arise once a product is live will negatively impact consumer experience, as they may result in reduced Device operability, increased Round Trip Times (RTTs) of System messages relating to key customer business processes, and increased cost of service if Device repair or replacement is required.

3. Solution

The DCC Boxed tool has been developed for internal use by the DCC. The DCC recognised the product may have potential uses for their customers' testing and development processes, and so conducted public surveys to gauge interest. The responses received expressed an appetite for the DCC Boxed product to be made available for purchase through an Explicit Charge model.

This modification seeks to make the necessary changes to the SEC to provide a commercial vehicle for DCC Boxed to be provided through an Explicit Charge to those Parties that wish to purchase it. This is a text-only change and will not impact DCC Systems.

The changes to the SEC required to deliver the Proposed Solution can be found in Annex A.

4. Impacts

This section summarises the impacts that would arise from the implementation of this modification.

SEC Parties

SEC Party Categories impacted			
	Large Suppliers		Small Suppliers
	Electricity Network Operators		Gas Network Operators
	Other SEC Parties	✓	DCC

The impact on the DCC will be the obligation to provide the DCC Boxed product and subsequent servicing requirements to Parties that wish to purchase it, and to update their financial reporting accordingly.

While there will be no direct impact on Parties other than the DCC from the implementation of MP179, any Party that wishes to purchase DCC Boxed will be subject to the relevant charges.

During the Refinement Consultation, a Large Supplier noted one impact to their business, which is that they will have to ensure their existing test equipment is configured to work with the DCC Boxed tool.

DCC System

There is no impact from this modification on the DCC Systems.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- SEC Section A 'Definitions and Interpretation'
- SEC Section H 'DCC Services'
- SEC Section K 'Charging Methodology'
- SEC Schedule 7 'Specimen Enabling Services Agreement'
- SEC Appendix J 'Enduring Testing Approach Document'

The changes to the SEC required to deliver the proposed solution can be found in Annex A.

Consumers

The Proposer believes that Consumers will be positively impacted by the implementation of this modification, as the improvement in testing will lead to the availability of more robust products and services.

Other industry Codes

There is no impact from this modification on other industry Codes.

Greenhouse gas emissions

There is no impact from this modification on greenhouse gas emissions.

5. Costs

DCC costs

There are no DCC costs to implement this modification.

SECAS costs

The estimated Smart Energy Code Administrator and Secretariat (SECAS) implementation cost to implement this as a stand-alone modification is one day of effort, amounting to approximately £600. This cost will be reassessed when combining this modification in a scheduled SEC Release. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.

SEC Party costs

There are no SEC Party costs to implement this modification.

6. Implementation approach

Agreed implementation approach

The Change Sub-Committee (CSC) agreed an implementation date of:

- **24 February 2022** (February 2022 SEC Release) if a decision to approve is received on or before 10 February 2022; or
- **30 June 2022** (June 2022 SEC Release) if a decision to approve is received after 10 February 2022 but on or before 15 June 2022.

7. Assessment of the proposal

Observations on the issue and solution

Views of the Change Sub-Committee

SECAS presented a summary of this modification to the Change Sub-Committee (CSC) on 31 August 2021 for initial comment. A CSC member noted the importance of understanding the cost/benefit case, and it was agreed that further development was required to define and understand the issue. When this modification was initially raised, the issue was defined by the need for the improvement of available testing services; however, it has since been redefined as the need to provide a commercial vehicle for the delivery of an existing testing and development tool.

Following this clarification, the CSC agreed that this modification should proceed to the Refinement Process to develop the solution.

Views of the SMKI PMA

A Smart Metering Key Infrastructure (SMKI) Policy Management Authority (PMA) member questioned whether the testing tool has an interface with the SMKI, and if so, how this is configured internally. The SMKI PMA considered that investigation would be required to determine if the DCC Boxed tool could be used to 'reverse engineer' sensitive data concerning SMKI configuration. The Proposer has since confirmed that DCC Boxed offers no more insight than the SMKI documentation already in the public domain and that no sensitive material is shared between DCC Boxed and the SMKI.

Views of the SSC

SECAS noted to the Security Sub-Committee (SSC) that no sensitive material is shared between DCC Boxed and DCC Systems or any of the interfaces which are emulated by tool.

The SSC queried why this is not being provided as an elective service. SECAS advised that DCC Boxed doesn't meet the scope of existing Elective Communication Services, so a SEC modification would still be required to allow this service to be offered to DCC customers.

The SSC queried how the tool would be security assured. SECAS advised that an independent security assessment had already been completed and no substantive issues were found. The DCC

has summarised the findings of the independent security assessment report below and provided responses to the specific questions raised by the SSC.

'The penetration test showed that both outsider and insider threats had low to negligible inherent risk levels, and low residual risks. The independent test was in two parts: a code review and a build review.

The code review included a check on third-party dependencies. The reviewed application was developed with care taken to ensure that security was accounted for, and security best practices were followed. The overall potential for abuse of the application code was found to be low. During the review, dependencies for the application code were verified to ensure that no required dependencies contained known security vulnerabilities. It was identified that some elements of the application depended on versions of third-party libraries that contained known vulnerabilities.

For the build review, one medium risk vulnerability was discovered which concerned the webserver configuration which supported the DCC application on the Device. The Device did not present any other vulnerabilities that could be leveraged by an unauthenticated network attacker. The overall risk rating was amended accordingly.

The penetration test report was clear in that this product has very low security risk. The DCC will also be exploring the hosting of a page for DCC Boxed users to gain security awareness regarding DCC Boxed components, as per its internal security recommendation.'

The SSC asked whether DCC Boxed connects to the internet or uses a separate operating system. The DCC has advised that an internet connection is required only to download new updates.

The SSC queried whether the emulator Universal Serial Bus (USB) sticks would be encrypted and how. The DCC has confirmed that the Device emulator code is contained within the mini-PC or Next Unit of Computing (NUC) and not on the USB stick. The USB sticks simply provide a method of integrating Zigbee into the computer's gateways and bridge Devices. There is no personal or sensitive data on the USB sticks, and from a security standpoint there is no necessity for encryption.

The SSC also asked what protections are in place on the mini-PC to prevent other USBs being used to interrogate Devices. The DCC has advised that the operating system is a compiled piece of code and has no user access. The DCC Boxed equipment acts as a server for hosting the DCC Boxed application only and cannot be used for any other activity. As the code is purely an emulator built from publicly available information, attackers would be unable to gain access to or information about the DCC Total Systems. The architecture of the DCC Boxed component ensures the Zigbee USB sticks are solely used for that purpose only on the preconfigured Device.

The SSC queried what controls are built in for protection in the event of physical theft of the mini-PC. The DCC advised that as the DCC Boxed component does not store any real or live data there are no significant risks to integrity or confidentiality. The DCC can stop the mini-PC from updating once being reported stolen, however the security risk is very low.

Views of the TAG

The Testing Advisory Group (TAG) considered that the issue had not been clearly defined, as it had not been made clear exactly what uses the tool is intended to have. Following a discussion with the Proposer and the TAG chair, the Modification Report summary has been amended to address this.

The TAG asked whether emulators would have to be updated ahead of Communications Service Provider (CSP) and Data Service Provider (DSP) uplifts, and how this would be aligned with

governance. The DCC has confirmed it can update the tool and users can configure the tool to test against current and upcoming releases. If DCC Boxed is configured to current releases it cannot be used as an early testing tool for upcoming releases; users will be referred to a website for configuration patches and updates, and it will be down to the user to check for and download the updates. The DCC proposes to set out its approach to updates in the DCC Boxed Policy.

The DCC confirmed that the projected cost of DCC Boxed covers annual uplifts of the product, which may be undertaken more regularly than once yearly.

The TAG asked what steps are in place to triage any issues encountered by DCC Boxed users. The DCC has a clearly defined path of customer support, starting with the product user guide, progressing to the DCC Service centre and internal staff support, through to specialist assistance to help understand issues and resolve any potential problems.

Views of the TABASC

The Technical Architecture and Business Architecture Sub-Committee (TABASC) had similar concerns to the TAG regarding the issue not being clearly defined.

The TABASC asked how many years' use the intended Explicit Charge covers when the tool is bought. The DCC has confirmed that the Explicit Charge covers user support for the lifecycle of the product, although the product is designed to be self-serving. The cost includes a twelve-month warranty, and the current pricing model has five years of GBCS changes costed in.

The DCC advised the tool is intended to increase the uptake of smart metering systems by Suppliers by supporting early testing and reducing the volume and severity of testing issues.

The TABASC also asked for more detail around uplifting of functionality and availability of Communications Hubs, including whether the tool would provide access to early versions of firmware. The DCC has responded that the DCC Boxed policy document, which is owned by the DCC and referred to in the legal text changes proposed for SEC Appendix J, will provide the plans for future updates and their frequency. The DCC has confirmed that DCC Boxed is not shipped with physical Communications Hubs and will not provide any details around availability or plans for future upgrades of any Communications Hub firmware. However, when early versions of Communications Hub firmware are released by CSPs ahead of any Release, they can be tested using DCC Boxed.

Views of the Working Group

SECAS presented a summary of the modification and the Proposed Solution to the Working Group on 3 November 2021. During the discussion the Working Group commented that the Device emulators used by the DCC should behave the same as emulators which are already in the market, rather than simply being compliant with the relevant technical specifications. The DCC noted this point, although SECAS advised that it cannot enforce compliance with 'unwritten' industry consensus. There were no concerns raised over the planned approach.

Support for Change

Refinement Consultation responses

There were two respondents to the Refinement Consultation, one Network Party and one Large Supplier. Both respondents agreed with the implementation approach, the legal text changes, and

that the modification would be beneficial to industry and consumers. Full collated responses can be found in Annex B.

Comments on the legal text

During the Refinement Consultation window, SECAS was contacted by a Device Manufacturer who noted that the draft legal text definition of DCC Boxed described it as replicating the 'end-to-end DCC Systems'. It believed this was incorrect, as DCC Boxed doesn't replicate DCC User systems. Subsequently, SECAS amended the legal text drafting to account for this. The term 'DCC Systems' was also changed to 'DCC Total Systems' to account for the inclusion of Smart Metering Equipment Technical Specifications (SMETS) 2+ Communications Hubs.

Following a review by the SEC Lawyer, part of the drafting under SEC Section H14.57 which referred to Testing Participants' obligations was removed, as it will be covered in the 'DCC Boxed policy document' referred to in the Enduring Test Approach Document; these sections were drafted to be consistent with the approach taken to GFI testing.

Views of the Working Group

At its meeting on 1 December 2021, the Working Group agreed that MP179 would be beneficial to Consumers, and that the modification was ready to proceed to the Report Phase.

The Working Group was informed that following the implementation of MP179 the DCC will coordinate with Ofgem on the Charging Statement which is a three-month process. Following this, the DCC Boxed product will be commercially available.

Views against the General SEC Objectives

Proposer's views

The Proposer believes that implementing MP179 would better facilitate SEC Objective (a)⁴, as the provision of DCC Boxed via an Explicit Charge should enable the DCC to reduce its overall fixed cost charges to SEC Parties.

Industry views

Both respondents to the Refinement Consultation believed that MP179 would better facilitate SEC Objective (a). One of the respondents also believed it would better facilitate SEC Objective (b)⁵.

The Working Group agreed that MP179 would better facilitate SEC Objective (a).

Views against the consumer areas

Improved safety and reliability

This modification is expected to have a positive impact on safety and reliability; more robust testing of new products and services will lead to more issues being identified prior to going live.

⁴ Facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain.

⁵ Enable the DCC to comply at all times with the General Objectives of the DCC (as defined in the DCC Licence), and to efficiently discharge the other obligations imposed upon it by the DCC Licence.

Lower bills than would otherwise be the case

This modification is expected to have a positive impact on consumer bills, as fewer issues in product design will lead to a lower cost to service.

Reduced environmental damage

This modification is expected to have a positive impact on the environment, as it will enable greater innovation in the design and delivery of new 'green' products and services.

Improved quality of service

This modification is expected to have a positive impact on quality of service, as it will lead to fewer faults being encountered after new products and services have entered the market.

Benefits for society as a whole

This modification is expected to have a positive impact on society as a whole, as it will enable greater innovation in the design and delivery of new products and services.

Appendix 1: Progression timetable

Following the Modification Report Consultation (MRC) the modification will be presented to the Change Board for vote under Self-Governance on 26 January 2022.

Timetable	
Event/Action	Date
Draft Proposal raised	23 Aug 2021
Presented to CSC for initial comment	31 Aug 2021
Modification discussed with Sub-Committees	Sep 2021 – Oct 2021
CSC converts Draft Proposal to Modification Proposal	26 Oct 2021
Discussion with Working Group	3 Nov 2021
Refinement Consultation	10 – 26 Nov 2021
Discussion with Working Group	1 Dec 2021
Modification Report approved by CSC	21 Dec 2021
Modification Report Consultation	22 Dec 2021 – 17 Jan 2022
Change Board Vote	26 Jan 2022

Appendix 2: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	Full term
CSC	Change Sub-Committee
CSP	Communication Service Provider
DCC	Data Communications Company
DSP	Data Service Provider
ETAD	Enduring Testing Approach Document
GBCS	Great Britain Companion Specification
GFI	GBCS for Industry
HAN	Home Area Network
HCALCS	HAN Connected Auxiliary Load Control Switch
NUC	Next Unit of Computing
RTL	Remote Testing Lab
RTT	Round Trip Time
SAPC	Standalone Auxiliary Proportional Controller
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMETS	Smart Metering Equipment Technical Specifications
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee
TAG	Testing Advisory Group
UIT	User Integration Testing
USB	Universal Serial Bus

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MP179 ‘DCC Boxed’

Annex A

Legal text – version 1.0

About this document

This document contains the redlined changes to the SEC that would be required to deliver this Modification Proposal.

Section A ‘Definitions and Interpretation’

These definitions will be included in alphabetical order into the latest version of Section A at the time of implementation.

DCC Boxed

means a testing tool provided by the DCC that replicates parts of the DCC Total System which can be used by Testing Participants outside of the DCC's physical test laboratories

Section H 'DCC Services'

These changes have been redlined against Section H version 12.0.

Amend Section H14.1

H14. TESTING SERVICES

General Testing Requirements

H14.1 The DCC shall provide the following testing services (the “**Testing Services**”):

- (a) User Entry Process Tests;
- (b) SMKI and Repository Entry Process Tests;
- (c) Device and User System Tests;
- (d) Modification Proposal implementation testing (as described in Section H14.34);
- (e) DCC Internal Systems change testing (as described in Section H14.36);
- (f) RDP Entry Process Tests;
- (g) SMETS1 Pending Product Combinations Tests;
- (h) RF Noise Testing;
- (i) Interoperability and Innovation Events;
- (j) GFI Testing; ~~and~~
- (k) Wired Instrumented Test Communications Hubs; ~~and~~
- (l) DCC Boxed.

Add Section H14.56 - 14.58 as follows:

DCC Boxed

H14.56 The DCC shall provide DCC Boxed to Testing Participants upon request, and subject to such Testing Participant agreeing to pay the applicable Charges.

H14.57 The following shall apply in respect of DCC Boxed:

- (a) the following persons shall be eligible to use DCC Boxed: (i) Parties and (ii) persons that have signed agreements in accordance with Section H14.7;

(b) the Testing Issue Resolution Process in Section H14.37 to H14.45 (General: Testing Issue Resolution Process) shall not apply to DCC Boxed, but Section H14.33 shall apply in relation to DCC Boxed, so that the DCC must (subject to payment of the applicable Charges) take reasonable steps to provide support and assistance to a person using DCC Boxed in order to assist that person in resolving Testing Issues encountered when using DCC Boxed.

H14.58 The DCC and the relevant Testing Participant in respect of DCC Boxed shall comply with any and all additional obligations concerning DCC Boxed set out in the Enduring Testing Approach Document.

Section K 'Charging Methodology'

These changes have been redlined against Section K version 10.0.

Amend Section K7.5 as follows:

K7.5 The Explicit Charging Metrics for each Party and the Charging Period for each month are as follows:

- (a) ('*security assessments*') an obligation to pay arising during that Charging Period in respect of that Party pursuant to Section G8.51 (Users: Obligation to Pay Charges) in relation to User Security Assessments, Follow-up Security Assessments, User Security Assessment Reports or the activities of the Independent Security Assurance Service Provider;
- (b) ('*privacy assessments*') an obligation to pay arising during that Charging Period in respect of that Party pursuant to Section I2.40 (Users: Obligation to Pay Charges) in relation to Full Privacy Assessments, Random Sample Privacy Assessments, Privacy Assessment Reports or the activities of the Independent Privacy Auditor;
- (c) ('*LV gateway connection*') an obligation to pay arising during that Charging Period in accordance with an offer for a DCC Gateway LV Connection accepted by that Party pursuant to Section H15 (DCC Gateway Connections), including where the obligation to pay is preserved under Section H15.19(b) (Ongoing Provision of a DCC Gateway Connection);
- (d) ('*HV gateway connection*') an obligation to pay arising during that Charging Period in accordance with an offer for a DCC Gateway HV Connection accepted by that Party pursuant to Section H15 (DCC Gateway Connections), including where the obligation to pay is preserved under Section H15.19(b) (Ongoing Provision of a DCC Gateway Connection);
- (e) ('*gateway equipment relocation*') an obligation to pay arising during that Charging Period as a result of a request by that Party to relocate DCC Gateway Equipment under Section H15.27 (DCC Gateway Equipment);
- (f) ('*elective service evaluations*') an obligation to pay arising during that Charging Period under the terms and conditions accepted by that Party for a Detailed Evaluation in respect of potential Elective Communication Services pursuant to Section H7.8 (Detailed Evaluations of Elective Communication Services);
- (g) ('*P&C support*') an obligation to pay arising during that Charging Period under the terms and conditions accepted by that Party in relation to that Party's use or implementation of the Parse and Correlate Software pursuant to Section H11.12 (Provision of Support & Assistance to Users);
- (h) ('*SM WAN for testing*') an obligation to pay arising during that Charging Period from the acceptance by that Party of the charges offered by the DCC to provide a connection to a simulation of the SM WAN pursuant to Section H14.31 (Device and User System Testing);
- (i) ('*additional testing support*') an obligation to pay arising during that Charging Period from the acceptance by that Party of the charges offered by the DCC to provide additional testing

support to that Party pursuant to Section H14.33 (Device and User System Testing);

- (j) ('communication services') the number of each of the Services identified in the DCC User Interface Services Schedule which have been provided to that Party during that Charging Period;
- (k) ('CH non-standard delivery') an obligation to pay arising during that Charging Period as a result of the request by that Party for non-standard Communications Hub Product delivery requirements pursuant to Section F6.17 (Non-Standard Delivery Options);
- (l) ('CH stock level charge') the number (to be measured at the end of that Charging Period) of Communications Hubs that have been delivered to that Party under Section F6 (Delivery and Acceptance of Communications Hubs) and for which none of the following has yet occurred: (i) identification on the Smart Metering Inventory as 'installed not commissioned' or 'commissioned'; (ii) rejection in accordance with Section F6.10 (Confirmation of Delivery); (iii) delivery to the DCC in accordance with Section F8 (Removal and Return of Communications Hubs); or (iv) notification to the DCC in accordance with Section F8 (Removal and Return of Communications Hubs) that the Communications Hub has been lost or destroyed;
- (m) ('GFI Testing') the number of each of the types of GFI Testing tools which have been delivered to that Party during that Charging Period under Section H14 (Testing Services) and in accordance with Section 15 of Appendix J (Enduring Testing Approach Document);
- (n) ('CH auxiliary equipment') the number of each of the types of Communications Hub Auxiliary Equipment which have been delivered to that Party during that Charging Period under Section F6 (Delivery and Acceptance of Communications Hubs), and which have not been (and are not) rejected in accordance with Section F6.10 (Rejected Communications Hub Products) or (in the case of the Communications Hub Auxiliary Equipment to which Section 7.8 applies (Ownership of and Responsibility for Communications Hub Auxiliary Equipment)) returned, or notified as lost or destroyed, for a reason which is a CH Pre-Installation DCC Responsibility;
- (o) ('CH returned and redeployed') the number of Communications Hubs which have been returned by that Party during that Charging Period for a reason which is a CH User Responsibility, and which have been (or are intended to be) reconditioned for redeployment pursuant to Section F8 (Removal and Return of Communications Hubs);
- (p) ('CH returned not redeployed') the number of Communications Hubs which have been returned, or notified as lost or destroyed, by that Party during that Charging Period for a reason which is a CH User Responsibility, and which have not been (and are not intended to be) reconditioned for redeployment pursuant to Section F8 (Removal and Return of Communications Hubs);
- (q) ('CH wrong returns location') an obligation to pay arising during that Charging Period as a result of the return by that Party of Communications Hubs to the wrong returns location as referred to in Section F8.9 (Return of Communications Hubs);
- (r) ('test comms hubs') the number of Test Communications Hubs delivered to that Party during that Charging Period, and which have not been (and are not) returned to the DCC in accordance with Section F10.8 (Ordering, Delivery, Rejection and Returns);

- (s) ('additional CH Order Management System accounts') the number of additional CH Order Management System accounts made available to that Party during that Charging Period in accordance with Section F5.23 (CH Order Management System Accounts);
- (t) ('shared solution Alt HAN Equipment') the number (as measured at the end of that Charging Period) of MPANs associated with premises supplied with electricity by that Party and of MPRNs associated with premises supplied with gas by that Party, in respect of each of which premises (except where the Alt HAN Inventory records that Party as having elected to use Opted-out Alt HAN Equipment at that time) Central Shared Solution Alt HAN Equipment is installed;
- (u) ('point-to-point Alt HAN Equipment') the number (as measured at the end of that Charging Period) of MPANs associated with premises supplied with electricity by that Party and of MPRNs associated with premises supplied with gas by that Party, in respect of each of which premises (except where the Alt HAN Inventory records that Party as having elected to use Opted-out Alt HAN Equipment at that time) Central Point-to-Point Alt HAN Equipment is installed; ~~and~~
- (v) ('stock level point-to-point Alt HAN Equipment') the number of items of Central Point-to-Point Alt HAN Equipment (as measured at the end of that Charging Period) delivered to that Party but not installed; ~~:-~~
- (w) ('RF Noise Testing') an obligation to pay arising during that Charing Period from the acceptance by that Party of the charges offered by the DCC to provide RF Noise Testing pursuant to Section H14.37 (Radio Frequency Noise Testing); ~~and~~;
- ~~(x) ('DCC Boxed') the number of each of the types of DCC Boxed which have been delivered to that Party during that Charging Period under Section H14 (Testing Services) and in accordance with Clause 18 of the Enduring Testing Approach Document.~~

Schedule 7 'Specimen Enabling Services Agreement'

These changes have been redlined against Schedule 7 version 7.0.

Amend schedule 1 of the Specimen Enabling Services Agreement as follows:

Schedule 1 – Enabling Services

[The Enabling Services shall comprise the provision of Test Communications Hubs in accordance with Section F10 (Test Communications Hubs). The DCC and the Participant shall each comply with their respective obligations set out or referred to in that Section F10 (the Participant complying with those obligations assigned to TCH Participants).]

[The Enabling Services shall comprise the provision of either or both those Device and User System Tests described in Section H14.31(a) and (b) (Device and User System Tests) in accordance with Section H14 (Testing Services). The DCC and the Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

[The Enabling Services shall comprise the provision of SMETS1 Pending Product Combinations Tests in accordance with Section H14 (Testing Services). The DCC and the Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

[The Enabling Services shall comprise the provision of RF Noise Testing in accordance with Section H14 (Testing Services). The DCC and Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

[The Enabling Services shall comprise the provision of Interoperability and Innovation Events in accordance with Section H14 (Testing Services). The DCC and Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

[The Enabling Services shall comprise the provision of GFI Testing in accordance with Section H14 (Testing Services). The DCC and Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

[The Enabling Services shall comprise the provision of DCC Boxed in accordance with Section H14 (Testing Services). The DCC and Participant shall each comply with their respective obligations set out or referred to in that Section H14 (the Participant complying with those obligations assigned to Testing Participants).]

Appendix J 'Enduring Testing Approach Document'

These changes have been redlined against Appendix J version 2.0.

Add Clause 18 to the ETAD as follows:

18 DCC Boxed

18.1 The DCC shall develop and make available via the DCC Website a policy describing the provisions and allocation requirements for types of DCC Boxed.

18.2 The Testing Participant shall request DCC Boxed in accordance with such policy, and the DCC shall comply with such policy.

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MP179 ‘DCC Boxed’

Annex B

Refinement Consultation responses

About this document

This document contains the full collated responses received to the MP179 Refinement Consultation.

Question 1: Do you agree that the solution put forward will effectively resolve the identified issue?

Question 1				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	-	-
Octopus Energy	Large Supplier	Yes	Positive on the solution. From the standpoint of a supplier, we'd like to view a demo so that we can confirm how well this option fits into our testing portfolio.	SECAS will liaise with the DCC to arrange a demonstration of the product.

Question 2: Do you agree that the legal text will deliver MP179?

Question 2				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	-	-
Octopus Energy	Large Supplier	Yes	Happy with the legal text.	-

Question 3: Do you agree with the proposed implementation approach?

Question 3				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	-	-
Octopus Energy	Large Supplier	Yes	Happy with the implementation approach.	-

Question 4: Will there be any impact on your organisation to implement MP179?

Question 4				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	No	-	-
Octopus Energy	Large Supplier	Yes	<p>Yes, as a supplier we are performing all our Device and E2E testing using actual test devices (Prod Zigbee and SMKI Test cert) using UITA environment. In order to include MP179 in our testing portfolio, we'll need to set up test equipment with the necessary certifications (Test Zigbee and SMKI certificate).</p> <p>To send and receive service requests, also need to set up a GUI platform (DDC adaptor/ other front end application) that connects to the right DCC boxed environment.</p>	-

Question 5: Will your organisation incur any costs in implementing MP179?

Question 5				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	No costs	-	-
Octopus Energy	Large Supplier	No costs	-	-

Question 6: How long from the point of approval would your organisation need to implement MP179?

Question 6				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	N/A	-	-
Octopus Energy	Large Supplier	3 to 6 months	<p>Time required to</p> <ol style="list-style-type: none"> 1. Arrange the test devices with appropriate Test certificates 2. Make our adaptor ready to send and receive request via DCC Boxed 3. Arranging the registration data to use for the testing <p>GUI application trainings if required.</p>	-

Question 7: Do you believe that MP179 would better facilitate the General SEC Objectives?

Question 7				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	We believe that this modification would better facilitate SEC Objectives (a) and (b).	-
Octopus Energy	Large Supplier	Yes	-	-

Question 8: Do you believe there will be any impacts on or benefits to consumers if MP179 is implemented?

Question 8				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	There is the potential for this modification to positively impact consumers by ensuring robust testing on new products and services and enabling easier access to test new innovations.	-
Octopus Energy	Large Supplier	Yes	Benefits of identifying issues early in the testing process, before UIT or Pre-live testing begins. Also use as an enduring test tool for all the future firmware release testing and Regression.	-

Question 9: Noting the costs and benefits of this modification, do you believe MP179 should be approved?

Question 9				
Respondent	Category	Response	Rationale	SECAS Response
Western Power Distribution	Networks Party	Yes	-	-
Octopus Energy	Large Supplier	Yes	Based on the current implementation documentation, it looks to be a good initiative, and I believe it should be approved.	-

Question 10: Please provide any further comments you may have

Question 10			
Respondent	Category	Comments	SECAS Response
Western Power Distribution	Networks Party	None	-
Octopus Energy	Large Supplier	We'd like to see a demo so that we can assess how well this will fit into our testing portfolio.	SECAS will liaise with the DCC to arrange a demonstration of the product.