

SECTION H: DCC SERVICES

H1 USER ENTRY PROCESS

Eligibility Generally

- H1.1 Many of the Services described in this Section H are described as being available only to Users. A Party is not entitled to receive those Services until that Party has become a User by completing the User Entry Process.
- H1.2 Only persons that are Parties are eligible to complete the User Entry Process and to become Users.

User Role Eligibility

- H1.3 The Services provided over the DCC User Interface are available only to Users within certain User Roles. A Party wishing to act as a User in one or more User Roles must first complete the User Entry Process for that User Role.

User IDs

- H1.4 When accessing Services a User must operate in a particular User Role using the applicable User ID.
- H1.5 A Party wishing to act as a User in one or more User Roles shall propose to the DCC one or more identification numbers, issued to it by the Panel, to be used by that Party when acting in each such User Role. Each such identification number must be EUI-64 Compliant, and the same identification number cannot be used for more than one User Role, save that a Party may use the same identification number when acting in the combined User Roles of either, 'Import Supplier' and 'Gas Supplier' or 'Import Supplier', 'Export Supplier' and 'Gas Supplier'.
- H1.6 The DCC shall accept each identification number proposed by each Party in respect of each of its User Roles (and record such numbers as identifying, and use such numbers to identify, such Party in such User Role); provided that the DCC shall only accept the proposed number if it has been issued by the Panel, and if (at the time of the Party's proposal) the Party:

- (a) holds for the User Role of ‘Import Supplier’ or ‘Export Supplier’, an Electricity Supply Licence;
- (b) holds for the User Role of ‘Gas Supplier’, a Gas Supply Licence;
- (c) holds for the User Role of ‘Electricity Distributor’, an Electricity Distribution Licence;
- (d) holds for the User Role of ‘Gas Transporter’, a Gas Transportation Licence; and
- (e) is for the User Role of 'Registered Supplier Agent', identified in the Registration Data as a Meter Operator or a Meter Asset Manager for at least one MPAN or MPRN.

H1.7 A Party may from time to time replace or withdraw its User ID for each of its User Roles on notice to the DCC; provided that any such replacement shall be subject to acceptance by the DCC in accordance with Section H1.6.

User Entry Guide

H1.8 The Code Administrator shall establish and publish on the Website a guide to the User Entry Process. Such guide shall:

- (a) identify the persons that a Party is required to contact to commence the steps required pursuant to the User Entry Process for each User Role; and
- (b) include a recommendation that each Party undertakes a privacy impact assessment:
 - (i) in accordance with the Information Commissioner’s guidance concerning the same; and
 - (ii) where the Party is completing the User Entry Process for the User Role of Other User, having regard to any guidance issued by the Secretary of State and/or the Authority in respect of matters relating to the Processing of Personal Data that are comprised in any Data of a type referred to in Sections I1.2 to I1.4,

but there shall be no obligation under this Code to do so.

User Entry

- H1.9 Where a Party wishing to become a User in a particular User Role commences the User Entry Process, it must notify the Code Administrator that it has done so (and in respect of which User Role).

User Entry Process Requirements

- H1.10 The User Entry Process for each User Role requires that the Party has:
- (a) received confirmation from the DCC of its acceptance of at least one User ID for the Party and that User Role in accordance with Section H1.6;
 - (b) successfully completed the User Entry Process Tests for that User Role in accordance with Section H14 (Testing Services);
 - (c) successfully demonstrated in accordance with the procedure set out in Section G8 (User Security Assurance) that the Party meets the applicable security requirements required by that Section;
 - (d) (in the case only of the User Role of Other User) successfully demonstrated in accordance with the procedure set out in Section I2 (Other User Privacy Audits) that the Party meets the applicable privacy requirements required by that Section; and
 - (e) provided the Credit Support or additional Credit Support (if any) that the DCC requires that Party to provide, to be calculated by the DCC in accordance with Section J3 (Credit Cover) as if that Party were a User for that User Role (which calculation will include the DCC's reasonable estimates of the Charges that are likely to be incurred by that Party in that User Role in the period until the first Invoice for that Party is due to be paid by that Party in that User Role).
- H1.11 A Party will have successfully completed the User Entry Process for a particular User Role once the Code Administrator has received confirmation from the body responsible for each of the requirements set out in Section H1.10 that the Party has

met each and every requirement set out in Section H1.10, and once the Code Administrator has confirmed the same to the Party.

- H1.12 Once a Party has successfully completed the User Entry Process for a particular User Role, the Code Administrator shall confirm the same to the DCC and the Panel. A Party who has successfully completed the User Entry Processes in one User Role shall not be considered to be a User in relation to any other User Role until it has completed the User Entry Processes in relation to such other User Role.

Disputes Regarding User Entry Process

- H1.13 Where a Party wishes to raise a dispute in relation to its application to become a User, and to the extent that the dispute relates to:
- (a) the matters described in Section H1.10(b), then the dispute shall be determined in accordance with the applicable dispute resolution procedure set out in Section H14 (Testing Services);
 - (b) the matters described in Section H1.10(c), then the dispute shall be determined in accordance with the dispute resolution procedure set out in Section G8 (User Security Assurance);
 - (c) the matters described in Section H1.10(d), then the dispute shall be determined in accordance with the dispute resolution procedure set out in Section I2 (Other User Privacy Audits);
 - (d) the matters described in Section H1.10(e), then the dispute shall be determined in accordance with Section J3.15 (Disputes); or
 - (e) any matters other than those referred to above, then the dispute may be referred to the Panel for determination.
- H1.14 Where a Party disagrees with any decision of the Panel made pursuant to Section H1.13(e), then that Party may refer the matter to the Authority for its determination, which shall be final and binding for the purposes of this Code.

Ceasing to be a User in a User Role

- H1.15 Where a User wishes to cease acting as a User in a User Role, the User shall notify the Code Administrator in writing of the date from which the User wishes to cease acting as a User in that User Role.
- H1.16 Where a User notifies the Code Administrator in accordance with Section H1.15, the User shall cease to be a User in the specified User Role with effect from the date specified in such notification.
- H1.17 The Code Administrator shall, as soon as reasonably practicable after receipt of a notification from a User in accordance with Section H1.15, notify the Panel and the DCC of the date from which that User will cease to be a User in the specified User Role.
- H1.18 Following any notification received from the Code Administrator under Section H1.17 in respect of a User and a User Role, the DCC shall cease to treat that User as a User in that User Role; provided that the DCC shall be allowed up to 24 hours from receipt of such notification to update the DCC Systems.

H2 REGISTERED SUPPLIER AGENTS

Rights and Obligations of Registered Supplier Agents

- H2.1 Registered Supplier Agents are Parties to this Code in their own right, and as such have rights and obligations as Other SEC Parties or as Users acting in the User Role of Registered Supplier Agent.

Responsibility for Registered Supplier Agents

- H2.2 It is acknowledged that the following Services (as described in the DCC User Interface Services Schedule) are only available to Users acting in the User Role of Registered Supplier Agent by virtue of their appointment by the Responsible Supplier as a Meter Operator or Meter Asset Manager in respect of the relevant MPAN or MPRN:

- (a) Read Device Configuration;
- (b) Read Event or Security Log;
- (c) Read Supply Status; and
- (d) Read Firmware Version.

- H2.3 Without prejudice to the rights and obligations of each Registered Supplier Agent (as described in Section H2.1), the Supplier Party described in Section H2.4 shall ensure that each Registered Supplier Agent that sends Service Requests for the Services described in Section H2.2 shall only do so for the purposes of providing services to that Supplier Party in a manner consistent with that Supplier Party's Energy Supply Licence.

- H2.4 The Supplier Party referred to in Section H2.3 is, in respect of a Service relating to a Smart Metering System or Device, the Responsible Supplier for that Smart Metering System or Device.

- H2.5 Nothing in this Code obliges Supplier Parties to contract with Meter Operators and/or Meter Asset Managers in order to procure from the Meter Operator and/or Meter Asset Manager services that result in the need for the Meter Operator and/or Meter Asset

Manager to send Service Requests.

- H2.6 Each Supplier Party shall be responsible for controlling the ability of the Registered Supplier Agent to send the Service Requests referred to in Section H2.2 in circumstances where that Supplier Party would be liable under Section H2.3.

H3 DCC USER INTERFACE**Obligation to Maintain DCC User Interfaces**

- H3.1 The DCC shall maintain the DCC User Interface in accordance with the DCC User Interface Specification, and make it available via DCC Gateway Connections to Users to send and receive communications in accordance with the DCC User Interface Specification and the DCC User Interface Code of Connection.
- H3.2 The DCC shall ensure that the DCC User Interface is available at all times (subject to Planned Maintenance undertaken in accordance with Section H8.3).

Communications to be sent via DCC User Interface

- H3.3 The DCC and each User shall use the DCC User Interface for the following communications:
- (a) Service Requests from a User to the DCC;
 - (b) Signed Pre-Commands from a User to the DCC;
 - (c) Acknowledgements from the DCC to a User;
 - (d) Pre-Commands from the DCC to a User;
 - (e) Service Responses from the DCC to a User;
 - (f) Device Alerts and DCC Alerts from the DCC to a User;
 - (g) Commands from the DCC to the User pursuant to the Local Command Services;
or
 - (h) any other communications expressly required in this Code to be sent via the DCC User Interface.
- H3.4 The communications required to be sent via the DCC User Interface under Section H3.3 shall only be validly sent for the purposes of this Code if sent in accordance with this Section H3, Section H4 (Processing Service Requests) and the DCC User Interface Specification.

- H3.5 No Party may use the DCC User Interface for any purpose other than to meet the requirements of Section H3.3. Only the DCC and Users may use the DCC User Interface.

Eligibility for Services Over the DCC User Interface

- H3.6 A User shall not send a Service Request in respect of a Smart Metering System (or a Device forming, or to form, part of a Smart Metering System) unless it is an Eligible User for that Service and Smart Metering System (save that a User may send a Service Request in circumstances where it is not an Eligible User in order to rectify errors, as further described in the Service Request Processing Document).
- H3.7 Whether or not a User is an Eligible User for the following Services is determined as follows:
- (a) for Enrolment Services, Core Communication Services and Local Command Services, the entitlement is described in Section H3.8; or
 - (b) for Elective Communication Services, the entitlement is described in the relevant Bilateral Agreement.
- H3.8 Subject to Sections H3.9 to H3.10A (inclusive), the following Users are entitled to receive the following Services in respect of a Smart Metering System (or a Device forming, or to form, part of that Smart Metering System):
- (a) the Import Supplier for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Import Supplier’;
 - (b) the Export Supplier for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Export Supplier’;
 - (c) the Gas Supplier for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Gas Supplier’;

- (d) the Electricity Distributor for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Electricity Distributor’;
- (e) the Gas Transporter for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Gas Transporter’;
- (f) the Registered Supplier Agent for that Smart Metering System is entitled to those Services described in the DCC User Interface Services Schedule as being available to the ‘Registered Supplier Agent’;
- (g) any User acting in the User Role of Other User is entitled to those Services described in the DCC User Interface Services Schedule as being available to an ‘Other User’; and
- (h) in respect of certain Services (where specified in the DCC User Interface Services Schedule) and where an electricity Smart Metering System and a gas Smart Metering System share a Communications Hub Function, the Import Supplier is entitled to those Services in respect of the gas Smart Metering System.

H3.9 Subject to Sections H3.10 and H3.10A, a User’s eligibility for a Service in respect of a Smart Metering System (or a Device forming, or to form, part of that Smart Metering System) is also dependent upon the status of that Smart Metering System (or such a Device), such that:

- (a) the Responsible Supplier may send Service Requests in respect of Devices that have an SMI Status of ‘pending’, ‘whitelisted’, ‘installed not commissioned’, ‘commissioned’, or ‘suspended’;
- (b) Users that are not the Responsible Supplier may only send Service Requests in respect of Devices that have an SMI Status of ‘installed not commissioned’ or ‘commissioned’; and
- (c) Communication Services are not available in respect of a Smart Metering

System until it has been Enrolled.

H3.10 Certain Services are available on the basis of Eligible User Role (rather than a User's status as an Eligible User in respect of a particular Smart Metering System or Device). In respect of these Services, references in the DCC User Interface Services Schedule to 'Electricity Import Supplier', 'Electricity Export Supplier', 'Gas Import Supplier', 'Electricity Network Operator', 'Gas Network Operator', 'Registered Supplier Agent' and 'Other Users' are to the corresponding User Roles. The Services in question are those described in the DCC User Interface Services Schedule as:

- (a) 'Request WAN Matrix';
- (b) 'Device Pre-notifications';
- (c) 'Read Inventory';
- (d) 'Communications Hub Status Update - Install Success';
- (e) 'Communications Hub Status Update - Install No SM WAN';
- (f) 'Communications Hub Status Update - Fault Return'; and
- (g) 'Communications Hub Status Update - No Fault Return'.

H3.10A Certain Services (or certain functionality in respect of certain Services) may be identified in the DCC User Interface Services Schedule as not being available in respect of SMETS1 Devices in general or in relation to particular SMETS1 Device Models. Where this is the case, Users are not Eligible Users for the Services (or affected functionality) that are identified as being unavailable in such circumstances.

Categories of Service

H3.11 Enrolment Services, Local Command Services and Core Communication Services fall into the following categories (and corresponding categories may be established in respect of Elective Communication Services under Bilateral Agreements):

- (a) Services identified in the DCC User Interface Services Schedule to be available as 'on-demand' services, and which a User requests on such basis ("On-Demand

Services”);

- (b) Services identified in the DCC User Interface Services Schedule to be available as ‘future-dated’ services, and which a User requests on such basis specifying the relevant time and date for execution (“Future-Dated Services”); and
- (c) Services identified in the DCC User Interface Services Schedule to be available as ‘scheduled’ services, and which a User requests on such basis specifying the initial time and date for execution as well as the frequency at which execution is to recur (“Scheduled Services”).

H3.12 The DCC shall only accept a Service Request for a Future-Dated Service or a Scheduled Service that has an execution date that is later than the time on the date at which the Service Request is received by the DCC. No User may request a Future-Dated Service that has an execution date of more than 30 days after the date on which the Service Request is sent to the DCC.

Sequenced Services

H3.13 An On-Demand Service or a Future-Dated Service may also be requested on the basis that it is only to be provided following the successful execution of a specified Service Request (“**Sequenced Services**”).

Target Response Times

H3.14 The DCC shall (subject to Section H3.15) undertake the following activities within the following time periods (each such time period being, in respect of each such activity, the “**Target Response Time**” for that activity, subject to Section H3.15):

- (a) Transforming Critical Service Requests into Pre-Commands and sending to the relevant User, within 3 seconds from receipt of the Service Request;
- (b) sending a User a Service Response in respect of a Non-Critical Service Request for an On-Demand Service that is not a Sequenced Service, within the applicable time period set out in the DCC User Interface Services Schedule measured from receipt of the Service Request from the User;

- (c) sending a User a Service Response in respect of a Critical Service Request for an On-Demand Service that is not a Sequenced Service, within the applicable time period set out in the DCC User Interface Services Schedule measured from receipt of the Signed Pre-Command from the User;
- (d) sending a User a Service Response in respect of a Service Request for an On-Demand Service that is a Sequenced Service, within the applicable time period set out in the DCC User Interface Services Schedule measured from the receipt by the DCC of the Service Response for the Service Request upon which the Sequenced Service is dependent;
- (e) sending a User a Service Response in respect of a Service Request for a Future-Dated Service that is not a Sequenced Service or for a Scheduled Service, within the applicable time period set out in the DCC User Interface Services Schedule measured from the time and date for execution specified in the Service Request;
- (f) sending a User a Service Response in respect of a Service Request for a Future-Dated Service that is a Sequenced Service, within the applicable time period set out in the DCC User Interface Services Schedule measured from the receipt by the DCC of the Service Response for the Service Request upon which the Sequenced Service is dependent;
- (g) (except for the Alerts referred to in (h) below) sending a User an Alert, within 60 seconds measured from the Alert being communicated to (Device Alerts) or generated by (Non-Device Alerts) the Communications Hub Function; or
- (h) for the Services Request ‘Update Device Configuration (Billing Calendar)’, in addition to the above response times applicable to the Service Response confirming the configuration, periodic Alerts will be generated as a result of such configuration, for which the response time for sending the Alert to the User shall be within 24 hours from the relevant data having been communicated to the Communications Hub Function.

H3.15 The Target Response Times set out in Section H3.14 shall not apply to activities in respect of SMETS1 Devices, and the Target Response Times for activities in respect

of SMETS1 Devices shall instead be determined in accordance with the DCC User Interface Services Schedule. For the purposes of Section H3.14 and activities in respect of SMETS2+ Devices:

- (a) the concepts of ‘sending’ and ‘receipt’ are to be interpreted in accordance with the explanation of those concepts in the DCC User Interface Specification;
- (b) any time during which an anomalous communication is quarantined by the DCC in accordance with Section H4 (Processing Service Requests) shall be disregarded for the purpose of measuring Response Times; and
- (c) the time taken by the Communications Hub Function in communicating with the other Devices forming part of a Smart Metering System shall be disregarded.

Inherent Restrictions Linked to Technical Specifications

- H3.16 The Services set out in the DCC User Interface Services Schedule are available only insofar as the minimum functionality of Devices as described in the Technical Specifications (or, to the extent required to support that minimum functionality, the GB Companion Specification or SMETS1 Supporting Requirements) allows for such Services. Any Services required in respect of additional functionality of Devices should be requested as Elective Communication Services. This Section H3.16 does not apply in respect of Services to which Non-Device Service Requests apply.

Change of Tenancy

- H3.17 As soon as reasonably practicable after a Responsible Supplier for an Enrolled Smart Metering System relating to a premises becomes aware of a change of occupancy at that premises, that Responsible Supplier shall send a ‘Restrict Access for Change of Tenancy’ Service Request to the DCC in relation to the Smart Meter and any Gas Proxy Function forming part of that Smart Metering System (except where the outgoing Energy Consumer has indicated that they wish historic information on the Smart Metering System to remain available to be viewed).

Cancellation of Future-Dated and Scheduled Services

- H3.18 As soon as reasonably practicable after receipt by the DCC of a Service Response from a Smart Metering System in respect of a ‘Restrict Access for Change of Tenancy’ Service Request, the DCC shall cancel any and all Service Requests for Future-Dated Services or Scheduled Services in respect of any Device forming part of that Smart Metering System for which the Command has not yet been sent and which are being processed on behalf of an Other User (and shall notify the relevant User of such cancellation via the DCC User Interface).
- H3.19 [Not used]
- H3.20 The DCC shall cancel any and all Service Requests for Future-Dated Services or Scheduled Services for which the Command has not yet been sent and which are due to be undertaken in respect of a Device after the Decommissioning or Suspension of that Device (and shall notify the relevant User of such cancellation via the DCC User Interface).

Managing Demand for DCC User Interface Services

- H3.21 By the 15th Working Day of the months of January, April, July and October, each User shall provide the DCC with a forecast of the number of Service Requests that the User will send in each of the 8 months following the end of the month in which such forecast is provided. Such forecast shall contain a breakdown of the total number of Service Requests by reference to each Service listed in the DCC User Interface Services Schedule and the category of Service (i.e. Future Dated, On Demand or Scheduled).
- H3.22 A Party that is not a User but expects to submit Service Requests to the DCC at any time during any period referred to in Section H3.21 shall comply with Section H3.21 as if it were a User.
- H3.23 The DCC shall monitor and record the aggregate number of Service Requests sent by each User in total, and also the aggregate number of Service Requests sent by each User in respect of each Service listed in the DCC User Interface Services Schedule.

H3.24 By no later than the 10th Working Day following the end of each month, the DCC shall provide:

- (a) each User with a report that sets out the number of Service Requests sent by that User during that month (in total and broken down by reference to each Service listed in the DCC User Interface Services Schedule), and comparing the actual numbers sent against the numbers most recently forecast for the applicable month;
- (b) each User with a report setting out the current value (calculated at the end of the previous month) for every Monthly Service Metric for that User and a comparison of the current value against the relevant Monthly Service Threshold; and
- (c) a report to the Panel that sets out:
 - (i) the aggregate number of Service Requests sent by all Users collectively during that month (in total and broken down by reference to each Service listed in the DCC User Interface Services Schedule), and comparing the actual numbers for that month sent against the numbers most recently forecast for the applicable month;
 - (ii) where the total number of Service Requests sent by any User during that month is less than or equal to 90% or greater than or equal to 110% of the User's most recent monthly forecast for the applicable month, the identity of each such User and the number of Service Requests sent by each such User (in total and broken down by reference to each Service listed in the DCC User Interface Services Schedule); and
 - (iii) where the measured value of any Monthly Service Metric for any User and that month is greater than or equal to 110% of Monthly Service Threshold, the identity of that User and the values of such Monthly Service Metrics during that month.

H3.25 The Panel shall publish the reports provided to it pursuant to Section H3.24(c) on the Website; provided that, in respect of the report concerning under-forecasting or over-

forecasting by a User as referred to in Section H3.24(c)(ii), the Panel:

- (a) may decide not to publish one or more parts of that report where the Panel considers that the under-forecasting or over-forecasting was reasonable in the circumstances (including where it arose as a result of matters beyond the User's reasonable control); and
- (b) shall not publish any parts of that report where there would have been no under-forecasting or over-forecasting by that User of the total number of Service Requests sent by that User during the relevant month (to be assessed on the basis of a direct comparison between actual and forecast without applying the 10% tolerance provided for in Section H3.24(c)(ii)) if the following Service Requests were excluded from the assessment:
 - (i) Service Request 2.2 (Top Up Device);
 - (ii) Service Request 7.4 (Read Supply Status); and
 - (iii) Service Requests published by the Panel pursuant to Section H3.26.

H3.26 The Panel shall maintain and publish a list of Service Requests (if any) that are subject to Section H3.25(b)(iii). A Service Request shall only be added or removed from the list on the application of one or more Users, and where the Panel considers the addition or removal to be reasonable in circumstances. The Panel shall publish the list from time to time on the Website, and shall give the DCC and each User advance notice of any changes to the list.

H3.27 The DCC shall, on or around each anniversary of the date on which it first started providing Services over the DCC User Interface, review (and report to the Panel on) each Monthly Service Metric and associated Monthly Service Threshold to establish whether they are still an appropriate mechanism to illustrate User behaviour that may utilise a significant element of the capacity requirements of the Services.

H3.28 The DCC shall not be considered to be in breach of this Code with regard to the obligation to achieve Target Response Times if, during the month in question, the aggregate Service Requests sent by all Users exceeds 110% of the aggregate demand

most recently forecast for that month by all Users pursuant to Section H3.22 (provided that the DCC shall nevertheless in such circumstances take reasonable steps to achieve the Target Response Times).

H4 PROCESSING SERVICE REQUESTS

Introduction

H4.1 The request by Users, and the provision by the DCC, of certain Services is achieved by means of the sending of communications in accordance with Section H3.3 (Communications to be Sent via the DCC User Interface) and this Section H4. The Services in question are:

- (a) Enrolment Services;
- (b) Local Command Services;
- (c) Core Communication Services; and
- (d) Elective Communication Services.

Processing Obligations

H4.2 Each User and the DCC shall each comply with the applicable obligations set out in the Service Request Processing Document concerning the secure processing of the communications required to be sent via the DCC User Interface.

DCC IDs

H4.3 The DCC shall obtain and use EUI-64 Compliant identification numbers for the purposes of its communications under this Code. Where it is expedient to do so, the DCC may use different identification numbers to identify different DCC roles.

H4.4 The DCC shall:

- (a) where Section G (Security) requires it to Separate one part of the DCC Systems from another part of the DCC Systems, use different identification numbers for the purposes of its communications from each such part of the DCC Systems; and
- (b) use different identification numbers for the purposes of becoming a Subscriber for different Organisation Certificates or OCA Certificates with different

Remote Party Role Codes.

H5 SMART METERING INVENTORY AND ENROLMENT SERVICES**Overview of Enrolment**

H5.1 Enrolment of a Smart Metering System occurs:

- (a) in the case of electricity, on the Commissioning of the Electricity Smart Meter forming part of that Smart Metering System; or
- (b) in the case of gas, on the Commissioning of both the Gas Smart Meter and the Gas Proxy Function forming part of that Smart Metering System.

H5.2 No Device that is to form part of a Smart Metering System (other than the Communications Hub Function) can be Commissioned before the Communications Hub Function that is to form part of that Smart Metering System has been Commissioned.

H5.3 No Device can be Commissioned:

- (a) unless it is listed on the Smart Metering Inventory; and
- (b) other than for Type 2 Devices, if it is listed with an SMI Status of 'decommissioned'.

Statement of Service Exemptions

H5.4 In accordance with Condition 17 of the DCC Licence (and notwithstanding any other provision of this Section H5), the DCC is not obliged to Commission Communications Hub Functions (or therefore to Enrol Smart Metering Systems) where it is exempted from the requirement to do so in accordance with a Statement of Service Exemptions.

Smart Metering Inventory

H5.5 The DCC shall establish and maintain the Smart Metering Inventory in accordance with the Inventory, Enrolment and Decommissioning Procedures.

H5.6 Each User and the DCC shall each comply with the applicable obligations set out in the Inventory, Enrolment and Decommissioning Procedures, which must include

obligations concerning:

- (a) the addition and removal of Devices to and from the Smart Metering Inventory; and
- (b) changes to the SMI Status of the Devices recorded on the Smart Metering Inventory from time to time.

Enrolment of Smart Metering Systems

H5.7 Each User and the DCC shall each comply with the applicable obligations set out in the Inventory, Enrolment and Decommissioning Procedures Document, which must include obligations concerning:

- (a) steps to be taken before a Device that is listed on the Smart Metering Inventory is installed and/or Commissioned at a premises;
- (b) steps to be taken in order to Commission such a Device;
- (c) steps to be taken following the Commissioning of such a Device; and
- (d) steps to be taken on the removal and/or replacement of any Device forming part of a Smart Metering System.

SMETS1

H5.8 A SMETS1 Smart Metering System is eligible to be Enrolled when the combination of SMETS1 Devices of which it is comprised form all or part of a SMETS1 Installation for which all the Devices are of Device Models which either:

- (a) comprise a combination of Device Models listed on the SMETS1 Eligible Product Combinations; or
- (b) could as a result of the application of an existing firmware upgrade or upgrades become a combination of Device Models listed on the SMETS1 Eligible Product Combinations.

H5.9 The DCC shall only be required to Enrol SMETS1 Smart Metering Systems, or

process Service Requests in respect of SMETS1 Smart Metering Systems, that comprise a combination of Device Models that is listed on the SMETS1 Eligible Product Combinations.

- H5.10 The Inventory, Enrolment and Decommissioning Procedures Document may also set out circumstances in which the Panel may direct the DCC not to Commission a SMETS1 Device (or purported SMETS1 Device).

H6 DECOMMISSIONING AND SUSPENSION OF DEVICES**Decommissioning**

- H6.1 Where a Device other than a Type 2 Device is no longer to form part of a Smart Metering System, then that Device should be Decommissioned. A Device may be Decommissioned because it has been uninstalled and/or is no longer operating (whether or not it has been replaced, and including where the Device has been lost, stolen or destroyed).
- H6.2 Only the Responsible Supplier(s) for a Communications Hub Function, Smart Meter, Gas Proxy Function or Type 1 Device may Decommission such a Device; provided that only the Lead Supplier may Decommission a SMETS1 CHF.
- H6.3 Where a Responsible Supplier (or, in the case of a SMETS1 CHF, the Lead Supplier) becomes aware that a Device has been uninstalled and/or is no longer operating, that User shall send a Service Request requesting that it is Decommissioned.
- H6.4 On successful processing of a Service Request from a User in accordance with Section H6.3, the DCC shall:
- (a) set the SMI Status of the Device to ‘decommissioned’;
 - (b) where relevant, amend the Smart Metering Inventory so that the Device is no longer Associated with any other Devices; and
 - (c) where the Device in question is a Communications Hub Function, notify any and all Responsible Suppliers (other than the Responsible Supplier that procured such Decommissioning) for that Communications Hub Function of such Decommissioning.
- H6.5 Where the DCC receives a Service Request from a User that does not satisfy the requirements of Section H6.2, the DCC shall reject the Service Request.
- H6.6 On the Decommissioning of a Communications Hub Function, the other Devices forming part of a Smart Metering System should also be Decommissioned; provided that the Devices forming part of a Smart Metering System (other than the Gas Proxy

Function) may remain Commissioned notwithstanding the Decommissioning of the Communications Hub Function if a replacement Communications Hub Function is Commissioned within a reasonable period.

H6.7 [Not used]

H6.8 [Not used]

H6.9 [Not used]

Suspension

H6.10 Where a Device's Device Model is removed from the Central Products List, that Device shall be Suspended and the DCC shall set the SMI Status of the Device to 'suspended'.

H6.11 Where a Communications Hub Device Model is removed from the Central Products List, both the Communications Hub Function and the Gas Proxy Function shall be deemed to be Suspended (and Section H6.10 shall apply accordingly).

Ancillary Obligations

H6.12 Each User and the DCC shall each comply with the obligations set out in the Inventory, Enrolment and Decommissioning Procedures concerning Decommissioning and Suspension of Devices (and the Smart Metering Systems of which such Devices form part), including (where applicable) notifying other Users of such Decommissioning and Suspension.

H7 ELECTIVE COMMUNICATION SERVICES

Eligible Smart Metering Systems

- H7.1 Elective Communication Services can only be provided in respect of Smart Metering Systems that have been Enrolled.

Entitlement to Elective Communication Services

- H7.2 Only a User is entitled to receive Elective Communication Services. A Party that is not a User is not entitled to receive Elective Communication Services.
- H7.3 A User shall not be entitled to request or receive (and the DCC shall not provide to such User) any Elective Communication Services that would constitute a Restricted Communication Service.

Preliminary Assessment of Elective Communication Services

- H7.4 Notwithstanding Section H7.1 and H7.2, any Party may request an initial evaluation of the technical feasibility and likely Charges for a proposed Elective Communication Service (a “**Preliminary Assessment**”).
- H7.5 Requests for a Preliminary Assessment shall be made in such format as the DCC may specify from time to time, and shall be submitted to the DCC.
- H7.6 The DCC shall respond to requests for a Preliminary Assessment in accordance with the time period prescribed by Condition 17 of the DCC Licence, and shall either (in accordance with Condition 17 of the DCC Licence):
- (a) provide an initial evaluation of the technical feasibility and the likely Charges for a proposed Elective Communication Service; or
 - (b) give notice that a further and more detailed evaluation of the request is required.

Detailed Evaluation of Elective Communication Services

- H7.7 Any Party that has requested a Preliminary Assessment and obtained a response as described in Section H7.6(b) may request a more detailed evaluation of the technical

feasibility and likely Charges for a proposed Elective Communication Service (a **“Detailed Evaluation”**).

- H7.8 Requests for a Detailed Evaluation shall be made in such format as the DCC may specify from time to time, and shall be submitted to the DCC. Following receipt of any such request (or purported request), the DCC shall:
- (a) where the request is incomplete or the DCC reasonably requires further information in order to assess the request, notify the Party that this is the case and provide reasonable assistance to the Party in re-submitting its request;
 - (b) once the DCC has received all the information it reasonably requires in order to assess the request, confirm the applicable Charges payable in respect of the Detailed Evaluation; and
 - (c) once the Party has agreed to pay the applicable Charges, provide the Detailed Evaluation to the requesting Party (in accordance with the time period prescribed by Condition 17 of the DCC Licence).

Request for an Offer for an Elective Communication Service

- H7.9 Any Party that has requested a Preliminary Assessment in respect of a proposed Elective Communication Service, and obtained a response as described in Section H7.6(a), may request a formal offer for that proposed Elective Communication Service.
- H7.10 Any Party that has requested and obtained a Detailed Evaluation in respect of a proposed Elective Communication Service may request a formal offer for that proposed Elective Communication Service.
- H7.11 Following a request pursuant to Section H7.9 or H7.10, the DCC shall (in accordance with the time period prescribed by Condition 17 of the DCC Licence):
- (a) make an offer to provide the Elective Communication Service in question; or
 - (b) notify the Party that the DCC is not willing to make such an offer (provided that the DCC may only do so where the DCC is not obliged to make such an offer in

accordance with Condition 17 of the DCC Licence).

Formal Offer

H7.12 An offer to provide the Elective Communication Service made by the DCC pursuant to this Section H7 shall:

- (a) include details of the Charges that would apply to the Elective Communication Service, as determined in accordance with the Charging Methodology;
- (b) where the proposed Charges have been calculated (in accordance with the Charging Methodology) on the assumption that one or more other Parties accept offers made pursuant to this Section H7, provide for two alternative sets of Charges, one of which is contingent on acceptance of all the other such offers and one of which is not; and
- (c) include an offer by the DCC to enter into a Bilateral Agreement with the Party requesting the Elective Communication Service.

H7.13 Each Bilateral Agreement must:

- (a) be based on the Specimen Bilateral Agreement, subject only to such variations from such specimen form as are reasonable in the circumstances;
- (b) not contradict or seek to override any or all of this Section H or Sections G (Security), I (Data Privacy), J (Charges), L (Smart Metering Key Infrastructure) or M (General);
- (c) where reasonably necessary in accordance with the Charging Methodology, provide for Charges that include or comprise a standing charge that is payable by the recipient of the Elective Communication Service regardless of whether or not the Elective Communication Service is requested or provided;
- (d) where reasonably necessary in accordance with the Charging Methodology, require the recipient of the Elective Communication Service to pay compensation to DCC in the event of the early termination of the Bilateral Agreement (except in the case of termination as envisaged by Section H7.13(e));

- (e) allow the recipient of the Elective Communication Services to terminate the Bilateral Agreement without paying compensation to the extent that such compensation is intended to recover investments made for the purposes of providing the Elective Communication Service where (and to the extent that) the DCC subsequently offers a Service listed in the DCC User Interface Services Schedule that relies upon such investments (and each Bilateral Agreement must provide for disputes regarding this provision to be subject to an initial Panel determination, but to ultimately be determined by arbitration); and
- (f) where reasonably necessary, require the recipient of the Elective Communication Services to provide credit support in respect of its obligation to pay the compensation referred to in Section H7.13(d).

H7.14 The parties to each Bilateral Agreement shall ensure that the Bilateral Agreement describes the Elective Communication Services in a manner consistent with the description of the Core Communication Services in this Code, including so as to identify (to the extent appropriate) equivalents of the following concepts: Service Requests; Non-Device Service Requests; Pre-Commands; Signed Pre-Commands; Commands; Services Responses; Alerts; and Target Response Times. To the extent that an Elective Communication Service comprises equivalents of such concepts, references to such concepts in this Code shall be construed as including the equivalent concepts under each Bilateral Agreement (and the DCC and the relevant User under the Bilateral Agreement shall comply with Sections H3 (DCC User Interface) and H4 (Processing Service Requests) in respect of the same). For the purposes of each Elective Communication Service (unless the Panel otherwise determined on a User's application):

- (a) the applicable Service Request shall be deemed to be a Critical Service Request, unless it results only in the sending of a Command to a Device that would arise were a Non-Critical Service Request listed in the DCC User Interface Service Schedule to be requested;
- (b) other than in the case of SMETS1 Service Requests, the applicable Service Request (and any associated Pre-Command) shall be deemed to contain Data

that requires Encryption, unless it contains only Data described in the GB Companion Specification as capable of being sent without Encryption.

H7.15 Elective Communication Services shall be provided in accordance with this Code and the applicable Bilateral Agreement. In the event of any inconsistency between this Code and a Bilateral Agreement, the provisions of this Code shall prevail.

H7.16 The DCC shall not agree to any variations to a Bilateral Agreement that would cause that agreement to become inconsistent with the requirements of this Section H7.

Disputes Regarding Offers for Elective Communication Services

H7.17 Where the requirements of Condition 20 of the DCC Licence are met, a Party that has requested an offer for a proposed Elective Communication Service may refer a dispute regarding such request to the Authority for determination under and in accordance with that Condition.

Publication of Details of Elective Communication Services

H7.18 Once the DCC has commenced provision of an Elective Communication Service pursuant to a Bilateral Agreement, the DCC shall notify the Code Administrator of the date on which the provision of such service commenced (but shall not provide any details regarding such agreement to the Code Administrator).

H7.19 The DCC shall, on or around the date falling six months after it commenced provision of an Elective Communication Service pursuant to a Bilateral Agreement, provide to the Code Administrator the following details:

- (a) a brief description of the Elective Communication Service;
- (b) the frequency with which, and (where stated) the period during which, the Elective Communication Service is to be provided; and
- (c) the Target Response Time within which the Elective Communication Service is to be provided.

H7.20 The Code Administrator shall arrange for the publication on the Website of the details

provided to it pursuant to Section H7.19. The Code Administrator shall monitor and report to the Panel on whether the DCC has provided details pursuant to Section H7.18 in respect of Elective Communication Services of which the Code Administrator is notified under Section H7.18.

- H7.21 Without prejudice to the DCC’s obligations under Section H7.19, the existence and contents of each Bilateral Agreement shall constitute Confidential Information which the DCC is obliged to keep confidential in accordance with Section M4 (Confidentiality).

H8 SERVICE MANAGEMENT, SELF-SERVICE INTERFACE AND SERVICE DESK

General

H8.1 The DCC shall provide the Services in a manner that is consistent with:

- (a) the Service Management Standards; or
- (b) any other methodology for service management identified by the DCC as being more cost efficient than the Service Management Standards, and which has been approved by the Panel for such purpose.

Maintenance of the DCC Systems

H8.2 The DCC shall (insofar as is reasonably practicable) undertake Maintenance of the DCC Systems in such a way as to avoid any disruption to the provision of the Services (or any part of them).

H8.3 Without prejudice to the generality of Section H8.2, the DCC shall (unless the Panel agrees otherwise and subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers):

- (a) undertake Planned Maintenance of the DCC Systems only between 20.00 hours and 08.00 hours;
- (b) limit Planned Maintenance of the Self-Service Interface to no more than four hours in any month; and
- (c) limit Planned Maintenance of the DCC Systems generally (including of the Self-Service Interface) to no more than six hours in any month.

H8.4 At least 20 Working Days prior to the start of each month, the DCC shall make available to Parties, to Registration Data Providers and to the Technical Architecture and Business Architecture Sub-Committee a schedule of the Planned Maintenance for that month (subject to any contrary provisions in the SEC Subsidiary Documents

applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers). Such schedule shall set out (as a minimum) the following:

- (a) the proposed Maintenance activity (in reasonable detail);
- (b) the parts of the Services that will be disrupted (or in respect of which there is a Material Risk of disruption) during each such Maintenance activity;
- (c) the time and duration of each such Maintenance activity; and
- (d) any associated risk that may subsequently affect the return of normal Services.

H8.5 The Panel may (whether or not at the request of a Party and subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers) request that the DCC reschedules any Planned Maintenance set out in a monthly schedule provided pursuant to Section H8.4. In making any such request, the Panel shall provide the reasons for such request to the DCC in support of the request. The DCC will take all reasonable steps to accommodate any such request.

H8.6 As soon as reasonably practicable after the DCC becomes aware of any Unplanned Maintenance, the DCC shall notify the Technical Architecture and Business Architecture Sub-Committee, Parties and (insofar as they are likely to be affected by such Unplanned Maintenance) Registration Data Providers of such Unplanned Maintenance (and shall provide information equivalent to that provided in respect of Planned Maintenance pursuant to Section H8.4).

H8.7 During the period of any Planned Maintenance or Unplanned Maintenance, the DCC shall provide Parties and (insofar as they are likely to be affected by such maintenance) Registration Data Providers with details of its duration and the expected disruption to Services to the extent they differ from the information previously provided.

DCC Internal System Changes

H8.8 Where the DCC is proposing to make a change to DCC Internal Systems, the DCC shall:

- (a) undertake an assessment of the likely impact on:
 - (i) Parties in respect of any potential disruption to Services; and/or
 - (ii) RDPs in relation to the sending or receipt of data pursuant to Section E (Registration Data),

that may arise as a consequence of the Maintenance required to implement the contemplated change;
- (b) where such assessment identifies that there is a Material Risk of disruption to Parties and/or RDPs, consult with Parties and/or RDPs (as applicable) and with the Technical Architecture and Business Architecture Sub-Committee regarding such risk;
- (c) provide the Parties and RDPs the opportunity to be involved in any testing of the change to the DCC Internal Systems prior to its implementation; and
- (d) undertake an assessment of the likely impact of the contemplated change upon the security of the DCC Total System, Smart Metering Systems, and the Systems of Parties and/or RDPs.

Release Management

- H8.9 The DCC shall ensure that it plans, schedules and controls the building, testing and deployment of releases of IT updates, procedures and processes in respect of the DCC Internal Systems and/or the Parse and Correlate Software in accordance with a policy for Release Management (the “**DCC Release Management Policy**”).
- H8.10 The DCC shall ensure that the DCC Release Management Policy:
 - (a) defines the scope of the matters that are to be subject to the policy in a manner consistent with the Service Management Standards;
 - (b) includes a mechanism for setting priorities for different types of such matters;
 - (c) defines periods of change-freeze where no such matters may be implemented; and

- (d) defines periods of notice to be given to Parties and RDPs prior to the implementation of such matters.

- H8.11 The DCC shall make the DCC Release Management Policy available to Parties, RDPs and the Technical Architecture and Business Architecture Sub-Committee. The DCC shall consult with Parties, RDPs and the Technical Architecture and Business Architecture Sub-Committee before making any changes to the DCC Release Management Policy.
- H8.12 The DCC's obligation under Section H8.11 is in addition to its obligations in respect of Planned Maintenance and changes to DCC Internal Systems to the extent that the activity in question involves Planned Maintenance or changes to DCC Internal Systems.

Self-Service Interface and Service Desk: General

- H8.13 Each User shall take reasonable steps to access the information it needs, and to seek to resolve any queries it may have, via the Self-Service Interface in the first instance. A User shall only contact the Service Desk where it cannot reasonably obtain the information it needs, or resolve its query, via the Self-Service Interface.
- H8.14 A Party that is not a User will be unable to access the Self-Service Interface, but may contact the Service Desk.

Self-Service Interface

- H8.15 The DCC shall maintain and keep up-to-date an interface (the **Self-Service Interface**) which:
 - (a) complies with the specification required by the Self-Service Interface Access Control Specification and the SSI Baseline Requirements Document;
 - (b) is made available to Users in accordance with the Self-Service Interface Code of Connection via DCC Gateway Connections; and
 - (c) allows each User to access the information described in Section H8.16 as being accessible to that User (and also allows other Users to access that information

to the extent permitted by the first User in accordance with the Self-Service Interface Access Control Specification).

H8.15A Any changes to the Self-Service Interface shall be processed by the DCC in accordance with the “**SSI Change Governance Process**”. Any changes to the SSI Change Governance Process shall be prepared and consulted upon by the DCC and approved by the Panel.

H8.16 The Self-Service Interface must (as a minimum) allow the following categories of User to access the following:

- (a) the Smart Metering Inventory, which shall be available to all Users and capable of being searched by reference to the following (provided that there is no requirement for the DCC to provide information held on the inventory in respect of Type 2 Devices other than IHDs):
 - (i) the Device ID, in which case the User should be able to extract all information held in the inventory in relation to (I) that Device, (II) any other Device Associated with the first Device, (III) any Device Associated with any other such Device; and (IV) any Device with which any of the Devices in (I), (II) or (III) is Associated;
 - (ii) the MPAN or MPRN, in which case the User should be able to extract all information held in the inventory in relation to the Smart Meter to which that MPAN or MPRN relates, or in relation to any Device Associated with that Smart Meter or with which it is Associated;
 - (iii) post code and premises number or name, in which case the User should be able to extract all information held in the inventory in relation to the Smart Meters for the MPAN(s) and/or MPRN linked to that postcode and premises number or name, or in relation to any Device Associated with those Smart Meters or with which they are Associated;
 - (iv) the UPRN (where this has been provided as part of the Registration Data), in which case the User should be able to extract all information held in the inventory in relation to the Smart Meters for the MPAN(s)

and/or MPRN linked by that UPRN, or in relation to any Device Associated with those Smart Meters or with which they are Associated;

- (b) a record of the Service Requests and Signed Pre-Commands sent by each User, and of the Acknowledgments, Pre-Commands, Service Responses and Alerts received by that User (during a period of no less than three months prior to any date on which that record is accessed), which shall be available only to that User;
- (c) a record, which (subject to the restriction in Section I1.4 (User Obligations)) shall be available to all Users:
 - (i) of all 'Read Profile Data' and 'Retrieve Daily Consumption Log' Service Requests in relation to each Smart Meter (or Device Associated with it) that were sent by any User during a period of no less than three months prior to any date on which that record is accessed; and
 - (ii) including, in relation to each such Service Request, a record of the type of the Service Request, whether it was successfully processed, the time and date that it was sent to the DCC, and the identity of the User which sent it;
- (d) the Incident Management Log, for which the ability of Users to view and/or amend data shall be as described in Section H9.4 (Incident Management Log);
- (e) the CH Order Management System, which shall be available to all Users;
- (f) any and all information in respect of the SMETS1 SM WAN as the DCC is required to make available under the Self-Service Interface Access Control Specification and the SSI Baseline Requirements Document, which shall be made available to all Users; and the following information in respect of the SMETS2+ SM WAN, which shall be available to all Users (and which shall be capable of interrogation by post code and postal outcode):
 - (i) whether a Communications Hub Function installed in a premises at any given location:

- (A) is expected to be able to connect to the SM WAN;
- (B) is expected to be able to connect to the SM WAN from a particular date before 1 January 2021, in which case the date shall be specified; or
- (C) cannot be confirmed as being able to connect to the SM WAN before 1 January 2021;
- (ii) any known issues giving rise to poor connectivity at any given location (and any information regarding their likely resolution); and
- (iii) any requirement to use a particular WAN Variant (and, where applicable, in combination with any particular Communications Hub Auxiliary Equipment) for any given location in order that the Communications Hub will be able to establish a connection to the SM WAN;
- (g) additional information made available by the DCC to assist with the use of the Services and diagnosis of problems, such as service status (including information in respect of Planned Maintenance and Unplanned Maintenance) and frequently asked questions (and the responses to such questions), which shall be available to all Users; and
- (h) anything else expressly required by a provision of this Code.

H8.17 Without prejudice to the requirements of Sections H8.16(b) and (c), to the extent that the Self-Service Interface does not allow a User to access a record of the information referred to in those Sections in respect of the preceding 7 years, then:

- (a) subject (in the case of the information referred to in Section H8.16(c)) to the restriction in Section I1.4 (User Obligations), that User shall be entitled to request such information from the DCC; and
- (b) the DCC shall provide such information to that User as soon as reasonably practicable following such request.

H8.18 The DCC shall ensure that the Self-Service Interface is available at all times (subject to Planned Maintenance undertaken in accordance with Section H8.3).

Service Desk

H8.19 The DCC shall ensure that a team of its representatives (the **Service Desk**) is available to be contacted as follows:

- (a) the Service Desk shall be contactable via the following means (to be used by Parties and Registration Data Providers, to the extent available to them, in the following order of preference, save as otherwise provided for in the Incident Management Policy):
 - (i) the Self-Service Interface;
 - (ii) a dedicated email address published on the DCC Website; and
 - (iii) a dedicated telephone number published on the DCC Website;
- (b) the Service Desk can be used by Parties to seek resolution of queries relating to the Services (provided that Users shall seek resolution via the Self-Service Interface in the first instance); and
- (c) the Service Desk can be used by Incident Parties that are not Users to raise Incidents (or by Users, where the Incident Management Log is not available via the Self-Service Interface, to raise or provide information in respect of Incidents), which the DCC shall then reflect in the Incident Management Log.

H8.20 The DCC shall ensure that the Service Desk is available at all times, and shall provide alternative arrangements (a different telephone number and email address) where the usual Service Desk is not available. Where a different telephone number and email address is to be used, the DCC shall publish details of the alternative number and address at least 20 Working Days in advance.

H9 INCIDENT MANAGEMENT

Incident Management Policy

H9.1 The Incident Management Policy must (as a minimum) make provision for the following matters:

- (a) raising an Incident by recording it in the Incident Management Log;
- (b) categorisation of Incidents into 5 categories of severity (“**Incident Category 1, 2, 3, 4 and 5**” respectively, such that Incident Category 1 is the most severe and Incident Category 5 the least);
- (c) prioritisation of Incidents, and (in those cases where the DCC is responsible for resolving an Incident) the time period within which an Incident in each Incident Category should be resolved (the “**Target Resolution Time**”);
- (d) prioritising and timescale for closure of Problems;
- (e) allocation of responsibility for Incidents and Problems in accordance with Section H9.2;
- (f) identification of other interested persons who are to be kept informed regarding Incidents;
- (g) courses of action to be undertaken in seeking to resolve Incidents and close Problems, including the need to update the Incident Management Log to record activity carried out (or planned to be carried out);
- (h) rules for the escalation of Incidents;
- (i) rules for the declaration of a Major Incident, and for the appointment of managers to coordinate resolution of Major Incidents;
- (j) rules for the closure of a resolved Incident;
- (k) rules for opening and closing Problem records by the DCC;
- (l) rules for reopening closed Incidents; and

- (m) describe the roles and responsibilities of the following persons in respect of different types of Incident: Users, Eligible Subscribers, DCC Gateway Parties and Registration Data Providers (such persons being the "Incident Parties").

Incident and Problem Management Responsibility

H9.2 The Incident Management Policy must allocate responsibility for resolution of Incidents and closure of Problems in accordance with the following principles:

- (a) where an Incident Party becomes aware of an Incident that is not yet logged on the Incident Management Log (or, if logged, is incorrectly logged as closed), and:
 - (i) where such Incident is reasonably capable of being resolved via the Self-Service Interface or via a Service Request which that Incident Party has the right to send, that Incident Party shall exercise such rights with a view to resolving the Incident;
 - (ii) where the CH Support Materials are relevant to the Incident and require the Incident Party to take any steps prior to raising an Incident, that Incident Party shall take such steps with a view to resolving the Incident; or
 - (iii) where the Incident Party is a Supplier Party and it is already at the premises when it first becomes aware of the Incident, and to the extent the Incident is either: (A) caused by a SMETS1 CH for which the Incident Party is the Lead Supplier; or (B) caused by a SMETS2+ Communications Hub and not capable of being resolved via communications over the SM WAN, then (in either case) that Incident Party shall be responsible for resolving that Incident;
- (b) subject to Section H9.2(a), the DCC shall be responsible for resolving Incidents and closing Problems to the extent they are caused by:
 - (i) the DCC Systems;

- (ii) the Parse and Correlate Software; or
- (iii) a SMETS2+ Communications Hub, and are capable of being resolved via communications over the SM WAN;
- (c) subject to Section H9.2(a), the Lead Supplier for a Communications Hub shall be responsible for resolving Incidents and closing Problems to the extent they are caused by that Communications Hub where either: (A) it is a SMETS1 CH; or (B) the Incident or Problem is not capable of being resolved or closed via communications over the SM WAN;
- (d) subject to Section H9.2(a), the Responsible Supplier for a Smart Metering System shall be responsible for resolving Incidents and closing Problems to the extent caused by Devices (other than the Communications Hub) forming part of that Smart Metering System;
- (e) in the case of Incidents arising in respect of the exchange of Data under Section E (Registration Data):
 - (i) the relevant Registration Data Provider shall be responsible for resolving those Incidents arising on its side of the Registration Data Interface; and
 - (ii) the DCC shall be responsible for resolving all other such Incidents; and
- (f) in the case of Incidents other than those referred to elsewhere in this Section H9.2, the Incident Party assigned responsibility in accordance with the Incident Management Policy shall be responsible for resolving the Incident.

Incident Management Log

H9.3 The DCC shall maintain and keep up-to-date an electronic log (the **Incident Management Log**) that records the following in respect of each Incident:

- (a) a unique reference number (to be allocated to each Incident that is identified by, or reported to, the DCC);
- (b) the date and time that the Incident was identified by, or reported to, the DCC;

- (c) the nature of the Incident and the location at which it occurred;
- (d) whether the Incident was identified by the DCC, or otherwise the person that reported the Incident to the DCC;
- (e) the categorisation of the Incident in accordance with the Incident Management Policy;
- (f) the person to whom the Incident has been allocated for resolution;
- (g) the course of action to be taken, or taken, to resolve the Incident;
- (h) the DCC's Good Industry Practice assessment of which Incident Parties and/or Services are affected by the Incident;
- (i) details of any communications with Incident Parties in respect of the Incident;
- (j) comments regarding any mitigating circumstances regarding the Incident;
- (k) the potential impact of the Incident on the DCC's ability to meet the Target Service Levels;
- (l) the current status of the Incident, and (once applicable) the date and time that the Incident was closed; and
- (m) a reference to any related Problem logged.

H9.4 The following shall apply in respect of the Incident Management Log:

- (a) (subject to paragraphs (c) and (d) below) the DCC shall provide Users with the ability to view and amend the Incident Management Log via the Self Service Interface;
- (b) (subject to paragraphs (c) and (d) below) the DCC shall provide Incident Parties that are not Users with the ability to obtain information from, and report information which the DCC shall then add to, the Incident Management Log via the Service Desk;
- (c) only the following Incident Parties shall be entitled to view or obtain

information from the Incident Management Log in respect of an Incident:

- (i) the Incident Party that raised the Incident;
- (ii) the Incident Party that is assigned responsibility for resolving the Incident;
- (iii) (subject to any further rules in the Incident Management Policy) the following persons:
 - (A) the Lead Supplier for each Communications Hub that is affected by the Incident;
 - (B) the Responsible Supplier for each Smart Metering System that is affected by the Incident;
 - (C) the Electricity Distributor or Gas Transporter (as applicable) for each Smart Metering System that is affected by the Incident;
 - (D) the DCC Gateway Party for, and any Party notified to the DCC in accordance with Section H15.17 (Use of a DCC Gateway Connection) as entitled to use, a DCC Gateway Connection shall be able to view matters relating to any Incident affecting that DCC Gateway Connection;
 - (E) the Registration Data Providers entitled to use a DCC Gateway Connection as provided for in Section E3 (DCC Gateway Connections for Registration Data Providers) shall be able to view matters relating to any Incident affecting that DCC Gateway Connection; and
 - (F) any other Incident Party that is reasonably likely to be affected by the Incident;
- (d) only the following Incident Parties shall be entitled to amend and report information to be added to the Incident Management Log:

- (i) the Incident Party that raised the Incident;
- (ii) the Incident Party that is assigned responsibility for resolving the Incident; and
- (iii) (subject to any further rules in the Incident Management Policy) the following persons:
 - (G) the Lead Supplier for each Communications Hub that is affected by the Incident (but such amending and reporting shall be limited to matters relating to the Communications Hub Function); and
 - (H) the Responsible Supplier(s) for each Smart Metering System that is affected by the Incident (but such amending and reporting shall exclude matters relating to the Communications Hub Function); and
- (e) to the extent that an Incident Party does not have the necessary rights in accordance with paragraph (d) above to amend the Incident Management Log, an Incident Party shall report the matter to the DCC, which shall then amend the Incident Management Log to reflect such matters.

Access to data regarding Problems

- H9.5 Where an Incident refers to a Problem, the DCC or any Incident Party may request that the person assigned responsibility for the Problem supplies to the DCC or Incident Party making the request reasonable information regarding the Problem, provided that information in respect of any other Incident shall only be supplied to an Incident Party where that Incident Party would be allowed access to that information in accordance with Section H9.4.

Addition of Incidents to the Incident Management Log

- H9.6 Where an Incident Party becomes aware of an Incident that is not yet logged on the Incident Management Log (or, if logged, is incorrectly logged as closed):
- (a) (where the Incident Party is a User) to the extent such Incident is reasonably

capable of being resolved via the Self-Service Interface or via a Service Request which that User has the right to send, then the User shall exercise such rights with a view to resolving the Incident;

- (b) (where the Incident Party is an RDP) to the extent such Incident is reasonably capable of being resolved by re-submitting a subset of Registration Data in accordance with the Registration Data Interface Documents, then the RDP shall re-submit such Data; or
- (c) where neither paragraph (a) nor (b) above apply (or to the extent the Incident is not resolved despite compliance with paragraph (a) or (b) above), then the Incident Party shall add the Incident to the Incident Management Log (or, if incorrectly logged as closed, reopen the Incident) via the Self-Service Interface (or, in the case of non-Users, the Service Desk).

H9.7 Where the DCC becomes aware of an Incident that is not yet logged on the Incident Management Log (or, if logged, is incorrectly logged as closed), then the DCC shall add the Incident to the Incident Management Log (or, if incorrectly logged as closed, reopen the Incident).

Resolving Incidents and Closing Problems

H9.8 Where an Incident has been added to the Incident Management Log (or reopened) pursuant to Section H9.6 or H9.7, then (until such time as that Incident is closed) the DCC and each relevant Incident Party shall each take all the steps allocated to them under and in accordance with the Incident Management Policy in respect of an Incident of the relevant type, so as to:

- (a) in the case of Incidents for which an Incident Party is responsible, resolve the Incident as soon as reasonably practicable; or
- (b) in the case of Incidents for which the DCC is responsible, resolve the Incident in accordance with the applicable Target Resolution Time.

H9.9 Where a Problem has been assigned to the DCC or an Incident Party, then (until such time as that Problem is closed) the DCC and each relevant Incident Party shall each

take all the steps allocated to it under and in accordance with the Incident Management Policy so as to close the Problem in accordance with priority for resolution and closure set out in the Incident Management Policy.

Major Incident Notification and Reports

- H9.10 Where an Incident Party is identified as responsible for resolution of an Incident, and where that Incident Party considers (or should reasonably have considered) that the Incident constitutes a Major Incident, then such Incident Party shall notify the DCC of such fact (in accordance with the Incident Management Policy).
- H9.11 Where the DCC becomes aware of a Major Incident, the DCC shall notify all Incident Parties that are likely to be affected by such Major Incident (in accordance with the Incident Management Policy).
- H9.12 In the event of a Major Incident:
- (a) where the DCC is responsible for resolving that Incident, each Incident Party shall provide the DCC with all reasonable assistance as the DCC may request; and
 - (b) where an Incident Party is responsible for resolving that Incident, the DCC and all other Incident Parties shall provide all reasonable assistance to the Incident Party responsible for resolving that Incident as such Incident Party may request,
- (in each case) in relation to the resolution of that Incident, including as set out in the Incident Management Policy.
- H9.13 Within two Working Days following resolution of a Major Incident, the DCC or the Incident Party responsible for resolving that Major Incident shall (subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers) provide a summary report to the Panel in respect of that Major Incident. Such summary report must include (as a minimum):
- (a) the nature, cause and impact (and likely future impact) of the Major Incident

(including, where the DCC is responsible for resolving the Major Incident, details of the impact the Major Incident had on provision of the Services and over what period, and details of any Data that may have been lost); and

(b) the action taken in the resolution of the Major Incident.

H9.14 Within 20 Working Days following resolution of a Major Incident, the DCC or Incident Party responsible for resolving that Major Incident shall (subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers) conduct a review regarding that Major Incident and its resolution, and shall report to the Panel and the Authority (and, on request, the Secretary of State) on the outcome of such review. Such report must include (as a minimum):

- (a) a copy of the summary report produced in respect of the Major Incident pursuant to Section H9.13;
- (b) (where the DCC is responsible for resolving the Major Incident) any Services which were not restored within the Target Resolution Time for the Major Incident;
- (c) (where the DCC is responsible for resolving the Major Incident) where any Services were not restored within the Target Resolution Time, the reason why this was the case and the steps the DCC is taking to prevent the re-occurrence of such an event;
- (d) a review of the response to the Major Incident and its effectiveness;
- (e) any failures by Incident Parties to comply with their obligations under Energy Licences and/or this Code that caused or contributed to the Major Incident or its consequences;
- (f) (where the DCC is responsible for resolving the Major Incident) whether there is likely to be a reduction (and, to the extent reasonably capable of being determined at that time, the amount of the anticipated reduction) in the DCC's External Costs (as defined in the DCC Licence) arising as a consequence of the

DCC Service Providers failing to achieve a restoration of any Services within the Target Resolution Time; and

- (g) any Modifications that could be made to this Code to mitigate against future Incidents and/or their consequences.

H9.15 The Panel shall make each report produced by the DCC pursuant to Section H9.14 available to the other Parties, subject to any redactions it considers necessary to avoid a risk of Compromise to the DCC Total System, User Systems, RDP Systems and/or Devices.

Disputes

H9.16 Where Disputes arise between the Incident Parties regarding whether or not the DCC and/or an Incident Party has complied with its obligations under this Section H9, then such Dispute shall be subject to determination by the Panel (which determination shall be final and binding).

H10 BUSINESS CONTINUITY**Emergency Suspension of Services**

H10.1 Section H10.2 applies in respect of any Party or RDP which has an established DCC Gateway Connection where, by virtue of the action or failure to act of that Party or RDP, or of any event occurring on or in relation to the Systems of that Party or RDP:

- (a) the DCC Systems are being Compromised to a significant extent; or
- (b) the DCC has reason to believe that there is an immediate threat of the DCC Systems being Compromised to a significant extent.

H10.2 Where this Section H10.2 applies, the DCC may, to the extent that it is necessary to do so in order to avoid or mitigate the potential impact of any Compromise to the DCC Systems, temporarily suspend:

- (a) in respect of a Party whose actions or Systems are giving rise to the actual or threatened Compromise:
 - (i) the provision (in whole or in part) of the Services to that Party;
 - (ii) the rights of that Party to receive (in whole or in part) the Services; and/or
 - (iii) the ability of that Party to use any DCC Gateway Connection;
 or
- (b) in respect of an RDP whose actions or Systems are giving rise to the actual or threatened Compromise, the ability of that RDP to use any DCC Gateway Connection.

H10.3 Where the DCC commences any temporary suspension of the provision of Services or rights, or of the ability to use a DCC Gateway Connection in accordance with Section H10.2, it shall promptly (and in any event within 24 hours) notify the Panel of the suspension and the reasons for it, and shall provide the Panel with such information relating to the suspension as may be requested.

H10.4 Where the Panel receives a notification in accordance with Section H10.3, it shall promptly consider the circumstances of the suspension, and:

- (a) shall either confirm the suspension, or determine that the suspension is to cease to have effect (in which case the suspended Services, rights or ability to use any DCC Gateway Connection shall be reinstated); and
- (b) may in either case give such directions as it considers appropriate:
 - (i) to the DCC in relation to the continuing suspension or the reinstatement of the Services, rights or ability to use any DCC Gateway Connection (as the case may be); and/or
 - (ii) to the Party or RDP whose Services, rights or ability to use any DCC Gateway Connection were suspended by the DCC, for the purpose of remedying any actual or potential cause of Compromise to the DCC Systems or for preventing its recurrence.

H10.5 The DCC shall comply with any direction given to it by the Panel in accordance with Section H10.4, and shall provide such reasonable support and assistance to the Party or RDP whose Services, rights or ability to use any DCC Gateway Connection were suspended by the DCC as that Party or RDP may request for the purpose of remedying any actual or potential cause of Compromise to the DCC Systems or for preventing its recurrence.

H10.6 A Party shall comply with any direction given to it by the Panel in accordance with Section H10.4.

H10.7 Each Electricity Network Party and each Gas Network Party shall ensure that its RDP shall (when acting in its capacity as the Network Party's RDP) comply with any direction given to it by the Panel in accordance with Section H10.4.

H10.8 Where the DCC or any Party or RDP which is directly affected by a decision of the Panel made pursuant to Section H10.4 disagrees with that decision, it may refer the matter to the Authority for its determination, which shall be final and binding for the purposes of this Code.

The Business Continuity and Disaster Recovery Procedure

H10.9 Subject to Section H10.10, the DCC shall comply with the requirements of the Business Continuity and Disaster Recovery Procedure for the purposes of ensuring so far as reasonably practicable that:

- (a) there is no significant disruption to the provision of any of the Services by the DCC; and
- (b) where there is any such significant disruption, the provision of those Services is restored as soon as is reasonably practicable.

H10.10 Where, in the case of Disasters, taking a different course of action to following the BCDR Procedure would (in accordance with Good Industry Practice) be a more effective course of action in order to achieve the objectives set out in Section H10.9, then the DCC may take such steps to achieve such objectives (rather than complying with the BCDR Procedure). Where the DCC takes a course of action that does not comply with the BCDR Procedure, the DCC must inform the Panel as soon as possible thereafter of the steps taken and the reasons why the DCC considered that they were more effective.

Business Continuity and Disaster Recovery Tests

H10.11 The DCC shall (subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers):

- (a) from time to time, and at least once each year, carry out a Business Continuity and Disaster Recovery Test in order to assess whether the Business Continuity and Disaster Recovery Procedure remains suitable for achieving the objectives described at Section H10.9; and
- (b) following any such test, report to the Panel and the Authority on the outcome of the test, and on any proposals made by the DCC in relation to the Business Continuity and Disaster Recovery Procedure having regard to that outcome.

H10.12 Each Party shall provide the DCC with any such assistance and co-operation as it may reasonably request for the purpose of carrying out a Business Continuity and Disaster Recovery Test and confirming the operation of the Business Continuity and Disaster Recovery Procedure.

H10.12A Before notifying the Parties of each Business Continuity and Disaster Recovery Test, the DCC shall consult with the Parties and the Technical Architecture and Business Architecture Sub-Committee regarding the Business Continuity and Disaster Recovery Test Schedule to ensure that (insofar as is reasonably practicable) the Business Continuity and Disaster Recovery Test is undertaken in such a way as to minimise any disruption to the provision of the Services (or any part of them). The DCC shall complete all necessary consultation prior to notifying Parties.

H10.12B The DCC shall notify each Party of its intention to carry out a Business Continuity and Disaster Recovery Test and provide each Party with a Business Continuity and Disaster Recovery Test Schedule at least 60 Working Days before the date on which such test is due to start. Where the DCC needs to amend the Business Continuity and Disaster Recovery Test Schedule following such notification and it is not reasonably practicable to give 60 Working Days' notice, it will provide such notice as far in advance as is reasonably practicable.

Business Continuity and Disaster Recovery Targets

H10.13 The DCC shall, on the occurrence of a Disaster (subject to any contrary provisions in the SEC Subsidiary Documents applying in relation to the SMETS1 SM WAN and/or the Systems of the SMETS1 Service Providers):

- (a) take all reasonable steps to ensure that any and all affected Services are restored in accordance with the Target Resolution Time for a Major Incident;
- (b) ensure that all affected Services are restored within eight hours of the occurrence of that Disaster (except in the case of a Disaster that directly affects a DCC Gateway Connection and where: (i) the DCC Gateway Party for that DCC Gateway Connection has not procured a backup DCC Gateway Connection; and (ii) the DCC can reasonably demonstrate that the Services could have been

restored within eight hours if the DCC Gateway Party had procured a backup DCC Gateway Connection); and

- (c) ensure in any event that Services are restored such that the loss of Data arising as a consequence of the Disaster is not in excess of that prescribed by the relevant Service Provider Performance Measures.

H11 PARSE AND CORRELATE SOFTWARE**Provision of Parse and Correlate Software**

H11.1 On receipt of a request to do so from any person, the DCC shall supply to that person a copy of the most recently released version of computer software (the “**Parse and Correlate Software**”) which:

- (a) has the functionality specified in Section H11.2;
- (b) has the characteristics specified in Section H11.3; and
- (c) is provided in the format specified in Section H11.4.

H11.2 The functionality specified in this Section H11.2 is that the software must enable any User to:

- (a) convert the relevant content of all Service Responses and Device Alerts (in each case only where generated from a Response or Alert originating from a SMETS2+ Device) into the format that is consistent with that set out in respect of them in the Message Mapping Catalogue; and
- (b) confirm that the content of any Pre-Command is substantively identical to the content of its associated Critical Service Request.

H11.3 The characteristics specified in this Section H11.3 are that:

- (a) the software is written using the Java programming language; and
- (b) the software is capable of operating on the version of the Java Virtual Machine/Run-time Environment prevailing at the time at which the design of that version of the software was finalised.

H11.4 The format specified in this Section H11.4 is that the software:

- (a) is provided as both:
 - (i) an executable file which includes everything required to enable the software to be installed on the systems of the person to whom it is

provided in such a manner as not to have a material adverse effect on the operation of other software deployed within the same system environment; and

- (ii) source software code; and
- (b) can be confirmed, on receipt by the person to whom it is provided:
- (c) as having been provided by the DCC; and
 - (i) as being authentic, such that any tampering with the software would be apparent.

Maintenance of the Parse and Correlate Software

H11.5 The DCC shall:

- (a) maintain the Parse and Correlate Software supplied by it to any person so as to ensure that it at all times continues to have the functionality specified in Section H11.2; and
- (b) for that purpose develop and release to such persons, where it is reasonably necessary from time to time, new versions of the Parse and Correlate Software which shall have the characteristics specified in Section H11.3 and be provided in the format specified in Section H11.4.

Development of the Parse and Correlate Software

H11.6 When proposing to develop any version of the Parse and Correlate Software, the DCC shall consult with Users, having regard in particular to their views in relation to:

- (a) the need for a new version of the software;
- (b) the potential impact of the proposed new version of the software on the security of the DCC Total System, User Systems and Smart Metering Systems;
- (c) the design of the software generally; and
- (d) the required operational performance of the proposed version of the software on

a standard system configuration specified by the DCC for the purposes of the consultation.

H11.7 Following any consultation with Users, the DCC shall inform all Users of the design of the version of the Parse and Correlate Software that it intends to develop.

H11.8 Before supplying any version of the Parse and Correlate Software to any person, the DCC shall:

- (a) ensure that that version of the software has been adequately tested for the purpose of ensuring that it satisfies the requirements of Sections H11.2 to H11.4;
- (b) provide suitable opportunities for Acceptance Testing of that version of the software;
- (c) take reasonable steps to ensure that any User who wishes to participate in that Acceptance Testing is able to do so; and
- (d) ensure that the version of the software has been subject to a software code review, by an individual or organisation with the professional competence to carry out such a review, for the purpose of identifying any vulnerabilities in the code that were not intended as a feature of its design.

Provision of Support and Assistance to Users

H11.9 The DCC shall, having consulted with Users, determine two Application Servers in respect of which it will provide support for the executable file referred to in Section H11.4(a)(i).

H11.10 Any User may appeal to the Panel a decision of the DCC made under Section H11.9, in which case:

- (a) the Panel shall determine the Application Servers in respect of which the DCC must provide support; and
- (b) the determination of the Panel shall be final and binding for the purposes of this Code.

H11.11 The DCC shall make available to each person to whom any version of the Parse and Correlate Software is provided a copy of an installation guide and release notes relevant to that version.

H11.12 Requests by any User for the DCC to provide that User with further assistance in relation to its use or implementation of the Parse and Correlate Software shall be made in such format as the DCC may specify from time to time, and shall be submitted to the DCC. Following receipt of any such request (or purported request), the DCC shall:

- (a) where the request is incomplete or the DCC reasonably requires further information in order to assess the request, notify the User that this is the case and provide reasonable assistance to the User in re-submitting its request;
- (b) once the DCC has received all the information it reasonably requires in order to assess the request, confirm the reasonable terms upon which the DCC will provide the requested assistance (which terms may not be inconsistent with the provisions of this Code) and the Charges payable in respect of the same; and
- (c) once the Party has agreed to such terms and to pay such Charges, provide the requested assistance to the User in accordance with such terms.

H11.13 Section H11.12 does not apply to the provision of assistance that is the responsibility of the DCC in accordance with the Incident Management Policy. The assistance referred to in Section H11.12 may include in particular assistance in respect of:

- (a) the development and testing of, and the provision of support for, a version of the Parse and Correlate Software which is capable of operating on a version of the Java Virtual Machine/Run-time Environment other than that prevailing at the time at which the design of the most recently released version of the Parse and Correlate Software was finalised;
- (b) the development and testing of, and the provision of support for, a version of the Parse and Correlate Software which meets any other User-specific requirements; and
- (c) the provision, in respect of more than two Application Servers, of support for

the executable file referred to in Section H11.4(a)(i).

Separation of Resources

H11.14 The DCC shall ensure that no staff or other resources of its own or of any third party which are directly used in the development of the Parse and Correlate Software are resources which are also used in the development or provision of the Transform functionality.

Right to Use the Parse and Correlate Software

H11.15 The DCC shall ensure that any person shall have the right to use the Parse and Correlate Software source software code on a non-proprietary and royalty-free basis, except insofar as royalties are due in respect of any Intellectual Property Rights the use of which is mandated by the Code.

H12 INTIMATE COMMUNICATIONS HUB INTERFACE SPECIFICATION**Maintenance of the ICHIS**

- H12.1 The DCC shall maintain the ICHIS and ensure that the ICHIS meets the requirements of Section H12.2 and H12.3. The ICHIS is not relevant to SMETS1 CHs.
- H12.2 The requirements of this Section H12.2 are that the ICHIS describes a specification for the physical interface (including the electrical and data connection) between:
- (a) the Communications Hub (which shall incorporate the male components of the physical interface); and
 - (b) either a Smart Meter or a Communications Hub Hot Shoe (which shall, in either case, incorporate the female components of the physical interface).
- H12.3 The requirement of this Section H12.3 is that the specification described by the ICHIS only requires the use of tangible and intangible property (including physical components and Intellectual Property Rights) that is readily available on a reasonable and non-discriminatory basis.

Publication of the ICHIS

- H12.4 The DCC shall publish the ICHIS on the DCC Website, and ensure that all persons are free to use the ICHIS without charge (whether for the purposes of this Code or otherwise); provided that the DCC shall limit its liability to persons other than the Parties on the same terms as apply in respect of the ICHIS under Section M2 (Limitations of Liability).

Consultation Regarding ICHIS

- H12.5 The DCC shall keep the ICHIS under review to ascertain whether the ICHIS remains fit for the purposes envisaged by this Code. The DCC may from time to time at its discretion (and shall where directed to do so by the Panel) consult with Parties as to whether they consider that the ICHIS remains fit for the purposes envisaged by this Code.

H12.6 Following each consultation pursuant to Section H12.5, the DCC shall publish on the DCC Website (and notify all Parties of) a report on the outcome of such consultation, setting out:

- (a) the process undertaken in respect of such consultation;
- (b) whether (and, if so, how and from what implementation date) the DCC proposes to amend the ICHIS as a result of such consultation;
- (c) a detailed summary of the consultation responses received from Parties, identifying in particular those responses that raised objections to the position adopted by the DCC;
- (d) the DCC's rationale for the position it has adopted;
- (e) the costs and expenses that are likely to arise as a result of the position adopted by the DCC (including the costs and expenses likely to arise as a result of any modifications that will be required to be made to Smart Meters, Communications Hubs and Communications Hub Hot Shoes); and
- (f) the steps it has taken (including any testing or prototype development) to ensure that the ICHIS (if amended as proposed) remains fit for the purposes envisaged by this Code.

Referral to the Authority

H12.7 Within 10 Working Days following notification by the DCC to a Party of a report published in accordance with Section H12.6, that Party may refer the report to the Authority to consider whether the consultation to which that report relates was undertaken in accordance with the DCC's obligations under this Code or whether the notice period provided for implementation of the amendment was reasonable given the circumstances.

H12.8 Where the Authority determines that the relevant consultation was not undertaken in accordance with the DCC's obligations under this Code or that the notice period provided for implementation of the amendment was not reasonable given the

circumstances, the DCC shall repeat the consultation and comply with any directions made by the Authority in respect of the same. Where the Authority determines both (where both of the following were referred to the Authority) or either (where only one of the following was so referred) that:

- (a) the relevant consultation was undertaken in accordance with the DCC's obligations under this Code; and/or
- (b) the notice period provided for implementation of the amendment was reasonable given the circumstances,

the consultation and proposed course of action shall stand.

Amendments to the ICHIS

H12.9 No amendment may be made to the ICHIS unless:

- (a) the DCC has first undertaken such prototype development and testing in respect of the proposed amendment as the DCC reasonably considers necessary to ensure that the ICHIS is fit for the purposes envisaged by this Code;
- (b) the DCC has first consulted with Parties regarding the proposed amendment and proposed date of implementation, published a report on the outcome of such consultation, and notified the Parties of such publication (all in accordance with Section H12.6); and
- (c) such report has not been referred to the Authority in accordance with Section H12.7, or the Authority has determined both (where both of the following were so referred) or either (where only one of the following was so referred) that:
 - (i) the relevant consultation was undertaken in accordance with the DCC's obligations under this Code; and/or
 - (ii) the notice period provided for implementation of the amendment was reasonable given the circumstances.

H13 PERFORMANCE STANDARDS AND REPORTING**Code Performance Measures**

H13.1 Each of the following performance measures constitute a Code Performance Measure (to which the following Target Service Level and Minimum Service Level will apply, measured over the following Performance Measurement Period):

No.	Code Performance Measure	Performance Measurement Period	Target Service Level	Minimum Service Level
1	Percentage of On-Demand Service Responses delivered within the applicable Target Response Time.	monthly	99%	96%
2	Percentage of Future-Dated Service Responses delivered within the applicable Target Response Time.	monthly	99%	96%
3	Percentage of Alerts delivered within the applicable Target Response Time.	monthly	99%	96%
4	Percentage of Incidents which the DCC is responsible for resolving and which fall within Incident Category 1 or 2 that are resolved in accordance with the Incident Management Policy within the Target Resolution Time.	monthly	100%	85%
5	Percentage of Incidents which the DCC is responsible for resolving and which fall within Incident Category 3, 4 or 5 that are resolved in accordance with the Incident Management Policy within the Target Resolution Time.	monthly	90%	80%
6	Percentage of time (in minutes) when the Self-Service Interface is available to be accessed by all Users during the Target Availability Period.	monthly	99.5%	98%

Service Provider Performance Measures

H13.2 The DCC may modify the Reported List of Service Provider Performance Measures

where it has:

- (a) undertaken reasonable consultation with the Parties regarding the proposed modification;
- (b) given due consideration to, and taken into account, any consultation responses received; and
- (c) provided to the Panel, the Parties, the Authority and (on request) the Secretary of State a statement of its reasons for the modification together with copies of any consultation responses received,

and as soon as reasonably practicable following any such modification, the DCC shall provide an up-to-date copy of the Reported List of Service Provider Performance Measures to the Panel, the Parties, the Authority and (on request) the Secretary of State.

H13.3 Prior to agreeing any changes to the DCC Service Provider Contracts that will alter the Service Provider Performance Measures, the DCC shall:

- (a) undertake reasonable consultation with the Panel and Parties regarding such changes;
- (b) give due consideration to, and take into account, any consultation responses received; and
- (c) provide to the Panel, the Parties, the Authority and (on request) the Secretary of State a statement of its reasons for proposing to agree such changes.

Reporting

H13.4 The DCC shall, within 25 Working Days following the end of each Performance Measurement Period, produce a report setting out the Service Levels achieved in respect of each Performance Measure. Such report must identify:

- (a) those Performance Measures (if any) for which the Service Level was less than the Target Service Level and/or the Minimum Service Level;

- (b) where a Service Level is less than the Target Service Level, the reason for the Service Level achieved;
- (c) where a Service Level is less than the Minimum Service Level, the steps the DCC is taking to prevent the re-occurrence or continuation of the reason for the Service Level achieved; and
- (d) any anticipated reductions in the DCC's Internal Costs and/or External Costs (as both such expressions are defined in the DCC Licence) arising as a consequence of the DCC Service Providers failing to achieve the Target Service Levels in respect of the Service Provider Performance Measures.

H13.5 A copy of the report produced pursuant to Section H13.4:

- (a) shall be provided by DCC, immediately following its production, to the Panel, the Parties, the Authority and (on request) the Secretary of State; and
- (b) may be provided by the Panel, at its discretion, to any other person.

Performance Measurement Methodology

H13.6 The DCC shall:

- (a) establish and periodically review the Performance Measurement Methodology in accordance with Good Industry Practice and in consultation with the Panel, the Parties and the Authority; and
- (b) as soon as reasonably practicable following any modification which it may make to the Performance Measurement Methodology, provide an up to date copy of the Performance Measurement Methodology to the Panel, the Parties, the Authority and (on request) the Secretary of State.

OPR Exceptional Events

H13.7 Sections H13.7 to H13.14 shall apply only to the extent that the OPR Reporting established under the DCC Licence applies by reference to reporting under this Code. OPR Exceptional Events shall not apply in respect of Performance Measure reporting

under Section H13.4.

H13.8 For the purposes of OPR Reporting, in measuring performance for each Performance Measure, the DCC shall exclude from the Service Level calculation any and all instances of delayed or non-performance for which the DCC has relief for an OPR Exceptional Event by virtue of Section H13.12.

H13.9 The DCC may claim relief for the purposes of OPR Reporting in respect of the Performance Measures to the extent this is due to OPR Exceptional Events. Where the DCC also wishes to claim relief in respect of its obligations under this Code, the DCC must also separately claim relief for Services FM under Section M3 (Services FM and Force Majeure).

H13.10 The DCC cannot claim an OPR Exceptional Event has occurred:

- (a) in relation to any wilful act, neglect or failure to take reasonable precautions against the relevant OPR Exceptional Event by the DCC or its servants, agents, employees or contractors (including the DCC Service Providers);
- (b) in relation to any circumstances resulting from a failure or delay by any other person in the performance of that other person's obligations under a contract with the DCC other than this Code (unless that other person is itself prevented from or delayed in complying with its obligations as a result of OPR Exceptional Events); and/or
- (c) as a result of any shortage of labour, material or other resources unless caused by circumstances which are themselves OPR Exceptional Events,

and in any event, the DCC shall not be entitled to relief for the purposes of OPR Reporting if and to the extent that it is required to comply with the BCDR Procedure in accordance with Sections H10.9 and H10.10 (the Business Continuity and Disaster Recovery Procedure) but has failed to do so (unless this failure is also due to OPR Exceptional Events affecting the operation of the BCDR Procedure).

H13.11 The DCC shall, as soon as reasonably practicable (and in any event within five (5) days of the occurrence of the OPR Exceptional Event), give to the Users that were due

to receive the affected Services and to the Panel full details of the OPR Exceptional Event and any relief for the purposes of OPR Reporting which the DCC wishes to claim in connection with the OPR Exceptional Event.

H13.12 The DCC shall be entitled to relief for the purposes of OPR Reporting in respect of OPR Exceptional Events to the extent that the Panel agrees following consultation with any relevant Sub-Committee that the requirements of Sections H13.9 and H13.10 are met, and that:

- (a) the DCC could not have avoided the occurrence of the OPR Exceptional Event (or its consequences or likely consequences) by taking steps which the DCC was required to take (or procure) under this Code and any Bilateral Agreement or might reasonably be expected to have taken;
- (b) the OPR Exceptional Event directly caused the non-performance of the Services for which relief is claimed;
- (c) the time lost and/or relief from the obligations under this Code and any Bilateral Agreement claimed by the DCC could not reasonably be expected to be mitigated or recovered by the DCC acting in accordance with Good Industry Practice; and
- (d) the DCC is taking all steps in accordance with Good Industry Practice to overcome or minimise the consequences of the OPR Exceptional Event on the performance of the Services.

H13.13 The Panel shall reach a determination as to whether the DCC is entitled to relief for the purposes of OPR Reporting in respect of an OPR Exceptional Event in accordance with Section H13.12 within 10 Working Days after the DCC notifies the Panel of the OPR Exceptional Event under Section H13.11.

H13.14 The DCC shall notify the affected Users and the Panel as soon as reasonably practicable after the OPR Exceptional Event ceases or no longer causes the DCC to be unable to comply with its obligations under this Code and/or any Bilateral Agreement in respect of the Services.

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; and
- (g) SMETS1 Pending Product Combinations Tests.

H14.2 The DCC shall make the Testing Services available, and shall provide the Testing Services:

- (a) in accordance with the Enduring Testing Approach Document and Good Industry Practice; and
- (b) between 08:00 hours and 18.00 hours Monday to Friday, and at any other time that it is reasonably practicable to do so (including where any DCC Service Provider has agreed to provide services at such time).

H14.3 The DCC shall act reasonably in relation to its provision of the Testing Services and shall facilitate the completion (in a timely manner) of tests pursuant to the Testing Services by each such person which is entitled to do so in accordance with this Section H14. Each Testing Participant shall comply with the Enduring Testing Approach Document with respect to the relevant Testing Services. The DCC shall publish on the DCC Website a guide for Testing Participants describing which persons are eligible for which Testing Services, and on what basis (including any applicable Charges).

H14.4 To the extent it is reasonably practicable to do so, the DCC shall allow persons who

are eligible to undertake tests pursuant to the Testing Services to undertake those tests concurrently, or shall (otherwise) determine, in a non-discriminatory manner, the order in which such persons will be allowed to undertake such tests. Where any Testing Participant disputes the order in which persons are allowed to undertake tests pursuant to this Section H14.4, then the Testing Participant may refer the matter to the Panel. Where the DCC or any Testing Participant wishes to do so, it may refer the Panel's decision on such matter to the Authority for its determination (which shall be final and binding for the purposes of this Code).

- H14.5 Each Party which undertakes tests pursuant to the Testing Services shall do so in accordance with Good Industry Practice. To the extent that such tests involve a Party accessing the DCC's premises, the Party shall do so in compliance with the site rules and reasonable instructions of the DCC.
- H14.6 The DCC shall be liable for any loss of or damage to the equipment of Testing Participants (fair wear and tear excepted) that occurs while such equipment is within the DCC's possession or control pursuant to the Testing Services; save to the extent that such loss or damage is caused by a breach of this Code (or the equivalent agreement under Section H14.7) by the Testing Participant.
- H14.7 Where (in accordance with this Section H14) a person that is not a Party is eligible to undertake a category of Testing Services as a Testing Participant, the DCC shall not provide those Testing Services to that person unless it is bound by an agreement entered into with the DCC pursuant to this Section H14.7. Where a person who is a Testing Participant (but not a Party) requests a Testing Service, the DCC shall offer terms upon which such Testing Service will be provided. Such offer shall be provided as soon as reasonably practicable after receipt of the request, and shall be based on the Specimen Enabling Services Agreement (subject only to such variations from such specimen form as are reasonable in the circumstances).

General: Forecasting

- H14.8 Each Testing Participant shall provide the DCC with as much prior notice as is reasonably practicable of that Testing Participant's intention to use any of the following Testing Services: User Entry Process Tests, SMKI and Repository Entry

Process Tests, Device and User System Tests and SMETS1 Pending Product Combinations Tests.

General: Systems and Devices

H14.9 The DCC shall provide such facilities as are reasonably required in relation to the Testing Services, including providing:

- (a) for access to the Testing Services either at physical test laboratories and/or remotely;
- (b) a reasonable number of Test Communications Hubs for use by Testing Participants at the DCC's physical test laboratories which represent each and every combination of HAN Variant and WAN Variant; and
- (c) a reasonable number of Devices (other than SMETS2+ Communications Hubs) for use by Testing Participants at the DCC's physical test laboratories, which Devices are to be:
 - (i) in the case of SMETS1 Devices as further described or set out in the Enduring Testing Approach Document; or
 - (ii) except for SMETS1 Devices, of the same Device Models as those selected pursuant to the Device Selection Methodology and/or such other Device Models as the Panel approves from time to time (provided that, where Test Stubs (or other alternative arrangements) were used then such Tests Stubs (or other alternative arrangements) will be used in place of Devices until the DCC agrees with the Panel which Device Models to use).

H14.10 Without prejudice to Sections H14.9(b) and (c), the DCC shall allow Testing Participants to use Devices they have procured themselves when using the Testing Services. The DCC shall make storage facilities available at the DCC's physical test laboratories for the temporary storage by Testing Participants of such Devices (for no more than 30 days before and no more than 30 days after completion of the Testing Service for which such Devices may be expected to be used). The DCC shall ensure

that such storage facilities are secure and only capable of access by persons authorised by the relevant Testing Participant.

H14.10A The DCC may require a Testing Participant to remove its Devices from a DCC physical test laboratory in accordance with the requirements set out in the Enduring Testing Approach Document. Any dispute between the DCC and a Testing Participant regarding the removal of such Devices (or the right to re-commence testing) may be referred to the Panel for its determination (which determination shall be final and binding for the purposes of this Code).

General: SMKI Test Certificates

H14.11 The following shall apply in relation to Test Certificates:

- (a) the DCC shall, in accordance with the Enduring Testing Approach Document, issue and make available to Testing Participants copies of such Test Certificates as are reasonably necessary for the purposes of the Testing Participants undertaking Testing Services and testing pursuant to Section T (Testing During Transition);
- (b) the DCC shall only use Test Certificates for the purposes envisaged by this Section H14.11 (and shall not use actual Certificates when providing the Testing Services or undertaking tests pursuant to Section T (Testing During Transition), except to such extent as is approved, and subject to any conditions imposed, by the SMKI PMA);
- (c) each Testing Participant to which Test Certificates are made available pursuant to this Section H14.11 shall only use those Test Certificates for the purposes for which such Test Certificates are made available (and shall not use actual Certificates when undertaking the tests referred to in this Section H14.11);
- (d) each Testing Participant to which Test Certificates are made available pursuant to this Section H14.11 shall be entitled to make those certificates available to others provided that such others only use them for the purposes for which such certificates were made available to the Testing Participant;

- (e) DCC shall ensure that the Test Certificates are clearly distinguishable from actual Certificates;
- (f) the DCC shall act in accordance with Good Industry Practice in providing the Test Certificates;
- (g) each Testing Participant shall act in accordance with Good Industry Practice in using the Test Certificates; and
- (h) each Testing Participant hereby, subject to Section M2.1 (Unlimited Liabilities):
 - (i) waives all rights, remedies and claims it would otherwise have (whether for breach of contract, in tort or delict or otherwise) against the DCC in respect of the Test Certificates;
 - (ii) undertakes not to bring any claim against the DCC in respect of the Test Certificates; and
 - (iii) where it makes the Test Certificates available to others, undertakes to ensure that no such others bring any claim against the DCC in respect of such Test Certificates.

User Entry Process Tests

H14.12 Parties seeking to become Users in accordance with Section H1 (User Entry Process) are entitled to undertake User Entry Process Tests.

H14.13 In respect of a Party seeking to become eligible as a User in a particular User Role, the purpose of the User Entry Process Tests is to test the capability of that Party and the Party's Systems to interoperate with the DCC and the DCC System, to the extent necessary in order that the Party:

- (a) has established a connection to the DCC User Interface via the Party's chosen DCC Gateway Connection;
- (b) can use the DCC User Interface for the purposes set out in Section H3.3 (Communications to be sent via DCC User Interface) in respect of the Services

for which Users in that User Role are eligible; and

- (c) can use the Self-Service Interface for the purposes set out in Section H8 (Service Management, Self-Service Interface and Service Desk).

H14.14 The User Entry Process Tests will:

- (a) test the sending of communications from the proposed User System via the DCC System to be received by Devices and from Devices via the DCC System to be received by the proposed User System, recognising that such tests may involve a simulation of those Systems rather than the actual Systems;
- (b) be undertaken in accordance with the Common Test Scenarios Document; and
- (c) be undertaken using Devices selected and provided by the DCC as referred to in Sections H14.9(b) and (c).

H14.15 Only Parties who the DCC considers meet any entry requirements (for a particular User Role) set out in the Common Test Scenarios Document shall be entitled to undertake the User Entry Process Tests for that User Role.

H14.16 Where the DCC is not satisfied that a Party meets such entry requirements (for a particular User Role), that Party may refer the matter to the Panel for its determination. Where the Party disagrees with any such determination of the Panel, then the Party may refer the matter to the Authority for its determination (which shall be final and binding for the purposes of this Code).

H14.17 Each Party seeking to undertake the User Entry Process Tests shall develop its own test scripts and demonstrate how those test scripts meet the requirements of the relevant scenarios set out in the Common Test Scenarios Document. Each Party shall obtain the DCC's approval that such test scripts meet those requirements before the User Entry Process Tests can commence. Any disputes regarding the approval of such test scripts may be referred to the Panel for determination (which determination shall be final and binding for the purposes of this Code).

H14.18 Each Party will have the right to determine the sequencing of the tests that comprise

the User Entry Process Tests; save to the extent that a particular sequence is mandated in the Common Test Scenarios Document.

H14.18A The DCC or the Party undertaking the User Entry Process Tests may suspend testing in accordance with the requirements set out in the Common Test Scenarios Document. Any dispute between the DCC and a Party regarding the suspension (or consequent resumption) of such testing may be referred to the Panel for its determination. Where the DCC or the Party disagrees with any such determination of the Panel, then the DCC or the Party may refer the matter to the Authority for its determination (which determination shall be final and binding for the purposes of this Code).

H14.19 A Party will have successfully completed the User Entry Process Tests (for a particular User Role), once the DCC considers that the Party has demonstrated that it has satisfied the requirements set out in the Common Test Scenarios Document for that User Role. Where requested by a Party, the DCC shall provide written confirmation to the Party confirming whether or not the DCC considers that the Party has successfully completed the User Entry Process Tests (for a particular User Role).

H14.20 Where Systems have been proven to meet the requirements of this Code as part of one Party's successful completion of the User Entry Process Tests or tests under Section H14.32 that are equivalent to all or part of the User Entry Process Tests (and where the substance of the relevant part of the User Entry Process Tests have not changed in the interim), then:

- (a) any Party that has use of those Systems shall be entitled to submit proof to the DCC that this is the case when seeking to meet any applicable entry and/or exit requirements set out in the Common Test Scenarios Document; and
- (b) the DCC shall take into account such proof when considering whether such Party meets such entry and/or exit requirements.

H14.21 Where the DCC is not satisfied that a Party has successfully completed the User Entry Process Tests (for a particular User Role), that Party may refer the matter to the Panel for its determination. Where the Party disagrees with any such determination of the

Panel, then the Party may refer the matter to the Authority for its determination (which shall be final and binding for the purposes of this Code).

SMKI and Repository Entry Process Tests

H14.22 Each Party or Registration Data Provider seeking to complete the entry process described in Section L7 (SMKI and Repository Entry Process Tests) is entitled to undertake the SMKI and Repository Entry Process Tests to become either or both of:

- (a) an Authorised Subscriber under either or both of the Organisation Certificate Policy and/or the Device Certificate Policy; and/or
- (b) eligible to access the SMKI Repository.

H14.23 The SMKI and Repository Entry Process Tests will be undertaken in accordance with the SMKI and Repository Test Scenarios Document.

H14.24 A Testing Participant seeking to undertake the SMKI and Repository Entry Process Tests for the purposes of either or both of Section H14.22(a) and/or (b) shall notify the DCC of the purposes for which it is undertaking those tests. Only Testing Participants that meet any applicable entry requirements set out in the SMKI and Repository Tests Scenarios Document shall be entitled to undertake those SMKI and Repository Entry Process Tests for the purposes described in Section H14.22(a) and/or (b).

H14.25 Where the DCC is not satisfied that a Testing Participant meets such entry requirements, that Testing Participant may refer the matter to the Panel for its determination. Where the Testing Participant disagrees with any such determination of the Panel, then the Testing Participant may refer the matter to the Authority for its determination (which shall be final and binding for the purposes of this Code).

H14.26 Each Testing Participant seeking to undertake the SMKI and Repository Entry Process Tests shall develop its own test scripts and demonstrate how those test scripts meet the requirements of the relevant scenarios set out in the SMKI and Repository Tests Scenarios Document (for the purposes described in Section H14.22(a) and/or (b), as applicable). Each Testing Participant shall obtain the DCC's approval that such test

scripts meet those requirements before the SMKI and Repository Entry Process Tests can commence. Any disputes regarding the approval of such test scripts may be referred to the Panel for determination (which determination shall be final and binding for the purposes of this Code).

H14.27 Each Testing Participant seeking to undertake the tests will have the right to determine the sequencing of the tests that comprise the SMKI and Repository Entry Process Tests; save to the extent that a particular sequence is mandated in the SMKI and Repository Tests Scenarios Document.

H14.27A The DCC or the Testing Participant undertaking the SMKI and Repository Entry Process Tests may suspend testing in accordance with the requirements set out in the SMKI and Repository Test Scenarios Document. Any dispute between the DCC and a Testing Participant regarding the suspension (or consequent resumption) of such testing may be referred to the Panel for its determination. Where the DCC or the Testing Participant disagrees with any such determination of the Panel, then the DCC or the Testing Participant may refer the matter to the Authority for its determination (which determination shall be final and binding for the purposes of this Code).

H14.28 A Testing Participant will have successfully completed the SMKI and Repository Entry Process Tests (for the purposes described in Section H14.22(a) and/or (b), as applicable), once the DCC considers that the Testing Participant has demonstrated that it has satisfied the requirements set out in the SMKI and Repository Tests Scenarios Document for those purposes. Where requested by a Testing Participant, the DCC shall provide written confirmation to the Testing Participant confirming whether or not the DCC considers that the Testing Participant has successfully completed the SMKI and Repository Entry Process Tests (for the purposes described in Section H14.22(a) and/or (b), as applicable).

H14.29 Where Systems have been proven to meet the requirements of this Code as part of one Testing Participant's successful completion of the SMKI and Repository Entry Process Tests or tests under Section H14.32 that are equivalent to all or part of the SMKI and Repository Entry Process Tests (and where the substance of the relevant part of the SMKI and Repository Entry Process Tests have not changed in the interim), then:

- (a) any Testing Participant that has use of those Systems shall be entitled to submit proof to the DCC that this is the case when seeking to meet any applicable entry and/or exit requirements set out in the SMKI and Repository Tests Scenarios Document; and
- (b) the DCC shall take into account such proof when considering whether such Testing Participant meets such entry and/or exit requirements.

H14.30 Where the DCC is not satisfied that a Testing Participant has successfully completed the SMKI and Repository Entry Process Tests (for the purposes described in Section H14.22(a) and/or (b), as applicable), that Testing Participant may refer the matter to the Panel for its determination. Where the Testing Participant disagrees with any such determination of the Panel, then the Testing Participant may refer the matter to the Authority for its determination (which shall be final and binding for the purposes of this Code).

Device and User System Tests

H14.31 This Section H14.31 shall only apply in respect of SMETS1 Devices from 31 August 2018 or any such later date as the Secretary of State may direct further to a recommendation from the DCC to the Secretary of State following a consultation on a proposed date by the DCC with all SEC Parties and the SEC Panel. The DCC shall provide a service to enable Testing Participants:

- (a) to test the interoperability of SMETS2+ Devices (other than those comprising Communications Hubs) with the DCC Systems and with the Test Communications Hubs provided as part of the Testing Services, such that those Devices are able to respond to Commands received from or via the DCC in accordance with the requirements defined in the GB Companion Specification;
- (b) to test the interoperability of SMETS1 Devices with the DCC Systems, such that those Devices are able to respond to Instructions received from or via the DCC such that the necessary Equivalent Steps are taken (provided that such service need only be provided by the DCC in respect of combinations of SMETS1 Device Models that are listed on the SMETS1 Eligible Product Combinations);

- (c) to test the interoperability of User Systems with the DCC Systems, including via the DCC User Interface and the Self-Service Interface;
- (d) to test simultaneously the interoperability of User Systems and SMETS2+ Devices (other than those comprising Communications Hubs) with the DCC Systems and with the Test Communications Hubs provided as part of the Testing Services; and
- (e) to test simultaneously the interoperability of User Systems and SMETS1 Devices (excluding combinations of SMETS1 Devices that are not listed on the SMETS1 Eligible Product Combinations) with the DCC Systems,

which Testing Services, except in respect of (c) above, shall (subject to the Testing Participant agreeing to pay any applicable Charges, as further described in the Enduring Testing Approach Document) include the provision of a connection to a simulation of the SMETS2+ SM WAN for the purpose of such tests as further described in the Enduring Testing Approach Document (save to the extent the connection is required where the DCC is relieved from its obligation to provide Communication Services pursuant to the Statement of Service Exemptions). For the avoidance of doubt, the DCC shall not be obliged by this Section H14.31 to provide a connection to a simulation of the SMETS1 SM WAN. References to particular Systems in this Section H14.31 may include a simulation of those Systems (rather than the actual Systems).

H14.32 Each Party is eligible to undertake Device and User System Tests. Any Manufacturer (whether or not a Party) is eligible to undertake those Device and User System Tests described in Section H14.31(a) and (b); provided that, in the case of any such tests that require the use of a DCC Gateway Connection, the Manufacturer must be a Party. Any person providing (or seeking to provide) goods or services to Parties or Manufacturers in respect of Devices is eligible to undertake those Device and User System Tests described in Section H14.31(a) and (b); provided that, in the case of any such tests that require the use of a DCC Gateway Connection, the person must be a Party. A Party undertaking the Device and User System Tests described in Section H14.31(c) is entitled to undertake tests equivalent to any or all of the User Entry

Process Tests and SMKI and Repository Entry Process Tests, in respect of which:

- (a) the DCC shall, at the Party's request, assess whether the test results would meet the requirements of all or part of the applicable User Entry Process Tests and/or SMKI and Repository Entry Process Tests;
- (b) the DCC shall, at the Party's request, provide a written statement confirming the DCC's assessment of whether the test results would meet the requirements of all or part of the applicable tests; and
- (c) the Party may, where it disputes the DCC's assessment, refer the matter to the Panel for its determination (which shall be final and binding for the purposes of this Code).

H14.33 The DCC shall, on request by a Testing Participant, take all reasonable steps to offer additional support to that Testing Participant (subject to such Testing Participant agreeing to pay any applicable Charges) in understanding and resolving issues associated with:

- (a) the DCC Total System and the results of such Testing Participant's Device and User System Tests;
- (b) where the Testing Participant is a Party, the Systems of the Testing Participant that are (or are intended to be) User Systems; and/or
- (c) communications between the DCC and any Device or between Devices which comprise (or which the Testing Participant intends will comprise) a Smart Metering System.

H14.33A The additional Testing Services provided for in Section H14.33 are without prejudice to the DCC's obligations in respect of Testing Issues, Incidents and Problems.

Modification Implementation Testing

H14.34 Where an approved Modification Proposal provides for the DCC to provide testing services as part of the Modification Proposal's implementation, then such testing shall be undertaken as a Testing Service pursuant to this Section H14.34.

H14.35 The Parties which are eligible, or obliged, to participate in such testing shall be determined in accordance with Section D(Modification Process), and either set out in this Code or established via a process set out in this Code.

DCC Internal System Change Testing

H14.36 Where, pursuant to Section H8.8 (DCC Internal Systems Changes), a Party or an RDP is involved in testing of changes to the DCC Internal Systems, then such testing shall not be subject to the requirements of Section H14.3, Section H14.4 and Sections H14.6 to H14.11 (inclusive), but such Party or RDP may nevertheless raise a Testing Issue in respect of the tests (and the references to Testing Participant in Sections H14.37 to H14.44 shall be interpreted accordingly).

SMETS1 Pending Product Combinations Tests

H14.36A This Section H14.36A shall only apply in respect of SMETS1 Devices from 31 August 2018 or any such later date as the Secretary of State may direct further to a recommendation from the DCC to the Secretary of State following a consultation on a proposed date by the DCC with all SEC Parties and the SEC Panel. The DCC shall provide services (the "**SMETS1 Pending Product Combinations Tests**") whereby a Party or a Manufacturer (being the relevant Testing Participant) can from time to time request that the DCC determines whether or not testing is required and, where it determines that testing is required, tests one or more combinations of SMETS1 Device Models and communication services provider that are not at that time listed on the SMETS1 Eligible Product Combinations in order to demonstrate whether the DCC is able to successfully process SMETS1 Service Requests and relevant SMETS1 Alerts in respect of them (subject to Section H14.36C(c)).

H14.36B Where requested in accordance with Section H14.36A, the DCC shall undertake, and facilitate the Testing Participant's participation in, the SMETS1 Pending Product Combinations Tests in respect of the requested combination(s) of SMETS1 Device Models as soon as reasonably practicable. The DCC shall then notify the relevant Testing Participant whether the DCC is able to successfully process SMETS1 Service

Requests and relevant SMETS1 Alerts in respect of them, without needing to make material changes to the DCC Systems and/or modifications to this Code.

H14.36C Where the DCC notifies a Testing Participant that the DCC is not able to successfully process SMETS1 Service Requests and relevant SMETS1 Alerts in respect of a combination of SMETS1 Device Models without needing to make material changes to the DCC Systems and/or modifications to this Code, then the DCC shall:

- (a) provide the relevant Testing Participant with reasonable details of the reasons why the DCC is not able to do so, and of the changes to the DCC Systems and/or modifications to this Code which would be required in order to enable the DCC to do so (in each case, to the extent that the DCC has been able to identify such reasons and changes and/or modifications, having taken reasonable steps to identify them);
- (b) provide the relevant Testing Participant with such reasonable support as they may request in understanding the issues identified by the DCC;
- (c) not be obliged to provide SMETS1 Pending Product Combinations Tests to the same Testing Participant in respect of the same combination of SMETS1 Device Models unless and until the relevant changes have been made to the DCC System and/or the relevant modifications have been made to this Code; and
- (d) make available in accordance with the Enduring Testing Approach Document such details regarding the relevant combination of SMETS1 Device Models as is required in accordance with the Enduring Testing Approach Document.

H14.36D Where the DCC is able to successfully process SMETS1 Service Requests and relevant SMETS1 Alerts in respect of a combination of SMETS1 Device Models without needing to make material changes to the DCC Systems and/or modifications to this Code, then the DCC shall add that combination of Device Models to the SMETS1 Eligible Product Combinations.

H14.36E The DCC and the relevant Testing Participant in respect of the SMETS1 Pending Product Combinations Tests shall comply with any and all additional obligations

concerning SMETS1 Pending Product Combinations Tests set out in the Enduring Testing Approach Document.

General: Testing Issue Resolution Process

- H14.37 Each Testing Participant undertaking tests pursuant to this Section H14 is entitled to raise a Testing Issue in respect of those tests. Each Testing Participant shall take reasonable steps to diagnose and resolve a Testing Issue before raising it in accordance with this Section H14.
- H14.38 A Testing Participant that wishes to raise a Testing Issue shall raise it with the relevant DCC Service Provider (as identified by the DCC from time to time) in accordance with a reasonable and not unduly discriminatory procedure, which is to be established by the DCC and provided to the Panel from time to time (which the Panel shall publish on the Website).
- H14.39 Where a Testing Participant raises a Testing Issue, the DCC shall ensure that the relevant DCC Service Provider shall (as soon as reasonably practicable thereafter):
- (a) determine the severity level and priority status of the Testing Issue;
 - (b) inform the Testing Participant of a reasonable timetable for resolution of the Testing Issue consistent with its severity level and priority status; and
 - (c) provide its determination (in accordance with such timetable) to the Testing Participant on the actions (if any) to be taken to resolve the Testing Issue.
- H14.40 Pursuant to H14.39, the DCC shall share with categories of Testing Participant any information (provided that the identities of the Testing Participant and, where relevant, the Device's Manufacturer are anonymised) relating to the Testing Issue which is likely to be of use to those categories of Testing Participants (provided that no such information should be shared to the extent it poses a risk of Compromise to the DCC Total System, User Systems, RDP Systems and/or Devices).
- H14.41 Where a Testing Participant is dissatisfied with any of the determinations under Section H14.39 (or the speed with which any such determination is made), the Testing

Participant may refer the matter to the DCC. On such a referral to the DCC, the DCC shall (as soon as reasonably practicable thereafter):

- (a) consult with the Testing Participant and any other person as the DCC considers appropriate;
- (b) either, depending on the subject matter of the disagreement:
 - (i) direct the DCC Service Provider to more quickly provide its determination of the matters set out in Section H14.39(a), (b) and/or (c);
 - or
 - (ii) make the DCC's own determination of the matters set out in Section H14.39(a), (b) and/or (c);
- (c) notify the Panel of the DCC's direction or determination under (b) above; and
- (d) share with categories of Testing Participant any information (provided that the identities of the Testing Participant and, where relevant, the Device's Manufacturer are anonymised) relating to the Testing Issue which is likely to be of use to those categories of Testing Participants (provided that no such information should be shared to the extent it poses a risk of Compromise to the DCC Total System, User Systems, RDP Systems and/or Devices).

H14.42 Where the Testing Participant (or any Party) disagrees with the DCC's determination pursuant to Section H14.41 of the matters set out at Section H14.39(c) (but not otherwise), then the Testing Participant (or Party) may request that the DCC refers the matter to the Panel for its consideration (provided that the identities of the Testing Participant and, where relevant, the Device's Manufacturer are anonymised).

H14.43 Where a matter is referred to the Panel for its consideration pursuant to Section H14.42, the Panel shall consider the matter further to decide upon the actions (if any) to be taken to resolve the Testing Issue, unless the matter relates to testing undertaken pursuant to Section T (Testing During Transition), in which case the Panel shall notify the Secretary of State and shall consider the matter further and make such a decision only where, having received such a notification, the Secretary of State so directs.

Where the Panel considers the matter further, it may conduct such further consultation as it considers appropriate before making such a decision. Such a decision may include a decision that:

- (a) an aspect of the Code could be amended to better facilitate achievement of the SEC Objectives;
- (b) an aspect of the DCC Systems is inconsistent with the requirements of this Code;
- (c) an aspect of one or more Devices is inconsistent with the requirements of this Code; or
- (d) an aspect of the User Systems or the RDP Systems is inconsistent with the requirements of this Code.

H14.44 The Panel shall publish each of its decisions under Section H14.43 on the Website; provided that the identities of the Testing Participant and (where relevant) the Device's Manufacturer are anonymised, and that the Panel shall remove or redact information where it considers that publishing such information would be prejudicial to the interests of one or more Parties, or pose a risk of Compromise to the DCC Total System, User Systems, RDP Systems and/or Devices.

H14.45 A decision of the Panel under Section H14.43 is merely intended to facilitate resolution of the relevant Testing Issue. A decision of the Panel under Section H14.43 is without prejudice to any future decision by the Change Board and/or the Authority concerning a Modification Proposal, by the Secretary of State in exercising its powers under section 88 of the Energy Act 2008, by the Authority concerning the DCC's compliance with the DCC Licence, or by the Panel under Section M8 (Suspension, Expulsion and Withdrawal).

H15 DCC GATEWAY CONNECTIONS**Obligation to Maintain DCC Gateway Connections**

- H15.1 The DCC shall maintain each DCC Gateway Connection and make it available subject to and in accordance with the provisions of this Section H15.
- H15.2 The DCC shall ensure that each DCC Gateway Connection is available at all times (subject to Planned Maintenance undertaken in accordance with Section H8.3).
- H15.3 No Party may use a DCC Gateway Connection for any purposes other than accessing, and sending and receiving Data via, the DCC Interfaces (and subject to the provisions of this Code applicable to each DCC Interface).

Requests for DCC Gateway Connections

- H15.4 Each Party other than the DCC may request (in accordance with this Section H15 and as further described in the DCC Gateway Code of Connection) as many DCC Gateway Connections as the Party wishes, in each case using the DCC Gateway Bandwidth Option of the Party's choice.
- H15.5 In order to assist a Party in determining which DCC Gateway Bandwidth Option to request (or, in the case of connections using a DCC Gateway HV Connection, the size of the bandwidth required), the DCC shall (on request) provide any Party with information regarding the size of the different message types that can be sent via the DCC User Interface.
- H15.6 Within 5 Working Days following receipt of any request from a Party for a DCC Gateway Connection at a premises, the DCC shall:
- (a) where the request does not include all the information required in accordance with the DCC Gateway Connection Code of Connection, notify the Party that this is the case and provide reasonable assistance to the Party in re-submitting its request; or
 - (b) undertake a desk-based assessment as described in the DCC Gateway Connection Code of Connection, and provide a response to the Party in respect

of that premises under Section H15.7, H15.8 or H15.9 (as applicable).

H15.7 In the case of a request for a DCC Gateway LV Connection, and where the DCC's desk-based assessment indicates that a physical site assessment is not required, the DCC shall provide an offer to the Party setting out:

- (a) the DCC's reasonable estimate of the likely bandwidth of the connection once made;
- (b) the date from which the DCC will provide the connection;
- (c) the connection Charges and annual Charges that will apply in respect of the connection; and
- (d) the connection period for which the connection will be made available.

H15.8 In the case of a request for a DCC Gateway LV Connection, and where the DCC's desk-based assessment indicates that a physical site assessment is required, the DCC shall notify the requesting Party that this is the case, and (unless the DCC is not reasonably able to do so without undertaking a physical site assessment, and subject to further information which may become available as a result of the physical site assessment) notify the Party of:

- (a) the DCC's reasonable estimate of the likely bandwidth of the connection once made;
- (b) the date from which the DCC will provide the connection;
- (c) the connection Charges and annual Charges that will apply in respect of the connection; and
- (d) the connection period for which the connection will be made available.

H15.9 In the case of a request for a DCC Gateway HV Connection, the DCC shall notify the Party that a physical site assessment is required, and (unless the DCC is not reasonably able to do so without undertaking a physical site assessment, and subject to further information which may become available as a result of the physical site assessment)

notify the Party of:

- (a) the date from which the DCC will provide the connection;
- (b) the connection Charges and annual Charges that will apply in respect of the connection; and
- (c) the connection period for which the connection will be made available.

Physical Site Assessments

H15.10 In the case of a notice to a Party under Section H15.8 or H15.9, the Party has 30 days following receipt of such notice to confirm to the DCC that the Party wishes the DCC to proceed with the physical site assessment. In the absence of such confirmation, the Party shall be deemed to have opted not to proceed.

H15.11 Where the DCC has received a confirmation in accordance with Section H15.10, then the DCC shall, within 30 days thereafter, complete the physical site assessment. The Party requesting the connection shall ensure that the DCC has such access to the Party's premises as the DCC may reasonably require in order to undertake such site assessment. The DCC shall ensure that all persons exercising such rights of access do so in compliance with the applicable site rules and reasonable instructions of those in control of the premises.

H15.12 The DCC shall, within 10 Working Days after completing a physical site assessment pursuant to Section H15.11, provide an offer to the Party that requested a connection at that premises setting out:

- (a) any supplementary conditions which will apply in respect of the connection (in addition to the provisions of this Code) required as a consequence of matters identified in the site assessment;
- (b) (in the case of DCC Gateway LV Connections) the DCC's reasonable estimate of the likely bandwidth of the connection once made;
- (c) the date from which the DCC will provide the connection;

- (d) the connection Charges and annual Charges that will apply in respect of the connection; and
- (e) the connection period for which the connection will be made available.

Initial Provision of a DCC Gateway Connection

- H15.13 In the case of an offer to a Party under Section H15.7 or H15.12, the Party has 30 days following receipt of such offer to confirm to the DCC that the Party accepts that offer. In the absence of such confirmation, the Party shall be deemed to have opted not to accept the offer (which shall lapse).
- H15.14 Where a Party accepts an offer as described in Section H15.13, the DCC shall take all reasonable steps to provide the requested DCC Gateway LV Connection or DCC Gateway HV Connection by the date set out in the accepted offer (subject to payment of any applicable Charges).
- H15.15 In the event that the DCC will be delayed in providing the requested DCC Gateway Connection, the DCC shall notify the relevant Party of the delay (including reasons for the delay) and of the revised connection date (being as soon as a reasonably practicable thereafter), and shall take all reasonable steps to provide the requested connection by that revised date.

Use of a DCC Gateway Connection

- H15.16 Subject to Section H15.3, the Party that requested a DCC Gateway Connection at a premises shall be entitled to use that connection for as long as the DCC is obliged to make it available in accordance with Section H15.18 (provided that such Party may transfer its right in respect of that DCC Gateway Connection to another Party on both such Parties giving notice to the DCC referring to this Section H15.16).
- H15.17 The DCC Gateway Party may notify the DCC of the other Parties (if any) that are (subject to Section H15.3) entitled to share (or no longer entitled to share) use of that DCC Gateway Connection, and in respect of which DCC Interfaces.

Ongoing Provision of a DCC Gateway Connection

H15.18 Once a DCC Gateway Connection has been established at a premises on behalf of a DCC Gateway Party:

- (a) the DCC shall make the connection available to the DCC Gateway Party in accordance with this Code until the DCC Gateway Party notifies the DCC that the Party wishes to cancel the connection (on not less than three months' prior notice);
- (b) the DCC shall give the DCC Gateway Party four months' advance notice of the date on which the period of connection referred to in the accepted connection offer is due to expire (or of the date on which any period of extension pursuant to paragraph (c) below is due to expire), and shall at the same time confirm the annual Charges that will apply if the connection is not cancelled;
- (c) on the expiry of a period referred to in paragraph (b) above, unless the DCC Gateway Party cancels the connection in accordance with paragraph (a) above, the period of connection shall be extended for a year (which will give rise to an additional annual Charge);
- (d) the DCC Gateway Party and the DCC shall comply with the provisions of the DCC Gateway Connection Code of Connection applicable to the DCC Gateway Bandwidth Option utilised at the connection (and the DCC may limit the use of the connection where the DCC Gateway Party fails to do so and where this is provided for in the DCC Gateway Connection Code of Connection);
- (e) the DCC shall, on request, provide the DCC Gateway Party with a report on the performance of its connection as further set out in the DCC Gateway Connection Code of Connection; and
- (f) in the case of DCC Gateway HV Connections, the DCC Gateway Party may increase or decrease the bandwidth of its connection in accordance with (and subject to the limitation provided in) the DCC Gateway Code of Connection (provided that, in the case of decreases, the applicable Charges may not alter as

a result).

H15.19 The cancellation of any DCC Gateway Connection pursuant to Section H15.18(a), is without prejudice to:

- (a) the right of the DCC Gateway Party to apply for another connection under Section H15.4; and
- (b) the obligation of the DCC Gateway Party to pay the applicable Charges for the full duration of the period of connection referred to in the accepted connection offer or any period of extension under Section H15.18(c).

DCC Gateway Equipment

H15.20 In first providing a DCC Gateway Connection at a premises, the DCC shall procure that the DCC Gateway Equipment is installed at the relevant premises, and that the DCC Gateway Equipment is installed in accordance with Good Industry Practice and all applicable Laws and Directives.

H15.21 Following its installation at a premises, the DCC shall ensure that the DCC Gateway Equipment is operated and maintained in accordance with Good Industry Practice, and that it complies with all applicable Laws and Directives. The DCC shall maintain a record of the DCC Gateway Equipment installed at each DCC Gateway Party's premises from time to time, and of the point of its connection to that Party's Systems.

H15.22 The DCC Gateway Party at whose premises the DCC Gateway 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, relocation or removal of the DCC Gateway 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 DCC Gateway Party.

H15.23 The DCC Gateway Party at whose premises the DCC Gateway Equipment is (or is to be) installed shall be entitled to witness and inspect the installation, maintenance, relocation or removal of the DCC Gateway Equipment. No such witnessing or assessment shall relieve the DCC of its obligations under this Code.

- H15.24 Each DCC Gateway Party shall ensure that no damage is deliberately or negligently caused to the DCC Gateway Equipment installed at its premises (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).
- H15.25 The DCC Gateway Equipment shall (as between the DCC and each other Party) remain the property of the DCC. The DCC Gateway Equipment is installed at the DCC's risk, and no other Party shall have liability for any loss of or damage to the DCC Gateway Equipment unless and to the extent that such loss or damage arose as a result of that Party's breach of this Code (including that Party's obligations under Section H15.24).
- H15.26 No Party other than the DCC shall hold itself out as the owner of the DCC Gateway Equipment, or purport to sell or otherwise dispose of the DCC Gateway Equipment.
- H15.27 Where a DCC Gateway Party wishes to alter the location of the DCC Gateway Equipment at the Party's premises, then that Party shall make a request to the DCC, and the DCC shall either (in accordance with any provisions of the DCC Gateway Connection Code of Connection concerning the same):
- (a) notify such Party that it is entitled to relocate the DCC Gateway Equipment within the Party's premises, in which case the Party may move such equipment (and, where it does so, it shall do so in accordance with Good Industry Practice and all applicable Laws and Directives); or
 - (b) notify such Party that the DCC Gateway Equipment must be relocated by the DCC, in which case the DCC shall (subject to payment of any applicable Charges) move the DCC Gateway Equipment in accordance with Good Industry Practice and all applicable Laws and Directives.
- H15.28 Where the DCC's obligation to make a DCC Gateway Connection available ends in accordance with Section H15.18(a) or the DCC Gateway Party for a DCC Gateway Connection ceases to be a Party in accordance with Section M8 (Suspension, Expulsion and Withdrawal), then the DCC shall, within 30 days thereafter:

- (a) cease to make that DCC Gateway Connection available; and
- (b) remove the DCC Gateway Equipment from the relevant premises in accordance with Good Industry Practice and all applicable Laws and Directives.

DCC Gateway Connection Disputes

H15.29 Where a DCC Gateway Party wishes to raise a dispute in relation to its request for a DCC Gateway Connection (or the extension of its period of connection or increases or decreases in the bandwidth of its connection, in each case under Section H15.18), then the dispute may be referred to the Panel for determination. Where that Party or the DCC disagrees with any such determination, then it may refer the matter to the Authority for its determination, which shall be final and binding for the purposes of this Code.