

APPENDIX AC

Inventory Enrolment and Decommissioning Procedures

Contents

1. Overview	2
2. Smart Metering Inventory	2
3. Pre-Commissioning Obligations	3
Pre-Commissioning obligations in relation to SMETS2+ Devices	3
Pre-Commissioning obligations in relation to SMETS1 Devices	5
4. Commissioning	5
Commissioning of Communications Hub Functions	5
Adding Devices to Communication Hub Functions' Device Logs	6
Joining Devices to Smart Meters, Standalone Auxiliary Proportional Controllers or Gas Proxy Functions	6
Commissioning of Devices other than Communications Hub Functions	7
5. Post-Commissioning Obligations in relation to SMETS2+ Devices	8
General Obligations on DCC	12
6. Post-Commissioning Obligations in relation to SMETS1 Devices	12
7. Unjoining	13
8. Reactivating Decommissioned or Suspended Devices	13
9. Replacement of SMETS2+ Communications Hub Functions	13
10. Removal of SMETS1 Communications Hub	13
11. Notification of Decommissioning and Suspension of Devices	13
12. CH Production Proving	14
13. Definitions	14
<u>1. Overview</u>	
1.1 This Appendix supplements Sections H5 (Smart Metering Inventory and Enrolment Services) and H6 (Decommissioning and Suspension of Devices).	
<u>2. Smart Metering Inventory</u>	
2.1 The DCC shall establish and maintain the Smart Metering Inventory.	
2.2 The DCC shall ensure that the Smart Metering Inventory reflects the most up-to-date information provided (or made available) to it from time to time in accordance with this Code (subject to Section F2.9 (Publication and Use by the DCC)).	
2.3 Parties shall not seek to add Devices to the Smart Metering Inventory (and the DCC shall not add Devices to the Smart Metering Inventory) otherwise than in compliance with this Appendix.	

- 2.4 Prior to delivering a Communication Hub to a Party pursuant to the Communications Hub Service, the DCC shall add the Communications Hub Function and Gas Proxy Function that comprise that Communications Hub to the Smart Metering Inventory (to be identified with an SMI Status of 'pending'); provided that such Devices may only be added to the Smart Metering Inventory where the Communications Hub is of a Device Model identified in the Central Products List.
- 2.5 No Party shall add Communications Hub Functions to the Smart Metering Inventory without also adding the Gas Proxy Function that forms part of the same Communications Hub (and vice versa).
- 2.6 Any User may send a Service Request requesting that the DCC adds a Device to the Smart Metering Inventory (to be identified with an SMI Status of 'pending'); provided that only Devices of (or forming part of) a Device Model that is identified in the Central Products List are eligible to be added to the Smart Metering Inventory. This Clause 2.6 does not apply to Type 2 Devices (which are covered in Clause 2.9).
- 2.7 The DCC shall not send any communication to a Device unless the Device is listed in the Smart Metering Inventory; save for communications sent for the purposes of testing under Section H14 (Testing Services).
- 2.8 In the case of Communications Hub Functions and Gas Proxy Functions, the only Communications Hubs that may be added to the Smart Metering Inventory (subject to Clause 12.3) are those that comprise either a SMETS1 CH or a Communications Hub that is to be provided by the DCC pursuant to the Communications Hub Service.
- 2.9 Any User may send a Service Request requesting that the DCC adds a Type 2 Device to the Smart Metering Inventory. For the avoidance of doubt, a Type 2 Device shall not be identified in the Central Products List, and shall have no SMI Status.
- 2.10 The Responsible Supplier for each Smart Metering System shall keep under review the information recorded in the Smart Metering Inventory in respect of the Devices that comprise that Smart Metering System. Where circumstances change or the Responsible Supplier identifies an error in such information, the Responsible Supplier shall submit Service Requests requesting that the DCC updates the Smart Metering Inventory (or, where it is not possible to do so, shall raise an Incident in accordance with the Incident Management Policy). Where a correction is made in respect of the relationship between one or more Smart Meters / Standalone Auxiliary Proportional Controllers and an MPAN and/or MPRN, then the DCC shall notify the Electricity Distributor and/or Gas Transporter for the affected MPANs and/or MPRNs.
- 2.11 Where a User other than the Responsible Supplier for a Smart Metering System becomes aware of an error in the information recorded within the Smart Metering Inventory in respect of a Device that comprises that Smart Metering System, it shall raise an Incident in accordance with the Incident Management Policy.
- 2.12 Where a User receives a Response or Alert other than via the SM WAN, the User shall, where the Response or Alert is listed in the DCC User Interface Specification as one that is required to be returned to the DCC, send a 'Return Local Command Response' Service Request containing the Response or Alert to the DCC.

3. Pre-Commissioning Obligations

Pre-Commissioning obligations in relation to SMETS2+ Devices

- 3.1 Where the relevant Device is a SMETS2+ Device, before:
- (a) a Responsible Supplier sends a Service Request which may result in the sending of a Command to a Smart Meter, Standalone Auxiliary Proportional Controller, Gas Proxy Function or Type 1 Device; or

- (b) the DCC delivers a Communications Hub (comprising a Communications Hub Function and a Gas Proxy Function) to a Party in accordance with the Communications Hub Service,

the Responsible Supplier or DCC (as the case may be) shall ensure that each Trust Anchor Cell on that Device which is required by the GB Companion Specification to be populated with credentials is populated with credentials in accordance with the requirements of Clause 3.2.

3.2 The requirements of this Clause 3.2 are that:

- (a) each Trust Anchor Cell with the Remote Party Role listed in the table immediately below shall be populated with the Security Credentials from the Certificate (or, as indicated, one of the Certificates) identified in relation to that Remote Party Role in the second column of that table; and
- (b) in each case the relevant Certificate shall have a keyUsage value which is the same as that of the Trust Anchor Cell it populates.

<u>Remote Party Role</u>	<u>Certificate</u>
Root	a Root OCA Certificate
Recovery	a DCC Recovery Certificate
AccessControlBroker	a DCC Access Control Broker Certificate
transitionalCoS	a DCC CoS Certificate
Supplier	one of the following: <ul style="list-style-type: none"> a. one of the relevant Supplier Party's Organisation Certificates; b. a DCC Access Control Broker Certificate; c. (where the consent of that other Supplier Party has been given) one of that other Supplier Party's Organisation Certificates.
networkOperator	one of the following: <ul style="list-style-type: none"> a. one of the relevant Network Operator's Organisation Certificates; b. one of the relevant Supplier Party's Organisation Certificates; c. (where the consent of that other Supplier Party has been given) one of that other Supplier Party's Organisation Certificates; d. a DCC Access Control Broker Certificate.
wanProvider	a DCC WAN Provider Certificate
loadController	one of the following: <ul style="list-style-type: none"> a. one of the relevant Supplier Party's Organisation Certificates; b. a DCC Access Control Broker Certificate; c. (where the consent of that other Supplier Party has been given) one of that other Supplier Party's Organisation Certificates.

Where 'DCC Recovery Certificate', 'DCC CoS Certificate', 'DCC Access Control Broker Certificate' and 'DCC WAN Provider Certificate' are each Organisation Certificates created by the DCC for the purposes of occupying the relevant Trust Anchor Cells on Devices in accordance with the above table and used by those

DCC Systems described in (respectively) sub-paragraphs (f), (c), (b) and (a) of the definition of DCC Live Systems.

- 3.3 Where and to the extent that the Electricity Distributor or Gas Transporter for a SMETS2+ Device has notified the Responsible Supplier for the Device of the values for the 'NP Configurable Data Items' that the Electricity Distributor or Gas Transporter (as applicable) wishes to have configured on the Device at the time of its Commissioning, the Responsible Supplier shall take all reasonable steps to ensure that those data items are so configured on the Device at the time of its Commissioning, including where the Device is a Standalone Auxiliary Proportional Controller, those items which are both included in the 'NP Configurable Data Items' and are supported by the Device. In this Clause 3.3, 'NP Configurable Data Items' means those data items held on Devices that are capable of being configured via Services Requests for which the User Role of 'Electricity Distributors' or 'Gas Transporter' (as applicable) is an Eligible User Role.

Pre-Commissioning obligations in relation to SMETS1 Devices

- 3.4 Prior to adding a SMETS1 Device (other than a SMETS1 IHD, SMETS1 PPMID or a SMETS1 CAD) to the Smart Metering Inventory, the relevant User shall contact the Service Desk to provide the following information in relation to the Device:
- (a) the Device ID; and
 - (b) any information the DCC reasonably requires in relation to SMETS1 Devices of that Device's Device Model (as made available by the DCC from time to time via the Self-Service Interface).
- 3.5 The DCC shall not add a SMETS1 Device (other than a SMETS1 IHD or a SMETS1 PPMID) to the Smart Metering Inventory in circumstances where it has not been provided with the information referred to in Clause 3.4 in relation to that Device.
- 3.6 Where a User has notified the DCC of the Device's details for recording in the Smart Metering Inventory, before attempting to communicate with the Device via the DCC, the User shall comply with the provisions of Clause 13.1 of the SMETS1 Supporting Requirements.

4. Commissioning

Commissioning of Communications Hub Functions

- 4.1 Subject to Clause 4.2, where the DCC receives a communication originating from a Communications Hub Function which does not have an SMI Status of 'commissioned' confirming that it has connected to the SM WAN, the DCC shall update the SMI Status of that Communications Hub Function to 'commissioned'.
- 4.2 Before taking the step set out in Clause 4.1, the DCC shall confirm whether the communication originates from the Communications Hub Function that is identified within the communication. The DCC shall not take the step set out in Clause 4.1 in respect of a Communications Hub Function where:
- (a) the Communications Hub Function is not listed within the Smart Metering Inventory;
 - (b) the Communications Hub Function is not identified in the Smart Metering Inventory as having an SMI Status of 'pending' or 'installed not commissioned'; and/or
 - (c) the communication may have changed in transit or does not originate from the Communications Hub Function that is identified within the communication.

Adding Devices to Communication Hub Functions' Device Logs

- 4.3 Following the Successful Execution of an 'Update HAN Device Log' Service Request requesting the addition of a Device to the Device Log of a Communications Hub Function, the DCC shall:
- (a) update the Smart Metering Inventory to Associate the Device with the applicable Communications Hub Function;
 - (b) in the case of Smart Meters and Standalone Auxiliary Proportional Controllers only, record the MPAN(s) or MPRN (as applicable) provided within the Service Request against that Device and notify the Electricity Distributor or Gas Transporter (as applicable) of the MPAN(s) and/or MPRN and of the Device's Device ID and Device Type; and
 - (c) other than in the case of a Type 2 Device, set the SMI Status of the Device to 'whitelisted'.
- 4.4 Following the receipt of an Alert from a Communications Hub Function informing the DCC that the Communications Hub Function is able to communicate over the HAN with a Device, the DCC shall (other than in the case of a Type 2 Device, or where the relevant Device already has an SMI Status of 'commissioned') set the SMI Status of the Device to 'installed not commissioned'.

Joining Devices to Smart Meters, Standalone Auxiliary Proportional Controllers or Gas Proxy Functions

- 4.5 Where a Responsible Supplier wishes to join any Device (other than a Type 2 Device) to a Smart Meter, a Standalone Auxiliary Proportional Controller or a Gas Proxy Function, the Responsible Supplier shall send the DCC a 'Join Service' Service Request to add the relevant Device to the Device Log of the relevant Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function.
- 4.6 The DCC shall not send a Command to join a Device to a Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function in response to a Service Request under Clause 4.5 where:
- (a) the Device to be joined is not listed within the Smart Metering Inventory with an SMI Status of 'pending', 'installed not commissioned' or 'commissioned';
 - (b) the Communications Hub Function that is to form part of the same Smart Metering System is not listed in the Smart Metering Inventory with an SMI Status of 'pending', 'installed not commissioned' or 'commissioned'; and/or
 - (c) the Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function with which the Device is to be joined is not listed in the Smart Metering Inventory with an SMI Status of 'pending', 'installed not commissioned' or 'commissioned'.
- 4.7 On the Successful Execution of a 'Join Service' Service Request to add a Device to the Device Log of a Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function in accordance with Clauses 4.5 and 4.6, the DCC shall Associate that Device with the applicable Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function (as applicable), and either:
- (a) where the Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function (as applicable) has an SMI Status of 'installed not commissioned', set the SMI Status of the Device to 'installed not commissioned'; or
 - (b) where the Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function (as applicable) has an SMI Status of 'commissioned', set the SMI Status of the Device to 'commissioned'.

4.8 In respect of Type 2 Devices:

- (a) where the Responsible Supplier or an Other User wishes to add a Type 2 Device to the Device Log of an Electricity Smart Meter, a Standalone Auxiliary Proportional Controller or a Gas Proxy Function, it shall send a 'Join Service' Service Request in order to do so;
- (b) the DCC shall not send a Command to join a Type 2 Device to a Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function in response to a Service Request under Clause 4.8(a) where the Electricity Smart Meter or Standalone Auxiliary Proportional Controller or Gas Proxy Function with which the Type 2 Device is to be Associated is not listed in the Smart Metering Inventory with an SMI Status of 'pending', 'installed not commissioned' or 'commissioned'; and
- (c) on the Successful Execution of a 'Join Service' Service Request to add a Type 2 Device to the Device Log of a Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function in accordance with (a) and (b) above, the DCC shall Associate that Device with the applicable Smart Meter, Standalone Auxiliary Proportional Controller or Gas Proxy Function (as applicable).

Commissioning of Devices other than Communications Hub Functions

- 4.9 Where a Responsible Supplier wishes to Commission a Type 1 Device, it shall send (under Clause 4.5) a 'Join Service' Service Request to add the Type 1 Device to the Device Log of a Commissioned Electricity Smart Meter, a Commissioned Standalone Auxiliary Proportional Controller or a Commissioned Gas Proxy Function (as applicable).
- 4.10 Where a Responsible Supplier wishes to Commission a Gas Proxy Function, it shall send (under Clause 4.5) a 'Join Service' Service Request to add the Gas Proxy Function to the Device Log of a Commissioned Gas Smart Meter.
- 4.11 Where a Responsible Supplier wishes to Commission a Smart Meter or Standalone Auxiliary Proportional Controller, the Responsible Supplier shall send the DCC a 'Commission Device' Service Request in respect of that Device.
- 4.12 The DCC shall not send a Command to a Device in response to a Service Request under Clause 4.11 where:
 - (a) the Device is not listed within the Smart Metering Inventory;
 - (b) the Device has an SMI Status of 'commissioned', 'decommissioned' or 'suspended'; and/or
 - (c) the Communications Hub Function that is to form part of the same Smart Metering System is not listed in the Smart Metering Inventory with an SMI Status of 'commissioned'.
- 4.13 Following the receipt of a Response, over the SM WAN, that indicates the Successful Execution of a 'Commission Device' Service Request in accordance with Clauses 4.11 and 4.12 in respect of a Device, the DCC shall update the SMI Status of the Device to 'commissioned'.
- 4.14 In respect of SMETS2+ Devices only, as soon as reasonably practicable after the Successful Execution of a 'Commission Device' Service Request which relates to a Smart Meter, the Responsible Supplier shall send a 'Set Device Configuration (Import MPxN)' Service Request to ensure that the relevant MPAN or MPRN (as applicable) is available for display upon the Smart Meter.
- 4.15 For the avoidance of doubt, there is no concept of commissioning a Type 2 Device.

- 4.16 Where, following the fitting and activation procedure, the installing Supplier Party wishes to leave a Smart Metering System installed without establishing a connection to the SM WAN, then following any subsequent change of supplier:
- (a) the gaining Supplier Party may contact the losing Supplier Party (and/or one or more former suppliers) by email requesting the installation codes for the Devices which comprise that Smart Metering System; and
 - (b) the installing Supplier Party shall, within ten (10) Working Days of receiving such a request, provide the relevant installation codes to the gaining Supplier Party by email (or, if the Supplier Party which is contacted is not the installing Supplier Party, confirm the same to the gaining Supplier Party by email).

5. Post-Commissioning Obligations in relation to SMETS2+ Devices

- 5.1 This Clause 5 applies only to SMETS2+ Devices.
- 5.2 As soon as reasonably practicable (and in any event within 7 days) following the Commissioning of a Communications Hub Function, the DCC shall ensure that:
- (a) the Communications Hub Function re-generates its Private Keys, and that Device Certificates containing the associated new Public Keys are stored on the Device; and
 - (b) the information from at least one of the Organisation Certificates that comprise the Communications Hub Function's Device Security Credentials is replaced (provided that for such purposes the information from an Organisation Certificate may be replaced with that from the same Organisation Certificate).
- 5.3 As soon as reasonably practicable (and in any event within 7 days) following the Commissioning of a Smart Meter, a Standalone Auxiliary Proportional Controller or a Gas Proxy Function, the Responsible Supplier shall, in relation to each such Device, ensure that:
- (a) the Device Security Credentials which pertain to the Network Parties are:
 - (i) in the case of those which pertain to the Electricity Network Party, those of the Electricity Distributor; and
 - (ii) in the case of those which pertain to the Gas Network Party, those of the Gas Transporter (or, if they are not available in the SMKI Repository, the Device Security Credentials which pertain to the Gas Network Party shall be populated with information from the Organisation Certificates Issued to the DCC and referred to in Sections L3.23(f) (the DCC (access-Control-Broker) – digitalSignature Certificate) and L3.23(g) (the DCC (access-Control-Broker) – keyAgreement Certificate));
 - (b) the Device re-generates its Private Keys, and that the Device Certificates containing the associated new Public Keys are stored on the Device; and
 - (c) in the case of a Smart Meter and a Standalone Auxiliary Proportional Controller, information from at least one of the Organisation Certificates that comprise the Device's Device Security Credentials is replaced (provided that for such purposes the information from an Organisation Certificate may be replaced with that from the same Organisation Certificate).
- 5.4 As soon as reasonably practicable (and in any event within 7 days) following the Commissioning of a Communications Hub Function, Gas Proxy Function, Standalone Auxiliary Proportional Controller or Smart Meter, the DCC shall interrogate the Device to ascertain whether the Device's recovery Trust Anchor Cell is

populated with Device Security Credentials that pertain to a DCC Recovery Certificate. For Devices Commissioned before Service Release 1.3 (or such later date as may be directed by the SofS for the purposes of this Clause 5.4), the reference to the period of 7 days following Commissioning shall apply as 7 days following Service Release 1.3 (or 7 days following any later date directed by the SofS).

- 5.5 The DCC shall monitor Commands sent to Devices and the associated Responses from Devices and, based on the information available to it, record the information set out in Clause 5.8 in relation to each Device identified in Clause 5.7 (the “**Post Commissioning Information**”).
- 5.6 The DCC shall ensure that the Post Commissioning Information is updated on a daily basis to reflect the most accurate and up-to-date information available to the DCC at the time of the update.
- 5.7 For the purposes of Clause 5.5, the relevant Devices include any Communications Hub Function, Gas Proxy Function, a Standalone Auxiliary Proportional Controller or Smart Meter which has an SMI Status of 'commissioned', has been Commissioned for a period of 7 days or more, and in relation to which one or both of the following applies:
- (a) the DCC has failed successfully to carry out the interrogation of the Device pursuant to Clause 5.4; and/or
 - (b) the DCC has successfully carried out the interrogation of the Device pursuant to Clause 5.4 and has identified that the Device's recovery Trust Anchor Cell is not populated with Device Security Credentials that pertain to a DCC Recovery Certificate.
- 5.8 For the purposes of Clause 5.5, the Post Commissioning Information to be recorded in relation to each relevant Device shall include:
- (a) the Device ID and Device Type;
 - (b) the date upon which the Device was Commissioned;
 - (c) which of Clauses 5.7 (a) and/or (b) applies;
 - (d) other than in the case of Communications Hub Functions, the Responsible Supplier at the time the Post Commissioning Information for the Device was most recently updated;
 - (e) other than in the case of Communications Hub Functions, the Supplier Party that sent the Service Request that resulted in the Commissioning of the Device; and
 - (f) the date on which the Post Commissioning Information for the Device was most recently updated.
- 5.9 As soon as reasonably practicable following the end of each month, the DCC shall, based upon the Post Commissioning Information prevailing at the end of that month, compile and provide (in an electronic format) to the Panel, the Security Sub-Committee and the Authority a report which includes the following information:
- (a) the month to which the report relates;
 - (b) for each Party that is the Responsible Supplier for any Smart Meter or Gas Proxy Function that is listed in the Post Commissioning Information for that month (or was listed in the information for the previous month):

- (i) the total number of Devices of each Device Type listed in the Post Commissioning Information for that month for which that Party is the Responsible Supplier;
 - (ii) the number of such Devices of each Device Type that have been added since the last monthly report;
 - (iii) the number of such Devices of each Device Type that have been removed since the last monthly report;
 - (iv) the number of such Devices of each Device Type that were listed in the Post Commissioning Information for the previous month and remain listed in the information for the month to which the report relates;
 - (v) the number of such Devices of each Device Type that were listed in the Post Commissioning Information for the previous three months and remain listed in the information for the month to which the report relates; and
 - (vi) the number of such Devices of each Device Type that were listed in the Post Commissioning Information for the previous six months and remain listed in the information for the month to which the report relates; and
- (c) in respect of Communications Hub Functions:
- (i) the total number of Communications Hub Functions listed in the Post Commissioning Information;
 - (ii) the number of Communications Hub Functions that have been added since the last monthly report;
 - (iii) the number of Communications Hub Functions that have been removed since the last monthly report;
 - (iv) the number of Communications Hub Functions that were listed in the Post Commissioning Information for the previous month and remain listed in the information for the month to which the report relates;
 - (v) the number of Communications Hub Functions that were listed in the Post Commissioning Information for the previous three months and remain listed in the information for the month to which the report relates; and
 - (vi) the number of Communications Hub Functions that were listed in the Post Commissioning Information for the previous six months and remain listed in the information for the month to which the report relates.

5.10 As soon as reasonably practicable following the end of each day, the DCC shall, based upon the Post Commissioning Information prevailing at the end of that day, compile and make available to each Supplier Party (via a secure electronic means for a period of at least 30 days following the day to which the report relates) a report which includes the following information in relation to Devices (other than Communications Hub Functions) listed in the Post Commissioning Information for which that Supplier Party was the Responsible Supplier on that day:

- (a) the Device ID and Device Type of each such Device;

- (b) the date on which the Post Commissioning Information for each such Device was most recently updated;
- (c) the date upon which each such Device was Commissioned; and
- (d) which of Clause 5.7 (a) and/or (b) applies in relation to each such Device.

5.11 Where requested by the Panel or the Authority, the DCC shall, as soon as reasonably practicable following any such request, provide to the Panel and/or the Authority (in an electronic format) copies of the reports referred to in Clause 5.10. Where requested by the Panel or the Authority, DCC shall additionally include in any such report the information referred to in Clause 5.8(e) in relation to each Device included in any such report.

5.12 The DCC shall ensure that each report provided under Clause 5.9, 5.10 or 5.11 is clearly marked as being “confidential”.

5.13 Where the DCC is aware that:

- (a) either or both of the steps in Clauses 5.2 (a) and/or (b) have not been carried out within 7 days following the Commissioning of a Communications Hub Function; and/or
- (b) either of Clause 5.7(a) or (b) applies in relation to a Communications Hub Function,

then the DCC shall raise an Incident in accordance with the Incident Management Policy.

5.14 Where, in relation to a Gas Proxy Function, Standalone Auxiliary Proportional Controller or a Smart Meter, a Supplier Party is aware that:

- (a) either or both of the steps in Clauses 5.3 (b) and/or (in the case of Smart Meters and Standalone Auxiliary Proportional Controllers only) 5.3(c) have not been carried out within 7 days following the Commissioning of the Device; and/or
- (b) the DCC has failed successfully to carry out the interrogation of the Device pursuant to Clause 5.4, and the Supplier has (within a period of 14 days following the Commissioning of the Device) also failed to successfully carry out the relevant interrogation,

then the Supplier Party shall not send Service Requests requesting that the DCC sends communications to that Device other than for the purposes of: (i) completing those steps; (ii) replacing the Device Security Credentials held on the Device in response to a change of supplier; or (iii) maintaining an energy supply to the relevant premises.

5.15 Where the Responsible Supplier for a Gas Proxy Function, Standalone Auxiliary Proportional Controller or Smart Meter becomes aware that the Device does not have a recovery Trust Anchor Cell that is populated with Device Security Credentials that pertain to a DCC Recovery Certificate, then that Responsible Supplier shall (subject to Clause 5.17), as soon as reasonably practicable thereafter: other than in the case of a Gas Proxy Function, replace the Device; or, in the case of a Gas Proxy Function, replace the Communications Hub of which that Gas Proxy Function forms part.

5.16 Where a Communications Hub is returned to the DCC:

- (a) following its replacement pursuant to Clause 5.13 or 5.15; or

- (b) a Communications Hub is returned following replacement because it was not possible to interrogate the Gas Proxy Function pursuant to Clause 5.14(b),

then the Supplier Party returning the Communications Hub may (under and subject to Section F9 (Categories of Communications Hub Responsibility)) specify the reason for return as being a CH Defect.

- 5.17 A Responsible Supplier shall not replace a Device under Clause 5.15 where the reason that the relevant steps cannot be completed is an inability to communicate with a Device as a result of the SM WAN being unavailable.

General Obligations on DCC

- 5.18 The DCC shall monitor Responses it receives from Devices in order to determine whether any of the Device Certificates held on each Device have been successfully replaced. On the basis of this information the DCC shall establish and maintain a record of the most up-to-date active Device Certificates for each Device.
- 5.19 Where, following the addition of a Device to the Device Log of a Communications Hub Function, the DCC identifies that a Trust Anchor Cell of that Device has been populated with Security Credentials derived from a DCC CoS Certificate that has a subject field that is populated with an identifier of a DCC Service Provider that does not provide services to the CoS Party, the DCC shall send a DCC Alert to the Responsible Supplier for the Device, notifying them of the situation.

6. Post-Commissioning Obligations in relation to SMETS1 Devices

- 6.1 This Clause 6 applies only to SMETS1 Devices.
- 6.2 As soon as reasonably practicable (and in any event within 7 days) following the Commissioning of a SMETS1 Device, the Responsible Supplier shall ensure that:
- (a) the Device Security Credentials which pertain to the Responsible Supplier are those of the Import Supplier or Gas Supplier (as applicable);
 - (b) the Device Security Credentials which pertain to the Electricity Network Party are those of the Electricity Distributor; and
 - (c) the Device Security Credentials which pertain to the Gas Network Party are those of the Gas Transporter (or, if they are not available in the SMKI Repository, the Device Security Credentials which pertain to the Gas Network Party shall be populated with information from the Organisation Certificates Issued to the DCC and referred to in Sections L3.23(f) (the DCC (access-Control-Broker) – digitalSignature Certificate) and L3.23(g) (the DCC (access-Control-Broker) – keyAgreement Certificate)).
- 6.3 Where any Party takes an action that results in a change to the information provided under Clause 3.4 it must (prior to doing so, or as soon as reasonably practicable thereafter) contact the Service Desk and notify the DCC of the updated information.
- 6.4 Where a Responsible Supplier for a SMETS1 CHF replaces the Device (or any component part of the Device that affects the means by which the DCC communicates with it), the Responsible Supplier must ensure that the replacement Device (or replacement parts) are such that that the DCC remains capable of communicating with that Device (where necessary after updating the information referred to in Clause 6.3 in relation to that Device).

- 6.5 As soon as reasonably practicable (and in any event within 7 days) following the Commissioning of a SMETS1 Device and thereafter at the frequency specified in the SMETS1 Supporting Requirements for the relevant Device Model, the DCC shall ensure that the Private Keys and / or Symmetric Keys, identified as being required by the SMETS1 Supporting Requirements to be replaced for such Device Models, are so replaced.

7. Unjoining

- 7.1 In the case of any Device other than a Standalone Auxiliary Proportional Controller or a Smart Meter, on the Successful Execution of an 'UnJoin Service' Service Request to remove that Device from the Device Log of an other Device, the DCC shall terminate the Association between that Device and the other Device.

8. Reactivating Decommissioned or Suspended Devices

- 8.1 Where the Responsible Supplier wishes to change the SMI Status of any Device (other than a Type 2 Device) from 'decommissioned' or 'whitelisted' to 'pending', then the Responsible Supplier shall send the DCC a Service Request to that effect. Provided the Device in question is of (or is part of) a Device Model that is identified in the Central Products List, the DCC shall change the SMI Status to 'pending'.
- 8.2 Where the SMI Status of a Device has remained as 'pending' for 36 months, then the DCC shall remove the Device from the Smart Metering Inventory.
- 8.3 Where a Device ceases to be Suspended (either as a result of the Device Model being added to the Central Product List, or the Device's Device Model being modified such that it is on the Central Product List), the DCC shall change the SMI Status of that Device to the status it held immediately prior to its Suspension.

9. Replacement of SMETS2+ Communications Hub Functions

- 9.1 This Clause 9 only applies to SMETS2+ Devices.
- 9.2 The DCC shall monitor Alerts and Responses sent from each Communications Hub Function and Gas Proxy Function in order to establish and maintain an up-to-date electronic record of the most recent information stored in the Device Log of each such Device.
- 9.3 Where DCC receives a 'Restore HAN Device Log' or 'Restore Gas Proxy Function Device Log' Service Request, the DCC shall use the up-to-date electronic record referred to in Clause 9.2 in relation to the relevant Device for the purposes of determining the information to be used to restore the Device Log of the relevant Device.
- 9.4 Where a Communications Hub is replaced and the Communications Hub Function and Gas Proxy Function that comprise the replacement Communications Hub are Commissioned, such Devices shall (for the avoidance of doubt) be considered to be newly Commissioned and any provisions of the Code which require steps to be taken by any Party in relation to a newly Commissioned Device shall apply.

10. Removal of SMETS1 Communications Hub

- 10.1 Where practicable, prior to, and if not as soon as possible after, removing a SMETS1 Communications Hub, the Lead Supplier for that Communications Hub shall ensure the SMI Status for the relevant SMETS1 CHF is set to 'decommissioned'.

11. Notification of Decommissioning and Suspension of Devices

- 11.1 As soon as reasonably practicable following the Decommissioning or Suspension of a Smart Meter or Standalone Auxiliary Proportional Controller, the DCC shall notify the Electricity Distributor or Gas

Transporter for that Device of such Decommissioning or Suspension, such notification to be made via the DCC User Interface.

- 11.2 As soon as reasonably practicable following the Suspension of a Device, the DCC shall notify the Responsible Supplier(s) for that Device of such Suspension, such notification to be made via the DCC User Interface.

12. CH Production Proving

- 12.1 The purpose of CH Production Proving is to provide assurance on the operation of the DCC Total System.
- 12.2 CH Production Proving entails the Commissioning of Communications Hub Functions and the sending and receiving of communications by the DCC to and from those Communications Hub Functions over the SM WAN. CH Production Proving is to be undertaken within the DCC Live Systems.
- 12.3 In order that the DCC can undertake CH Production Proving using particular Communications Hub Functions, those Communications Hub Functions will need to be included within the Smart Metering Inventory. The DCC shall only be entitled to include Communications Hub Functions (and the associated Gas Proxy Functions) within the Smart Metering Inventory for the purpose of CH Production Proving where the Security Sub-Committee has approved the inclusion of those Communications Hub Functions (and the associated Gas Proxy Functions) for such purpose.
- 12.4 The DCC shall, from time to time, be entitled to undertake CH Production Proving (and the other provisions of this Code shall be interpreted accordingly).
- 12.5 The DCC shall undertake CH Production Proving in accordance with Good Industry Practice, in a manner that does not adversely affect the provision of the Services, and in accordance with any conditions imposed by the Security Sub-Committee in respect of its approval pursuant to Clause 12.3.

13. Definitions

- 13.1 For the purposes of this Appendix:
- (a) "**Trust Anchor Cell**", in relation to any Device, has the meaning given to it in the GB Companion Specification;
 - (b) "**keyUsage**", in relation to any Certificate, means the field referred to as such in the Organisation Certificate Policy;
 - (c) "**Service Release 1.3**" means, where the Secretary of State makes directions pursuant to Section X3 (Provisions to Become Effective Following Designation) whereby the DCC User Interface Services Schedule is varied on it first becoming effective so that there are Service Requests that are deemed to be omitted from the document, the date on which one or more of those variations are cancelled; and
 - (d) "**CH Production Proving**" is the activity described in Clause 12.