

## APPENDIX Z

### CPL Requirements Document

## **1. Overview**

- 1.1 This Appendix supplements Section F2 (Central Products List).

## **2. Central Products List Contents**

- 2.1 The Panel shall ensure that the Central Products List identifies each Device Model by Physical Device Type, and lists the following matters in respect of each Device Model:
- (a) Manufacturer and model;
  - (b) hardware version;
  - (c) firmware version;
  - (d) for SMETS2+ Device Models, the version of the SMETS or CHTS (as applicable) and (in each case) the GBCS version for which the Device Model has one or more Assurance Certificates;
  - (e) for SMETS1 Device Models, Version 1.2 of SMETS;
  - (f) for SMETS2+ Device Models, the identification numbers for each of the Device Model's Assurance Certificates (including the version of the relevant standard against which each Assurance Certificate was issued);
  - (g) where the Device Model is required to have an associated CPA Certificate, the expiry or renewal date of the Device Model's CPA Certificate and the associated version of the Security Characteristics (as defined in the relevant Technical Specification);
  - (h) where there is an associated Manufacturer Image:
    - (i) the relevant identity of the person who created the Manufacturer Image;
    - (ii) a descriptor of the Manufacturer Image;
    - (iii) the Hash of the Manufacturer Image (to be provided pursuant to Clause 4); and
  - (i) Zigbee band, which is a mandatory field.

## **3. Addition of Device Models to the List**

- 3.1 For SMETS2+ Device Models, the Panel shall only add Device Models to the Central Products List once the Panel has received all the Assurance Certificates required (under the Technical Specifications) to be obtained in respect of Device Models of the relevant Physical Device Type (which Assurance Certificates may be provided to the Panel by a Party or any other person).
- 3.2 For SMETS1 Device Models, the Panel shall only add a Device Model to the Central Products List once the Panel has received a notification from the DCC or, subject to Clause 3.5, from a Supplier Party. Clauses 3.3 to 3.13 (inclusive) set out the process for adding SMETS1 Device Models to the Central Products List.

- 3.3 The DCC shall only send a notification to the Panel in respect of a SMETS1 Device Model (as referred to in Clause 3.2) once the Device Model has been included as part of at least one entry on the SMETS1 Eligible Products Combinations list.
- 3.4 A Supplier Party may only send a notification to the Panel in respect of a SMETS1 Device Model (as referred to in Clause 3.2) if:
- (a) that SMETS1 Device Model has not been included as part of at least one entry on the SMETS1 Eligible Product Combinations list; and
  - (b) that Supplier Party reasonably believes that the addition of the SMETS1 Device Model to the Central Products List is required in order to facilitate the urgent resolution of a material security vulnerability relating to Commissioned Devices for which it is the Responsible Supplier.
- 3.5 As soon as reasonably practicable after sending a notification to the Panel in accordance with Clause 3.2, the relevant Supplier Party shall notify the DCC via the Notification Interface that it has sent such a notification to the Panel and, in doing so, shall inform the DCC of the Device Model notified to the Panel.
- 3.6 The Panel shall only accept and process a notification from a Supplier Party under Clause 3.2 if the notification has been made in accordance with the requirements of the Supplier Party CPL Notification Procedures and where the Panel has successfully confirmed that the notification was from a Supplier Party and has not been modified since its creation.
- 3.7 For the purposes of Clause 3.6, the Supplier Party CPL Notification Procedures are procedures that provide for a Device Model to be notified to the Panel by a Supplier Party in a manner that allows the Panel to confirm that:
- (a) any such notification has originated from a Supplier Party; and
  - (b) any such notification from a Supplier Party has not been modified since its creation.
- 3.8 The Panel shall develop the Supplier Party CPL Notification Procedures and any subsequent modification to them in consultation with the Security Sub-Committee and publish the Supplier Party CPL Notification Procedures on the Website.
- 3.9 Where the DCC has received a notification via the Notification Interface from a Supplier Party pursuant to Clause 3.5, the DCC shall, as soon as reasonably practical after uploading into the DCC Systems a revised version of the Central Products List that additionally includes the Device Model notified to the Panel by the Supplier Party, inform that Supplier Party via the Notification Interface that the upload has taken place.
- 3.10 For the purposes of Clauses 3.5 and 3.9, the Notification Interface is an appropriately secure interface, the identity of which the DCC shall communicate to Supplier Parties, for the purposes of making the notifications between Supplier Parties and the DCC referred to in those Clauses.
- 3.11 After the addition of a Non-EPCL Device Model to the Central Products List, the Supplier Party that notified the Non-EPCL Device Model to the Panel shall take all reasonable steps to ensure that each Device Model Combination:
- (a) of which any Commissioned Device of that Non-EPCL Device Model forms part; and
  - (b) for which Commissioned Device it is the Responsible Supplier,

is added to the SMETS1 Eligible Product Combinations List as soon as reasonably practicable.

- 3.12 After the Commissioning of a Device that is of a Non-EPCL Device Model, the Responsible Supplier for that Device shall take all reasonable steps to ensure that that the Device Model Combination of which that Device forms part is added to the SMETS1 Eligible Product Combinations List as soon as reasonably practicable.
- 3.13 Where a PPMID of a particular type is capable of forming part of either a SMETS1 Smart Metering System or a SMETS2+ Smart Metering System, any Device Model added to the Central Products List shall:
- (a) insofar as it relates to PPMIDs of that type forming part of SMETS2+ Smart Metering Systems, be the Manufacturer of the PPMID, its model, its hardware version and its firmware version; and
  - (b) insofar as it relates to PPMIDs of that type forming part of SMETS1 Smart Metering Systems, be the Manufacturer of the PPMID, its model, its hardware version and a value representing its firmware version that is different to the firmware version of the PPMID of that type that forms part of a SMETS2+ Smart Metering System.

#### **4. Association of Hashes with Device Models on the CPL**

- 4.1 Where the DCC, a Supplier Party or a Manufacturer which is a Party wishes the Panel to associate the Hash of a Manufacturer Image with a Device Model on the Central Products List, that Party shall provide the Hash and the identity of the person who created the Manufacturer Image in a communication to the Panel which has been Digitally Signed by the person who created the Manufacturer Image in a manner that reasonably enables the Panel to check that the communication originates from the person who created the Manufacturer Image.
- 4.2 The Panel may specify the format which the communication referred to in Clause 4.1 must take (in which case Parties sending such communications must use such format). The Panel shall notify the relevant Parties of any such required format and of any changes to such required format that the Panel may make from time to time.
- 4.3 The Panel shall only associate a Hash provided under Clause 4.1 with a Device Model on the Central Products List where:
- (a) the Panel has successfully confirmed that the Digital Signature referred to in Clause 4.1 is that of the person who created the Manufacturer Image (validated as necessary by reference to a trusted party);
  - (b) there is no Hash currently associated with the Device Model; provided that, if there is a Hash currently associated with the Device Model, the Panel shall investigate the matter with the relevant Parties to identify whether it is appropriate to replace the associated Hash (and shall, where it is appropriate to do so, update the Central Products List accordingly); and
  - (c) if the Device Model is a SMETS1 Device Model, the communication to the Panel referred to in Clause 4.1 is from the DCC.

#### **5. Adding Device Models to CPA Certificates**

- 5.1 An existing CPA Certificate for a Device Model may allow one or more additional Device Models to be added under that existing CPA Certificate, provided that any additional Device Model differs from the Device Model for which the CPA Certificate was originally issued only by virtue of having different versions of hardware and/or firmware that do not have a significant impact on the security functions of the Device Model (as set

out in the CPA Assurance Maintenance Plan). Where this is the case, the following persons may notify the Panel of one or more additional Device Models to be added to the CPA Certificate:

- (a) the DCC for Communications Hubs; or
- (b) a Supplier Party or a Manufacturer which is a Party for Device Models of all other Physical Device Types.

5.2 Where the DCC, a Supplier Party or a Manufacturer which is a Party notifies the Panel of an additional Device Model pursuant to Clause 5.1, the DCC, Supplier Party or Manufacturer shall:

- (a) only do so in accordance with the terms of the relevant CPA Assurance Maintenance Plan; and
- (b) retain evidence that it has acted in accordance with the terms of the relevant CPA Assurance Maintenance Plan, such evidence to be provided to the Panel or the Authority on request.

5.3 The Panel shall not be required to check whether the DCC, a Supplier Party or Manufacturer (as applicable) is entitled to add a Device Model under the terms of the CPA Certificate and the CPA Assurance Maintenance Plan (as described in Clause 5.1).

5.4 [NOT IN USE]

## **6. Removal of Device Models from the List**

6.1 Where an Assurance Certificate for a Device Model which was issued by the ZigBee Alliance or the DLMS User Association is withdrawn or cancelled by the ZigBee Alliance or the DLMS User Association (as applicable), then the Panel shall remove that Device Model from the Central Products List.

6.2 Where a CPA Certificate for a Device Model expires or is not renewed or is withdrawn or cancelled by NCSC or a Trial Device Certificate for a Trial Device Model expires or is withdrawn or cancelled by the Security Sub-Committee, then the Security Sub-Committee shall determine whether the Device Model is to be removed from the Central Products List, and the Panel shall remove the Device Model (or not) as determined by the Security Sub-Committee. In reaching such a determination, the Security Sub-Committee:

- (a) shall consider the security implications of such circumstances, and weigh them against the consequences for Energy Consumers of Devices of the relevant Device Model being Suspended as a result of removing the Device Model from the Central Products List;
- (b) shall take into account any relevant information provided to it by NCSC concerning the risks associated with the cancellation, withdrawal or expiry without renewal of the CPA Certificate;
- (c) may determine, whether or not the Device Model is to be removed from the Central Product List, that a CPA Certificate Remedial Plan or a Trial Device Remedial Plan (as relevant) is to be imposed (for SMETS2+ Communications Hubs) on the DCC or (for all other Device Models) on the Import Suppliers (for Devices of that Device Model forming part of a Smart Metering System for which they are the Import Supplier) and/or the Gas Suppliers (for Devices of that Device Model forming part of a Smart Metering System for which they are the Gas Supplier); and
- (d) shall reach a determination as soon as reasonably practicable taking into account the seriousness of the potential security consequences.

- 6.3 Where the Security Sub-Committee determines under Clause 6.2 that a CPA Certificate Remedial Plan or a Trial Device Remedial Plan (as relevant) is to be imposed on one or more Parties, then the Security Sub-Committee shall notify those Parties and each of those Parties shall:
- (a) (within such period as the Security Sub-Committee may require) propose a plan to the Security Sub-Committee setting out how the Party intends to remedy the security issue or issues that have resulted in or arise from the cancellation, withdrawal or expiry without renewal of the CPA Certificate or Trial Device Certificate, and within what time period;
  - (b) (within such period as the Security Sub-Committee may require) take into account any and all comments on the proposed plan raised by the Security Sub-Committee, and obtain the Security Sub-Committee's approval of the plan (the approved plan for each such Party, as modified from time to time with the approval of the Security Sub-Committee, being that Party's "**CPA Certificate Remedial Plan**" or, in the case of a Trial Device Certificate, its "**Trial Device Remedial Plan**");
  - (c) comply in all material respects with the CPA Certificate Remedial Plan or Trial Device Remedial Plan (as relevant); and
  - (d) (where requested by the Security Sub-Committee) report to the Security Sub-Committee on progress in respect of the CPA Certificate Remedial Plan or Trial Device Remedial Plan (as relevant).
- 6.4 Where the Security Sub-Committee initially determines under Clause 6.2 that a CPA Certificate Remedial Plan or Trial Device Remedial Plan (as relevant) is to be imposed as an alternative to removing a Device Model from the Central Products List, then the Security Sub-Committee may at any time determine that the Device Model in question is to be removed from the Central Products List, in which case the Panel shall remove the Device Model from the Central Products List.
- 6.5 For the purposes of Section M8.1(g) (Events of Default), the obligations of a Party under Clause 6.3 are material obligations. Accordingly, failure by a Party to gain approval for, or failure by a Party to comply in all material respects with, a CPA Certificate Remedial Plan shall be an Event of Default if not remedied within 20 Working Days after notice from the Security Sub-Committee requiring remedy.
- 6.6 The DCC, each Supplier Party and each Manufacturer which is a Party shall provide such relevant information as the Security Sub-Committee may reasonably request to assist it in reaching a determination under Clause 6.2 or 6.4.
- 6.7 The DCC, each Supplier Party and each Manufacturer which is a Party shall notify the Panel of any withdrawal, expiry or cancellation of an Assurance Certificate of which the DCC, Supplier Party or Manufacturer becomes aware. Where removal occurs as a result of the withdrawal, expiry or cancellation of an Assurance Certificate, the Panel shall only remove a Device Model from the Central Products List after the Panel has confirmed with the relevant Assurance Certification Body that the Assurance Certificate for that Device Model has expired or has been withdrawn or cancelled (and no new Assurance Certificate has been provided to the Panel under Clause 3).
- 6.8 The Panel may also remove a SMETS1 Device Model from the Central Products List where either:
- (a) the Security Sub Committee advises that the Device Model should be removed from the Central Products List; or

- (b) it is determined by the Authority or by the Panel under Section F3 (Panel Dispute Resolution Role) that Devices of the relevant Device Model are not compliant with SMETS1 (either on their own or in combination with Devices of other Device Models listed on the Central Products List).

- 6.9 The Panel may reinstate to the Central Products List a SMETS1 Device Model that it has removed pursuant to Clause 6.8; provided that the Panel may only reinstate a Device Model that has been removed pursuant to Clause 6.2A(b) where it determines that the issue that gave rise to the removal of the Device Model has been rectified.
- 6.10 For the purposes of this Code, a Communications Hub Function or a Gas Proxy Function shall be considered to be on (or not on) the Central Products List if the Communications Hub of which it forms part is on (or not on) the Central Products List.
- 6.11 The Panel may provide for the removal of a Device Model from the Central Products List by marking that Device Model as 'removed'. All references in this Code to the removal of a Device Model from the Central Products List (and similar expressions) shall be interpreted accordingly.

## 7. Digital Signatures on CPL

- 7.1 When providing an updated Central Products List (or extract of it) to the DCC, the Panel shall provide a copy of the Central Products List (or of that extract) that is Digitally Signed so as to reasonably enable the DCC to check that the updates to the Central Product List originate from the Panel.
- 7.2 The DCC shall, before using and relying upon the Central Products List received by the DCC from the Panel, first confirm that the Digital Signature referred to in Clause 7.1 is that of the Panel (validated as necessary by reference to a trusted party).
- 7.3 Following receipt by the DCC of an updated Central Products List from the Panel, the DCC shall take all reasonable steps to establish whether the update included the removal of one or more Device Models from the Central Products List. Where the DCC establishes that an update did include the removal of one or more Device Models from the Central Products List, then:
  - (a) the DCC shall take all reasonable steps to confirm that it was the intention of the Panel to remove such Device Models from the Central Products List; and
  - (b) where the DCC reasonably believes that it was not the intention of the Panel to remove such Device Models from the Central Products List, the DCC shall notify the Panel that this is the case and (notwithstanding Section F2.9) shall ignore the updated Central Products List.