

Smart Energy Code

Section F: Smart Metering System Requirements

SEC Section F provisions concern:

- Supplier Parties
- Data & Communications Company (DCC)
- SEC Panel
- Technical Architecture and Business Architecture Sub-Committee (TABASC)

What does Section F cover?

Section F outlines the **Smart Metering System Requirements** for GB Smart Metering, which are necessary to ensure that the arrangements for Smart Metering are managed in a consistent and holistic manner.

What is a Smart Metering System?

A **Smart Metering System** is defined in the SEC to collectively describe either:

- an Electricity Smart Meter with the Communications Hub Function; or,
- a Gas Smart Meter with its associated Communications Hub Function and an Associated Gas Proxy Function;

together with any other Type 1 Devices that may from time to time be **Associated** with that Smart Meter.

In the context of the SEC, a **Device** means one of the following individual devices:

- Electricity Smart Meter;
- Gas Smart Meter;
- Communications Hub Function;
- Gas Proxy Function;
- Pre-Payment Meter Interface Device;
- Home Area Network (HAN) connected Auxiliary Load Control Switch; and
- Any Type 2 Device.

A Type 1 Device is a HAN Connected Auxiliary Load Control Switch or a Pre-Payment Meter Interface Device.

A Type 2 Device is a device that does not store or use the Security Credentials of other devices for the purposes of communicating via the HAN.

Detailed information on Type 1 and Type 2 Devices is provided in the **Smart Metering Equipment Technical Specifications (SMETS)**.

Technical Architecture and Business Architecture Committee

Section F1 sets out the requirement on the Panel to establish a Technical Architecture and Business Architecture Sub-Committee (TABASC) to provide advice and guidance to the Panel in relation to the technical aspects of the Code and to review the effectiveness of the Business Architecture (including their assessment against the SEC Objectives). Section F1.4 sets out the specific duties and obligations of the TABASC in relation to the Code. This includes seeking the advice of the Alt HAN Forum where necessary.

The TABASC is formed of an Independent Chair, 6 Large Suppliers, 1 Gas Network, 1 Electricity Network and 2 Other SEC Parties. The DCC is also obligated to provide all reasonable assistance to the TABASC in relation to the performance of its duties.

Certified Product List (CPL)

The Panel is obligated to maintain a list of Device Models for which it has received all the Assurance Certificates required. The Panel must provide the DCC with up-to-date versions of the CPL so that the DCC can use and reply upon the CPL to make any necessary changes to the **Smart Metering Inventory**.

Information on how Parties can add Device Models to the CPL will be found in the **CPL Requirements Document** (to be designated) and on the '[Certified Products List](#)' SEC webpage.

Device Assurance Certificates

The SEC requires Suppliers and the DCC to ensure their Devices comply with the relevant **Technical Specifications**. For Suppliers, the requirements for a Device's compliance is set out in the **SMETS**. For the DCC, the compliance for Communications Hubs is set out in the **Communication Hub Technical Specifications (CHTS)**.

Devices will require a number of Assurance Certificates and ensure that replacement certificates are sought before expiry, as part of the requirement for a Device to be added to the CPL. Depending on the device type, these Assurance Certificates include the:

- ZigBee Alliance (required for all devices);
- Device Language Message Specification (DLMS) User Association (only required for Single/Twin/Polyphase Electricity Smart Metering Equipment); and
- Commercial Product Assurance [scheme administered by the National Technical Authority for Information Assurance] (required for all Devices other than Prepayment Interface Device (PPMID) and Type 2 Devices).

Deployed Products List

A list of all the different combinations of Device Models that comprise a **Smart Metering System** (including associated Type 2 Devices) will be produced and kept up-to-date by the DCC and will be made available on the SEC Website.

Technical Specification Compatibility

A matrix detailing which versions of each Specification are compatible with which versions of each other Specification will be kept up to date by the Panel and made available on the SEC Website.

Panel's role in Dispute Resolution

If a Party believes a Device no longer meets the requirements set out in the Technical Specifications, then they may refer this issue to the **Panel**.

If the issue is in relation to Communications Hubs, then the DCC shall retain evidence and demonstrate to the Panel (or the Authority) that the Communications Hubs comply with the DCC's obligations within their Licence and the relevant Technical Specification.

If the issue is in relation to a Supplier Party's Device, then each Supplier Party shall retain evidence and demonstrate to the Panel (or the Authority) that their Devices comply with the Technical Specification.

If the Panel believes the Device does not comply with the Technical Specifications, then the Panel may require the Party or DCC to comply with a **remedial plan**, which seeks to remedy or mitigate the non-compliance issue with a Device.

If a Supplier fails to comply with the remedial plan, then the Supplier is subject to the **Event of Default** process. Guidance on the Event of Default Process can be found [here](#).

Interoperability Requirements

The **Import Supplier, Export Supplier** and/or **Gas Supplier** is required to ensure that:

- Each **Enrolled Smart Metering System** (excluding the Communications Hub Function), provides the minimum operational functionality required to allow the DCC to provide Services; and
- All Devices are interoperable with the **DCC Total System**, i.e. able to receive commands from or via the DCC as set out in the **Great Britain Companion Specification**.

The DCC and each Supplier Party must undertake testing, retain and present evidence of its compliance with the interoperability obligations when requested by the Panel or the Authority.

The DCC is ensured remote access to the Smart Metering System. This allows the DCC to provide the services set out in the SEC and the DCC Licence, and includes the rights to send communications, interrogate, receive communications and obtain data from each Smart Metering System.

Communications Hubs Procurement

The SEC places an obligation on the DCC to publish the **physical dimensions** of Communications Hub Device Models which are available, as well as consult with other Parties on these physical dimensions. This consultation period will occur within 18 months after the date that Smart Meters are capable of being commissioned.

Prior to procuring **Communications Hubs** comprising new **HAN Variants and/or WAN Variants**, or Communications Hubs with differences in the physical dimensions, then the DCC shall consult with Parties. If the financing arrangements are likely to materially differ, then the DCC must consult on these changes.

Communications Hub Forecasting and Ordering

Communications Hubs will be installed into premises by Suppliers. Parties must provide the DCC with an estimate of the future requirements for the delivery of Communications Hubs – a **Communications Hub Forecast**.

SECAS have published guidance on Communications Hub Forecasting and Ordering on the SEC Website [here](#).

Communications Hub Order System

The **DCC Order Management System** is a system established by the DCC for Parties to order Communications Hubs.

Parties should use the DCC Order Management System to:

- Submit details of its forecasts, orders and returns of Communications Hubs and/or Communications Hub Auxiliary Equipment;
- View Data regarding the status of each forecast submission; and
- View information in respect of the SM WAN.

DCC Policy

The DCC have developed a policy which outlines to Parties the circumstances in which the DCC will accept (or reject) Communication Hub Orders. The Communication Hub Orders Policy can be found [here](#).

Parties: Rights and Duties in relation to Communication Hub Orders

Each Party may submit one Communication Hub Order for each Region in any month. Each Party is required to submit their request no later than the 5th Working Day prior to the last Working Day of that month. These orders shall be submitted via the **DCC Order Management System** (OMS).

Communications Hubs Delivery and Acceptance

The delivery requirements to be observed by the DCC are set out in the **CH Handover Support Materials**.

Parties should confirm the delivery (if compliant) of their order through the DCC OMS and are entitled to reject it (if non-compliant) in accordance with the CH Handover Support Materials.

If a Party fails to accept a delivery it shall reimburse the DCC for all reasonable costs and expenses incurred as a result.

Communications Hubs Delivery Cancellations

Parties can cancel a **Consignment** by notifying the DCC at least 48 hours before the delivery. If a Party does cancel their delivery, then that Party is liable to reimburse the DCC for reasonable costs and expenses incurred by the DCC.

This compensation shall be included within the Party's following DCC Invoice, and the DCC shall provide the Party with a non-binding estimate of the costs and expenses it is likely to incur.

Communications Hubs Installation and Maintenance

The installation requirements to be observed by Supplier Parties are set out in the **CH Installation and Maintenance Support Materials**. Suppliers should, where possible, ensure that the Communications Hubs they install are capable of operating with other Suppliers' Smart Meters. Where it is determined in accordance with the CH Installation and Maintenance Support Materials, a Supplier Party is also required to install a Special Installation Mesh Communications Hub in respect of a premises.

Suppliers should obtain consent to access premises where the DCC is to undertake works on their behalf that are so required.

The DCC shall ensure that Communications Hubs are able to connect to the **Smart Metering**

Removal and Return of Communications Hubs

The DCC may ask Parties to return Communications Hubs and Special Installation Mesh Communications Hub for Product Recall or Technology Refresh purposes in accordance with SEC **Section F8**.

Where a Supplier Party removes a Communications Hub it must do so in accordance with the **CH Installation and Maintenance Support Materials**.

The Party returning the Communications Hubs will be liable to pay Charges if they are returned to the wrong returns location.

Categories of Communications Hub Responsibility

Parties shall notify the DCC of the **reason** for the return of each returned Communications Hub, or for its loss or destruction, in accordance with SEC **Section F9**.

Such reason shall be used to determine the applicable **category of responsibility** (as described in **Sections F9.4** and **F9.6**), which is then used for the purposes of calculating the **Charges** (or adjustments to the Charges in accordance with SEC Section F9).

Test Communications Hubs

Parties may order Prototype Communications Hubs for testing from the DCC in accordance with **Section X10**, once it publishes a notification that these are available for order on the DCC Website. Test Communications Hubs are not covered by the SEC provisions on Communications Hubs and shall:

- not be commissioned;
- only be populated with Test Certificates; and
- only be used for purposes of tests undertaken under the SEC.

Disclaimer

These guides are intended to provide a simple overview of the SEC and any supporting or related arrangements and do not replace or supersede the SEC or these related arrangements in any way. The author does not accept any liability for error, omission or inconsistency with the SEC.

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