**SECMP0056 ‘IHD / PPMID ZigBee Attributes Available on the HAN’**

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**Annex B**

**Legal text – version 1.2**

About this document

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

These changes have been drafted against SEC Version 35.

Schedule 8 ‘Great Britain Companion Specification (GBCS)’ version 4.0

## Amend Section 7.4 as follows:

**7.4 Device requirements – ZSE**

This Section 7.4 details the ZigBee clusters, attributes and commands that shall be supported by Devices in their interactions with other Devices on the same HAN, including whether the support is as a ZSE client or a server. Note, this Section does not detail the ZCL / ZSE commands that Devices will need to process as part of processing Remote Party Commands, or Commands sent by a PPMID to a GSME. Such requirements are detailed in Sections 18 and 19.

Only Devices capable of operating at Sub-GHz shall be required to support the requirements in rows of Table 7.4 where the cell in the column labelled ‘Sub GHz capable Devices only?’ contains ‘Yes’.

For clarity and as required by ZSE, all Devices shall support the Key Establishment Cluster as both Client and Server.

A GSME shall implement a ZSE *Metering Device* and shall implement all *the clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘GSME: Metering Device’.

A GPF shall implement a *ZSE Metering Device* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘GPF: Metering Device (Gas Mirror Endpoint)’.

A GPF shall implement a *ZSE Energy Services Interface* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘GPF: Energy Services Interface (Gas ESI Endpoint)’

A CHF shall implement a *ZSE Remote Communications Device* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘CHF: Remote Communications Device (Remote Communications Endpoint)’.

An SAPC shall implement a *ZSE Energy Services Interface* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘SAPC: Energy Services Interface (Electricity ESI Endpoint)’.

Where it supports the corresponding SMETS functionality, an SAPC shall implement the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘SAPC optional: Energy Services Interface (Electricity ESI Endpoint)’.

Additionally, an SAPC may support other *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘ESME: Energy Services Interface (Electricity ESI Endpoint)’.

An ESME which is not a Twin Element ESME shall implement a *ZSE Energy Services Interface* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘ESME: Energy Services Interface (Electricity ESI Endpoint)’.

An ESME which is a Twin Element ESME shall implement three *ZSE Energy Services Interfaces*:

1. the first which shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘ESME: Energy Services Interface (Twin ESME aggregate ESI Endpoint)’;
2. the second which, in relation to the primary measuring element, shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘ESME: Energy Services Interface (Twin ESME primary/secondary ESI Endpoint)’; and
3. the third which, in relation to the secondary measuring element, shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘ESME: Energy Services Interface (Twin ESME primary/secondary ESI Endpoint)’.

A PPMID shall implement a ZSE In-Home Display, shall implement all the clusters, commands, attribute sets and attributes in Table 7.4 where column A is ‘PPMID: In-Home Display’, and shall support the other clusters, attributes and commands necessary to meet the SMETS requirements.

An HCALCS shall implement a *ZSE Load Control Device* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘HCALCS: Load Control Device’.

An HHT shall implement a *ZSE Remote Communications Device* and shall implement all the *clusters, commands, attribute sets and attributes* in Table 7.4 where column A is ‘HHT: Remote Communications Device’.

An IHD shall implement all the clusters, commands, attribute sets and attributes in Table 7.4 where column A is ‘IHD: In-Home Display’ and shall support the other clusters, attributes and commands necessary to meet the SMETS requirements.

Where a row in Table 7.4 is required for a Device, that Device shall support the cluster, attribute or command specified in that row as client or server, as specified in column C (labelled ‘Client / Server’).

Support for *clusters, commands, attribute sets and attributes* shall be as defined in columns B (‘Cluster’), D (‘Command’), E (‘Attribute Set’) and F (‘Attribute’).

Note that the other columns in Table 7.4 are informative and for requirements traceability only.

Except where explicitly required by this Section 7.4 or by Section 19.3, a Device shall not execute any ZSE command, be that in a GBZ Command Payload or provided as a native ZSE command, that could, if executed, constitute a Critical action. For clarity, a Device shall not execute a ZSE *Publish Change of Supplier* command if bits 11-12 of the *Provider* *Change Control* parameter (*Meter Contactor State*) of that command has any value other than 0b11 (*Supply UNCHANGED*).

In relation to the *calendar cluster’s* use for exchanging information about the Auxiliary Controller Calendar (with its SMETS meaning) between Devices:

* the *Calendar Type* value of 0x04 (named *Auxillary Load Switch Calendar*) shall be used, to differentiate from the values of 0x00 (named *Delivered Calendar*) and 0x03 (named *Friendly Credit Calendar*) for the Tariff Switching Table and Non-Disablement Calendar, respectively (with their SMETS meanings); and
* the *Auxiliary Load Switch State* parameters in *PublishDayProfile* commands shall be set so that:
* *bit0* to *bit4* have values corresponding to Auxiliary Controller [1] to Auxiliary Controller [5] respectively, with each such bit being 0b1 where the commanded output state is 100 for the switching instruction in question (so the value of ‘p’ with its Section 7.3.6.1 meaning), or 0b0 otherwise; and
* *bit5* to *bit7* have the value 0b0.

For clarity, this means that settings related to commanded input states are not shared, and commanded output settings of 99 or less on an Auxiliary Proportional Controller (with its SMETS meaning) are all represented as 0b0 to other HAN Devices.



Table 7.4: Device Requirements

Schedule 9 ‘Electricity Smart Metering Equipment Technical Specifications (ESMETS)’ version 5.0

## Amend Section 5.6.3 as follows:

***5.6.3.31 Restrict Data***

A Command to restrict provision to Type 1 Devices and Type 2 Devices of all items of Personal Data stored in ESME which have a UTC date and time stamp prior to the date and time stamp specified in the Restrict Data Command.

In executing the Restrict Data Command the ESME shall:

i. make the information to remove all Personal Data available to Type 1 Devices and Type 2 Devices via its HAN Interface; and

ii. clear the *Supplier Message* *[INFO](5.7.4.43).*

Schedule 9 ‘In Home Display Technical Specifications (IHDTS)’ version 4.3

## Amend Section 6.5.1 as follows:

**6.5.1 Receipt of information via the HAN Interface**

The IHD shall be capable, immediately upon establishment of a Communications Link with ESME and / or a Gas Proxy Function (as set out in *Section* 6.4.1.1) of (as relevant):

1. receiving information (and updates of any changes of this information every 10 seconds thereafter) required to meet the display requirements described in *Section* 6.4.2;
2. receiving information (and timely updates of any changes to the information thereafter) required to meet the display requirements described in *Section* 6.4.3;
3. receiving information (and updates of any changes of this information every 10 seconds thereafter) required to meet the display requirements described in *Section* 6.4.4; and
4. receiving information regarding a change of tenancy (and updates every day at midnight UTC) and if a change of tenancy has occurred to clear *Historic Consumption(6.4.3.7)* and *Supplier Message(4.6.4.24)* for gas, and *Historic Consumption(6.4.4.7)* and the *Supplier Message [INFO](5.7.4.43)* for electricity*.*

Schedule 9 ‘Pre-Payment Meter Interface Device Technical Specifications (PPMIDTS)’ version 4.3

## Amend Section 7.5.1 as follows:

**7.5.1 Receipt of Information via the HAN Interface**

A PPMID shall be capable, immediately upon establishment of a Communications Link with ESME and a Gas Proxy Function (as set out in *Section 7.4.1.1*) of:

1. receiving information required to meet the display requirements set out in *Section 7.4.3*;
2. receiving information (and timely updates of any changes to the information thereafter) required to meet the display requirements set out in *Section 7.4.5*;
3. receiving information (and updates of any changes of this information every 10 seconds thereafter) required to meet the display requirements set out in *Section 7.4.6; and*
4. receiving information regarding a change of tenancy (and updates every day at midnight UTC) and if a change of tenancy has occurred to clear, if stored on the PPMID, all historic Consumption data and Supplier messages.

Schedule 10 ‘Communications Hub Technical Specifications (CHTS)’ version 1.4

## Amend Section 4.5.4 as follows:

***4.5.4.10 Restrict GPF Data***

A Command to restrict provision to Type 1 Devices and Type 2 Devices of all items of Personal Data stored in the GPF which have a UTC date and time stamp prior to the date and time stamp specified in the Restrict GPF Data Command.

In executing the Restrict GPF Data Command the GPF shall:

i. make the information to remove all Personal Data available to Type 1 Devices and Type 2 Devices via its HAN Interface; and

ii. clear the Supplier Message.