

Proposed Change: SECMP0003 - Deficiencies in the Service Request for setting Maximum Demand Configurable Time

Requirement

This section summarises the key parts of the requirement for this SEC Modification, as currently clarified and refined by the Working Group. The following solution(s) sections detail the required changes to SEC and wider documents that are proposed to implement this requirement. Where there are multiple solutions sections, they reflect the alternatives the Working Group wished to consider.

Context

SMETS requires that all ESME have a configuration data item called Maximum Demand Configurable Time Period, which is defined as:

'A single time period of up to 24 hours comprising a number of half-hour periods (commencing at the start of minutes 00 and 30 in each hour) during which recording to the Maximum Demand (Configurable Time) Active Power Import Value(5.7.5.20) is active.'

As a configuration data item, there is a SMETS requirement to read and set this data item. Thus, there is a GBCS Use Case and a DUIS Service Request to set this value, and also a GBCS Use Case and a DUIS Service Request to read this value.

Change

SMETS

1. The proposed change would be to revise SMETS, so that the Maximum Demand Configurable Time Period also includes:
 - The days of the week, on which recording to the Maximum Demand (Configurable Time) Active Power Import Value(5.7.5.20) is active in the specified time period; and
 - A start and end date, between which recording to the Maximum Demand (Configurable Time) Active Power Import Value(5.7.5.20) is active in the specified time period.

GBCS Use Cases

2. Correspondingly, new Use Cases would replace the existing two Use Cases (i.e. the one to set this data item and the one to read it). The new Use Cases would adopt the same GBCS Message Categories and access rights as the existing Use Cases, since the same rationale applies. They would also use the same DLMS COSEM objects and attributes as the existing Use Cases.
3. The existing read Use Case reads SMETS operational data items (5.7.5.19 Maximum Demand Active Power Import Value and 5.7.5.20 Maximum Demand (Configurable Time) Active Power Import Value) as well as this configuration data item (Maximum Demand Configurable Time Period). To align to the more general GBCS approach (which recognises operational and configuration data would not normally be needed together), the existing read Use Case would be replaced by two new Use Cases: one for reading the operational data and the other for the configuration data. Thus, three new Use Cases would be specified.
4. In line with the wider SEC approach, there would be no requirement to update already installed ESME to support these new Use Cases.

5. The new Use Cases would not require any change to the ZigBee attributes / commands to be supported over the SMHAN. Thus, there would be no impact on the design of, or requirements for, other HAN Devices.

Service Requests

6. Correspondingly, new Service Requests would need to be specified. The Proposer wishes to move forward with two options:

Option 1

- a. DCC to continue to offer existing Service Requests for ESME installed against a SMETS version prior to that in which this change is included, and new Service Requests for ESME installed against a SMETS version in which this change is included to access these Commands;
- b. To ensure that DCC Users know which version of Service Request to send to ESME, the SMI would need to be modified to include which GBCS version the ESME supports;
- c. On the SSI, GBCS version would need to be added to the inventory data display;
- d. Some of the pre-defined reports to extract information from the SSI would need to be amended to include a GBCS version field. They are: [TBC]

Option 2

- a. DCC would offer one set of Service Requests to access these Commands. DCC would then look up the GBCS version for the ESME and construct the Command(s) corresponding to the version of SMETS and GBCS the ESME supports;
 - b. No changes to the SMI and SSI would be required under this option.
7. From a DCC User perspective, access to these Commands would be provided by **[DN: tbc when DUIS / MMC details added. Note: This draft version does not include detailed DUIS changes arising, and so does not detail the new Service Request(s). However, there is a placeholder for the SEC Appendix E change to show that at least one new Service Request would be needed.]**
 8. Given that the new Use Cases would be Non Critical, it is assumed they would not fall within the SEC mandated scope of threshold anomaly detection.

Solution

This section details the required changes to SEC and wider documents that are proposed to implement the requirement for this SEC Modification. Please note that all numbering, messages codes, alert codes and so on are based on GBCS 0.8.2 and related document versions. Numbering, codes etc may need to be updated in light of other changes agreed.

Smart Energy Code (version published by DECC in December 2015)

SEC Section A - Definitions

Smart Metering Inventory means an electronic database of Devices which records (as a minimum) the following information in respect of each Device:

- (a) its Device Type;
- (b) its Device ID;
- (c) its Device Model (provided that no firmware version is needed for Type 2 Devices);
- (d) for Devices other than Type 2 Devices, its SMI Status, and the date from which that status has applied;
- (e) for Devices other than Type 2 Devices, its SMI Status history;
- (f) where it is a Smart Meter which has been installed, the related MPAN or MPRN and the Communications Hub Function with which that Smart Meter is associated; ~~and~~
- (g) where it is a Device (other than a Smart Meter or a Communications Hub Function), the Smart Meter or Gas Proxy Function with which that Device is associated-; and
- (h) for Devices other than CAD, its GBCS version.

SEC Section H5 - Smart Metering Inventory and Enrolment Services

H3.22 to H3.28 – potential changes incorporating demand management (or section X)

SEC Section H8 - Service Management, Self-Service Interface and Service Desk

H8.15 to H8.18 - no change

SEC Appendix E changes

This Appendix has not been designated at the time of drafting. The below changes to Appendix E indicate areas of change.

SECMP0003 - Deficiencies in the Service Request for setting Maximum Demand Configurable Time

Service Reference	Service Reference Variant	Description	Eligible Users	Target Response Time	Non-Device Services	Notes
4.12	4.12.3	Read Maximum Demand Registers (import only)	Import Supplier, Electricity Distributor	24 hours		
4.12	4.12.4	Read Maximum Demand Configurable Time Period	Import Supplier, Electricity Distributor	24 hours		
6.26	6.26	Set Maximum Demand Configurable Time Period including days and dates	Electricity Distributor	24 hours		

SMETS changes

Make the following additions (shown by underlining) and deletion (shown by strikethrough of the capital A) to section 5.7.4.26:

5.7.4.26 Maximum Demand Configurable Time Period

A set of days of the week, a start date, an end date and a~~A~~ single time period of up to 24 hours comprising a number of half-hour periods (commencing at the start of minutes 00 and 30 in each hour) during which, where the day is one of the specified days of the week and the date is between the specified start and end date inclusive, recording to the *Maximum Demand (Configurable Time) Active Power Import Value*(5.7.5.20) is active.

CHTS changes

None

GBCS changes – to add the new Use Cases

Add the rows in each of the tabs in the embedded document 'Table 20 additions for SECMP0003', to the corresponding tab of GBCS:



GBCS Table 20
additions for SECMP

This adds the new Use Cases and corresponding DLMS COSEM Message Templates. The additions are as per the following embedded documents

Resulting Use Cases

[DN: Insert new Use Cases]

Resulting DLMS COSEM Message Templates:

[DN: tbc]

GBCS changes – to remove the replaced Use Cases

To remove references to the replaced Use Cases:

- in the SMETS required objects tab of GBCS Table 20, on rows 74, 502, 504, 505, 507, 508, 510, 511, 513, 728, 730, 740, 746, 748, 750, 761, 768, 770, 780 and 1825 do the following:
 - Clear the row
 - Set the cell in column D to 'This row left blank'
- in the Use Case reference tab, on row 51 and 94:
 - Set column A to 'This row is not used';
 - Clear all other cells in each row EXCEPT for columns D and G (which contain the Message Codes used by the old Use Cases. Note: leaving the Message Codes is to help ensure that they are not accidentally re-used in later GBCS versions, since such accidental re-use would cause DCC and Device issues)

DCC User Interface Specification (version 0.8.2.1 published by the DCC on 29 March 2016)

This Specification has not been designated at the time of drafting. The below changes to the DCC User Interface Specification indicate areas of change.

They will be subject to further refinement and possible change during the detailed design and implementation stages. The DCC User Interface Specification will be updated by the DCC following the detailed design and implementation stages.

[DN – new Service Requests: tbc]

[DN - SMI Management: tbc]

DCC User Interface Specification XML Schema

This document will be updated by the DCC following the detailed design and implementation stages.

MMC

This document will be updated by the DCC following the detailed design and implementation stages.

Self-Service Interface Specification (version published by the DCC in November 2015)

This Specification has not been designated at the time of drafting. The below changes to the Self Service Interface Specification indicate areas of change.

[DN – tbc]

Self-Service Interface Reporting Specification (version published by the DCC in August 2014)

This Specification has not been designated at the time of drafting. The below changes to the Self Service Interface Specification indicate areas of change.

[DN – tbc]