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# MP124 'Consequential changes to DUIS and MMC'

## Modification Report

Version 1.0

19 June 2020

Corporate member of  
Plain English Campaign  
Committed to clearer  
communication

592



Managed by



## About this document

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This document is a Modification Report. It currently sets out the background, issue, solution, impacts, costs, implementation approach and progression timetable for this modification, along with any relevant discussions, views and conclusions.

## Contents

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1. Summary.....	3
2. Issue.....	4
3. Solution .....	6
4. Impacts .....	7
5. Costs .....	8
6. Implementation approach .....	9
7. Assessment of the proposal .....	10
Appendix 1: Progression timetable .....	11
Appendix 2: Glossary .....	12

This document also has one annex:

- **Annex A** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.

## Contact

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If you have any questions on this modification, please contact:

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## 1. Summary

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This proposal has been raised by Gary Bailey from the Data Communications Company (DCC).

This modification consists of consequential changes arising from two modifications already approved for the November 2020 SEC Release. These parts of the legal text were not available when the modifications were approved. This is because the detailed design of the solutions were finalised following approval of the change.

When [SECMP0062 'Northbound Application Traffic Management - Alert Storm Protection'](#) is implemented, a consequential change is required in SEC Appendix AD 'DCC User Interface Specification' (DUIS) to ensure that the SEC accurately reflects the solution from SECMP0062. In particular, two entries are required for Table 4 in Section 1.4.11.2 'SMETS1ResponseMessage Format' to include two data items.

When [MP093 'Implementing IRP511 and CRP535 to support GBCS v3.2 devices'](#) is implemented, a consequential change is required to the DUIS and to SEC Appendix AF 'Message Mapping Catalogue' (MMC). This is to ensure that the new use case and message code is provided in DUIS and to include the description and specific header data items in the MMC.

The costs of this proposal are limited to Smart Energy Code Administrator and Secretariat (SECAS) time and effort to implement the changes. It will have no impacts on SEC Parties due to only adding clarifications from previously approved Modification Proposals and is targeted for the November 2020 SEC Release.

## 2. Issue

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### What are the current arrangements?

[SECMP0062 'Northbound Application Traffic Management - Alert Storm Protection'](#) looks at providing protection to the DCC Systems against Alert Storms and its solution will be implemented in two parts. Part 1 was implemented as part of the June 2020 SEC Release and Part 2 will be implemented as part of the November 2020 SEC Release. In Part 2, changes to the DUIS will be required.

[MP093 'Implementing IRP511 and CRP535 to support GBCS v3.2 devices'](#) followed on from an uplift of the Great Britain Companion Specification (GBCS) as part of the November 2019 SEC Release. As part of this modification, consequential changes will be made to the DUIS and the MMC schemas which were left out of the original designation to reduce the impact on testing for the Smart Metering Equipment Technical Specifications (SMETS) 1 Initial Operating Capacity (IOC).

### What is the issue?

#### SECMP0062

In the changes that have been approved under SECMP0062, there currently aren't any amendments to a table in Section 1.4.11.2 'SMETS1ResponseMessageFormat'. This is required so that the SEC is aligned to the technical elements of the solution. As part of the solution, entries need to be added to this table, as they have been with their SMETS2 counterparts in order to register the following data items:

- ThrottledAlertSequenceId
- ThrottledAlertCount

#### MP093

In addition to the scheduled changes to the DUIS and MMC schema in November 2020, additional changes are required to both the DUIS and the MMC. The following needs to be added/amended:

- Updating references from "GBCS v3.2" to "GBCS v3.2 or later" with the addition of GBCS 4.0 scheduled
- Adding the GBCS3.2 GBCS use case and message code information to Table 3.8.108.1
- Updating descriptions for data items and response codes in DUIS to maintain consistency with the other technical specifications
- In the MMC, the table in Section 5.101.2.2.4 "DeviceSecurityDetails" data item needs amending to change the length from "16 bytes string" to "32 bytes string".
- Updating a description for a data item in the MMC to maintain consistency with the other technical specifications
- Removing a repeated word in a data item used in the GBCS v1.0 and v3.2 tables in the MMC

### What is the impact this is having?

If SECMP0062 Part 2 is implemented in the November 2020 SEC Release as currently drafted, it will only cover SMETS2 and not both SMETS1 and SMETS2. Without the above entries, it will prevent SMETS1 Alerts being given indicators that Alert throttling is in effect and the number of Alerts that have been consolidated by the solution's mechanism to the User.

If MP093 is implemented in the November 2020 SEC Release as drafted, it will only update the schemas and the previously mentioned entries in the DUIS and MMC won't align. Without the above entries, it will create confusion for Users and would require additional changes to be made to the affected technical specifications.

### 3. Solution

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#### Proposed Solution

The Proposed Solution is to make a consequential change to the versions of DUIS and the MMC being implemented in the November 2020 SEC Release. The changes are for each Modification Proposal below:

#### SECMP0062

Including two data item entries into the DUIS table 1.4.11.2 so that both SMETS1 and SMETS2 Alerts will be managed in the same way and inform Users if the Alerts have been consolidated through SECMP0062's solution. This is so that SMETS1 Alerts can indicated to a User that they have been managed by SECMP0062's solution mechanism and to ensure that both SMETS1 and SMETS2 Alerts are managed correctly and in the same way.

#### MP093

Including the relevant DUIS description changes, adding the use case and message code information to DUIS table 3.8.108.1 and making clarifications to the MMC to ensure terms used are consistent with others used in other technical specification documents. This is so that the schema changes that are planned for the November 2020 SEC Release will align to the text found within the DUIS and the MMC.

This solution is not creating any material changes and is only ensuring that correct DUIS and MMC changes are in place for the SECMP0062 Part 2 and MP093 solutions to deliver the intended outcomes that they were approved for.

The DUIS and MMC changes required to make this change can be found in Annex A.

## 4. Impacts

This section summarises the impacts that would arise from the implementation of this modification.

### SEC Parties

SEC Party Categories impacted			
	Large Suppliers		Small Suppliers
	Electricity Network Operators		Gas Network Operators
	Other SEC Parties		DCC

No SEC Parties will be impacted by the proposal, as it will only deliver clarifications to the SECMP0062 and MP093 legal text.

### DCC System

There are no impacts to the DCC Systems.

### SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Appendix AD 'DCC User Interface Specification'
- Appendix AF 'Message Mapping Catalogue'

The changes to the SEC required to deliver the proposed solution can be found in Annex A.

### Consumers

There are no impacts to consumers.

### Other industry Codes

There are no impacts on other industry Codes.

### Greenhouse gas emissions

There are no impacts on greenhouse gas emissions.

## 5. Costs

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### DCC costs

There are no DCC costs associated with this proposal.

### SECAS costs

The SECAS costs to implement this modification is two days of effort amounting to approximately £1,200. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.

### SEC Party costs

There will be no cost to SEC Parties.



## 6. Implementation approach

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### Approved implementation approach

The Panel has agreed an implementation date of:

- **5 November 2020** (November 2020 SEC Release) if a decision to approve is received on or before 22 October 2020.

The Proposed Solution needs to be implemented at the same time as the Proposed Solutions for MP093 and SECMP0062 Part 2 in the November 2020 SEC Release. This way, the two solutions will be aligned and the full set of DUIS and MMC changes will be available after the November 2020 SEC Release as originally intended under SECMP0062 and MP093.

## 7. Assessment of the proposal

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### Observations on the issue

The Change Sub Committee (CSC) agreed that the Draft Proposal should be converted to a Modification Proposal and issued straight for Modification Report Consultation.

The Technical Architecture and Business Architecture Sub Committee (TABASC) agreed that the Draft Proposal should be progressed. This was due to acknowledging the changes in this proposal are required to ensure the SEC and the solutions of Modification Proposals soon to be implemented will be aligned for the November 2020 SEC Release. The TABASC enquired into why a Draft Proposal was required to implement these changes to the previously accepted Modification Proposal. SECAS responded that this was to ensure transparency into any amendments to the accepted legal text and so that the industry had visibility of any such changes.

### Solution development

#### Addition of MP093 changes

Originally, this proposal was tasked with implementing changes for only SECMP0062 to fix the SMETS1 table which required two additional data items to reflect the solution in the SEC. After discussions with the Proposer, they were happy to include the non-material changes arising from MP093 which required amendments to the SEC to ensure a match between the technical solution and what would be recorded in the technical specifications. Given the alternative would have been raising another proposal to deal with the same issue, it was agreed combining the changes would be a more efficient means of addressing these necessary clarifications for the November 2020 SEC Release.

### Support for Change

#### TABASC

The TABASC noted its support for addressing the required clarifications of SECMP0062 and MP093. As mentioned above, it approved of the change but expressed disappointment that a proposal was required to make clarifications that should have been included in the original proposals.

### Views against the General SEC Objectives

#### Proposer's views

The Proposer believes the proposal better facilitates General SEC Objective (g)<sup>1</sup>. This is due to aligning the SEC to the technical requirements of solutions and ensuring the two are identical.

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<sup>1</sup> (g) To facilitate the efficient and transparent administration and implementation of the SEC.

## Appendix 1: Progression timetable

This Draft Proposal was presented to the CSC on 26 May 2020. From there, it will be presented to the Panel in June 2020 for conversion to a Modification Proposal.

Since this Draft Proposal only covers consequential changes designed to ensure the delivery of earlier approved Modification Proposals, SECAS believe these are grounds for this proposal to be issued for Modification Report Consultation after approval from the Panel. Following the Modification Report Consultation, the proposal will be presented to the Change Board in July for approval under Self-Governance to implement the changes in the November 2020 SEC Release.

Timetable	
Event/Action	Date
Draft Proposal raised	4 May 2020
Presented to CSC for comment and recommendations	26 May 2020
Presented to Panel for conversion to Modification Proposal	19 June 2020
Issue Modification Report Consultation	22 June – 10 July 2020
Present to Change Board for approval	22 July 2020

## Appendix 2: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	Full term
CSC	Change Sub Committee
DCC	Data Communications Company
DUIS	DCC User Interface Specification
GBCS	Great Britain Companion Specification
IOC	Initial Operating Capacity
MMC	Message Mapping Catalogue
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMETS	Smart Metering Equipment Technical Specification
TABASC	Technical Architecture and Business Architecture Sub Committee

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# MP124 ‘Consequential changes to DUIS and MMC’

## Annex A

## Legal text – version 1.0

### About this document

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

## Appendix AD ‘DCC User Interface Specification’

These changes have been redlined against Appendix AD version 3.1.

### Amend Table 1.4.11.2 as follows:

Data Item	Description	Type	Mandatory	Valid Values
ServiceReference	Identifier that signals the particular Service Reference to DCC (and is driven from the User’s selection of Request)	sr:ServiceReference (See 3.10.1.5)	Yes	As per the Request
ServiceReferenceVariant	Identifier that signals the particular Service Reference Variant to DCC (and is driven from the User’s selection of Request)	sr:ServiceReferenceVariant (See 3.10.1.6)	Yes	As per the Request
DSPScheduleID	Schedule ID generated by the DCC Systems Valid Set: $\geq 0$ and $\leq 1000000000000$	sr:scheduleID (Restriction of xs:nonNegativeInteger)	Present for DCC Scheduled requests	See description
<u>ThrottledAlertSequenceId</u>	<u>An optional data item that identifies that this Alert Code is currently subject to throttling by the DCC Data Systems.</u> <u>If this attribute is included in the Alert then it indicates the sequence number for this Alert message since Alert throttling began.</u>	<u>xs:unsignedInt</u>	<u>No</u>	<u>As per Table 43</u>
<u>ThrottledAlertCount</u>	<u>An optional data item used to indicate the number of Alerts that have been consolidated by DCC Data Systems since the last Alert was forwarded to the Service User.</u>	<u>xs:unsignedInt</u>	<u>No</u>	<u>As per Table 43</u>
SMETS1SignedResponse	Message created and signed by the S1SP. It contains a SMETS1 Response or a SMETS1 Alert	sr:SMETS1SignedResponse (see clause 1.4.11.3)	Yes	See description

**Amend Table 3.8.108.1 as follows:**

<b>Service Request Name</b>	ReadDeviceLog	
<b>Service Reference</b>	8.9	
<b>Service Reference Variant</b>	8.9	
<b>Eligible Users</b>	Import Supplier (IS) Gas Supplier (GS) Other User (OU)	
<b>Security Classification</b>	Non Critical	
<b>BusinessTargetID</b> <b>1. Device Type applicable to this request</b>	Electricity Smart Meter (ESME) Gas Smart Meter (GSME) Gas Proxy Function (GPF) Communications Hub Function (CHF) HAN Connected Auxiliary Load Control Switch (HCALCS) PrePayment Interface Device (PPMID)	
<b>Can be future dated?</b>	DSP	
<b>On Demand?</b>	Yes	
<b>Capable of being DCC Scheduled?</b>	No	
<b>Command Variants applicable to this Request (Only one populated)</b>	1 – Send (Non-Critical) 2 – Return for local delivery (Non-Critical) 3 – Send and Return for local delivery (Non-Critical)	
<b>Common Header Data Items</b>	See clause 3.4.1.1	
<b>Data Items Specific to this Service Request</b>	See Specific Data Items Below	
<b>Possible responses from this Service Request</b>	These are the possible responses applicable to this Service Request. Please see clause 3.5 for more details on processing patterns 1. Acknowledgement 2. Service Response (from Device) – GBCSPayload 3. Response to a Command for Local Delivery Request – LocalCommand Format Also see Response Section below for details specific to this request	
<b>Response Codes possible from this Service Request</b>	See clause 3.5.10 for Common Response Codes	
<b>GBCS Cross Reference</b>	Communications Hub Function	All Other Devices
<b>GBCS v1.0 MessageCode</b>	0x0004	0x0013
<b>GBCS v1.0 Use Case</b>	CCS05/CCS04	CS07
<b>GBCS v2.0 MessageCode</b>	0x010F	0x0013
<b>GBCS v2.0 Use Case</b>	CCS06	CS07
<b><u>GBCS v3.2 or later MessageCode</u></b>	<u>0x010F/0x00FE</u>	<u>0x0013</u>
<b><u>GBCS v3.2 or later Use Case</u></b>	<u>CCS06/ CCS07</u>	<u>CS07</u>
<b>GBCS Commands - Versioning Details</b>		

DCC System creates the following GBCS Commands or Response Codes based on the following combinations,			
Device Type	CHF		
GBCS version that pertains to the Device Model recorded in the SMI for the Business Target Device ID specified in the Service Request	GBCS v1.0	GBCS v2.0	<u>GBCS v3.2 or later</u>
DEFAULT - No specific XML criteria	CCS05/CCS04	CCS06	<u>CCS06</u>
<u>XML Criteria - XML data item ReadSecurityDetails included</u>	<u>E080902</u>	<u>E080902</u>	<u>CCS07</u>

### Amend Section 3.8.108.2 as follows:

Data Item	Description / Values	Type	Mandatory	Default	Units
ExecutionDateTime	<p>A User shall only add this Data Item to the Service Request where they require the Service Request to be executed at a future date and time.</p> <p>The UTC date and time the User requires the command to be executed on the Device</p> <ul style="list-style-type: none"> <li>Date-time in the future that is either &lt;= current date + 30 days or the date = '3000-12-31T00:00:00Z'</li> </ul>	xs:dateTime	No	None	UTC Date-Time
<u>ReadSecurityDetails</u>	<p><u>This parameter is supplied if the User wishes to receive the CHF Device Log and the CHF Historic Device Logcurrent and historic device log available in the CHF.</u></p>	<u>sr:ReadSecurityDetails</u>	<u>No</u>	<u>None</u>	<u>None</u>

### Amend Section 3.8.108.3 as follows:

~~No specific validation is applied for this Request, see See~~ clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Execution Date Time validation ~~and clause 3.10.2 for Execution Date Time validation.~~

<u>Response Code</u>	<u>Response Code Description</u>
<u>E080902</u>	<u>Check that if 'ReadSecurityDetails' is specified in the Service Request then but the Firmware Version recorded in the SMI for the Device mustis not-be at GBCS version 3.2 or later.</u>
<u>E080903</u>	<u>Check that if 'ReadSecurityDetails' is specified in the Service Request then but the Device Type mustis not-be a CHF</u>



## Appendix AF 'Message Mapping Catalogue'

These changes have been redlined against Appendix AF version 3.1.

### Amend Section 5.101.2.1 as follows:

Data Item	CHF Response	Non-CHF Response
GBCSHexadecimalMessageCode	0x0004	0x0013
GBCS Use Case (for reference - not in header)	CCS05/CCS04	CS07
SupplementaryRemotePartyID	ra:EUI  (see clause 2.4.1)	ra:EUI (see clause 2.4.1) Where originator is Unknown Remote Party or the target Device Type is HCALCS
SupplementaryRemotePartyCounter	xs:nonNegativeInteger	xs:nonNegativeInteger Where originator is Unknown Remote or the target Device Type is HCALCS <del>Party</del>

Table 1 : Read Device Log MMC Output Format Header data items – GBCS v1.0

<u>Data Item</u>	<u>CHF Response</u>	<u>Non-CHF Response</u>
<u>GBCSHexadecimalMessageCode</u>	<u>0x010F, 0x00FE</u>	<u>0x0013</u>
<u>GBCS Use Case Number</u> (for information only – not in header)	<u>CCS06, CCS07</u>	<u>CS07</u>
<u>SupplementaryRemotePartyID</u>	<u>ra:EUI</u> (see clause 2.4.1)	<u>ra:EUI</u> (see clause 2.4.1) <u>Where originator is Unknown Remote Party or the target Device Type is HCALCS</u>
<u>SupplementaryRemotePartyCounter</u>	<u>xs:nonNegativeInteger</u>	<u>xs:nonNegativeInteger</u> <u>Where originator is Unknown Remote or the target Device Type is HCALCS <del>Party</del></u>

Table 2323-1 – Read Device Log MMC Output Format Header Data Items – GBCS v3.2

### Amend Section 5.101.2.2 as follows:

Data Item	Description / Valid Set	Type	Units	Sensitivity
DeviceLogEntries	This is only present if the response code indicates a successful response.  The element returns a list of DeviceLogEntry items from the Device, which may be empty	ra:DeviceLog  List of DeviceLogEntry (maxOccurs = unbounded), as set out in Section 5.101.2.2.1 of this document	N/A	Unencrypted

CHFDeviceLog	If reading the comms hub Device log, this group is returned rather than DeviceLogEntries, which shall include all currently authorised Devices on the ZIGBEE PAN.	ra:CHFDeviceLogType  List of CHFDeviceLogEntry (maxOccurs = 16), as set out in Section 5.101.2.2.2 of this document	N/A	Unencrypted
<u>CHFConnectedDeviceLog</u>	<u>If reading the CHF's current and historic device log, this group is returned. This holds the current and historic devices that are/were in the ZIGBEE PAN. If reading the CHF Device Log and CHF Historic Device Log, this group is returned. These Logs hold details for Devices that can establish Communications Links, or were previously able to (where all terms have their CHTS meaning).</u>	<u>ra:CHFConnectedDeviceLogType</u>	<u>N/A</u>	<u>Non-Sensitive</u>

Table 2-233: Read Device Log MMC Output Format Body data items

## Add Section 5.101.2.3 as follows:

### 5.101.2.2.3 CHFConnectedDeviceLogType Data Items

GBCS3.2 or later

<u>Data Item</u>	<u>Description / Valid Set</u>	<u>Type</u>	<u>Units</u>	<u>Sensitivity</u>
<u>CHFCurrentConnectedDeviceLogEntry</u>	<u>List of Devices and their Security Details that are currently in the CHF Device Log.</u>	<u>List of CHFConnectedDeviceLogEntry (maxOccurs = 16), as set out in Section 5.101.2.2.4 of this document</u>	<u>N/A</u>	<u>Non-Sensitive</u>
<u>CHFHistoricConnectedDeviceLogEntry</u>	<u>List of Devices and their Security Details that are in the CHF Historic Device Log.</u>	<u>List of CHFConnectedDeviceLogEntry (maxOccurs = 16), as set out in Section 5.101.2.2.4 of this document</u>	<u>N/A</u>	<u>Non-Sensitive</u>

Table 3235-1 - CHFConnectedDeviceLogType Data Items

## Add Section 5.101.2.4 as follows:

### 5.101.2.2.4 CHFConnectedDeviceLogEntry Data Items

GBCS3.2 or later

<u>Data Item</u>	<u>Description / Valid Set</u>	<u>Type</u>	<u>Units</u>	<u>Sensitivity</u>
<u>DeviceID</u>	<u>The device identifier.</u>	<u>ra:EUI</u>	<u>N/A</u>	<u>Non-Sensitive</u>
<u>DeviceSecurityDetails</u>	<u>Where a TC Link Key between the CHF and the Device with this Device ID had been established previously, this field shall contain a Hash of that TC Link Key. Otherwise this field shall contain an empty string.</u>	<u>Restriction of xs:string (maxLength = 32)</u>	<u>N/A</u>	<u>Non-Sensitive</u>

Table 4235-2- CHFConnectedDeviceLogEntry Data Items