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MP093

'Implementing IRP511 and CRP535 to support GBCS v3.2 devices'

Modification Report
Version 0.3





About this document

This document is a draft 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. This document will be updated as this modification progresses.

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This document also has five annexes:

- Annex A contains the business requirements for the solution.
- Annex B contains the redlined changes to the SEC required to deliver the Proposed Solution.
- Annex C contains the DCC Impact Assessment response
- Annex D contains the Refinement Consultation responses

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1. Summary

This proposal has been raised by Chun Chen from the Data Communications Company (DCC) on 28 October 2019.

In July 2019, the Department for Business, Energy and Industrial Strategy (BEIS) designated an uplift of Smart Energy Code (SEC) Schedule 8 'Great Britain Companion Specification' (GBCS) to version 3.2 as part of the November 2019 SEC Release.

The solution proposes that in order to fully deliver the functionality of two resolution proposals included in GBCS v3.2 (IRP511 'Set Clock Alerts Refs in Alert Tables Incorrect' and CRP535 'Restoring Removed Devices from the HAN'), consequential changes are now required to Appendix AD 'DCC User Interface Specification' (DUIS) and Appendix AF 'Message Mapping Catalogue' (MMC) schemas.

The amendments to the schemas had been intentionally left out of the November 2019 SEC Release in order to reduce any potential impact on testing for the Smart Metering Equipment Technical Specifications 1 (SMETS1) Initial Operating Capacity (IOC).

This Modification will enable SEC Parties to use the full functionality of the resolution proposals that are already in GBCS. There will be impacts on Data Management and Request Management as there will need to be updates to support the new version of DUIS and GBCS. The estimated cost to deliver this modification in the November 2020 Release is £260,245, if approved this change will be included in the November 2020 SEC Release.





2. Issue

Agreed approach to implementing two BEIS resolution proposals

In May 2019 BEIS issued a consultation <u>"SMIP_CR_085 – Uplift of GB Companion Specification (GBCS) and SMETS2 to support Emergency Credit changes</u>". The consultation set out a number of amendments that were due to be designated for implementation in November 2019.

Part of the changes consulted upon was an uplift of GBCS to v3.2 and subsequent changes to the Technical Specification Applicability Tables (TSAT) to mandate an Applicability Period Start Date for GBCS v3.2 of 7 November 2019 (November 2019 SEC Release).

The DCC's response to the consultation set out that two resolution proposals (RPs) would not be fully delivered in November 2019:

- Issue Resolution Proposal (IRP) 511 'Set Clock Alerts Refs in Alert Tables Incorrect'
 which introduces the Set Clock Alert 0x81C6 to the Event log to allow Users to identify the
 need for Home Area Network (HAN) Device fault correction; and
- Change Resolution Proposal (CRP) 535 'Restoring Removed Devices from the HAN'
 which allows Users to use Service Request SR8.9 'Read Device Log' to read the
 Communications Hub Function (CHF) device log. The log contains the active and historical
 Device which allows Users to know which historical Device has been removed from the HAN
 so that it could be restored if required.

Both RPs required amendments to the schemas for Appendix AD 'DCC User Interface Specification' (DUIS) and Appendix AF 'Message Mapping Catalogue' (MMC). It had been previously agreed between the DCC and BEIS (in December 2018) that changes to these schemas would not happen in November 2019 in order to avoid any complexities with the SMETS1 IOC. Therefore, the full functionality of the two resolution proposals would be delivered in November 2020.

As such the scope of the two RPs in the November 2019 SEC Release was as follows:

- IRP511 DCC Systems will be amended to support the new Alert code in the response. However, capability for Users to configure the Alert and Parse & Correlate (P&C) to translate this Alert into meaningful English is not in the scope for delivery in November 2019.
- CRP 535 Implementing the Communications Hub (CH) removal log is in scope. However, capability for Customers and Users to retrieve the removal log is not in scope for delivery in November 2019.

On 4 July 2019 BEIS designated GBCS v3.2 for implementation in the November 2019 SEC Release. Therefore, to enable the planned changes, this Modification Proposal has been raised to introduce the remaining functionality into DUIS and MMC.

What is the impact this is having?

Without the required changes to Data Service Provider (DSP) and P&C needed for IRP511, Users will be unable to configure the Alert, and the response returned by P&C will not be meaningfully translated into English. Equally, without the changes relating to CRP535 the Historic Device Log on the CHF cannot be read for diagnostic purposes during Installation and Configuration (I&C).

The DSP and the P&C part of the IRP511 and CRP535 will allow the full use of functionality in the GBCS3.2 and SMETS2 v4.2 devices.





3. Solution

Proposed Solution

In order to implement the functionality for IRP511 and CRP535 changes are required to the DSP and P&C to provide capability for Users to configure this Alert and use their full functionality. To achieve this, the DUIS and MMC Schemas must be amended.

IRP511

IRP 511 introduces the Set Clock Alert 0x81C6 to the Event log to allow Users to identify the need for HAN Device fault correction. DUIS changes are required to add support for 0x81C6 in the following Service Request Variants (SRVs):

- 6.22 Configure Alert Behaviour
- 6.2.10 Read Device Configuration (Event and Alert Behaviours)

If an attempt is made to configure 0x81C6 using SRV 6.22 on a Device running on a version of GBCS prior to v3.2, the Service Request will be rejected using the existing error code E062203. No changes are required to SRVs 6.11 Synchronise Clock, 6.13 Read Event Or Security Log.

CRP535

This CRP is primarily a change to CHF processing for adding and removing devices to/from the CHF device log. However, the CHF processing change involves creation of a history of previous device log entries and a new GBCS Use Case CCS07 is introduced to allow the current and historic device log entries to be read by the User.

DUIS changes will be modified to add support for the new Use Case CCS07 in the following SRV:

• 8.9 Read Device Log

If the SR contains the optional input parameter 'ReadHistoric' and is targeted at a CH running on a version of GBCS v3.2 or later then the new GBCS Use Case CCS07 will be used. If the SR does not include the optional input parameter 'ReadHistoric', then the existing GBCS Use Case CCS06 will be used.

If the SR contains the input parameter 'ReadHistoric' and the target device does not support CCS07 yet (i.e. the device runs on an earlier GBCS version than v3.2), then the Service Request will be rejected using a new error code.

The SRVs 8.11 (Add) and 8.11 (Remove) are not expected to undergo any changes due to CRP535.

Parse & Correlate

Changes to the P&C application will include:

- Add new GBCS Use Case 'CCS07 Read CHF Device Logs
- Update the existing GBCS Use Cases related with SR6.22 and SR6.2.10
- New DUIS / MMC schema deployment
- Add test cases to exercise the changes
- Documentation updates and release tasks





The business requirements for the solution 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 | | | |

MP093 will enable SEC Parties to use the full functionality of the resolution proposals that are already in GBCS.

DCC System

Changes will be required to DUIS, MMC, DCC User Gateway Interface Design Specification (DUGIDS) and GBCS. The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Impact Assessment response in Annex C.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Schedule 8 'GBCS'
- Appendix AD 'DUIS'
- Appendix AF 'MMC'

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

Consumers

This modification will not have an impact on consumers.

Other industry Codes

There are no identified impacts on other industry Codes.

Greenhouse gas emissions

There are no identified impacts on greenhouse gas emissions.





5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification is £260,245. The breakdown of these costs are as follows:

| Breakdown of DCC implementation costs | | | | |
|---|---------|--|--|--|
| Activity | Cost | | | |
| Design, Build and Pre-Integration Testing (PIT) | £56,376 | | | |
| Systems Integration Testing (SIT) | £60,031 | | | |
| User Integration Testing (UIT) | £43,905 | | | |
| Implement to Live | £19,653 | | | |
| Application Support | £15,515 | | | |

SECAS costs

The estimated SECAS implementation 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

A SEC Party stated in the Refinement Consultation that there will be costs involved in analysis and amendments to the processing of Alerts and the process for resolution of SR 8.9. Whilst additionally noting the changes will bring cost benefit to allow them to identify HAN Device faults earlier and ensure incorrect Devices are identified and removed from the HAN





6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **5 November 2020** (November 2020 SEC Release) if a decision to approve is received on or before 5 May 2020
- **24 June 2021** (June 2021 SEC Release) if a decision to approve is received after 5 May 2020 but on or before 24 December 2020.

This date aligns with the next major update to DUIS and therefore is recommended as the most efficient date to implement the changes. It also aligns with previous discussions between BEIS and the DCC and the DCC's estimated lead time of 6 months to implement the changes.





7. Assessment of the proposal

Observations on the issue

The Change Sub Committee agreed there was a clear rationale for the change. They also noted that as part of the Modification progression consideration needed to be given to what if any impacts there would be on Parties as part of the update and when it is scheduled.

Solution development

The DCC noted that the change would result in an uplift to the DSP Operational service charge due to the enhanced functionality. DCC also noted that they reserve the right to raise a CR for the provision of additional infrastructure should the DCC Data System experience performance problems that are the direct result of such changes. The new functionality could result in an increased level of support to address additional Alerts and the functional changes.

During the Refinement Consultation the DCC noted that the term 'ReadHistoric' could be unclear and proposed changing it to 'ReadSecurityDetails'. SECAS updated the legal text with these changes.

Support for Change

A SEC Party that responded to the Refinement Consultation noted that changes will bring cost benefit to allow them to identify HAN Device faults earlier and ensure incorrect Devices are identified and removed from the HAN.

Views against the General SEC Objectives

Proposer's views

Objective (a)1

The Proposer believes that MP093 will better facilitate SEC Objective (a) by ensuring DCC Users can configure the functionality already implemented.

¹ Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain.





Appendix 1: Progression timetable

This Modification will be presented to the Panel ex-committee on 17 March 2020. If approved by the Panel, there will then be a Modification Report Consultation. The intent is to request approval of the modification at the Change Board on 22 April 2020.

| Progression Timetable | | |
|--|---------------------------|--|
| Action | Date | |
| Draft Proposal raised | 28 Oct 2019 | |
| Presented to Change Sub-Committee | 28 Oct 2019 | |
| Preliminary Assessment | 18 Nov 2019 – 21 Jan 2020 | |
| Refinement Consultation | 17 Feb - 6 Mar 2020 | |
| Request Impact Assessment approval | 26 Feb 2020 | |
| Modification Report presented to Panel | 13 Mar 2020 | |
| Modification Report Consultation | 20 Mar 2020 - 10 Apr 2020 | |
| Change Board vote | 22 Apr 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 | | | |
| BEIS | Department for Business, Energy and Industrial Strategy | | | |
| СН | Communications Hub | | | |
| CHF | Communications Hub Function | | | |
| CRP | Change Request Proposal | | | |
| DCC | Data Communications Company | | | |
| DSP | Data Service Provider | | | |
| DUGIDS | DCC User Gateway Interface Design Specification | | | |
| DUIS | DCC User Interface Specifications | | | |
| GBCS | Great Britain Companion Specification | | | |
| HAN | Home Area Network | | | |
| I&C | Installation and Configuration | | | |
| IOC | Initial Operating Capability | | | |
| IRP | Issue Resolution Proposal | | | |
| MMC | Message Mapping Catalogue | | | |
| P&C | Parse and Correlate | | | |
| SMETS Smart Metering Equipment Technical Specification | | | | |
| TSAT Technical Specification Applicability Tables | | | | |
| SEC | Smart Energy Code | | | |
| SECAS | Smart Energy Code Administrator and Secretariat | | | |
| SRV | Security Request Variant | | | |





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MP093 'Implementing IRP511 and CRP535 to support GBCS v3.2 devices' Annex A Business requirements – version 0.1

About this document

This document contains the business requirements for this Modification Proposal. It provides detailed information on the business requirements for the Proposed Solution agreed by the Proposer with input from the Data Communications Company (DCC) and Sub-Committees. It also provides the considerations and assumptions for each business requirement with respect to this Modification Proposal.





1. Business requirements

This section contains the functional business requirements needed for the Issue Resolution Proposal (IRP) and Change Resolution Proposal (CRP) contained within MP093 that the DCC have indicated could be DCC System impacting. Based on these requirements a full solution will be developed.

| | Business Requirements | | | | | |
|-----|--|--|--|--|--|--|
| Ref | Ref Requirement | | | | | |
| 1 | DCC system changes for IRP 511 'Set Clock Alerts Refs in Alert Tables Incorrect' | | | | | |
| 2 | 2 DCC system changes for CRP 535 'Restoring Removed Devices from the HAN' | | | | | |

Changes to the DCC User Interface Specification' (DUIS) and Message Mapping Catalogue (MMC) schemas are required in order to implement IRP511 and CRP535 as described below.

1.1 Requirement 1: DCC system changes for IRP 511 'Set Clock Alerts Refs in Alert Tables Incorrect'

IRP 511 introduces the Set Clock Alert 0x81C6 to the Event log to allow Users to identify the need for Home Area Network (HAN) Device fault correction.

The DCC systems are required to

- support the new alert code in the response. (Parse & Correlate)
- Support the configuration required for 0x81C6 (DSP)

1.2 Requirement 2: DCC system changes for CRP 535 'Restoring Removed Devices from the HAN'

CRP 535 allows Users to use Service Request SR8.9 'Read Device Log' to read the Communications Hub Function (CHF) device log. The log contains the active and historical Device which allows Users to know which historical Device has been removed from the HAN so that it could be restored if required.



DUIS Changes Based on DUIS 3.1

Changes to Service Request 8.9

Section 3.8.108.1 Service Description

| Service Request Name | ReadDeviceLog | | |
|---|--|---------------------------|--|
| Service Reference | 8.9 | | |
| Service Reference Variant | 8.9 | | |
| Eligible Users | Import Supplier (IS) Gas Supplier (GS) Other User (OU) | | |
| Security Classification | Non Critical | | |
| BusinessTargetID 1. Device Type applicable to this request | 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) | | |
| Can be future dated? | DSP | , | |
| On Demand? | Yes | | |
| Capable of being DCC Scheduled? | No | | |
| Command Variants applicable to this Request (Only one populated) Common Header Data Items | 1 – Send (Non-Critical) 2 – Return for local delivery (Non-Critical) 3 – Send and Return for local delivery (Non-Critical) See clause 3.4.1.1 | | |
| Data Items Specific to this Service Request | See Specific Data Items Below | | |
| Possible responses from this Service Request | 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 | | |
| Response Codes possible from this Service Request | See clause 3.5.10 for Common Respor | | |
| GBCS Cross Reference | Communications Hub Function | All Other Devices | |
| GBCS v1.0 MessageCode | 0x0004 | 0x0013 | |
| GBCS v1.0 Use Case | CCS05/CCS04 | CS07 | |
| GBCS v2.0 MessageCode | 0x010F | 0x0013 | |
| GBCS v2.0 Use Case | CCS06 CS07 | | |
| GBCS Commands - Versioning DCC System creates the followin combinations, | g Details ng GBCS Commands or Response Code | es based on the following | |

| 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 | GBCS v3.2 |
| DEFAULT - No specific XML criteria | CCS05/CCS04 | CCS06 | <u>CCS06</u> |
| XML Criteria - XML data item ReadHistoric ReadSecurityDetails included | E080902 | E080902 | <u>CCS07</u> |
| Device Type | | ESME | |
| GBCS version that pertains to the Device Model recorded in the SMI for the Business Target Device ID specified in the Service Request DEFAULT - No specific XML criteria | GBCS v1.0 | Gl | BCS v2.0 CS07 |
| | | CG) (F | |
| Device Type | | GSME | |
| 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 | G | BCS v2.0 |
| DEFAULT - No specific XML criteria | CS07 | CS07 | |
| Device Type | GPF | | |
| 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 | G | BCS v2.0 |
| DEFAULT - No specific XML criteria | CS07 | | CS07 |
| Device Type | | HCALCS | |
| GBCS version that pertains to the Device Model recorded in the SMI for the Business Target Device ID specified in the Service Request | /II for the Business Target Device ID specified in the Service | | BCS v2.0 |
| DEFAULT - No specific XML criteria | CS07 | | CS07 |
| vice Type PPMID | | | |
| GBCS version that pertains to the Device Model recorded in the SMI for the Business Target Device ID specified in the Service Request | II for the Business Target Device ID specified in the Service | | BCS v2.0 |
| DEFAULT - No specific XML criteria | CS07 | | CS07 |

Section 3.8.108.2 Specific Data Items for this Request

ReadDeviceLog Definition

| T T. | TO 1 11 177 1 | res | | T. 0 I. | TT |
|-----------|----------------------|------|-----------|---------|-------|
| Data Item | Description / Values | Tvpe | Mandatory | Default | Units |

| ExecutionDateTime | 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. The UTC date and time the User requires the command to be executed on the Device • Date-time in the future that is either <= current date + 30 days or the date = '3000-12- 31T00:00:00Z' | xs:dateTime | No | None | UTC Date- Time |
|----------------------------------|--|--|----|------|----------------------|
| ReadSecurityDetails ReadHistoric | This parameter is supplied if the User wishes to receive the current and historic device log available in the CHF. | sr: ReadSecurityDetailsReadHistoric | No | None | None |

Table 1 : ReadDeviceLog (sr:ReadDeviceLog) data items

Adding a new Update Section 3.8.108.3 Specific Validation for this Request

3.8.108.3 Specific Validation for this Request

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

| Response Code | Response Code Description | | |
|---------------|---|--|--|
| E080902 | Check that if 'ReadHistorie' 'ReadSecurityDetails' is specified in the Service Request then the Firmware Version recorded in the SMI for the Device must be at GBCS version 3.2 or later. | | |
| E080903 | <u>Check that if 'ReadHistoric' 'ReadSecurityDetails'</u> is specified in the Service Request then the Device Type must be a CHF | | |

MMC Changes Based on MMC 3.1

Changes to Service Request 8.9

Section 5.101.2.1 Specific Header Data Items

Add a new table for GBCSv3.2 or later

GBCS v3.2 or later:

| Data Item | CHF Response | Non-CHF Response (N/A to SMETS1) |
|---|------------------------------|--|
| <u>GBCSHexadecimalMessageCode</u> | <u>0x010F, 0x00FE</u> | <u>0x0013</u> |
| GBCS Use Case Number (for information only reference – not in header) | CCS06, CCS07 | <u>CS07</u> |
| <u>SupplementaryRemotePartyID</u> | 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 |
| SupplementaryRemotePartyCount er | xs:nonNegativeInteger | xs:nonNegativeInteger Where originator is Unknown Remote or the target Device Type is HCALCS Party |

Table 233-1 – Read Device Log MMC Output Format Header Data Items – GBCS v3.2

Section 5.101.2.2 Specific Body Data Items

Adding a new optional data item

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

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

Adding a new Section 5.101.2.2.3

5.101.2.2.3 CHFConnectedDeviceLogType Data Items

GBCS3.2 or later

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

<u>Table 3-1 - CHFConnectedDeviceLogType Data Items</u>

Adding a new Section 5.101.2.2.4

5.101.2.2.4 CHFConnectedDeviceLogEntry Data Items

GBCS3.2 or later

| <u>Data Item</u> | Description / Valid Set | Type | <u>Units</u> | Sensitivity |
|------------------------|--|--|--------------|--------------------|
| <u>DeviceID</u> | The device identifier. | ra:EUI | <u>N/A</u> | Non- Sensitive |
| DeviceSecurityDet ails | 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. | Restriction of xs:string (maxLengt h = 16) | <u>N/A</u> | Non- Sensitive |

<u>Table 4-2- CHFConnectedDeviceLogEntry Data Items</u>



SEC Modification Proposal, SECMP0093, DCC CR1118

Implementing IRP511 and CRP535 to Support GBCS v3.2 Devices

Full Impact Assessment (FIA)

Version: 0.4

Date: 6th March, 2020

Author: DCC

Classification: DCC PUBLIC



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1 Document Information

1.1 Revision History

| Revision Date | Revision Number | Summary of Changes |
|------------------|--------------------|--|
| 27/02/2019 | 0.1 | Initial compilation from Service Providers |
| 06/03/2020 | 0.4 | Completed DCC reviews |
| | | |

1.2 Associated Documents

This document is associated with the following other documents:

| # | Title and Originator's Reference | Source | Issue |
|---|--|--------|------------|
| 1 | MP093 Business-Requirements | SECAS | 29/11/2019 |
| 2 | DP093-Problem-Statement-v0.1.pdf | SECAS | 29/11/2019 |
| 3 | SECMP0093, Preliminary Impact Assessment | DCC | 21/02/2020 |

Any references are shown in this format, [1].

1.3 Document Information

The Proposer for this Modification is Chun Chen of SmartDCC. The original proposal was submitted on the 28th October 2019.

The Preliminary Impact Assessment was requested of DCC on 21st November 2019, and the response published on the 21st January, 2020.

The Full Impact Assessment was requested on the 26th February 2020.

1.4 **Document Purpose**

The purpose of this DCC Full Impact Assessment (FIA) is to provide the relevant Working Group with the information requested in accordance with SEC Section D6.9 and D6.10.



2 Context and Requirements

In this section, the context of the Modification, and the requirements are stated. These have been provided by SECAS and the Proposer.

2.1 Problem Statement

In May 2019 BEIS issued a consultation "SMIP_CR_085 – Uplift of GBCS and SMETS2 to support Emergency Credit changes". The consultation set out a number of amendments that were due to be designated for implementation in November 2019.

Part of the changes consulted upon was an uplift of the GB Companion Specification (GBCS) to version 3.2 and subsequent changes to the Technical Specification Applicability Tables (TSAT) to mandate an Applicability Period Start Date for GBCS v3.2 of the November 2019 SEC Release.

The DCC's response to the consultation set out that two Resolution Proposals (RPs) would not be fully delivered in November 2019. The following RPs were excluded from the earlier release:

- Issue Resolution Proposal (IRP) 511 'Set Clock Alerts Refs in Alert Tables Incorrect' introduces the Set Clock Alert 0x81C6 to the Event log to allow Users to identify the need for Home Area Network (HAN) Device fault correction.
- Change Resolution Proposal (CRP) 535 'Restoring Removed Devices from the HAN' which allows Users to use Service Request SR8.9 'Read Device Log' to read the Communications Hub Function (CHF) device log. The log contains the active and historical Device which allows Users to know which historical Device has been removed from the HAN so that it could be restored if required.

Both Resolution Proposals (RP) required amendments to the schemas for Appendix AD 'DCC User Interface Specification' (DUIS) and Appendix AF 'Message Mapping Catalogue' (MMC). It was agreed between the DCC and BEIS (in December 2018) that changes to these schemas would not happen in November 2019 to avoid any complexities with the SMETS1 Initial Operating Capacity (IOC). Therefore, the full functionality of the two RPs would be delivered in November 2020.

Note that DCC Change Request (CR) 1047 covers the non-DUIS/transform elements of the GBCS v3.2 changes, including the Central Product List (CPL) with updates necessary to support the new version of GBCS v3.2. The work for CR1047 is being carried out by the Communications Service Providers (CSPs). As such the scope of the two RPs in the release is as follows:

- IRP511: DCC Systems will be amended to support the new Alert code in the response. The capability for Users to configure the Alert and Parse & Correlate to translate this Alert into meaningful English was not in scope for delivery in CR1047.
- CRP535: Communications Hub implementing the removal log is in the scope.
 However, capability for Customers and Users to retrieve the removal log is not in scope for delivery in CR1047.



On 4 July 2019 BEIS and SECAS designated GBCS v3.2 for implementation in the November 2019 SEC Release. Therefore, to enable the planned changes this Modification was raised to introduce the remaining functionality into DUIS and MMC.

2.2 Issue

Without the required changes to DSP and the Parse and Correlate application defined in IRP511, Users will be unable to configure the Alert, and the response returned by Parse and Correlate will not be meaningfully translated into English.

In addition, the changes relating to the Historic Device Log on the CHF defined in CRP535 cannot be read for diagnostic purposes during Installation and Configuration (I&C).

Implementing IRP511 and CRP535 will allow the full use of functionality in the GBCS 3.2 and subsequent GBCS versions, as well as SMETS2 v4.2 and subsequent compliant versions.

2.3 Business Requirements

This section contains the considerations and assumptions for each business requirement. These are excerpts from each of the RPs and the DCC will develop solution(s) to the consequential changes these RPs will have on the DCC Systems. The document text changes are contained within each of the RPs.

| Req. | Requirement | | | | | |
|------|--|--|--|--|--|--|
| 1 | DCC system changes for IRP 511 'Set Clock Alerts Refs in Alert Tables Incorrect' | | | | | |
| 2 | DCC system changes for CRP 535 'Restoring Removed Devices from the HAN' | | | | | |

Table 1: Business Requirements for SECMP0093, CR1118

2.3.1 Requirement 1: IRP511 'Set Clock Alerts Refs in Alert Tables Incorrect'

IRP 511 introduces the Set Clock Alert 0x81C6 to the Event log to allow Users to identify the need for HAN Device fault correction.

The DCC systems are required to:

- Support the new alert code in the response (Parse and Correlate)
- Support the configuration required for 0x81C6 (DSP)

2.3.2 Requirement 2: CRP 535 'Restoring Removed Devices from the HAN'

CRP 535 allows Users to use Service Request SR8.9 'Read Device Log' to read the CHF device log. The log contains the active and historical Device which allows Users to know which historical Device has been removed from the HAN so that it could be restored if required.



2.4 Requirements Summary

Based on the discussions at the Working Group and the Business Requirements as set out in the Solution Design Document, DCC consider the requirements for SECMP0093 to be **STABLE**.



3 Solution Overview

In order to implement the functionality for IRP511 and CRP535 changes are required to the Data Service Provider (DSP) and the Parse and Correlate application to provide capability for Users to configure this Alert and use their full functionality. To achieve this, the DUIS and MMC Schemas must be amended.

3.1 DSP Solution

3.1.1 IRP511, Set Clock alert references in alerts table incorrect

This IRP involves introduction of the Set Clock Alert 0x81C6 to the Event log and allows users to identify the need for HAN device fault correction.

DUIS changes are required to add support for 0x81C6 in the following Service Request Variants (SRVs):

6.22 Configure Alert Behaviour

6.2.10 Read Device Configuration (Event and Alert Behaviours)

If an attempt is made to configure 0x81C6 using SRV 6.22 on a Device running on a version of GBCS prior to v3.2, the Service Request will be rejected using the existing error code E062203.

No changes are required to SRVs 6.11 Synchronise Clock, 6.13 Read Event Or Security Log.

3.1.2 CRP535, Restoring removed devices from the HAN

This CRP is primarily an internal change to CHF processing for adding and removing devices to/from the CHF device log. However, the CHF processing change involves creation of a history of previous device log entries and a new GBCS Use Case CCS07 is introduced to allow the current and historic device log entries to be read by the user.

DUIS changes will be modified to add support for the new Use Case CCS07 in the following SRV:

8.9 Read Device Log

If the SR contains the optional input parameter 'ReadHistoric' and is targeted at a Comms Hub running on a version of GBCS v3.2 or later then the new GBCS Use Case CCS07 will be used. If the SR does not include the optional input parameter 'ReadHistoric', then the existing GBCS Use Case CCS06 will be used.

If the SR contains the input parameter 'ReadHistoric' and the target device does not support CCS07 yet (i.e. the device runs on an earlier GBCS version than v3.2), then the Service Request will be rejected using a new error code.

SRVs 8.11 (Add) and 8.11 (Remove) are not expected to undergo any changes due to CRP535.



3.2 Critical Software Solution

Changes will be required to implement this Modification by Critical Software. The assumption is that the change is to be applied to Parse and Correlate D3-G3-x branches.

3.2.1 Parse and Correlate

Changes to the Parse and Correlate application will include:

- Add new GBCS Use Case 'CCS07 Read CHF Device Logs
- Update the existing GBCS Use Cases related with SR6.22 and SR6.2.10
- New DUIS / MMC schema deployment
- Add test cases to exercise the changes
- Documentation updates and release tasks

3.2.2 GFI Core

To meet the requirements specified above, the GBCS Integration Testing For Industry (GFI) tool will need to implement as follows:

- Implement support for the use case CCS07 on the Reference Test Data Set (RTDS)
- Update the use cases referent to Service Requests 6.22 and 6.2.10 on RTDS
- Update the use cases referent to Service Requests 6.22 and 6.2.10 on GFI Testing Tool
- Enhance Triage Tool to support CCS07
- Update Business Scenarios

3.2.3 SMITEn Lite

The changes required to implement this Modification will affect the SMITEn parse service and require the following changes.

- Create a new mapper for CCS07
- Create new Unit tests
- Update the integration test

3.3 Communication Service Provider (CSP) Changes

It should be noted that CSP South and Central had indicated in the PIA [2] that they were impacted by this SEC Modification. The impact identified was for the existing Telefonica Access Control Broker (ACB) emulator, and was tied to a change in DUIS version.



Assuming this SEC Modification is grouped into a release including other changes to the Telefonica ACB, the work mentioned above will be covered in the Release CR rather than as a cost for this particular Modification.



4 Impact on Systems, Processes and People

This section describes the impact of SECMP0093 on services and Interfaces that impact Users and/or Parties.

Note Testing and Implementation services and activities are covered in sections 5 and 6.

4.1 Technical Specifications

DUGIDS will be updated to incorporate the changes to Service Request definitions, Response definitions, MMC schema and the DUIS XML schema.

The existing SRV 8.9 Read Device Logs shall be updated to support the GBCS 3.2 Use Case CCS07 for the Comms Hubs.

The general attributes of SRV 8.9 will remain unchanged as shown below.

| Service Reference | Service Reference Variant | Name | Critical | Sensitive Response | Protection Against Replay | On Demand | Future Dated | DSP Scheduled | DCC Only | Eligible User Role |
|----------------------|---------------------------------|---|----------|-----------------------|---------------------------------|-----------|--------------|------------------|----------|-----------------------|
| 6.2 | 6.2.10 | Read Device Configuration (Event and Alert Behaviours) | No | No | No | Yes | No | No | No | EIS GIS ENO |
| 6.22 | 6.22 | Configure Alert Behaviour | No | No | No | Yes | No | No | No | EIS GIS ENO |
| 8.9 | 8.9 | Read Device Log | No | No | No | Yes | DSP | No | No | EIS GIS OU |

Table 2: Service Request Matrix extract for the impacted SRVs

The parse response and the MMC XML schema will also be updated for SRV 8.9.

A new error code (E080902) will be introduced to notify the Service Users if the Service Request contains the input parameter 'ReadHistoric' but the targeted device is running on an earlier version of GBCS than v3.2.

A new error code (E080903) will be introduced to notify the scenario wherein the Service Request contains the input parameter 'ReadHistoric' but targeted at a Device other than a Comms Hub. Please note that the Service Request 8.9 supports Comms Hubs, ESME and GSME device types, but the Use Case that supports 'ReadHistoric' is applicable only to Comms Hubs.

An illustrative example of the changes required to DUGIDS are available in the extract embedded below. A complete version of DUGIDS will be developed by the DSP during the Design phase.





4.1.1 Service User Simulator

The new version of MMC schema will introduce a version uplift of Parse and Correlate (P&C) software. The Service User Simulator will be updated to incorporate the latest P&C software.

4.2 Transform

The Transform component will require updating to create the new GBCS Use Case CCS07 when this variant is requested for SRV 8.9 Read Device Log.

4.3 Security

There is no impact on the DSP security implementation as a result of this change,

On the basis that there are no changes to infrastructure and no changes to interfaces, it will not be necessary to perform any security testing. No additional Penetration Testing will take place as a result of this change on the basis that:

- there are no material changes to DSP interfaces
- there are no material changes to the security implementation
- there is no new infrastructure being introduced

As a result of the above, there is no requirement to update the Protective Monitoring implementation.

The implementation will be subject to security assurance to ensure contract compliance. Security assurance will validate that contractual obligations in relation to security reviews of the revised functional solution have been completed. No additional requirements for monitoring are expected.

4.4 Request Management

Introduction of the new GBCS Use Case as part of CRP535 will require changes to the implementation of SRV 8.9 to determine the correct GBCS Use Case based on the SRV contents and the GBCS version of the target device. The Response to CCS07 will need to be delivered via a new Response structure.

Request Management will need to implement the two new validation checks introduced within SRV 8.9 Read Device Log.

Request Management will need to perform configuration updates to support the DUIS version increment.

4.5 Data Management

Data Management will require configuration updates to support the new version of DUIS and GBCS.

This Modification does not materially change or increase interfaces, processing, data storage or data exchange within the DSP, as such the change on its own does not warrant the procurement of additional infrastructure.

Note that the aggregated impact of many such changes to the DSP solution will ultimately result in a reduction of the available processing headroom assumed as part of the original DSP agreement. Separately, there many need to be a change raised for



the provision of additional infrastructure should the DCC Total System experience performance problems that are the direct result of such changes.

4.6 Impact on processing, storage and/or transmission of the DCC Data

No change to the infrastructure design is expected as a result of this change. This assumes the use of the Service Requests in this Modification will have no material impact on the currently agreed volumetric profiles for Service Requests and that this change does not materially increase processing, data storage or data exchange within the DSP solution.

Note that the aggregated impact of many such changes to the DSP solution will ultimately result in a reduction of the available processing headroom assumed as part of the original DSP agreement. As such, DSP reserves the right to raise a CR for the provision of additional infrastructure should the DCC Data System experience performance problems that are the direct result of such changes.

It will be necessary to deploy the revised DUIS schema to Data Power devices.

4.7 Infrastructure Impact

No specific infrastructure requirements or changes have been identified.

4.8 Volumetric Impact

This change does not impact the volume of Service Requests received by DSP.

4.9 Non Functional Impacts

There will be no significant impact on performance because of this change. DSP will validate this with some Modification-specific regression tests during the implementation phase.

There will be no change to the system resilience solution because of this change.

There will be no change to the Disaster Recovery solution or BCDR procedures because of this change.

4.10 Impact on DSP Services

There is an uplift to the DSP Operational service charge due to the enhanced functionality. DSP will support the additional functionality until the end of the current DSP contract.

4.11 Impact on Safety

CRP535 functional failures may present an indirect safety risk e.g. HAN devices are unable to be restored when required. IRP511 functional failures may present an indirect safety risk e.g. HAN device faults are not corrected due to misdirection of Set Clock Alerts. SRV 6.22 is assessed as safety related in the SHAR (DQ.0005).

This change will impact the functional design for DSP Request Management and Data Management components. DSP is required to perform safety assessment of the functional design at Use Case level via the FMECA Report (DQ.0019), and to assess the safety significance of DUIS Alerts in the SHAR (DQ.0005). DSP will update the FMECA and SHAR to assess the systems safety risks associated with this change. Test evidence demonstrating



the implementation of functional mitigation in the DSP system will continue to be reviewed at each major release as part of planned DSP safety programme activity.

The current plan is that this change will be deployed as part of the November 2020 major release. The DSP safety and Environment Case deliverables are required to be updated and reissued for each major DSP release (or at least once annually) as agreed with the DCC (ref. SEMP; DQ.0004). DSP will update and reissue the safety deliverables to the DCC prior to go-live consultation for the November 2020 release following approval of this change and the updated DSP functional design.

No new types of hardware infrastructure are identified in this Modification and, therefore, there is no foreseeable Health, Safety and Environmental (HSE) impact. For the purposes of this Safety Impact Assessment, it is assumed that the proposed functionality will be accommodated within existing types of DSP infrastructure, which have already been subject to DSP Safety and Environmental assessment.



5 Testing Considerations

This section outlines the testing required to complete the Design, Build and Test phases for this SEC Modification.

5.1 DSP Team Resource

To implement the scope of supply described in this FIA, DSP will supply the following testing services:

- Pre-integration team (PIT) activities to align DSP functionality with the solution
- Preparation and Support for Solution Test and User Acceptance Testing
- Preparation for User Integration Testing (UIT)
- SIT testing to validate the changed functionality
- SIT support functions including support for issue investigation, resolution and deployment to the SIT environment
- Support for Transition to Operations (TTO) including deployment activities (one-time uplifts to the SIT-A, UIT-A/B and Production/DR environments) and validation by the respective SIT, UIT teams and Application Support teams of successful deployment
- A subset of the Programme Leadership and Operations team will be required to support the CR1118 resources

Note that the activities and costs given following are for testing as part of a standalone release, where this Modification would be the only change in place. Testing costs will be assessed for a release as part of a separate "Release CR" where costs and activities are considered as an overall figure. Clearly the Release CR will change the testing costs association with each Modification and Change Request allocated to a release.

5.2 Pre-Integration Testing

During Pre-Integration Testing (PIT), each Service Provider tests its own solution to agreed standards in isolation of other Service Providers. Specifically, the development team will carry out unit testing and the build will be subject to continuous build and automated testing to identify build issues at the earliest opportunity.

PIT will operate as a single phase of activity with a single drop. It will consist of a defined subset of system tests being observed by DCC. As this change is relatively small, the amount of PIT and PIT regression testing is relatively small.

5.3 Systems Integration Testing

The System Integration Testing (SIT) to be performed for CR1118 will be based on the following high-level scenario descriptions:

- For CRP535:
 - Existing SRV8.9 scenario to be updated to add in new Use Case CCS07 applicable to CHF only.
 - New negative scenario where the SR contains "ReadHistoric" and is sent to a CHF that does not support GCBSv3.2 an error message is displayed.
- IRP511:
 - Update existing SRV6.22 scenario Comments section with a Set Clock Alert 0x81C6 added to the Event Log.



 New negative scenario where the Set Clock Alert is configured on a device running and earlier version of GBCSv3.2 error E062203 is displayed.

SIT testing will take place in the SIT-B environment only.

Note: A full regression test covering different versions of GBCS and DUIS is not included; testing within SIT-B covers the functional change only.

5.3.1 Test Preparation

Testing will be carried out across all three SMETS2 Comms Hubs – EDMI, Toshiba and WNC. The testing will require two sets of each.

In addition to creating and/or updating test scenarios and scripts, the DSP SIT team preparation will include setting up on each Comms Hub the create history of the device logs; each will need a history of previous device entries of removing and adding devices from the CHF.

5.3.2 Test Execution

The following tests will be executed:

- 1. Execute SRV8.9 against CHF, which is configured to GBCSv3.2 or higher and includes input parameter "ReadHistoric". This will exercise new use case CCS07 and verify the response has additional information in it.
- 2. Execute SRV8.9 against CHF configured lower than GBCSv3.2 and do not include input parameter "ReadHistoric". This will exercise CCS06 use case.
- 3. Execute negative scenario SRV8.9 against CHF configured lower than GBCSv3.2 where the SR contains "ReadHistoric" input parameter; error message E080902 is displayed.
- 4. Execute SRV6.22 to configure Set Clock Alert on device that is configured to GBCSv3.2 and higher.
- 5. Execute negative scenario SRV6.22 where the Set Clock Alert is configured on a device running on an earlier version of GBCSv3.2; error message E062203 is displayed.
- 6. Execute SRV 6.2.10 to read the Device Configurations

The uplifted Service User Simulator (SUS) updated by the DSP PIT team, will be employed during SIT testing.

5.4 User Integration Testing

The User Integration Test (UIT) projects team will plan, prepare and develop a series of tests against two types of Comms Hubs from three different meter manufacturers (EDMI, WNC and Toshiba) with real meters and devices.

The test scope will be defined in the associated UIT Test Plan for CR1118. The agreed tests will utilise meter sets located in the DCC Manchester Test Lab with Comms Hubs at R2.0 and for single band Comms Hubs.

The Install and Commission business process will be run with each Comms Hub and meter combination (as required and confirmed by the DCC) to test CRP535.

Support for Test Participants during the formal UIT test phase will be provided by the UIT core services team under the extension to CR279 (assuming that the required CAN for this CR has been agreed and authorised by both Parties prior to the start of UIT testing).



6 Implementation Approach and Timescales

6.1 Transition to Operations (TTO) Approach

Assuming that DCC provides full commercial cover to proceed with this FIA by the end of March 2020, this change could be implemented as part of the November 2020 release. It is assumed that standard service preparation phases for transition to operations will be minimal following completion of contractual integration test phases. Security assurance will validate that contractual obligations in relation to security reviews of the revised functional solution have been completed. The DSP Safety Manager will ensure that the safety documentation set has been updated with respect to additional safety considerations in relation to this CR. Charges have been included for performance testing within DSP's PIT environment. No integrated performance testing or other non-functional testing is included.

Deployment activities include one-time uplifts to the SIT-A, UIT-B and Production/DR environments. A small amount of validation from the respective SIT, UIT and Application Support teams will be needed to validate successful deployment of the change.

Environment uplifts will take place outside of business hours.

Only a small provision for TTO is included in the charges for this Modification. It is expected that the overall release CR will review provision made under the November 2020 solution CRs (like this CR1118) and address any synergies or shortfall.

6.2 Application Support

The new functionality could result in an increased level of support to address additional alerts and the functional changes. As a result, DSP has made a conservative estimate that the change will result in four low complexity calls that need to be assimilated, investigated, resolved and monitored per month over the life of the contract.

The team will need to be prepared to support the change from the day it goes into live operation. To achieve this, the team must review the functional solution and its technical implementation, understand any configurable options and develop procedures to enable its support. This information must be absorbed across the team.



6.3 Change Lead Times

From the date of approval (in accordance with Section D9 of the SEC), to implement the changes proposed DCC requires a lead time of 6 months.

It is assumed that this change is to be implemented as part of a November 2020 release alongside other DSP impacting SEC Modifications. Implementation will need to commence in May 2020 based on a set of Modifications and Change Requests being selected in conjunction with SECAS. The high level plan for the release will need to follow the high level timelines in the table below:

| Phase | Start | End |
|---|-----------|-------------|
| SECAS agreement on scope of release | April | 2020 |
| Design, Build, and PIT Phase | May 2020 | June 2020 |
| SIT Phase, (limited to functional changes only) | July 2020 | August 2020 |
| UIT Phase, (limited to functional changes only) | Sept 2020 | Oct 2020 |
| Transition to Operations and Go Live | Nov 2020 | Nov 2020 |

Table 3: June 2020 Release Timescales

Note that the implementation lifecycle is expected to fit into this schedule. In order to achieve this timescale and implement changes alongside other releases such as SMETS1 it may be necessary to align some activities with those programmes of work. Where required, changes will be implemented using feature switches to enable functionality to be only switched on for testing when it is required.

6.4 Consideration against Other Changes

None currently identified.



7 Costs and Charges

This section indicates the quote per application development stage for this Modification. Note these costs assume a standalone release of just this SEC Modification without any other Modifications or Change Requests in the release A calculation of the costs of a Release will be carried out when the contents of the future Release are finalised and the post-PIT costs determined through a "Release CR".

| £ | Design and Build | PIT | SIT | UIT | тто | App. Support | Total |
|----------------|---------------------|--------|----------------------|--------|-----------|---------------------------------------|------------|
| Phase Total | 56,376 | 64,766 | 60,031 | 43,905 | 19,653 | 15,515 | 260,245 |
| Design | | • | duction of requireme | | ystem and | I Service designs | to deliver |
| Build | | | on (e.g. co | | | tems and Service ucts) that can be | |

Pre-Integration Each Service Provider tests its own solution to agreed standards in isolation of other Service Providers. This is assured by DCC.

Systems Integration
Testing (SIT)

All the Service Provider's PIT-complete solutions are brought together and tested as an integrated solution, ensuring all SP solutions align and operate as an end-to-end solution.

Users are provided with an opportunity to run a range of preresting (UIT)

Users are provided with an opportunity to run a range of prespecified tests in relation to the relevant change.

The solution is implemented into production environments and

Live (TTO) made ready for use by Users as part of a live service.

Application Support Any costs associated with supporting the new functionality.

7.1 Changes to the DSP Contract

Contract updates will be required for this change. The detailed updates will be determined as part of the resulting Contract Amendment Note (CAN). It is expected to impact the following schedules:

- Schedule 6.1: Inclusion of new milestones
- Schedule 7.1: Update to include a payment against the Schedule 6.1 milestones and the Operational charge uplift.

There will be no updates to Service Level Agreements as a result of this change.



8 Risks, Assumptions, Issues, and Dependencies

In the following sections, Risks, Assumptions, Issues, and Dependencies have been identified.

8.1 Risks

| Ref. | Area | Description | Impact/Outcome |
|-----------|--------------------------|---|---|
| MP93-RD01 | Requirements and Cost | Given the current uncertainty about whether there will be a continuous stream of approved work for the DSP Programme teams during 2020, there is a risk that the costs and delivery schedule described in this FIA will be subject to change. | Rejected, there is a full programme of work |

8.2 Assumptions

The assumptions have been considered in the planning for SECMP0093.

| Ref. | Description | Accepted? |
|-----------|--|-----------|
| MP93-AD01 | The pricing and commercial assumptions listed above apply. | Accepted |
| MP93-AD02 | The solution is as described in section 3 and the teams supporting delivery of CR1118 are as described in section 5. | Accepted |
| MP93-AD03 | Estimates are based on the team supporting the delivery of CR1118 being a similar size and profile to the current DSP team (i.e. it is assumed that no material ramping down of the DSP Programme team has occurred prior to delivery of this CR). | Accepted |
| MP93-AD04 | The use of changed Service Requests will have no material impact on the currently agreed volumetric profiles for SRs. | Accepted |

8.3 Issues

None at this time.

8.4 Dependencies

| Ref. | Dependency | Impact |
|----------|--|--------|
| MP93-DD1 | DCC to specify the exact make-up of each Comms Hub and meter set prior to testing commencement. | Medium |
| MP93-DD2 | Critical to provide an updated version of Parse & Correlate software which aligns with the updated MMC Schema. | Medium |



Appendix: Glossary

The table below provides definitions of the terms used in this document.

Acronym Definition

ACB Access Control Broker

BEIS Department for Business, Energy & Industrial Strategy

CAN Contract Amendment Note

CH Communications Hub

CHF Communications Hub Function

CPL Central Product List (formerly Certified Product List)
CR, SCR (DCC) Change Request, Small Change Request

CRP Change Resolution Proposal

CSP Communication Service Provider
DCC Data Communications Company

DR Disaster Recovery
DSP Data Service Provider

DUGIDS DCC User Gateway Interface Design Specification

DUIS DCC User Interface Specification

FIA Full Impact Assessment

FMECA Failure Modes Effects Criticality Analysis

GBCS GB Companion Specification

GFI GBCS Integration Testing For Industry

GSME Gas Smart Metering Equipment

HAN Home Area Network

IOC Initial Operating Capacity
IRP Issue Resolution Proposal
I&C Install and Configuration

PIA Preliminary Impact Assessment

PIT Pre-Integration Testing
P&C Parse and Correlate
RP Resolution Proposal

RTDS Reference Test Data Set

SAT Service Audit Trail
SEC Smart Energy Code

SECAS Smart Energy Code Administrator and Secretariat

SIT Systems Integration Testing

SMETS1, Smart Metering Equipment Technical Specification, 1st and 2nd

SMETS2 Generation

SMIP Smart Metering Implementation Programme



SP Service Provider

SR, SRV Service Request, Service Request Variant

SUS Target Response Time
TLO Test Lab Operator

TSAT Technical Specification Applicability Tables

TTO Transition to Operations
UIT User Integration Testing



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MP093 'Implementing IRP511 and CRP535 to support GBCS v3.2 devices' Refinement Consultation response

About this document

This document contains the full collated response received to the MP093 Refinement Consultation.





Question 1: Do you agree with the solution put forward?

| Question 1 | | | |
|------------|----------------|----------|--|
| Respondent | Category | Response | Rationale |
| ovo | Large Supplier | Yes | The changes provide enhanced service for smart metering. |
| | | | |
| | | | |





Question 2: Will there be any impact on your organisation to implement MP093?

| | Question 2 | | | |
|------------|----------------|----------|---|--|
| Respondent | Category | Response | Rationale | |
| OVO | Large Supplier | Yes | There will be system changes to identify the new configuration of 0x81C6 alert and the details of the results from SR8.9. This will include an uplift of SSE's DCC Adapter to the latest version of DUIS (assuming there will be a version beyond DUIS v3.0/v3.1), changes in SSE's Meter Data Management System and continuing to work with meter manufacturers to ensure they have deployable GBCS v3.2 compliant firmware. | |
| | | | | |
| | | | | |





Question 3: Will your organisation incur any costs in implementing MP093?

| | Question 3 | | | |
|------------|----------------|----------|--|--|
| Respondent | Category | Response | Rationale | |
| ovo | Large Supplier | Yes | Cost will involve analysis and amendment to the process for Alerts and also business process for the resolution of SR 8.9 results. | |
| | | | | |
| | | | | |





Question 4: Do you believe that MP093 would better facilitate the General SEC Objectives?

| | Question 4 | | | |
|------------|----------------|------------|------------|--|
| Respondent | Category | Response | Rationale | |
| ovo | Large Supplier | No comment | No comment | |
| | | | | |
| | | | | |





Question 5: Noting the costs and benefits of this modification, do you believe MP093 should be approved?

| | Question 5 | | | |
|------------|----------------|----------|---|--|
| Respondent | Category | Response | Rationale | |
| ovo | Large Supplier | Yes | The benefits of the changes will enable Suppliers to identify faults early and also to ensure incorrect Devices are identified and removed. | |
| | | | | |
| | | | | |





Question 6: How long from the point of approval would your organisation need to implement MP093?

| Question 6 | | | |
|------------|----------------|-----------|---|
| Respondent | Category | Response | Rationale |
| ovo | Large Supplier | 9 Months. | The changes would need to be aligned with our release schedule. |
| | | | |
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Question 7: Do you agree with the proposed implementation approach?

| Question 7 | | | |
|------------|----------------|----------|------------|
| Respondent | Category | Response | Rationale |
| OVO | Large Supplier | Yes | No comment |
| | | | |
| | | | |





Question 8: Do you agree that the legal text will deliver MP093?

| Question 8 | | | |
|------------|----------------|----------|---|
| Respondent | Category | Response | Rationale |
| ovo | Large Supplier | Yes | The legal text aligns the changes required. |
| | | | |
| | | | |





Question 9: Please provide any further comments you may have

| Question 9 | | | |
|------------|----------------|-------------|--|
| Respondent | Category | Comments | |
| ovo | Large supplier | No comments | |
| | | | |
| | | | |

