Data Communications Company

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**

Data Communications Company

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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.

DUGIDS Extract-CR1118.docx

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-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	TTO	App. Support	Total
Phase Total	56,376	64,766	60,031	43,905	19,653	15,515	260,245

Design	The production of detailed System and Service designs to deliver all new requirements.
Build	The development of the designed Systems and Services to create a solution (e.g. code, systems, or products) that can be tested and implemented.
Pre-Integration Testing (PIT)	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.
User Integration Testing (UIT)	Users are provided with an opportunity to run a range of pre-specified tests in relation to the relevant change.
Implementation to Live (TTO)	The solution is implemented into production environments and 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, SMETS2	Smart Metering Equipment Technical Specification, 1st and 2nd 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