Data Communications Company

# SEC Modification Proposal, SECMP0092, DCC CR1268

## Planned Maintenance Methodology

## Preliminary Impact Assessment (PIA)

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|---|---|
| **Version:** | **0.25** |
| **Date:** | **5th June, 2020** |
| **Author:** | **DCC** |
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# 1 Document History

## 1.1 Revision History

| Revision Date | Revision | Summary of Changes |
|---|---|---|
| 01/06/2020 | 0.1 | Initial version, internal DCC review |
| 05/06/2020 | 0.25 | Completed internal DCC review |
| | | |

## 1.2 Associated Documents

This document is associated with the following documents:

| Ref | Title and Originator's Reference | Source | Issue Date |
|---|---|---|---|
| 1 | MP092 PA request form - DCC | SECAS | 25/11/2019 |

References are shown in this format, [1].

## 1.3 Document Information

The Proposer for this Modification is Chris Thompson from DCC. The original proposal was submitted on 22nd October 2019.

The Preliminary Impact Assessment was requested of DCC on 2nd December 2019 and was submitted on 5th June 2020.

The Business Requirements are included from document [1].

# 2 Context and Requirements

In this section, the context of the Modification, assumptions, and the requirements are stated.

The context, and issue statement, and requirements following have been provided by SECAS and the Proposer.

## 2.1 Context

In April 2019 the DCC began a trial of a new approach regarding the delivery of Planned Maintenance. The new approach sought to categorise planned changes as either low or high impact, based upon a risk-based methodology. It also amended the timings with which Planned Maintenance was scheduled and implemented.

Whilst the SEC is silent on the methodology for scoping Planned Maintenance, it does set out when the Maintenance should occur and the timescales around publishing Maintenance schedules (Sections H8.3 and H8.4). In order to trial the new approach, the SEC Panel granted the DCC a derogation against these provisions for six months (later extending for a further three months until February 2020). The Panel requested the DCC report on progress to the Operations Group.

In July, the DCC reported the trial had been a success and, following a final report to the Operations Group, raised a Modification Proposal to formalise the new approach.

## 2.2 Business Requirements for this Modification

This section contains the definitions, considerations and assumptions for each business requirement as provided by the Proposer and SECAS.

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| 1. | DCC proposes that Planned Maintenance will be categorised into two types, ('a' and 'b') below so that the impact to Users can be appropriately managed:<br>a. Low Impact Planned Maintenance changes<br>b. High Impact Planned Maintenance changes |
| 2. | DCC proposes the introduction of up to two High Impact and up to six Low Impact Planned Maintenance windows per month. |
| 3. | DCC proposes that High Impact Planned Maintenance will have a total maximum duration of 6 hours calculated across both windows. Each Low Impact Planned Maintenance window will have a maximum duration of 6 hours. |
| 4. | Planned Maintenance will continue to take place between 20:00 and 08:00 hours (as per Section H8.3). |
| 5. | DCC will continue to publish the schedule of Planned Maintenance (as per Section H8.4) and issue an email notification to all Parties 20 Working Days ahead of the month in which Planned Maintenance will occur. This notification will set out when the scheduled windows are for High Impact and Low Impact changes and provide high level information on what Parties should expect in each window. |

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| 6. | If additional Low Impact Planned Maintenance windows are required beyond this notice, a revised notice will be issued to Parties. |
| 7. | High Impact changes will have a minimum lead time of 20 Working Days and Low Impact changes a minimum lead time of 10 Working Days. |
| 8. | The SEC will be updated to create the concept of High and Low Impact Maintenance windows and detailing the outage duration associated with each. |
| 9. | High Impact Planned Maintenance changes mean that one or more of the following is disrupted:<br>• End-to-end communications between Service Users and Comms Hubs<br>• Install & Commission activities<br>• Previously scheduled SMETS1 migrations |
| 10. | Low Impact changes will not disrupt any of the activities described in point 9 and will not require changes to be made by Users except in cases where Service Improvements are being made to SSI. |

# 3 Description of Impacts and Solution

## 3.1 DSP Impact

DSP assumes that the High Impact total duration of six hours per month and the Low Impact duration of six hours per event is for DSP only and is NOT shared between other SPs.

The DSP PIT team already carries out a number of Low Impact deployments a month which fit within the Low Impact duration.

No impacts on Security and Infrastructure are anticipated.

In terms of Service Impact, the only activity currently defined as High Impact Planned Maintenance is a major deployment. The Application Management team currently implements one major deployment a month, which fits within one High Impact Planned Maintenance six hour duration. It would not be possible to fit a second major deployment into the six hour duration allocated for High Impact Maintenance for a single month.

Whilst there is overall no impact on DSP of the High and Low impact durations and windows, this Modification does not impose time restrictions on the times of day and night when the changes can be made that are not already present in SEC and, indeed, in their contract. For the avoidance of doubt, DSP does not intend to change its contract with DCC in order to fully accommodate this Modification.

## 3.2 CSP North Impact

CSP North has identified that there may be impacts on their Service and Operations teams. The Modification may also require changes to the following Contract Schedules:

- Schedule 1 – Definitions
- Schedule 2.1 - DCC Requirements
- Schedule 2.2 - Performance Measures
- Schedule 6.1 - Implementation Planning
- Schedule 7.1 - Charges and Payment

Schedule 2.2, under appendix 5 Outline Performance Monitoring Approach, Section 2, the DSMS is expected to be the data source for the calculation of PM10 (Planned Maintenance). Post implementation of this Modification the calculation of PM10 will need to take the category of Planned Maintenance into consideration as the requirements and Performance Measures will differ between the ‘low’ and ‘high’ cases. The DSMS as the source of the data for PM10 will need to be modified to collect and provide the category type for each Planned Maintenance request.

## 3.3 CSP South and Central

CSP South and Central have identified the following changes for this Modification:

- Uplift Schedule 6.2 to reflect the proposed new Planned Maintenance Release rules

- Uplift Part F of Schedule 1 or 6.2 (Testing and Acceptance) to include the definition of having up to two (2) High Impact and up to six (6) Low impact Planned Maintenance windows per month.

- Uplift Part F 1 or Schedule 6.2 to include that High Impact Planned Maintenance will have a total maximum duration of six (6) hours calculated over both windows. Each Low impact Planned Maintenance window will have maximum duration of six (6) hours. (This means a total of up to forty-two (42) hours)

- Uplift Schedule 6.2 to include that Telefónica will comply to Planned Maintenance schedule which is 20:00 and 08:00 hours

- Uplift Schedule 6.2 to include that High Impact changes will have a minimum lead time of twenty (20) working days and Low impact changes a minimum lead time of ten (10) working days.

Several items for CSP South and Central have been listed in the Risks, Assumptions, Issues, and Dependencies listed in section **Error! Reference source not found.** following.

## 3.4 Cap Gemini

Provided the assumptions outlined in section 7 are valid, then this change will have no measurable or chargeable impact to Capgemini's services.

# 4 Costs and Charges

The table below details the cost of delivering the changes and Services required to implement this Modification Proposal.

The Rough Order of Magnitude cost (ROM) shown below typically describes indicative costs to implement the functional requirements as assumed above. In the case of this Modification. As a result the final price may result in a variation.

## 4.1 Design, Build, and Testing Cost Impact

There is no overall impact to the DSP, and neither a FIA nor any charges will be incurred.

In the case of CSP North as well as CSP South and Central; while there are no anticipated changes in terms of Design, Build, and PIT Test, contract changes will require assessment in a Full Impact Assessment.

| £ | Design, Build and Test |
|---|---|
| Planned Maintenance Methodology | £0 |

Based on the existing requirements, the fixed price cost for a Full Impact Assessment is **£23,491** and would be expected to be completed in 30 days.

# 5 Risks, Assumptions, Issues, and Dependencies

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

It is possible that further RAID will be established as part of the Working Group reviews and the FIA.

## 5.1 Risks

No risks related to this Modification have been noted.

## 5.2 Assumptions

| Ref. | Area | Description | Accept |
|---|---|---|---|
| MP92-AD01 | High Impact Duration | The High Impact total duration of six hours per month and the Low Impact duration of six hours per event reflect the time available to DSP and are NOT totals shared between DSP and other SPs. | Accepted |
| MP92-AC02 | Downtime | Capgemini assumes this Modification correlates to downtime, i.e., any change that requires an element of downtime to the Dual Control Organization (DCO) application will be categorised as a High Impact change, and any changes that do not require downtime will be categorised as low impact or standard changes. Any changes would only be high impact if they directly impacted previously scheduled (SMETS1) migrations. | Accepted |
| MP92-AC03 | Environments | Capgemini assumes this change request is only relevant to production environments. Therefore UIT, SIT and other Dev/Test environments are not impacted by this change request. | Accepted |
| MP92-AC04 | Release Management | Capgemini assumes that the Service Integrator processes for release management as well as the DCC Change management process are all aligned to this change. | Accepted |
| MP92-AT05 | Environments | CSP South and Central will continue to manage their environment and adhere to internal governance to ensure the right amount of rigour to protect our services. | Accepted |
| MP92-AT06 | Disruption | Assume that Low Impact changes will not disrupt any of the activities described in MP92-AT06 and will not require changes to be made by Users except in cases where Service Improvements are being made to SSI. | Accepted |
| MP92-AT07 | SLAs | Requirements and changes detailed in this Modification will not impact the current agreed SLA and performance measures | Accepted |
| MP92-AT08 | Slots | When a slot is removed due to SPP's or other activity, new slots must be considered for each Service Provider to ensure they can maintain service, avoid delays to critical downstream deployments etc. In this instance CSP South and Central assumes that DCC will agree another slot. This may require a further Project Request or Change request. | Accepted |
| MP92-AT09 | Vendor Contracts | CSP South and Central assume that there is no uplift to our existing vendor contract with our suppliers. At any case this assumption is not correct and discovered during the IA stage, Telefónica reserves the right to include cost in our IA response | Accepted |

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| MP92-AT10 | Future Ownership | CSP South and Central assumes that DCC will continue to own and manage the Planned Maintenance Release methodology. Any changes to this document must be shared. CSP South and Central may require DCC to provide a Project Request or a Change request in order to manage this new requirement. CSP South and Central also reserves the right to review its solution and the charges associated with the Planned Maintenance Release methodology. | Accepted |
| MP92-AT11 | | CSP South and Central assumes that all the resource uplifts to support the following will be covered under a separate DCC CR:<br>1) Replicating changes into DSMS<br>2) New or additional reporting requirements in relation to the Forward Schedule. | Accepted |

## 5.3 Issues

No risks related to this Modification have been noted.

## 5.4 Dependencies

Note that the following dependencies are understood by DCC and accepted,

| Ref. | Organisation | Description | Recommended action |
|---|---|---|---|
| MP92-DT1 | DCC | CSP South and Central are dependent on DCC in providing a forward view of change slots for a rolling 18-month period. | DCC to Identify all High slots in the agreed period. |
| MP92-DT2 | DCC | To help all parties plan changes for the future, DCC to define the forecasting process and timelines at IA stage | DCC to provide |
| MP92-DT3 | DCC, CSP South and Central | Based on a series of meetings with DCC regarding the ambiguity of the framework supplied by this Modification it was agreed that DCC and CSP South and Central will work together on a supplementary document that will allow each party to assess change in a much more accurate manner. This supplementary documentation must be in place before the FIA can be completed. This document must stay aligned with the Planned Maintenance Release methodology document at all times. | DCC to work with CSP South and Central |
| MP92-DA4 | DCC | All SPs are dependent on DCC to continue to publish the schedule of Planned Maintenance and issue an email notification to all Parties twenty (20) working days ahead of the month in which Planned Maintenance will occur. This notification will set out when the scheduled windows are for High and Low impact changes and provide high level information on what Parties should expect in each window. | Continue existing process |
| MP92-DA5 | DCC | DCC to inform all SPs when any additional Low Impact Planned Maintenance windows are required beyond the agreed notice of ten | Continue existing process |

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| | | (10) days, a revised notice will be issued to Parties. | |
| MP92-DT6 | DCC | CSP South and Central are dependent on the DCC to update SEC to create the concept of high and low impact maintenance windows and detailing the outage duration associated with each. Contract changes made as a result of this Modification will be misaligned with SEC until SEC has agreed and know the concept of high and low impact maintenance windows | Is part of this Modification |
| MP92-DT7 | DCC | DCC to lead discussion and agree commercial vehicle to cover additional requirements which have resulted in resource uplifts with no commercial vehicle to date. DCC have requested CSP South and Central to remove these in scope items from this Modification and have confirmed DCC will facilitate discussion for a separate change to cover the below items which CSP South and Central is currently incurring cost for:<br>- Uplift resource profile to support the replication of CSP South and Central Smart Metering Operational changes onto DSMS that has been providing the DCC Change Management team the visibility of all changes that will impact or have the potential to impact the smart metering service.<br>This will help DCC meet the ISO accreditation standards which requires 'segregation of duties' as DCC change management no longer raise and approve the same change. | CSP South and Central have absorbed this cost to date and have been requesting for DCC-L to raise a Change Request to cover this work. If not covered, CSP South and Central will have no commercial vehicle to charge DCC_L of the additional effort and therefore, the request for Telefónica re-enter changes onto DSMS will stop |

# Appendix A: Glossary

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

| .Acronym | Definition |
|---|---|
| DCC | Data Communications Company |
| DCO | Dual Control Organisation (Capgemini) |
| DSP | Data Service Provider |
| FIA | Full Impact Assessment |
| PIA | Preliminary Impact Assessment |
| PIT | Pre-Integration Testing |
| ROM | Rough Order of Magnitude (cost) |
| SEC | Smart Energy Code |
| SECAS | Smart Energy Code Administrator and Secretariat |
| SIT | Systems Integration Testing |
| SP | Service Provider |
| SR | Service Request |
| SRV | Service Request Variant |
| UIT | User Integration Testing |