SEC Modification Proposal, SECMP0077, DCC CR1249

DCC Service Flags

Preliminary Impact Assessment (PIA)

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Contents

1   Document History

1.1   Revision History

Revision Date	Revision	Summary of Changes
30/12/2019	0.26	Initial version, internal DCC review
12/05/2020	0.6	Revised requirements
15/05/2020	0.7	Completed internal DCC review
18/05/2020	0.72	Note on multiple installs
17/06/2020	0.8	Clarifications on SMETS1
20/08/2020	1.0	Added MRA & Xoserve cross code information

1.2   Associated Documents

This document is associated with the following documents:

Ref	Title and Originator's Reference	Source	Issue Date
1	MP077-Business-Requirements-v0.1	SECAS	27/11/2019

References are shown in this format, [1].

1.3   Document Information

The Proposer for this Modification is Paul Saker of EDF Energy. The original proposal was submitted in June 2019.

The Preliminary Impact Assessment was requested of DCC on 9th November 2019 and was submitted on 31st December 2020. After a series of clarifications and revised requirements were provided by the Working Group, a second request for a PIA was issued on 16th April 2020.

The SECAS-provided text following combines references to "Device Status" and "DCC Service Flag". For consistency the term "DCC Service Status" has been used for the solution definition instead of "DCC Service Flag" for consistency with Smart Metering Inventory (SMI) terminology. However the Modification title and requirements have been left with the term DCC Service Flag.

2 Context and Requirements

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

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

2.1 SEC Definitions of Service Flags

The following definitions are specified in the Smart Energy Code (SEC).

A Smart Metering System (SMS) is defined as a Communication Hub (CH) with one Commissioned meter and any available PPMID or IHD devices. One CH and Electricity Smart Metering Equipment (ESME) for electricity or one CH and Gas Smart Metering Equipment GSME for gas are the minimum configurations. Note that the SEC explicitly distinguishes between a SMS for electricity and gas.

The DCC Service Flag and the current state associated with the SMS is communicated to the appropriate Meter Point Administration Service (MPAS) for electricity meters and XOSERVE for gas meters.

There are three possible status flags; Active (A), Suspended (S), and Withdrawn (W). Once the ESME (or GSME) is Commissioned the SMS has the status of "Active".

The SEC does not indicate what happens if the LAST meter of a SMS is removed (in the sense of removed from the Certified Products List (CPL), it may still be physically at the premises). In analogy to the creation of the SMS, the SMS ceases to exist. In such a case the SMS state should be set to "Suspended".

2.2 Current State

The "Active" state is applicable when a SMS is commissioned. According to Suppliers and DNOs, the "Active" state is retained even when all meters are physically removed from the premises; this is perceived as being an issue when it comes to assess whether a Smart Metering Services are possible. In the sense of the SEC there is no longer a functional SMS at the premises.

SMI Device States can be mapped to the Service Flag states as shown following.
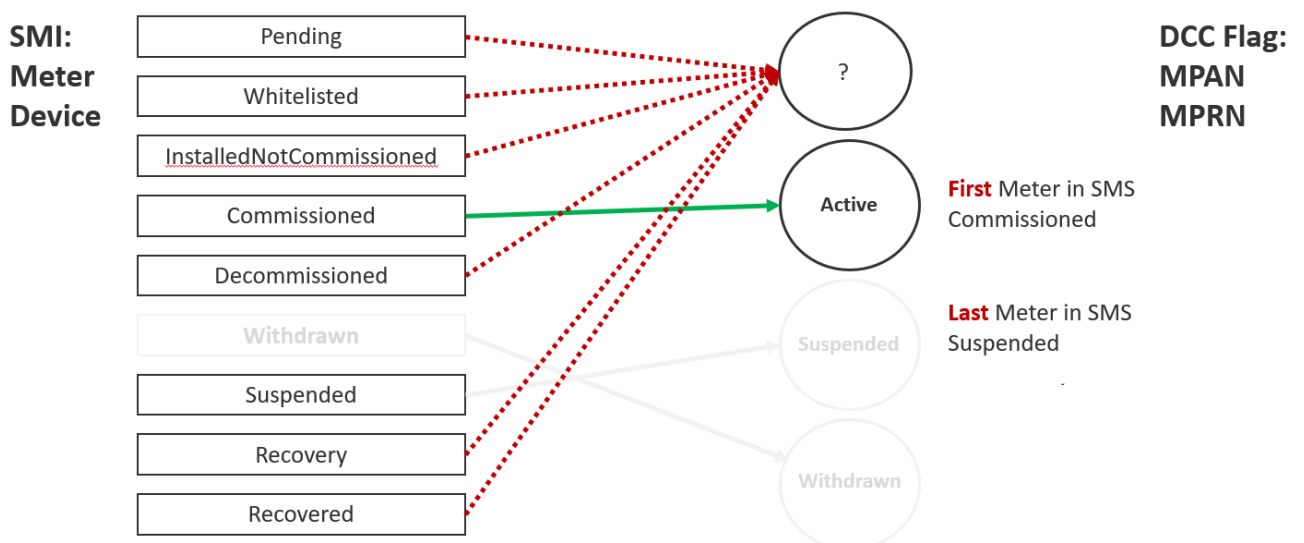
Most of the SMI states do not map to the DCC Service Flag, which makes it difficult for the DNOs and Suppliers to track status.

2.3 What is the Issue?

The industry needs a simple and reliable mechanism for identifying cases where smart devices are, or are not, present at a location. This information is necessary for suppliers to establish whether there is a smart metering system they can communicate with at that location, and for distributors to correctly handle alerts. Issues have been identified in the current process where the Service Flagging is incomplete which could hinder the switching process for some consumers with smart meters.

2.4 Business Requirements for this Modification

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

Req.	Requirement
1	DCC to implement a method of understanding if there is a Device currently at a premise
2	DCC to have a reliable source of information on the state of DCC Service Flags
3	DCC to implement a new Service Flag state of "N" for Non-Active to inform where a Device has been installed but not commissioned or set to Active

Table 1: Business Requirements for SECMP0077, CR1249

2.4.1 Requirement 1: Implement a method of understanding if there is a Device currently at a premise

This requirement obligates the DCC to implement a means of identifying Devices at premises. Currently, the means of identifying Devices is through noting whether a Smart Metering System (SMS) is active or not. This doesn't account for Devices that may have been removed from the SMS or that don't deliver all of the smart functionality. Therefore, a more granular approach is required as part of the Modification Proposal's solution.

Note that SECAS have separately provided the following supporting information for this requirement:

A clarification on how the DCC Service Flag state "Suspended" currently works is required.

According to DNOs and Suppliers the DDC Service Flag state "Suspended" has not been observed in the live system. This may be because the conditions for this state haven't been met in the live system.

When the last meter on the SMS has been Suspended in SMI, then the state of the DCC Service Flag must be set to "Suspended". This state will require all meters to be in the Suspended state.

2.4.2 Requirement 2: To have a reliable source of information on the state of DCC Service Flags

This requirement obligates the DCC to provide reliable and consistent updates on the state of Service Flags. At the moment, there are Service Flags that have been set to the state of the SMS that are inaccurate. SEC Parties have noted that this inaccuracy has made the switching process of Smart Meters and other Devices harder to complete. It also may result

in Suppliers mis-selling a service to consumers if the Service Flag misinforms the Supplier of which services they can provide to the consumer. With reliable information of DCC Service Flags being an integral part of Ofgem's Switching Programme plans, this is required as part of the Modification Proposal's solution.

Note that SECAS have separately provided the following supporting information for this requirement:

The Withdrawal of devices has been removed from the SEC; in DUIS the corresponding Service Request 8.5 has been modified so that no DCC user is entitled to use this Service Request. As a consequence it is not possible for devices to enter the SMI status of "Withdrawn". The DCC Service Flag "Withdrawn" is not possible since it would require that all meters are set to the SMI state "Withdrawn".

The DCC Service Flag state "Withdrawn" must be removed.

2.4.3 Requirement 3: To implement a new Service Flag state of "N" for Non-Active to inform where a Device has been installed but not commissioned/set to Active

This requirement obligates the DCC to create a new DCC Service Flag state of "N" for Non-Active.

SEC Parties have identified that after a SMS is fully operational, the flag is set to A. However, the flag state has not changed on these systems, despite having had Devices removed from the system – meaning these should have been changed to either W or S. The proposed N flag would be used to distinguish between Devices that were installed in a premises, but not fully operational. Until it can deliver the full range of functionality and then set to A, the Device will be set to N.

Note that SECAS have separately provided the following supporting information for this requirement:

The SEC doesn't currently specify what state the DCC Service Flag should be set to for most of the SMI states which haven't been covered in the previous slides.

The suggestion is to add a new state to the DCC Service Flag called "Non-Active" abbreviated as "N". This state will be used to indicate whether all meters on the SMS are in one of the following SMI states:

- *InstalledNotCommissioned*

- *Decommissioned*

- *Recovery*

- *Recovered*

Note that meters on the SMS can have different SMI states; they don't need to be in the same state for the DCC Service Flag "Non-Active" to apply.

2.5 Working Group Update

Following the Working Group meeting on 1st April 2020, the DCC was directed to provide an updated Preliminary Assessment which included a solution against:

- the originally proposed business requirements (DCC Service Flags 'A', 'N' and 'I')

- the originally proposed business requirements with the additional DCC Service Flag 'S' included

3 Description of Solution

The solution requested by SECAS is to provide clarity in SEC Appendix X 'Registration Data Interface Specification' to describe the DCC Service Flag process. As part of this, the "W" for Withdrawn DCC Flag will be removed from the SEC and an "N" for Non-Active Flag will be introduced. The "N" Flag will cover the state for devices in a Smart Metering System (SMS) which are installed but yet to be commissioned, decommissioned or in a state of recovery.

Two solutions are presented, the first to support Installed Not Commissioned, Active and Non-Active Service Status, referred to as the A, N, and I Solution. The second solution will include the first plus an additional Service Status of Suspended and is referred to as the A, N, I, and S Solution.

3.1 Requirements Review

The DCC and Service Providers have reviewed the requirements and noted the following.

3.1.1 Terminology and Definitions

The SEC Modification request and requirements in the above sections combine references to "Device Status" and "DCC Service Flag". Instead of the latter, the term "DCC Service Status" will be used in this Preliminary Impact Assessment for technical consistency with Smart Metering Inventory (SMI) terminology.

For clarity, these are two different statuses with different purposes:

1. **Device Status** refers to an individual Device, which may be a Smart Meter or other Device Type. Examples of Device Status include Pending, Commissioned, Decommissioned, Suspended and Recovery.

2. **DCC Service Status** refers to a Meter Point (sometimes referred to as a MPxN), which may be a Meter Point Administration Number (MPAN) or Meter Point Registration Number (MPRN).

   - Within DSP, the DCC Service Status is changed to *Active* when it is first associated with a Commissioned Smart Meter. At that point the change in status is communicated to the relevant Registration Data Provider (RDP) via an outgoing data flow (D0350 for electricity and the DXI equivalent for gas).

   - There is an additional status *Withdrawn* that was intended for use when the Service Opt-Out Service Requests were used.[1] Since those Service Requests are no longer available via DUIS the "Withdrawn" status is not valid. In the current implementation, the DCC will never inform the RDPs of a change in DCC Service Status after changing it to Active.

   - The flows to the RDPs also support a DCC Service Status of *Suspended*, but as it is not possible to suspend a MPxN (only a device) this status is also never used currently.

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[1] The status "Withdrawn" applies if the last meter of a SMS has been opted out of the DCC Smart services. The Service Request (SR) 8.5 is currently set such that it cannot be used by any DCC User. In this sense, Withdrawn would be used to indicate if a Supplier is no longer Smart; however, BEIS have officially stated that Withdrawn is not a valid state.

The statuses are communicated in different ways:

1. Device Status is made available to DCC Service Users via the functions in Self Service Interface (SSI) screens and the DUIS Service Request 8.2 Read Inventory.

2. DCC Service Status is not made available to DCC Service Users by the DCC directly, e.g. it is not included in SSI screens or DUIS Service Requests. The status is available via industry Registration Data processes D350 and DXI.

Note that DSP has already implemented an additional DCC Service Status N meaning *Not Active*, which is maintained within DSP SMI, but as this is not currently a valid value in Registration Data flows and therefore cannot be exported.

A SMS is said to be "Decommissioned" if it is removed from the wall. This is a relatively frequent occurrence.

The Device Statuses of "Recovery" and "Recovered" relate to putting a new certificate on a device. The update from this action is not sent to the DNOs but is a separate DCC Status Update.

In the case of an Install and Leave scenario, where a supplier does not complete the installation, then a SMS can be set to state of "Suspended".

3.1.2 DCC Service Status Rules

Existing DSP rules for changing a DCC Service Status from Active to Not Active are based on the decommissioning of Smart Meters and consider circumstances of the same Meter Point (MPxN) being allocated to more than one Smart Meter. Hence, in a case where one Smart Meter is being decommissioned while another Smart Meter with the same MPxN remains Commissioned, the DCC Service Status would not be set to Not Active. Checks are also made for cases where a Meter Point association was made in error and is corrected using Service Request Variant (SRV) 8.4 Update Inventory. The current rules are:

1. The starting position in DSP for Meter Points which have never had a Smart Meter operated via DCC is that DCC Service Status is null.

2. The DCC Service Status becomes A (Active) when:

    • a Smart Meter has been associated with a Meter Point (SRV 8.11 Update HAN Device Log) and the Smart Meter's Device Status becomes Commissioned (SRV 8.1.1 Commission Device).

    • when a Meter Point (that is not A already) is linked to a Commissioned Smart Meter (by SRV 8.4 Update Inventory).

3. The DCC Service Status becomes N (Not Active) when:

    • a Smart Meter associated with the Meter Point is decommissioned (SRV 8.3 Decommission Device), except where the Meter Point is still associated with another Smart Meter;

    • a Smart Meter associated with the Meter Point is unlinked from a commissioned device (SRV 8.4 Update Inventory), except where the Meter Point is still associated with another Smart Meter.

3.2 DSP Solution Overview

As requested, the proposed DSP solution would implement changes to outgoing Registration Data flows for electricity and gas to add a Not Active status ('N'). There is a further request to

include an additional status called Suspended ("S") as an optional item in this assessment. These changes depend on revised interface specifications being agreed with the industry.

The following diagram shows the revised list of DCC Service Statuses and the corresponding Device Statuses that trigger switching to those DCC Service Statuses.
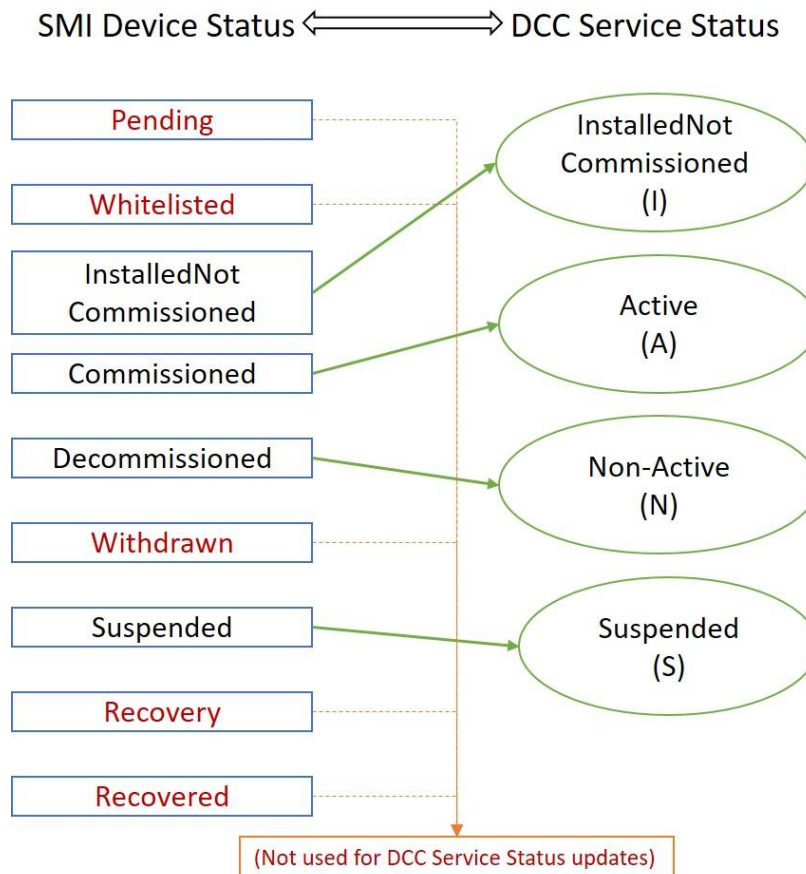
Figure 1: Mapping of SMI Device Status to DCC Service Status

Note that the External Interface (ESI) files sent to RDPs will cover all device types (both SMETS2 and SMETS1) and all DCC Service Status values, so A, N, I and S (if implemented). This will ensure the business requirement of providing new DCC Service Status values applies to both SMETS2 and SMETS1 devices.

3.2.1   Service Status, A, N, and I Solution

The DSP solution will involve implementing the new DCC Service Status Installed Not Commissioned ("I"). The DCC Service Status of a Meter Point will become "I" when:

- A Smart Meter has been associated with a Meter Point (with status of 'Null') (SRV 8.11 Update HAN Device Log) and the Smart Meter's Device Status becomes 'Installed Not Commissioned'

- A Meter Point (with a status of 'Null') is linked to an ''Installed Not Commissioned'' Smart Meter (by SRV 8.4 Update Inventory)

The DSP's current rules for Active ("A") and Not Active ("N") will remain unchanged.

It should be noted that the setting in Smart Meters of Device Statuses, "Recovery" and "Recovered" do not contribute to the changing of DCC Service Status in related Meter Points.

DSP's current implementation for supplying outgoing data to RDPs for DCC Service Status has a database query which returns flags that have changed to status A but for which the status change has not yet been notified to the RDP. The current implementation includes recording that a change has been notified to the RDP.

This approach would be extended in the proposed DSP solution for this Modification to cover status changes to I and N. Note that Meter Points for which the DCC has never supported a Smart Metering service, will be recorded with null DCC Service Status, so would not be picked up by this query for N, i.e. only Meter Points which have been Active previously and then become Not Active would be identified.

When the new Modification functionality goes live, all Meter Points where the DCC Service Status is I and N in the DSP Inventory will be picked by the first run. The performance risk has been considered; research on Production data shows that at the time of submission of this preliminary impact assessment there are approximately 45,000 Meter Points with DCC Service Status N spread across all the RDPs (for comparison, there were approximately three million live Smart Meters). It is assumed that these numbers are not large enough to justify introducing a batching approach for the initial catch-up, and that it should be possible for them all to be notified to RDPs using the same approach as the subsequent incremental changes. This PIA also expects that the Meter Points with the DCC Service Status "I" will also be small enough to avoid batching for the initial catch-up. However, this should be reviewed nearer the time of implementation in case the position changes substantially.

Two feature switches will be introduced by which the new functionality in this Modification will be enabled, one for Gas service and one for Electricity service at the appropriate point for each. It is assumed that the new functionality will be enabled only when all RDPs for a given fuel type are in a position to receive the new DCC Service Status, i.e. there will be no need for DSP to enable the new feature for electricity on a per RDP basis, since with more than 20 electricity RDPs that would make the solution more complex.

In Enterprise Systems Interface (ESI) reports, Meter Point Registration Extract and Meter Point Extract only include those with DCC Service Status "A", and it is assumed that will continue to be the case, so the changes under the core solution do not impact those data extracts.

3.2.2   Service Status, A, N, I, and S (Suspended) Solution

Further additional functionality has been requested to assess the impact of introducing a new DCC Service Status *Suspended* ("S") to match the SMI Device Status of Suspended, and extending the solution to Include Suspended Status. The transition to and from the 'S' status would happen as follows:

•   When all the Smart Meters associated with a specific Meter Point becomes Suspended, the DCC Service Status of a Meter Point becomes 'S'

•   If any of the Smart Meters associated with a Meter Point in DCC Service Status 'S' has been restored from suspension then the DCC Service Status will return to its previous status (I or A).

It must be stressed that adopting changes due to a corresponding Smart Meter's Firmware Version suspension could result in large numbers of Meter Points needing to have their DCC

Service Status changed at the same time (e.g. a million Smart Meters can have their firmware suspended at one go). This will require the corresponding RDP data flow to be divided into multiple batches to handle the higher volumes. This significantly increases complexity and implementation cost of adding support for the DCC Service Status 'S'.

Introduction of DCC Service Status 'S' affects a number of ESI reports. Currently the DCC Service Status 'A' is a criteria for producing the following ESI data extracts.

• ESI-031 / ESI-031i Meter Point Registration Extract

• ESI-032 / ESI-032i Meter Point Extract

• ESI-033 / ESI-033i Premises Extract

With the introduction of DCC Service Status 'S' any Meter Points that were previously in the DCC Service Status 'A' would become excluded from the report. Therefore, it is required to modify the criteria to include both 'A' and 'S' while producing these extracts, so that the recipients of these reports remain unaffected.

The definition of ESI-032 / ESI-032i will need to be changed such that the status 'S' is supported by the field DCC Service Status.

Two DSP feature switches will be introduced to enable the new functionality, one for Gas and one for Electricity at the appropriate point for each. It is assumed that the new functionality will be enabled only when all RDPs for a given fuel type are in a position to receive the new DCC Service Status, i.e. there will be no need for DSP to enable the new feature for electricity on a per RDP basis, since with more than 20 electricity RDPs that would make the solution more complex.

3.3 Impacts on SMETS1 Service Providers

The DSP also send the DCC Service Status to the S1SPs as part of the "Inventory synchronisation" that takes place between DSP and the S1SPs. The Service Status is included because the DSP replicates the entire Meter Point table which contains the DCC Service Status attribute. The S1SPs have no use for this attribute, and to avoid unnecessary change (and cost) for all of the S1SPs, the solution will map the new DCC Service Status values (I and S) to the values they would have taken previously (i.e., Null and A respectively) in the data exported to the S1SPs.

The solution has been designed to not impact SMETS1 as follows.

3.3.1 A, N, and I Solution

The DCC Service Status values currently recognised by the S1SPs are A, N and W. The newly added status "I" is not a recognised by S1SPs as a valid DCC Service Status. DCC Service Status is set as NULL for new Smart Meters prior to commissioning. In order to avoid the impact of introducing the new DCC Service Status 'I' on S1SPs, DSP will map 'I' to NULL in the relevant data extracts and web service requests.

3.3.2 A, N, I, and S (Suspended) Solution

S1SPs do not recognise 'S' as a valid DCC Service Status. In order to retain the existing meaning of the data sent to the S1SPs, DSP will map 'S' to 'A' in the relevant data extracts and web service requests. This will ensure that S1SPs are not required to make any changes as result of this Modification.

3.4   Other Solution Impacts

Two other areas of the overall Smart Metering System solution are likely to be impacted by the solutions described above.

- The Ofgem Switching Programme, also referred to as the Central Switching Solution (CSS), will assume the responsibility for providing RDP updates to DSP.

- Changes to the Registration Data outgoing flows from the DSP for electricity and gas to add a Not Active status ('N'). This depends on revised interface specifications being agreed with the industry.

These impacts will be fully assessed as part of the Full Impact Assessment (FIA), if the revised approach is approved and the FIA requested.

In addition, impacts have been identified on the Master Registration Agreement (MRA) and Xoserve, the Central Data Service Provider for Great Britain's gas market.

In terms of the MRA, the D0350 flow, an industry Registration Data process, currently used by the MRA will be impacted by the proposed status changes. This flow is used so that the DCC notifies an MPAS that it is providing communications services to a metering point and provides any data updates required for that MPAS. As the DCC is only limited by how many flows are needed (1 MPAN/MPRN = 1 flow) in an update and with MRA saying there is no cap on the content or how many flows can be placed in a single file update, this results in the chance of thousands of Devices potentially changing Flag state all at once. The MRA have also agreed in principle a June 2021 date for implementation, although this will be subject to change and will be reviewed going forward to ensure this is still appropriate.

Xoserve have confirmed that the impacts of this Modification would be limited to changes to the UK Link Manual to set out guidance surrounding the changes to any flags and consequential impacts on RDPs. Xoserve additionally stated that to mirror the impacts of this Modification, a proposal has been raised through Xoserve to ensure that all impacted codes facilitate their changes on the same date. This proposal is called XRN 5142 – New Allowable Values for DCC Service Flags in DXI File from DCC, and as of August 2020 is in its Initial Review stage.

3.5   DSP Solution Changes Summary

The revised list of DCC Service Statuses and the rules that lead to them are summarised in the table below.

DCC Service Status	Description
Null	The starting position of a Meter Point that never had a Smart Meter operated via DCC. This will not be used in the flows to the RDP.
Installed Not Commissioned ("I")	The Meter Point Status "I" requires <u>all</u> the associated meters to be in the 'Installed Not Commissioned' status in the SMI.
Active ("A")	The Meter Point Status "A" requires at least one of the associated meters to be in the 'Commissioned' status in the SMI.
Not Active ("N")	The Meter Point Status "N" requires all the associated meters to be in the 'Decommissioned' status in the SMI.
Suspended ("S") **[A, N, I, and S Only]**	The Meter Point Status "S" requires all the associated meters to be in the 'Suspended' status in the SMI.

4 Impact on DCC Systems, Processes and People

This section describes the impact of SECMP0077 on DCC Services and Interfaces that impact Users and/or Parties.

4.1 System Components

The following DSP system components are affected by this change:

- Data Management

- Registration Data interfaces outgoing from DSP to RDPs, both electricity and gas

- Reference data to define the two new feature switches

4.2 Security Impact

The implementation will be security assured during the implementation phase. This includes reviewing designs, test artefacts and providing consultancy to the implementation and test teams.

A more detailed security impact will be carried out as part of the Full Impact Assessment.

At this stage, a penetration test and updates to protective monitoring are not thought to be required.

4.3 Technical Specifications

No changes to DUIS, GBCS, or any other Technical Specification is expected.

Changes to industry flows as detailed above are anticipated.

Guidance notes relating to the DCC Service Status and the conditions associated with each will be produced as part of the detailed design, and included in the appropriate SEC Release.

4.4 Integration Impact

An appropriate level of Systems Integration and User Integration Testing (SIT and UIT) will be carried out prior to progressing the release of this change to the Production environment, but this is not included in the PIA.

Testing of the changes to the Registration Data interfaces between the DSP and RDPs will be required.

4.5 Infrastructure Impact

There will be no change to the infrastructure design as a result of this change.

The Modification does not impact the DSP resilience or Disaster Recovery implementation.

4.6 Application Support

No changes to Application Support are expected.

4.7 Service Impact

No material impact is expected for the DSP Operations team and no changes to SLAs are expected.

4.8 Safety Impact

No impact is expected, but a full Safety Impact Assessment will be carried out as part of the production of the Full Impact Assessment (FIA).

4.9 Contract Schedules

No changes to contracts are expected, but this will be re-evaluated for the FIA.

5 Implementation Timescales and Approach

Notwithstanding in which release this change is implemented, based on the currently stated requirements, the elapsed time for DSP implementation from project initiation through to PIT complete for the two solution options will be:

- For the A, N, and I Solution approximately 1 month
- For the A, N, I, and S Solution between 3 and 4 months

The release lifecycle duration will be confirmed as part of the FIA. As currently planned, the standard ongoing major release model will provide drops to the production environment in November 2021.

5.1 Implementation Approach

Implementation of this change is assumed to follow a waterfall methodology. The release lifecycle duration will be confirmed as part of the FIA.

When the proposed new functionality goes live, all Meter Points with DCC Service Status of N in the DSP Inventory will be identified by the first run. This performance risk has been considered; research on Production data shows that at the time of this PIA (November 2019), there are approximately 45,000 Meter Points with DCC Service Status N spread across all the RDPs out of approximately three million live Smart Meters. It is assumed that these numbers are not large enough to justify introducing a batching approach for the initial catch-up, and that it should be possible for them all to be notified to RDPs using the same approach as the subsequent incremental changes. However, this should be reviewed nearer the time of implementation in case the position changes substantially.

5.2 Testing and Acceptance

It is assumed that the change will be implemented and tested as part of a major release, and will include release based regression testing in SIT and UIT. Changes to the RDPs will be tested during UIT.

6 Costs and Charges

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

The scope of supply under this PIA includes design, development (build), system testing, and performance testing within the PIT environments.

The Rough Order of Magnitude cost (ROM) shown below describes indicative costs to implement the functional requirements as assumed above. The price is not an offer open to acceptance. It should be noted that the change has not been subject to the same level of analysis that would be performed as part of a Full Impact Assessment and as such there may be elements missing from the solution or the solution may be subject to a material change during discussions with the DCC. As a result the final offer price may result in a variation.

6.1 Design, Build, and Testing Cost Impact

The table below details the cost of delivering the changes and Services required to implement this Modification. For a PIA, only the Design, Build and PIT indicative costs are supplied.

£	Design, Build and PIT	SP Total
A, N, and I Solution	50,000	50,000
A, N, I, and S Solution	275,000	275,000

Based on the existing requirements, the fixed price cost for a Full Impact Assessment is **£11,169** and would be expected to be completed in 30 days.

7 Risks, Assumptions, Issues, and Dependencies

In the following sections, Risks, Assumptions, Issues, and Dependencies have been identified. Two clarifications are also requested.

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

7.1 Risks

Ref.	Risk Description	Mitigation
MP77-RA01	Integration with CSS is not in the scope of this document	This will be considered in the FIA

7.2 Assumptions

Ref.	Area	Description	Accept
MP77-AD01	Volume	It is assumed that numbers of Meter Points with Device Status I and N are low enough that it should be possible for them all to be notified to RDPs using the same approach as the subsequent incremental changes, i.e. they are not large enough to justify introducing a batching approach for the initial catch-up	
MP77-AD02	Requirement	There is a disparity between some status meanings as described in the requirements and the terminology used in the solution descriptions. It is assumed that SECAS accept the usage of the technical terminology.	
MP77-AD03	RDP	It is assumed that the new feature will be enabled only when all RDPs for a given fuel type are in a position to receive the new DCC Service Status, i.e. there will be no need for DSP to enable the new feature on a per RDP basis	
MP77-AD04	Data Flow Change	SECAS will coordinate changes to electricity and gas data flows with the industry	
MP77-AD05	Reports	Assume it will continue to be the case that ESI data extract reports Meter Point Registration Extract and Meter Point Extract will only include DCC Service Status "A", i.e. those with DCC Service Status "N" are not included	
MP77-AD06	Switching	Integration with CSS is not in the scope of this Modification. If that position changes then a Change Request governing DSP's CSS adaptation will need to be raised or amended.	
MP77-AA07	SMETS1 and SMETS2	The introduction of the new functionality described above is limited to SMETS2 only	
MP77-AA08	Code	This document does not include any reference to the Master Registration Agreement (MRA) and Uniform Network Code (UNC). These are out of scope for this document, but will be a key factor in progressing the Modification	

7.3 Issues

None at this time.

7.4 Dependencies

Ref.	Area	Dependency	Impact
MP77-DD01	Reg Data Flows	Implement changes to outgoing Registration Data flows for electricity and gas to add a Not Active status ('N'). This will depend on revised interface specifications being agreed with the industry.	Med

7.5 Clarification

Ref.	Dependency	Impact
MP77-CA01	What is the expected behaviour if there are multiple meter changes in one day?	Medium
MP77-CA02	How does the system ensure that synchronisations occur between SMI and RDP without any opportunity to correct it manually or automatically?	Medium

Appendix A: Glossary

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

.Acronym	Definition
CH	Communication Hub
CPL	Certified Products List
CR	DCC Change Request
DCC	Data Communications Company
DSP	Data Service Provider
DUIS	DCC User Interface Specification
ESI	Enterprise Systems Interface
ESME	Electricity Smart Metering Equipment
FIA	Full Impact Assessment
GBCS	Great Britain Companion Specification
GSME	Gas Smart Metering Equipment
IHD	In Home Display
MPAN	Meter Point Administration Number
MPAS	Meter Point Administration Service
MPRN	Meter Point Registration Number
MPxN	Generic term for Meter Point (Number)
MRA	Master Registration Agreement
PIA	Preliminary Impact Assessment
PIT	Pre-Integration Testing
PPMID	PrePayment Meter user Interface Device
RDP	Registration Data Provider
ROM	Rough Order of Magnitude (cost)
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
S1SP	SMETS1 Service Provider
SMETS	Smart Metering Equipment Technical Specification
SMI	Smart Metering Inventory
SMS	Smart Metering System
SP	Service Provider
SR	Service Request
SRV	Service Request Variant
SSI	Self Service Interface
TTO	Transition to Operations
UIT	User Integration Testing
UNC	Uniform Network Code