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MP077 'DCC Service Flagging'

Modification Report

Version 1.0

18 January 2021

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About this document

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

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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 Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full Data Communications Company (DCC) Impact Assessment response.
- **Annex D** contains the full responses received to the Refinement Consultation.
- **Annex E** contains the DCC statement around the costs. This annex is classified as **RED** – Parties can request a copy by emailing sec.change@gemserv.com.

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1. Summary

This Proposal was raised by Paul Saker of EDF on 7 June 2019.

The industry needs a simple and reliable mechanism for identifying where smart Devices are, or are not, present at a location. This is currently performed by a DCC 'service flag' at meter point level, where the information is stored in the DCC's Smart Metering Inventory (SMI). This information is necessary for Suppliers to establish whether there is a Smart Metering System (SMS) they can communicate with at that location. Suppliers need this information on order to be able to offer consumers the correct service and associated tariff. Network Parties need the information to correctly handle Alerts.

Issues have been identified in the current process where the DCC service flag is incorrect. This hinders both the switching process for some consumers with Smart Meters (as Suppliers cannot offer an appropriate tariff) and Ofgem's Switching Programme in general.

The Proposed Solution is to amend the SEC Appendix X 'Registration Data Interface Specification' and any other references in the SEC to the DCC service flags. The 'W' for Withdrawn and 'S' for Suspended flags will be removed. Instead, a 'N' for Non-Active and an 'I' flag for InstalledNotCommissioned will take their place. By doing this, the new DCC service flag states should align to what is written in the SEC and allow Users to tell the difference between the status of an SMS which is either Active, installed but not commissioned or decommissioned.

The cost of implementing the Modification Proposal is approximately £387,000. This Modification Proposal affects all Supplier Parties, Gas and Electricity Network Operators, Other SEC Parties and the DCC. This Modification Proposal will impact the DCC Systems by affecting the Data Service Provider (DSP), but will not impact the technical specifications. This change is targeted for the November 2021 SEC Release and is a Self-Governance Modification. Please note that this Modification Proposal requires sequential changes to be administered by the Master Registration Agreement (MRA) and Xoserve for the Uniform Network Code (UNC) to be implemented on the November 2021 SEC Release date.

2. Issue

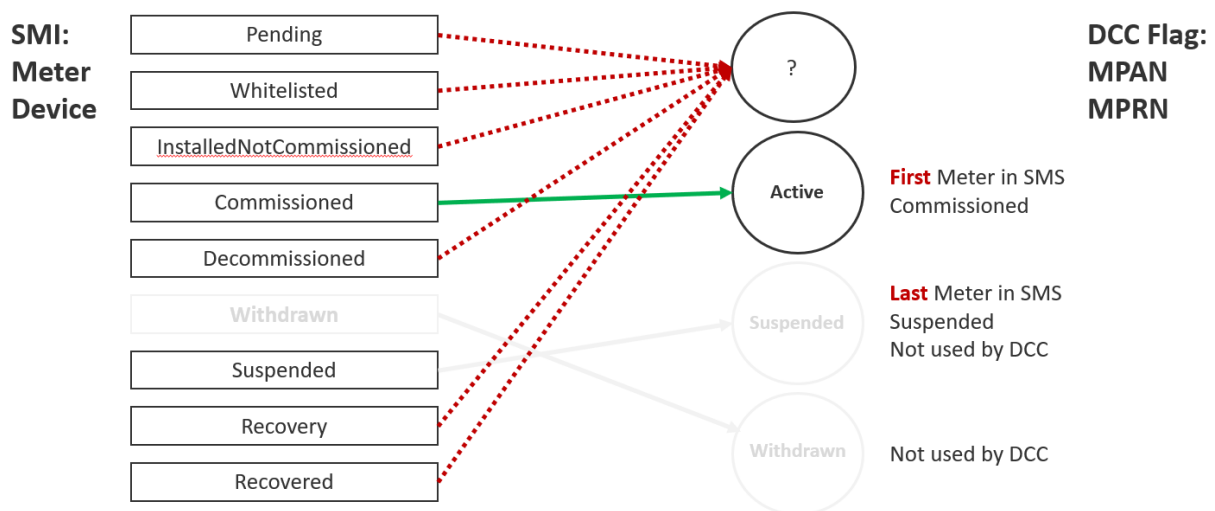
What are the current arrangements?

The current approach, as recommended by the DCC, is to use the DCC service flag held in the gas and electricity registration systems to understand the SMS at a property. This registration is managed by the DCC Service status update file as part of the wider DCC Systems. The DCC describes this as the file produced by DCC and transferred to each Network Party detailing the DCC Status of each Electricity Metering Point or Gas Supply Meter Point registered to that Network Party. This is created using the D0350 'Notification of DCC Services at Metering Point' data flow triggered from the DCC central systems. When the first meter in a smart metering system is commissioned the value of the service flag is set to 'A' for active. The other current service flag values available are 'S' for suspended and 'W' for withdrawn. These three DCC service flags are detailed in the SEC in Appendix X 'Registration Data Interface Specification'.

The DCC service flags correspond to the various states as described in the SMI which consist of the following:

- Pending
- Whitelisted
- InstalledNotCommissioned
- Commissioned
- Decommissioned
- Withdrawn
- Suspended
- Recovery
- Recovered

Of this list, only Commissioned, Withdrawn and Suspended are currently in use for DCC service flag states. The current SMI Device states and how they are mapped to the service flags are displayed in the infographic below:



This illustrates and details where Suppliers and Network Parties have noted that the 'Active' status does not change, even when all Smart Meters have been physically removed from the premises. This also helps to explain why the 'Withdrawn' flag isn't used as the non-domestic opt out has since been removed, as per the BEIS consultation referenced below, and why the 'Suspended' state is currently not working as originally intended due to Smart Meters being removed and the SMS still being listed as 'Active'.

What is the issue?

At the moment, multiple concerns that have been raised with the way the DCC service flags operate. These issues include:

- The DCC service flag is being set to 'A' (active) where a smart metering system is installed but has not been commissioned, and therefore cannot be operated as 'smart'. It appears that this may be set to 'A' when the meter status is set to 'whitelisted' or 'installed not

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commissioned'. This is incorrect as these SMSs are not active and is not what would be expected based on the definition of 'Enrolment' within the SEC as found in SEC Section A 'Definitions and Interpretations' and H5 in SEC Section H 'DCC Services'.

- The DCC service flag currently will remain as 'A' indicating an SMS is still present even when a SMS is removed and not replaced or is replaced with a non-smart meter as there are no DCC service flags to reflect that removal.
- The DCC service flag may remain as NULL, where a valid flag value hasn't been set. This may be the case even where a Smart Metering Equipment Technical Specifications (SMETS) 2 meter has been installed, if the meter has been installed without a WAN connection being made ('Install and Leave' process).
- Due to the removal of the "non-domestic opt-out"¹, the 'W' DCC service flag is no longer required. The non-domestic opt-out allowed SMETS2 Smart Meters to be 'Withdrawn' from a non-domestic premises (both public and private), but following a BEIS consultation had chosen to remove this from the energy Supply Licence.
- The 'S' flag is not currently used in DCC Systems. This is due to the SEC not currently detailing the service flag states and that the appropriate Device status has been removed from the Central Products List (CPL), meaning it is no longer in use.
- The DCC systems include a value of "N" for Not Active to address the situations where a meter is or has been present but is not operating in smart mode, but this value is not currently used in the registration systems.

SEC Section E 'Registration Data' specifies an obligation on the DCC to provide information to Gas and Electricity Registration Data Providers (RDPs) where an enrolled SMS is associated with the relevant network. SEC Appendix X 'Registration Data Interface Specification' details the definition of a service flag and the relationship of the interfaces between the RDPs and the DCC concerning data flows as defined in the Data Transfer Catalogue (DTC). Currently, SEC Appendix X still uses the 'Withdrawn' and 'Suspended' flag states which are no longer used for the reasons given above and there is no area in the SEC which explicitly defines how each individual service flag corresponds to an enrolled SMS.

What is the impact this is having?

It is important that the issues raised are addressed as it is having a direct impact on and impeding the switching process for some consumers with Smart Meters. The reliability and accuracy of the switching process is something that Ofgem is focussing on currently through its Switching Programme.

The industry needs a simple and reliable mechanism for identifying where smart Devices are, or are not, present at a location. This information is necessary for Suppliers to establish whether there is an SMS they can communicate with at that location in order to accurately offer customers the correct tariff and service. It is also essential for Network Parties to correctly handle Alerts.

It could also lead to Suppliers having to expend additional resources and effort to correct any issues and reducing confidence in the existing business process. Suppliers with Smart Metering stock may need to perform a site visit to attain information concerning SMSs such as the location and condition

¹ The "non-domestic opt-out" was removed from the Energy Supply Licence conditions following a [BEIS consultation](#).

of individual Devices, whether they are fully operational, in a 'dumb' state or have been removed and/or damaged.

Impact on consumers

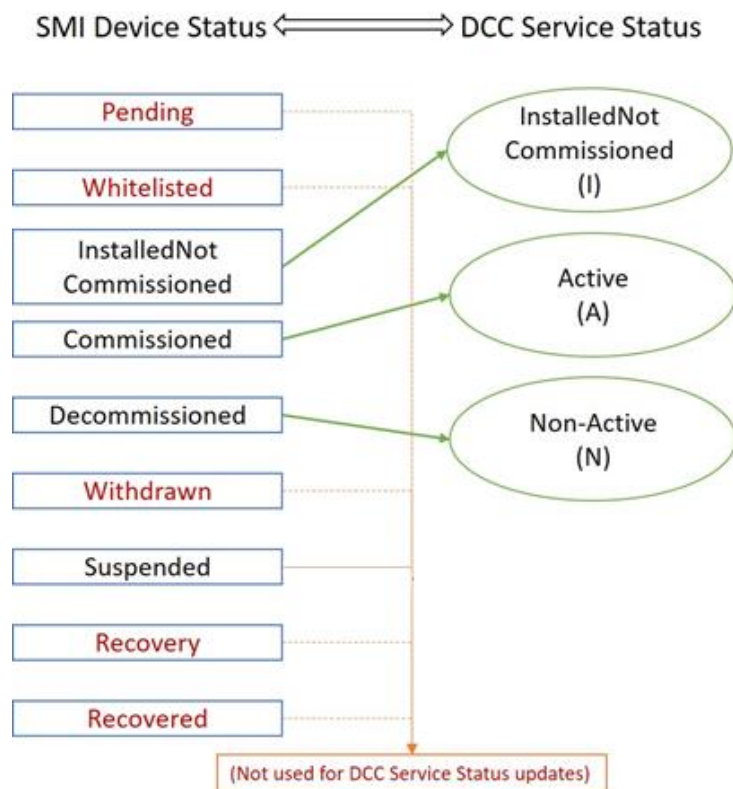
If a consumer wants to switch Suppliers, their tariff will be based on the information in the SMI. However, if the consumer's actual meter configuration does not match this information, it might not be possible to complete a switch or the consumer might default onto a different tariff causing financial loss. If the issue is left unchecked, it may result in consumers not being offered a full choice of products or services as part of the Change of Supply process leading to reducing consumer confidence in the Smart Metering Programme.

3. Solution

Proposed Solution

The Proposed Solution is to amend SEC Appendix X 'Registration Data Interface Specification' to describe the DCC service flag process. This will require removing the 'W' and 'S' flags which are no longer in use, and instead replace them with the existing DCC 'N' flag and a new 'I' (InstalledNotCommissioned) flag which will need to be placed into the appropriate registration system. Additional guidance will be added to the SEC to describe what each service flag does.

These new DCC service flag states in addition to the 'A' flag will enable Users to tell the difference between an SMS that is active, installed but not fully operational, or decommissioned. As a result of these changes, the 'Suspended' state will no longer be mapped to a service flag and will not be affiliated with the other service flags. This will not create any issues, as when a Device would be placed in a 'Suspended' state but the SMS it is part of is displayed as 'Active' with the 'A' flag, this should not change. An example where this would happen is if the Device model is removed from the CPL, and a Supplier Party would then likely issue a firmware update of said Device which throughout would keep the SMS displayed as 'Active' This results in the SMI Device states being mapped to the new service flag states as outlined below:



For the purpose of clarity, below is a list of the possible DCC service flag states and their descriptions:

- **NULL** - The starting position of a Meter Point that is not associated with a Device with an 'Installed Not Commissioned' or 'Commissioned' Device status and has not done so previously.
- **'Active'/'A'** - The Meter Point Status 'A' requires at least one of the associated Smart Meters to have the 'Commissioned' Device status in the SMI.
- **'Non-Active'/'N'** - The Meter Point Status 'N' indicates that it is not associated with a Device with an 'Installed Not Commissioned' or 'Commissioned' Device status, but has been previously.
- **'InstalledNotCommissioned'/'I'** - The Meter Point Status 'I' requires all the associated Smart Meters to have the 'Installed Not Commissioned' Device status in the SMI.

The business requirements for the Proposed 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

Breakdown of Other SEC Party types impacted			
✓	Shared Resource Providers	✓	Meter Installers
✓	Device Manufacturers	✓	Flexibility Providers

All Parties are impacted by this change to some degree. All Users can use the DCC service flags to be given information on the status of an SMS. If these change then any Party who uses these amended service flags will be impacted.

Supplier Parties will be additionally positively impacted by potentially not having to correct any issues arising from incorrect information being provided to a SMS they are responsible for. This will result in less time and money being used to mitigate these issues.

DCC System

In the DCC Impact Assessment the DCC stated that its DSP Systems are impacted by this change. However, it confirms there are no changes to Technical Specifications.

The DCC Service Status update file used for registration data management for processing electricity and gas will be amended to include meter points which have had a DCC Service Status update to the 'A' flag and the meter points which have had a DCC Service Status to either of the incoming 'N' or 'I' flags.

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:

- Appendix X 'Registration Data Interface Specification'

The full details of the legal text can be found in Annex B.

Consumers

Consumers will be positively impacted by this change by their Suppliers being able to pass on reliable information about the state of a SMS their respective Devices. Suppliers will be able to identify which premises are able to run a full range of Smart Metering services and so will help to ensure that a Change of Supplier event doesn't deprive a consumer of any of the benefits of Smart Metering.

Consumers will also benefit from accurate information being given to Devices they own on an SMS and therefore being offered the correct tariff and not potentially incur any pass through of costs incurred by Suppliers.

Other industry Codes

This Modification Proposal will impact both the Master Registration Agreement (MRA) and Xoserve who administer the UNC. Both Codes were consulted extensively during the Refinement Process of the Modification Proposal. As part of these discussions, an agreed implementation date of 4 November 2021 (November 2021 SEC Release) was confirmed across the SEC, MRA and the UNC in consultation with Ofgem so that all the impacts would be made live simultaneously.

MRA

The MRA will be affected as it will be required to change the D0350 flow, used in the industry Registration Data process.

The D0350 flow allows the DCC to notify the Meter Point Administration Service (MPAS) that it is providing communications services to a metering point. It further provides any data updates required for that MPAS.

A concern was raised as the DCC is only limited to one flow per MPAN/MPRN. The MRA confirmed there is no cap on the content or how many flows can be placed in a single file update. This could mean thousands of Devices potentially changing flag state all at the same time.

As part of the changes to the D0350 flow, the 'W' and 'S' service flag values will be replaced with the new 'N' and 'I' service flag values. This requires a sequential change to be made after this Modification Proposal is approved so that the DTC matches SEC Appendix X resulting in the service flag values remain consistent. The existing service flag values for Electricity RDPs in the MRA which will need to be amended can be found [here](#).

Under the Retail Code Consolidation (RCC) Significant Code Review (SCR) the MRA will transition to the Retail Energy Code (REC) on 1 September 2021. The MRA highlighted that this could provide a barrier to implementing the changes on the proposed implementation date in November 2021. After raising this issue with Ofgem, it was agreed that a consequential change would be raised after MP077 is approved in order to carry out the changes to the REC needed to mirror the SEC changes.

Xoserve

Xoserve will be affected by changes to the UK Link Manual so it can set out guidance surrounding the changes to any flags and consequential impacts on RDPs. The UK Link Manual contains the terms and conditions of the UNC, as set out in the framework of the gas transporters license.

Xoserve additionally stated that to mirror the impacts of MP077, a proposal has been raised through Xoserve to ensure the changes are implemented on the same date. This proposal is called [XRN 5142 – New Allowable Values for DCC Service Flags in DXI File from DCC](#).

Like the MRA, this consequential change will enact the amendments needed to ensure that all Codes align to the newly introduced DCC service flag states. The proposal will set out the detailed design stages and lay out the changes required after MP077 is approved and pending implementation in November 2021. This approach was agreed with SECAS, the MRA/REC and Ofgem.

Greenhouse gas emissions

There are no impacts on greenhouse gas emissions.

5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification is £387,378. The breakdown of these costs is available in Annex E which will be available upon request from SECAS for SEC Parties by emailing sec.change@gemserv.com.

SECAS costs

The estimated Smart Energy Code Administrator and Secretariat (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 minority of respondents to the Refinement Consultation stated they would incur minor costs. One respondent stated it would be a low cost due to updating a list of valid values. Another respondent stated that they would require further analysis to detail the effort and costs associated with implementation.

6. Implementation approach

Agreed implementation approach

The Panel agreed an implementation date of:

- **4 November 2021** (November 2021 SEC Release) if a decision to approve is received on or before 4 March 2021; or
- **3 June 2022** (June 2022 SEC Release) if a decision to approve is received on or before 1 October 2021, but after 4 March 2021.

According to the DCC's Impact Assessment, they have stated that eight months lead time would be required to implement the Proposed Solution. This lead time means that the earliest SEC Release this Modification Proposal can be implemented in is the November 2021 SEC Release.

This implementation approach has been agreed in principle by the MRA/REC, Xoserve and Ofgem, where following approval of the SEC Modification Proposal, sequential changes will be made so that all industry Codes progress their changes to go live on 4 November 2021.

7. Assessment of the proposal

Observations on the issue

The Technical Architecture and Business Architecture Sub-Committee (TABASC) stated its interest in the modification. It questioned whether this would be classified as a defect; something the DCC needs to correct to be in line with what the SEC currently states. SECAS responded saying that because the modification's solution could end up changing the DCC flagging system outright, this would require a SEC modification rather than being a defect. No other Sub-Committee gave any views on the Modification Proposal during its Development Stage.

Comments from SEC Parties were unanimously supportive, expressing their support to address the issue raised and to prevent it becoming harder to manage. One Large Supplier noted, along with its support, that there would be a cross-Code impact with the MRA and that any Impact Assessments would have to be coordinated with developments with Ofgem's Switching Programme. SECAS had acknowledged the cross-Code impact this modification would create with MRA and confirmed that there had been communication between Ofgem and the DCC over implementation of the solution. Following discussions with the other industry Codes affected and Ofgem, the outcome was an agreement to target the implementation of the Modification Proposal for the November 2021 SEC Release. Following approval of the SEC Modification Proposal, the MRA and Xoserve would progress the necessary changes in their Codes with an implementation date to match this Modification Proposal, to ensure a synchronised set of changes to the DCC service flags takes place.

Solution development

Changes in the Solution from the Business Requirements

When the Proposed Solution was originally suggested in the first Working Group meeting, members believed that InstalledNotCommissioned, Suspended and Recovery/Recovered should be included in the new 'N' flag. The business requirements were drafted to include these and were submitted to the DCC for a Preliminary Assessment. When the Preliminary Assessment was returned, SECAS noted that there were divergences from the business requirements which were raised at the next Working Group meeting. Specifically, the DCC's solution did not include the Suspended and Recovery/Recovered states under the 'N' flag.

This was due to some of the proposed changes potentially resulting in large numbers of Meter Points needing to have their DCC Service Status flag changed at the same time. For example, the Meter Point Administration Number (MPANs) and Meter Point Reference Number (MPRNs) associated with every Smart Meter in some types of Smart Metering Key Infrastructure (SMKI) Recovery incident, or a corresponding Smart Meter's Firmware Version suspension or Recovery status. Additionally, changes to the Recovery status could have also affected the performance of the Recovery operation due to having to undertake additional functionality when the focus should be on recovering the Devices. Also, if a popular Device model is removed from the CPL this would cause a large number of DCC service flags on an SMS to change to Suspended simultaneously.

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In a previous communication the MRA stated it could only handle 20,000 updates per file, which is sent to the Network Parties, meaning the approach for these updates would be staggered. Additionally, an 'I' flag was introduced so that the 'N' and 'I' flags could differentiate between Smart Meters that are decommissioned and installed, but not commissioned. With the removal of the 'W' and 'S' flags, this results in the service flags being changed to the following:

- A – Active
- N – Non-Active
- I – InstalledNotCommissioned

One Working Group member enquired into the restrictions on the existing D0350 flows that the 'N' flag would use. In particular, how many flows could be included a single file update and if there was a definitive content limit for this file. This was to confirm whether a single D0350 file update could be sent from the DCC through the DTC to Users could potentially affect hundreds of thousands of Devices. SECAS took this query to both the DCC and the MRA to which both confirmed that there was no limit from a DCC or MRA perspective for what they could provide to Users. This means that a single D0350 update could affect hundreds of thousands of Devices, including the above scenario where if a popular Device type is removed from the CPL, this will suspend them.

One Working Group member asked that any resulting legal text that introduces changes to the DCC service flags in SEC Appendix X include details about the states and their processes, in addition to the change of values. This is so that anyone examining the SEC for the purpose of understanding the roles of the DCC service flag states would be given clear and accessible information for these states. The SEC currently only contains the flag values, but no further information. The other Working Group members agreed with this. SECAS acknowledged this and has provided this additional information alongside the change of values, this can be found in the legal text in Annex B.

Rejected Alternative Solution

A potential Alternative Solution was discussed and ultimately disregarded to amend SEC Appendix X to describe the DCC service flag process. This required removing the 'W' flag which will no longer be in use, and instead replace it with the existing DCC 'N' flag and the new 'I' flag the Proposed Solution looks at introducing, which will need to be placed into the appropriate registration system.

This Alternative Solution would have retained the 'S' flag so that there will be four service flag states in use (A, N, I and S). This option was rejected by the Proposer as it was more expensive in the Preliminary Assessment solutions returned. The Working Group was content to remove the 'Suspended' DCC service flag state as members agreed it was not necessary to know about the suspension. Consequently, only the Proposed Solution was undertaken for an Impact Assessment.

Alignment of changes to other Codes

One member asked about the implementation date, and whether the other impacted codes would be notified about when this change will take place to prevent any breaches of code. SECAS took actions to confirm with the MRA and to Xoserve when a suitable implementation date would be for the Modification Proposal – see Section 4 above.

SECAS was also asked to confirm if the MRA's figure of 20,000 updates per file is for the data flow affected by the Modification Proposal, rather than a Change of Agent flow. The MRA confirmed that

there was no cap on the number of updates in a file, as per the previous enquiry into restrictions on MRA data flows.

Impact on the Ofgem Switching Programme

After investigation, the Ofgem Switching Programme will be unaffected. This is due to the only message from the DSP sent to the Central Switching Service (CSS) being a “CommHubLink” message which only contains information to highlight where a meter point is associated or joined to a specific Communications Hub. The CSS is a one of a number of Switching DSPs which comprises of a registration service and address management service, which shall operate alongside the existing industry registrations services for gas and electricity.

Other impacts of this modification

It has been estimated that of 3 million live Smart Meters, approximately 45,000 meter points were set to the status that is covered in the proposed N flag state. Both the Preliminary Assessment and Impact Assessment confirmed that the solution will only affect SMETS2 Smart Meters, and any changes to SMETS1 Smart Meters will consist of non-functional changes.

The only other area affected by the solution is that there will be changes to the Registration Data outgoing flows from the DSP for electricity and gas to add a Non-Active status ('N') and the InstalledNotCommissioned status ('I').

Support for Change

The Working Group members were happy with this new Proposed Solution in principle.

The Refinement Consultation also noted support from the Consumer Representative and from some Network Parties. Their reasons for supporting the Modifications were that it offered consumers fewer issues for switching Smart Metering services, that the changes to the service flags would improve the reliability of information available and that aligning the SEC to the flags would ensure clarity and transparency.

Views against the General SEC Objectives

Proposer's views

The Proposer believes that the Modification Proposal better facilitates General SEC Objective (a)². The reason for this was that by establishing a source of reliable information on the status of an SMS at a consumer's premise, this will help ensure the efficient operation of Smart Meters and associated Devices. It can also improve the provision of Smart Metering services by helping provide accurate information to Supplier Parties if a consumer is affected by a CoS event.

² Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain.

Industry views

Refinement Consultation respondents who supported the solution believed that the modification better facilitated SEC Objective (a). This was due to better reliability of the information provided through service flags and that it could help identify Devices forming part of a Smart Metering System and its overall status.

Views against the consumer areas

For the current end consumer experience, switching between energy Suppliers is a relatively straightforward process, but crucially requires correct information from the DCC's SMI to underpin the status of an SMS at a consumer's premise. If this Modification Proposal is not implemented by the time the CSS is brought live, there is a risk that incorrect information would be used which could lead to a consumer switching to a new energy supplier that can't offer a full range of services to their location or that it could lead to the wrong tariff being applied. If the consumer's meter configuration does not match this information, it might not be possible to complete a switch of service or the customer might default onto a different tariff causing financial loss.

If this Modification Proposal was to be implemented, the newly proposed service flag states and subsequent mapping would ensure that consumer information matches the data in the SMI. This would mean the information is reflective of whether Devices as part of a consumer's SMS are Active, Non-Active, installed but not yet commissioned, or have been physically removed from the premise. This would provide assurances to consumers that the information they use for switching energy suppliers is reliable and would give them confidence for any switch of service.

Improved safety and reliability

This area would be positively impacted by the change. This would be due to the improvement of accuracy in the information used in the DCC's SMI and therefore the information which is relayed to consumers which would be used for a switch of energy Supplier. This would also increase the confidence of consumers using switching services to find a tariff at optimum cost by getting accurate quotes and lists of services available from energy Suppliers. This will positively impact the Switching Programme by helping to ensure that an SMS involved in a CoS event will be displaying the correct information for its DCC service flag.

Lower bills than would otherwise be the case

This area would be positively impacted by the change. This Modification Proposal will not lower the material cost of energy bills, but would prevent the possible passthrough of costs borne by the energy Supplier on to consumers. By preventing resources being used to rectify issues on site at a premise for an SMS and averting potential reputational damage, this may lower the cost of consumers bills, or at least negate an increase in the costs.

Reduced environmental damage

This area would be positively impacted by the change. An argument could be raised in that no energy would be consumed to transport personnel to a premise for an on-site visit to correct problems with an SMS, but this is a minor improvement. However, this would likely increase the confidence both in the

CSS and the Smart Metering Implementation Programme (SMIP) and consequently encourage the average UK citizen to use a Smart Meter which will reduce energy consumption over time.

Improved quality of service

This area would be positively impacted by the change. The assurances provided by the Proposed Solution would guarantee that consumers can reliably use switching services for changing energy tariffs and that alignments between the DCC's SMI information and the state of Devices as part of a consumer's SMS remain consistent.

Benefits for society as a whole

This area would be positively impacted by the change. The confidence of switching services being underpinned by reliable data will improve consumer confidence in both the SMIP, and the wider UK energy market as a whole.

Comments from Panel

The Panel approved the Modification Report to progress to the Report Phase on 15 January 2021. One member enquired whether the other members were satisfied with the implementation approach and SECAS confirmed that they were continuing to liaise with affected Parties to ensure the implementation approach was achievable.

Appendix 1: Progression timetable

The Panel approved the Modification Report on 15 January 2021. It will now be issued for Modification Report Consultation (MRC) and taken to the Change Board for a vote in February 2021. There, it will look to be approved under Self-Governance with the referral window closing in early March 2021, ensuring the necessary lead time for implementation in the November 2021 SEC Release.

Progression Timetable	
Action	Date
Issue Refinement Consultation	24 Feb 2020 – 13 Mar 2020
Return to Working Group	1 Apr 2020
Preliminary Assessment updated	18 May 2020
Working Group meeting to discuss updated PA	3 Jun 2020
Preliminary Assessment updated with SMETS1 clarifications	17 Jun 2020
Preliminary Assessment updated to include MRA & UNC impacts	20 Aug 2020
Business Requirements updated	10 Sep 2020
Impact Assessment Requested	22 Sep 2020
Joint Industry Code meeting with Ofgem	13 Nov 2020
Impact Assessment returned	25 Nov 2020
Joint Industry Code meeting with Ofgem	27 Nov 2020
Joint Industry Code meeting with Ofgem	11 Dec 2020
Modification Report approved by Panel	15 Jan 2021
Modification Report Consultation	18 Jan 2021 – 5 Feb 2021
Change Board Vote	24 Feb 2021

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
CPL	Central Products List
CSS	Central Switching Service
DCC	Data Communications Company
DSP	Data Service Provider
DTC	Data Transfer Catalogue
MPAN	Meter Point Administration Number
MPAS	Meter Point Administration Service
MPRN	Meter Point Reference Number
MRA	Master Registration Agreement
MRC	Modification Report Consultation
RCC	Retail Code Consolidation
RDP	Registration Data Provider
REC	Retail Energy Code
SCR	Significant Code Review
SEC	Smart Energy Code
SECAS	Smart Energy Code and Secretariat
SMI	Smart Metering Inventory
SMIP	Smart Metering Implementation Programme
SMKI	Smart Metering Key Infrastructure
SMS	Smart Metering System
TABASC	Technical Architecture and Business Architecture Sub-Committee
UNC	Uniform Network Code

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Annex A

Business Requirements – version 1.0

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. Based on these requirements a full solution will be developed.

Business Requirements	
Ref.	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 not been set to active.

This document contains requirements for multiple solution options, and an assessment for each option is to be provided. The table below summarises the requirements that make up each solution option:

Solution Options			
Option	Req. 1	Req. 2	Req. 3
Option 1	✓	✓	✓
Option 2	✓	✓	✓

2. Considerations and assumptions

This section contains the considerations and assumptions for each business requirement.

2.1 General

The DCC Service Flag provides information regarding the state of a Smart Metering System (SMS) at the consumer's premise. The three current states of the DCC Service Flagging are:

- "A" for Active;
- "W" for Withdrawn; and
- "S" for Suspended.

The solution will look to address the issues of understanding what the correct DCC Service Flags are, whether those are displayed and ensuring that the correct information can be sent to users of the service.

The DCC will create a new DCC Service Flag state of "I". The proposed "I" flag will be used to identify a SMS with installed Devices where the Devices are not fully operational or have not been commissioned. Until the SMS can deliver the full range of functionality, the DCC Service Flag associated with the SMS will be set to "I". The "I" flag will be added as a new state to the existing Service Flag states.

With the InstalledNotCommissioned being included in the "I" Flag, the responsible party (or parties) for installation(s) will be obligated to provide the correct information to the Smart Metering Inventory (SMI). This is crucial to ensure no miscommunications occur with setting the correct DCC Service Flags.

The “I” Flag is to be used when the following circumstance occurs:

- One or multiple Metering Devices have been installed at a premise and the DCC is informed by the Responsible Supplier that the Devices are in the state “InstalledNotCommissioned”.

SEC Section A ‘Definitions and Interpretations’ defines the Smart Metering Systems separately for electricity and gas. The DCC Service Flag is used equally for electricity and gas and is communicated to the Electricity Registration Data Provider (RDP) and Gas RDP. MP077 was raised by Network Parties and Suppliers for electricity; however, it makes sense to extend this to gas too, so both are accounted for in the same solution.

We anticipate this solution will have impacts on the Smart Energy Code (SEC), Master Registration Agreement (MRA), Retail Energy Code (REC), the UK Link Systems and potentially the Uniform Network Code (UNC). The UK Link Systems impact will require a change proposal to be raised and implemented by their Data Services Contract (DSC) Delivery Sub-Group.

Any solution should cover Smart Metering Equipment Technical Specification (SMETS)2 meters.

Any solution should include a ‘clean up’ of the data and links between the SEC, MRA and Xoserve which are affected as a result of this Modification Proposal.

Any solution should include guidance notes to fully detail what each Service Flag does in plain English and what it reflects in the inventory as well as what triggers a flag to be updated to that status.

2.2 Requirement 1: To 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 whether there is at least one Device enrolled in a Smart Metering System at a premise.

Currently, the means of identifying Devices is done through identifying whether a SMS is active or not. An active SMS is identified by at least one Metering Device that has been commissioned on the SMS. For accurate information on the location of an individual smart meter, a combination of DCC Service Status, Meter Point Status and Device Status is required. Information supplied by DCC service flags alone does not suffice.

The current implementation of the SEC and DCC service does not account for Devices that may have been removed from the SMS or that don’t deliver all of the smart functionality. If all Metering Devices have been removed from the SMS the status of the SMS remains incorrectly as active.

Therefore, a more granular approach is required. As part of the Modification Proposal’s solution, it looks to allow for the situation where the SMS ceases to exist due to all Metering Devices being removed or not being available. As part of this assessment, we require the clarifications on the current DCC’s use of the “A” for Active Flag and “S” for Suspended Flag states and whether that aligns to the SEC.

DCC will also provide summaries for the current “A” for Active and “S” for Suspended DCC Service Flag States so it can be accurately placed in the SEC. These are required to remove ambiguity from when Flag states are used and to prevent SEC Users being misinformed.

2.3 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, Service Flags describing the state of the SMS are being set to inaccurate values. 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.

This requires DCC to remove the "W" for Withdrawn Flag from the DCC Flagging System. With the "W" Flag requiring a Service Request which is not currently used in the DCC User Interface Specification (DUIS) and future versions, this Flag is obsolete and needs removing. The reason it currently isn't in use in DUIS is due to the removal of the non-domestic opt-out.

2.4 Requirement 3: To implement a new Service Flag state of "N" for Non-Active to inform where a Device has not been set to active.

This requirement obligates the DCC to create a new DCC Service Flag state of "N" to indicate a Non-Active SMS. The "N" flag will be added as a new state to the existing D0350 Data Flow.

SEC Parties have identified that after a SMS is fully operational, the flag is set to "A". However, this flag state did not change on these systems, despite having had all Devices removed from the SMS at a later time.

Upon successful commissioning of the Device the DCC Service Flag will be then set to "A".

The "N" Flag is to be used when the following circumstance occurs:

- All Metering Devices on the SMS have been set to the states "Decommissioned", "Recovery" or "Recovered".

Any time the "N" Flag is used, the DCC will issue the D0350 Data Flow and provide the relevant information to the Meter Point Administration Service (MPAS) Provider.

Discussions took place as to whether more Device States should be included in the "N" Flag's scope or whether it should be providing information at a Device, rather than SMS level. These points were considered by the Proposer from the Working Group and the Technical Architecture and Business Architecture Sub-Committee (TABASC). The Proposer elected to choose this limited scope due to the information at an individual Device level already being available through the SMI. It was acknowledged that although possible to replicate the data in the SMI to deliver information through the Service Flags, this wouldn't be feasible. This was due to concerns that it would come at unjustifiable expense to industry and that the lead time required to implement the solution would be too long for any improvement before Ofgem's Switching Programme takes effect.

3. Solution options

This section outlines the solution options for this Modification Proposal. It provides detailed information on the two variants of the proposed solution for the business requirements contained in Section 1 of this document.

3.1 Option 1

Solution Option 1 will consist of Business Requirements 1-3.

This solution consists of the originally proposed business requirements, with the intention of removing the “W” and “S” Service Flags and retaining only the “A” Flag. From there, two new Service Flags will be added – the “N” and “I” Flags leaving the following 3 states:

- A – Active
- N – Non-Active
- I – InstalledNotCommissioned

3.2 Option 2

Solution Option 2 will consist of Business Requirements 1-3.

This solution consists of the originally proposed business requirements, but with the intention of only removing the “W” whilst retaining both the “A” and “S” Flags. The solution will therefore display the correct information when using these two existing Service Flag states, whilst introducing the two new Service Flags – the “N” and “I” Flags. This will result in the following 4 states:

- A – Active
- S – Suspended
- N – Non-Active
- I – InstalledNotCommissioned

4. Glossary

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

Glossary	
Acronym	Full term
DCC	Data Communications Company
DSC	Data Services Contract
DUIS	DCC User Interface Specification
MPAS	Meter Point Administration Service
MRA	Master Registration Agreement
RDP	Registration Data Provider
REC	Retail Energy Code
SEC	Smart Energy Code
SMETS	Smart Meter Equipment Technical Specifications
SMI	Smart Metering Inventory
SMS	Smart Metering System
TABASC	Technical Architecture and Business Architecture Sub-Committee

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MP077 ‘DCC Service Flagging’

Annex B

Legal text – version 1.0

About this document

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

These changes have been drafted against SEC Version 28.0.

This document contains the changes required to deliver the Proposed Solution.

Appendix X 'Registration Data Interface Specification'

Amend Section 3.28 (b) (i) as follows:

(i) The format of an E46 record is as follows:

Field Name	Optionalit y	Type	Length	Description	
Transaction Type	Mandatory	Text	3	Value: E46	
Outcome Code	Mandatory	Text	2	Details whether the request has been accepted or rejected. AC – Accepted RJ – Rejected.	
Meter Point Reference	Mandatory	Number	10		
DCC Service Flag	Mandatory	Text	1	Service flag provided by the DCC. The allowable values are:	
				A	Active
				SN	Suspended Non-Active
				WI	Withdrawn InstalledNotCommissioned
DCC Service Effective From Date	Mandatory	Date	8	The date the DCC Service Flag (provided above) is effective from. Format : YYYYMMDD	

<u>Service Flag</u>	<u>Description</u>
<u>Active</u>	<u>DCC Service Flag 'A' requires at least one of the associated Smart Meters at an SMS to have the 'Commissioned' Device status in the SMI.</u>
<u>Non-Active</u>	<u>DCC Service Flag 'N' indicates that it is not associated with a Device with an 'InstalledNotCommissioned' or 'Commissioned' Device status, but has been previously.</u>
<u>InstalledNotCommissioned</u>	<u>DCC Service Flag 'I' requires all the associated Smart Meters at an SMS to have the 'InstalledNotCommissioned' Device status in the SMI.</u>

Amend Section 3.29 (a) as follows:

(a) DCC Status File

To notify each Gas Registration Data Provider of DCC Service Flag updates the DCC shall send a single DCC Status File (Ref DXI) that shall consist of a single data

record per update (Ref. E45). The format of an E45 record is as follows:

Field Name	Optionality	Type	Length	Description	SEC reference						
Transaction Type	Mandatory	Text	3	Value: E45	Not applicable						
Meter Point Reference	Mandatory	Number	10		Section E2.4 (b)						
DCC Service Flag	Mandatory	Text	1	<div>Service flag provided by the DCC. The allowable values are:</div> <table><tr><td>A</td><td>Active</td></tr><tr><td>SN</td><td>SuspendedNon-Active</td></tr><tr><td>WI</td><td>WithdrawnInstalledNon-missioned</td></tr></table>	A	Active	SN	Suspended Non-Active	WI	Withdrawn Installed Non-missioned	Section E2.4 (b)
A	Active										
SN	Suspended Non-Active										
WI	Withdrawn Installed Non-missioned										
DCC Service Effective From Date	Mandatory	Date	8	The date the DCC Service Flag (provided above) is effective from. Format : YYYYMMDD	Section E2.4 (b)						

SEC Modification Proposal, SECMP0077

DCC Service Flags

Full Impact Assessment (FIA), DCC CR1249 and CR4069



Version:

1.0

Date:

27th November, 2020

Author:

DCC

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1 Document History

1.1 Revision History

Revision Date	Revision	Summary of Changes
20/11/2020	0.1	Initial compilation from Service Provider
27/11/2020	1.0	DCC internal review completed

1.2 Associated Documents

This document is associated with the following documents:

#	Title and Originator's Reference	Source	Issue Date
1	MP077 Business-Requirements v0.5	SECAS	23/09/2020
2	SECMP0077 CR1249 - PIA - Service Flags v1.01	DCC	16/09/2020

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.

Subsequently the Working Group chose the "A, N, and I Solution", and requested a Full Impact Assessment (FIA) on 1st October, 2020.

The SECAS-provided text following combines references to "Device Status" and "DCC Service Flag", while SECAS title for the Modification is "DCC Service Flagging". 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".

All cost information has been removed from this document to allow public distribution.

2 Solution Requirements and Overview

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 at least one Commissioned meter and any available PPMID or IHD devices. The minimum configurations for a SMS is one CH and Electricity Smart Metering Equipment (ESME) for electricity or one CH and Gas Smart Metering Equipment GSME for gas. 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.

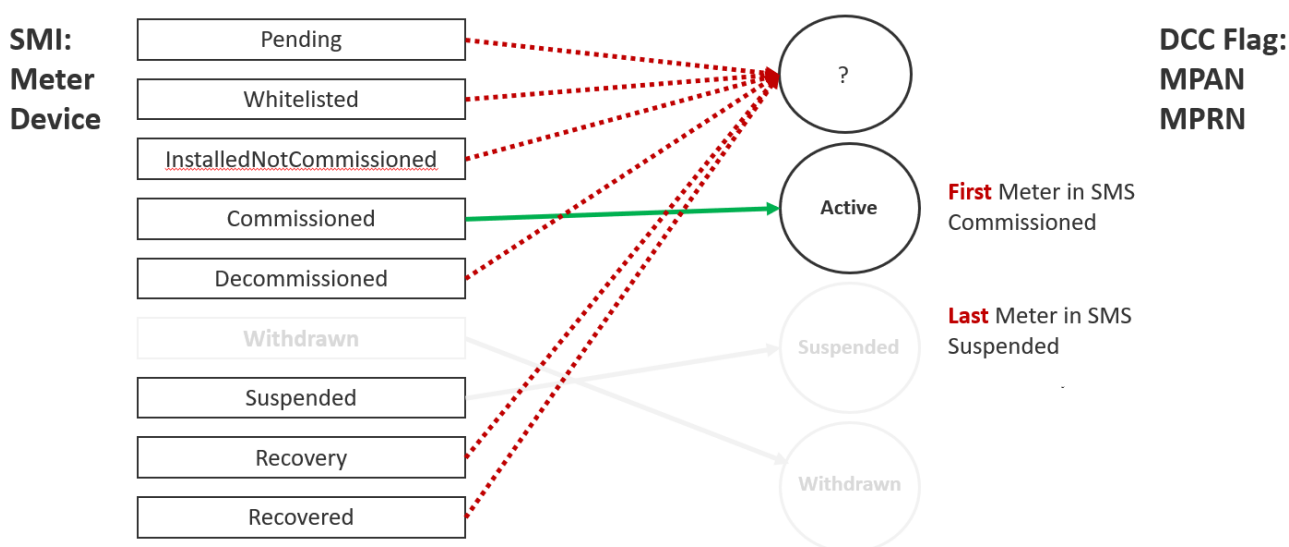
There are three possible status flags; Active (A), Suspended (S), and Withdrawn (W). Once the ESME (or GSME) is Commissioned the SMS has the status of "Active".

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. Suppliers and DNOs have noted that the "Active" state is retained even when all meters are physically removed from the premises, and this is a significant 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 Existing Rules for the Update of DCC Service Status

Existing DSP rules for changing a DCC Service Status from Active to Not Active are based on the decommissioning of Smart Meters and take into account 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 SRV 8.4 Update Inventory. The current values for DCC Service Status are:

DCC Service Status	Description
Null	The starting position of a Meter Point that is not associated with a device with an 'Installed Not Commissioned' or 'Commissioned' device status and never has been.
Active ("A")	The Meter Point Status "A" requires at least one of the associated meters to have the 'Commissioned' device status in the SMI.
Not Active ("N")	The Meter Point Status "N" indicates that it is not associated with a device with an 'Installed Not Commissioned' or 'Commissioned' device status, but has been at some point.

The current electricity and gas daily Registration Data Provider (RDP) reports only include Meter Points whose DCC Service Status has changed to 'A' since the previous report was run. No DCC Service Status changes to 'N' are reported.

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. An active SMS is identified by at least one Metering Device that has been commissioned on the SMS.

For accurate information on the location of an individual smart meter, a combination of DCC Service Status, Meter Point Status and Device Status is required. Information supplied by DCC service flags alone does not suffice.

Currently, the means of identifying Devices is through noting whether a 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 the smart functionality. Therefore, a more granular approach is required as part of the Modification 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.*

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. Currently some 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. The "N" flag will be added as a new state to the existing D0350 Data Flow.

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 premises, but are not fully operational. The Device will be set to N until it can deliver the full range of functionality when it will be set to A.

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 reviews with the Working Group, the DCC was directed to provide a Full Impact Assessment which included a solution against the originally proposed business requirements (DCC Service Flags 'A', 'N' and 'I').

2.6 Business Case

The Modification looks to address the issue of incomplete mapping of Devices states, and potential misalignments between data used for switching held in the Smart Metering Inventory (SMI), the Master Registration Agreement (MRA) for electricity meters and Xoserve for gas meters.

Currently the SMI does not have a full and accurate picture of the Smart Meters at premises. For example, Suppliers and Network Parties have noted the "Active" state is retained even when all meters are physically removed from the premises. This is an issue when it comes to assess whether Smart Metering Services are possible, or in the sense of the SEC, where there is no longer a functional SMS at the premises.

In the current state, there is an impact to Network Operators of being unable to handle alerts from affected Devices correctly, and on potential Suppliers to premises.

If a customer wants to switch Suppliers, their tariff will be based on the information in the SMI. However if the customer's actual meter configuration does not match this information, it might not be possible to complete a switch or the customer might default onto a different tariff causing financial loss. In such cases, Suppliers may have to carry out an expensive site visit to determine the meter type and state at a customer premises, and both waste significant time and inconvenience a customer, in remedying the problem. The reputational damage to Suppliers, the Energy Industry and Smart Metering Programme could be substantial in these cases.

2.7 DCC Service Status and Device Status

The DCC Service Status refers to a Meter Point, which may be an MPAN or MPRN (commonly referred to as a MPxN):

- Within the DSP, it 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 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. Since those Service Requests are no longer available via DUIS that is now irrelevant: 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.
- Device Status refers to an individual Device, which may be a Smart Meter or other Device Type. Examples of Device Status include Pending, Installed Not Commissioned, Commissioned, Decommissioned, Suspended and Recovery.

The statuses are communicated in different ways:

- DCC Service Status is not made available to DCC Service Users by the DCC directly, e.g. it is not included in Self Service Interface (SSI) screens or DUIS Service Requests. The status is available via industry Registration Data processes (D0350 and DXI).
- Device Status is made available to DCC Service Users via the functions in SSI screens and the DUIS Service Request 8.2 Read Inventory.

It should be noted that DSP has already implemented an additional DCC Service Status 'N' meaning "Not Active", which is maintained within the SMI but, as this is not currently a valid value in Registration Data flows, cannot be exported.

3 Solution Overview

The requirement is to include two new DCC Service Status values in the outgoing Registration data flows for electricity and gas:

- I – where a MPxN is associated with meters, but all meters are in an 'Installed Not Commissioned' state
- N – where a MPxN has been, but is no longer, active and associated with any meters

The requirements apply to SMETS1 and SMETS2 meters and above.

The following diagram shows the revised list of DCC Service Statuses and the corresponding Device (Meter) Statuses that trigger switching to those DCC Service Statuses.

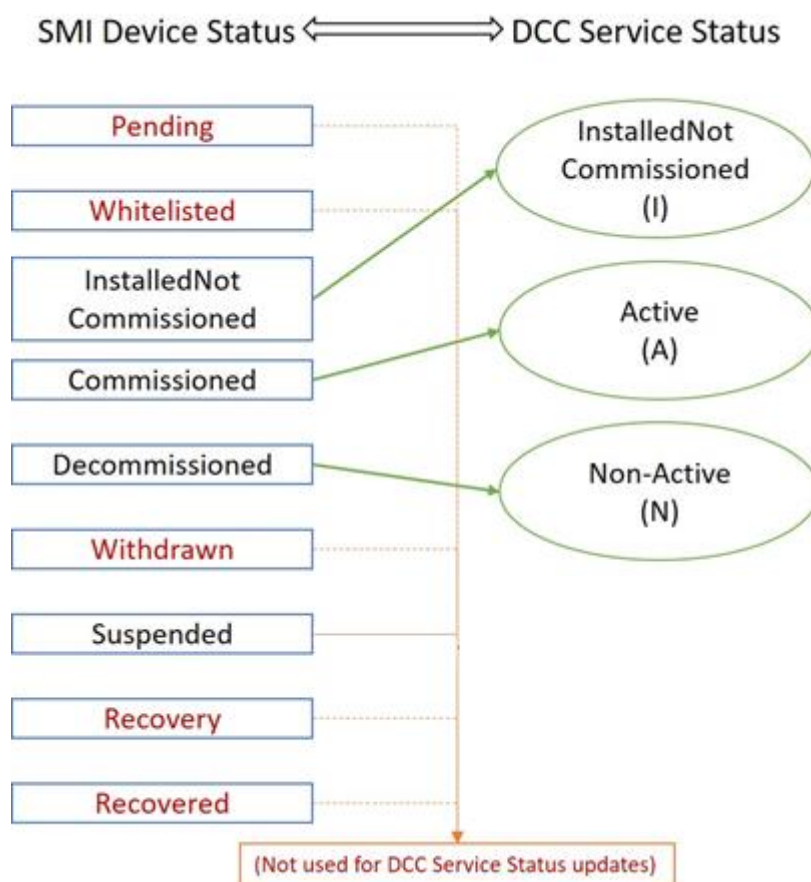


Figure 1: Solution Overview, Mapping Device Status to DCC Service Status

The solution will involve implementing the new DCC Service Status Installed Not Commissioned ("I"), resulting in a revised set of values as below. Note where a Meter Point is linked to a Smart Meter with a 'Whitelisted' device status, this is ignored in the following determination:

DCC Service Status	Description
Null	The starting position of a Meter Point that is not associated with a device with an 'Installed Not Commissioned' or 'Commissioned' device status and never has been.
Installed Not Commissioned ("I")	The Meter Point Status "I" requires all the associated meters to have the 'Installed Not Commissioned' device status in the SMI.

DCC Service Status	Description
Active ("A")	The Meter Point Status "A" requires at least one of the associated meters to have the 'Commissioned' device status in the SMI.
Not Active ("N")	The Meter Point Status "N" indicates that it is not associated with a device with an 'Installed Not Commissioned' or 'Commissioned' device status, but has been in the past.

It should also be noted that changing the Device Status of Smart Meters to 'Recovery' or 'Recovered' does alter the DCC Service Status in related Meter Points.

The daily RDP status report for Electricity and Gas currently includes any Meter Points whose DCC Service Status has changed to 'A' since last reported. The report will now also include any Meter Points whose DCC Service Status has changed to 'N' or to 'I' since last reported. Note: The report will continue to exclude those Meter Points with a status of 'Null'.

In addition to being informed of Meter Points that have at least one commissioned Smart Meter, Registration Data Providers will be informed of Meter Points that:

- have Smart Meters installed but not yet commissioned
- have had but no longer have Smart Meters installed

Two feature switches will be introduced by which the new RDP statuses of 'I' and 'N' will be included in the daily RDP reports, one for Gas and one for Electricity. It is assumed that the new functionality will be enabled only when all RDPs for a given energy type are in a position to receive the new DCC Service Statuses. A third feature switch will control the point at which the processing for the new status of 'I' is introduced into the DSP.

The ESI reports that use the DCC Service Status as a filter criteria are the following:

- ESI-017 UITMR Mandated Smart Metering Systems, SEC Party by Energy Participant Report
- ESI-018 Post-UITMR Enrolled Smart Metering Systems, SEC Party by Energy Participant Report
- ESI-022 UITMR Enrolled Non-Domestic Premises, SEC Party by Energy Participant Report
- ESI-031/i Meter Point Registration Extract
- ESI-032/i Meter Point Extract – also reports DCC Service Status (only 'A')
- ESI-033/i Premises Extract

3.1 Data Update Utility

A one-off data update utility will be provided to catch up on the backlog of those MPxNs that should have an 'I' DCC Service Status. For each ESME and GSME that is in an 'Installed Not Commissioned' state, the utility will:

- Check whether the ESME/GSME is associated with one or more MPxNs
- For each MPxN associated with the ESME/GSME, if it has a DCC Service Status of 'N' or 'Null', update it to 'I' and update the DCC Service Status change date, such that it will be included in the next daily RDP report.

The update utility will record a change in DCC Service Status to 'I' for those Meter Points that are associated with Smart Meters that are all in a status of 'Installed Not Commissioned', for them to be picked up once the above RDP reporting functionality described in section 3.5.4 goes live. This utility is to be run soon after the introduction of the change for each energy type.

When the new functionality provided by this Modification goes live for a given energy type, all Meter Points where the DCC Service Status is 'I' or 'N' in the DSP Inventory will be picked by the first run for that energy type. The performance risk associated with this has been considered: Research on Production data shows that, at the time of submission of this FIA, there are approximately 90,000 Meter Points with DCC Service Status 'N' spread across all of the RDPs (for comparison, there are approximately five million live Smart Meters). Further research shows that currently, on a given day, there are around 60,000 Smart Meters with a device status of 'Installed Not Commissioned', where some, but not all of which would result in the DCC Service Status being updated to 'I'. It is assumed that the receiving RDPs will be able to accommodate the one-off increase in the number of reported MPxNs whose DCC Service Status have changed.

The update utility is to be run separately for electricity and gas at a time to be agreed with the DCC and RDPs.

Note this utility is one of the factors that has increased the cost previously quoted in the PIA.

3.2 Impact of Core Solution on S1SPs

The SMETS1 Service Providers (S1SP) Data Extracts and web services that include the DCC Service Status are as follows:

- S1SPM-F09 Meter Point Extract
- N7 RequestIndividualRegistrationData Response

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 Impact on the Switching Programme

Currently the only related message sent from the DSP to the Switching Solution (CSS) is the CommHubLink message and this only contains information to highlight that a meter point (MPxN) is associated or joined to a specific Comms Hub ID. There is no additional device status information and as CSS does not maintain any device information the actual status of the device or SMS is not required by CSS. The changes in this SEC Modification are focused on the DCC Status Update files that are sent to the DNOs via the existing RDP file transfer interface. This outbound FTP interface will remain active after CSS goes live.

3.4 Deliverables

The deliverables of this Modification are described in the table below.

Phase Deliverables	Deliverable	Changes Required
Design	SD4.3.2 Registration Systems Interface Design Specification – Gas	Update to DCC Service Flag values allowed (note: No equivalent change is required for the electricity interface document)

		as it references the MRASCO ¹ flows).
	SD2.2.1 IE Functional Specification	Changes to post processing for Service Requests and Device Alerts, updates to processing of the RDP, ESI and S1SP interfaces.
	SD2.2.1.4 – Data Management Component Design Specification (parts 1 and 2)	Changes to reference data, post processing and processing for the RDP, ESI and S1SP interfaces.
PIT Completion	System Test and FAT Completion Report	To be created

Figure 2: DSP Deliverables

3.5 Impact on DSP Components

The following sub-systems and components of the DSP are impacted by this change.

3.5.1 Registration Gateway

The outgoing Registration Data interface (daily DCC Service Status report) for both electricity and gas require updating to include the DCC Service Status values of 'I' and 'N'. The inclusion of the new values will be controlled by a feature switch for each energy type.

3.5.2 Data Management

Data Management requires modification to the post processing of Service Requests and Alerts such the determination of DCC Service Status and flagging for RDP notification will be changed to accommodate the new 'I' status.

On building the response to an N7 RequestIndividualRegistrationData response from an S1SP, if the DCC Service Status of the MPxN of the response is 'I', then Data Management will map it to 'Null'.

3.5.3 Data Management - Registration

The DCC Service Status update file processing for electricity and gas will be modified to not only include those MPxNs that have had a DCC Status update to 'A' but also to include those that have had a DCC Service Status update to 'I' or to 'N'.

The Modifications are controlled by a separate feature switch for electricity and gas.

3.5.4 Reporting

The S1SPM-F09 Meter Point Extract processing will be modified such that any Meter Points to be included that have a DCC Service Status of 'I' will have the value mapped to 'Null'.

¹ MRASCO is the Meter Registration Agreement Service Company

3.5.5 Reference Data

The Reference data will be updated to include three new feature switches to control the point at which:

- Service Request/Device Alert post processing is updated to accommodate the new DCC Service Status of 'I'. This includes the additional processing for S1SP web services and ESI reporting.
- DCC Service Status updates of MPANs to 'I' and 'N' are sent to electricity RDPs.
- DCC Service Status updates of MPRNs to 'I' and 'N' are sent to gas RDPs.

4 Impact on DCC Systems, Processes, and People

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

4.1 Impact on DSP Services

The Services team will be required to implement the one time data update activity for each energy type to update the DCC Service Status to 'I' for those MPxNs that are associated with devices that have an 'Installed Not Commissioned' status, by running the 'Data Update Utility' described in section 3.1. A small amount of early life support following the introduction of the change for each energy type will also be required.

4.2 Technical Specifications

There are no changes to the schema or structure of DUIS, but some wording changes to DUIS.

4.3 Impact on Security

The DSP Security Assurance team has reviewed this change. There is a notable change to processing logic and checks of CGI Instant Energy (the S1SP) and associated interfaces, but no change to DUIS (other than wording) and no new communication paths or infrastructure components. Therefore, there is no material impact on the DSP security implementation. The Security Assurance team will provide general security oversight throughout the implementation in accordance with DSP's contractual requirements.

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.

4.4 Impact on Processing, Storage or Transmission of DCC Data

This change does not materially increase processing, data storage or data exchange within the DSP solution; therefore, it is not thought that this change on its own warrants 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. As such, DSP reserves the right to raise a Change Request for the provision of additional infrastructure if the DCC Data System experiences performance problems that are the direct result of such changes

4.5 Impact on Safety

Industry is dependent on accurate and up-to-date DCC Service Status information for managing device alerts and change of supplier operations, which carry indirect systems safety risks. Instant Energy sends Daily DCC Service Status Update Files (Gas and Electricity) to notify RDPs of changes in DCC Service Statuses for meter points they administer. If these files contain incorrect

information, then external RDP systems may not be updated to reflect changes to the DCC Service Status for MPxNs (hazard SS08: "DSP interfaces incorrectly with external safety related systems"). The safety risks associated with Instant Energy sending incorrect DCC Service Statuses to RDPs, and the impact of incorrect registration data on switching operations are assessed in the DSP FMECA (DQ.0019).

DSP plans to discharge its safety risk assessment and management responsibilities through update of the Safety Case, and implementation of suitable and sufficient mitigations in its solution to reduce the risks to acceptable levels. DSP expects that suitable and sufficient external mitigations will be implemented by DCC, Service Users and other responsible authorities in line with their legal and licensed safety obligations, to allow for continued safe operation of the DSP solution in its wider energy supply business environment - e.g. checks on DCC Service Statuses for meter points, dependence on industry registration data for change of supplier operations.

4.6 Impact on Performance and Infrastructure

There will be no change to Performance and Infrastructure as a result of this Modification.

4.7 Impacts on Resilience and Disaster Recovery

There will be no change to Resilience, the Disaster Recovery solution or BCDR procedures as a result of this Modification.

4.8 Impacts on Interfaces

This Modification requires updates to the electricity and gas registration interfaces.

4.9 Transition to Operations (TTO) Approach

No TTO-specific charges related to the DSP have been included in this FIA on the basis that it is relatively small. It is assumed that other larger or more complex Change Requests will include partial provision for TTO and that the overall release CR will address any collective shortfall.

4.10 Application Support

The Application Management Support team are responsible for the provision of application level support for the DCC Data System application.

It is not expected that this new functionality will result in an increase in service calls.

5 Testing Considerations

This Full Impact Assessment includes the cost to develop, fully test and deliver this SEC Modification.

5.1 Pre-Integration Testing

Pre-Integration Testing (PIT) will be required to align DSP functionality and the functionality described above. The PIT phase of implementation will be subject to standard test phases and level of DCC assurance as defined in previous releases. 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. The implementation team will carry out system testing consisting of positive and negative path testing which will culminate in a short period of Factory Acceptance Testing (FAT), witnessed by DCC test assurance at DSP offices. The FAT tests will be a subset of System Tests.

Acceptance will be defined by:

1. An agreed set of design documentation;
2. DCC approving the Factory Acceptance Testing outcome in accordance with pre-agreed criteria, which shall not be unreasonably delayed or withheld;
3. Meeting Schedule 6.2 PIT exit criteria;
4. Approval for a MAC to be issued will be authorised by DCC's Test Assurance Board.

5.2 System Integration Testing and User Integration Testing

The SIT phase of testing will be aligned with other Modifications and Change Requests in the November 2021 release.

This Modification impacts both SMETS1 and SMETS2. However the new functionality does not need to be tested against each Device Meter Combination (DMC) or repeated for each CSP.

SMETS1 testing will include:

- Any DMCs from CGI IE and Secure and FOC to be used as Device Sets
- Brand new device sets not migrated as yet
- Two dual fuel Active Sets and One Single Fuel Active Device Set for FO

For SMETS2 testing, the test execution is to be spread across the different CHF types and will require at least four new dual device sets which are Not Installed and Not Commissioned.

The scope of this testing will be detailed in a heatmap and Solution Test Plan associated to the release that this will be delivered against, as SIT completes Solution Test Plans for a SEC Release, and not for individual CRs. This will be included as part of the November 2021 SEC Release.

Following each of the SMETS1 and SMETS2 tests, the ESI reports listed at the end of Section 3 will be executed, to check that the DCC Service Status is reflected correctly in these reports for the Device Sets under test.

There is no requirement to test this Modification in the UIT environments.

5.3 Application Support

It is assumed that this change will not result in a material increase in support required however an allowance has been included to allow knowledge transfer to the Application Support team to ensure any issues can be supported.

6 Implementation Timescales and Releases

This Modification was expected to be included in a SEC release in November 2021. Implementation timescales will be finalised as part of the relevant SEC Release Change Request.

6.1 Change Lead Times and Timelines

From the date of approval (in accordance with Section D9 of the SEC), to implement the changes proposed DCC requires a lead time of approximately **8 months**.

The broad breakdown of the testing regime is shown in the following table in months after an approval decision date (D).

Phase	Duration
SECAS agreement on scope of release	
CAN signature	D + 1 Month
Design, Build and PIT Phase	4 Months
SIT Phase (functional changes only), aligned with Release Sit Dates	2 Months
Transition to Operations and Go Live	D + 8 Months

6.2 SEC Release Allocation and Other Code Impacts

The allocation to any release may be dependent on other Modification timings and the suitability of a release. No functionality overlaps with other Modifications has been identified.

SECMP0077 is a cross-Code impacting change that impacts other Codes beyond the SEC as follows:

- Changes to the Data Transfer Catalogue (DTC), which sits under the Master Registration Agreement (MRA) and Retail Energy Code (REC).
- The UK Link Systems impact will require a change proposal to be raised and implemented by their Data Services Contract (DSC) Delivery Sub-Group.
- Changes to Xoserve's systems, the Central Data Service Provider for Great Britain's gas market funded primarily under the Uniform Network Code (UNC).

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 result could lead to thousands of Devices potentially changing Flag state all at once.

Xoserve have confirmed that the impacts of this Modification are 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 was in its Initial Review stage.

Implementation of the SECMP0077 solution must therefore be concurrent across all the impacted arrangements.

6.3 Impact on Contracts and Schedules

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

- Schedule 2.1: Updates to Part E Clause 43.3 to reflect new DCC Service Status values of 'I' and 'N';
- Schedule 6.1: Inclusion of two new milestones referencing completion of PIT and SIT for this change as detailed in section 6.2
- Schedule 7.1: Payment values associated with the Schedule 6.1 milestones.

There will be no change to Schedule 2.2 SLAs due to this Modification.

Appendix A: Risks, Assumptions, Issues, and Dependencies

The tables below provide a summary of the Risks, Assumptions, Issues, and Dependencies (RAID) observed during the production of the Full Impact Assessment. DCC requests that the Working Group considers this section and considers any material matters that have been identified. Changes may impact the proposed solution, implementation costs and/or implementation timescales.

Risks

None at this time.

Assumptions

These assumptions have been used in the creation of this Full Impact Assessment. Any changes to the assumptions may require DCC to undertake further assessment, prior to the contracting and implementation of this change.

Ref	Description	Status/Mitigation
D77-A1	The modifications required to the electricity and gas registration interfaces have been agreed with industry and the specifications will have been updated (including the MRASCO data flow) prior to the commencement of work for this change.	Accepted
D77-A2	There is no requirement to enable the new functionality separately for each individual RDP. The new functionality will be introduced only when all RDPs for a given fuel type are able to receive the new DCC Service Status values.	Accepted
D77-A3	The introduction of this change for a given energy type will result in a one off increase in the number of Meter Points whose change in DCC Service Status is to be notified to RDPs of that energy type. It is assumed that the receiving RDPs will be able to accommodate this increase. If this is not the case, then further consideration will need to be given to limit the number of Meter Points sent to RDPs as part of a separate CR.	Accepted
D77-A5	It is assumed that SIT integration testing will be required with at least one RDP for electricity and one RDP for gas and that this SIT testing will form part of the November 2021 Release CR.	Accepted
D77-A6	It is assumed that no UIT/UTS testing is required for the change.	Accepted but there may be testing of the other code bodies required
D77-A7	There is no requirement for a penetration test and no change to the DSP's Protective Monitoring solution	Accepted
D77-A8	The introduction of this change for a given energy type will result in a one off increase in the number of Meter Points whose change in DCC Service Status is to be notified to RDPs of that energy type. It is assumed that the receiving RDPs will be able to accommodate this increase. If this is not the case, then further consideration will need to be given to limit the number of Meter Points sent to RDPs as part of a Modification.	Accepted, but that note that SECAS and the MRA have indicated this assumption is correct.

Issues

None at this time.

Dependencies

Reference	Dependency	Implication if dependency not met	Status
D77-D1	Changes to the electricity (D0350) and gas (DXI) data flows to support the new functionality are required to be agreed with all stakeholders. This is the responsibility of the flow owners and must be completed in time for the change to go into Production.	Flows must be agreed or the Modification cannot be implemented	Accepted
D77-D2	The timing of the introduction of the change and of the running of the data update utility requires agreement between the DCC and all RDPs.	The data update utility should only be run when all impacted parties agree.	Accepted
D77-D3	SECMP077 is a cross-Code impacting change that impacts other Codes beyond the SEC. It will require changes to the Data Transfer Catalogue (DTC), which sits under the Master Registration Agreement (MRA)/Retail Energy Code (REC). It also requires changes to Xoserve's systems, which are funded primarily under the Uniform Network Code (UNC).	Implementation of the SECMP0077 solution must be concurrent across all the impacted arrangements. If not, the Modification should not go live.	Accepted

Appendix B: Glossary

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

Acronym	Definition
CAN	Contract Amendment Note
CR	DCC Change Request
CSP	Communication Service Provider
DCC	Data Communications Company
DMC	Device Meter Combination
DSP	Data Service Provider
DTC	Data Transfer Catalogue
DSC	Data Services Contract
DUIS	DCC User Interface Specification
ESME	Electricity Smart Metering Equipment
FAT	Factory Acceptance Testing
FIA	Full Impact Assessment
FMECA	Failure Modes Effects Criticality Analysis
GSME	Gas Smart Metering Equipment
MPAN	Meter Point Administration Number (Electricity supply point)
MPRN	Meter Point Reference Number (Gas supply point)
MPxN	Generic term for MPAN or MPRN
MRA	Meter Registration Agreement
MRASCO	Meter Registration Agreement Service Company
PIA	Preliminary Impact Assessment
PIT	Pre-Integration Testing
RDP	Registration Data Provider
REC	Retail Energy Code
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMETS	Smart Metering Equipment Technical Specification
SP	Service Provider
SSI	Self Service Interface
S1SP	SMETS1 Service Provider
UIT	User Integration Testing
UNC	Uniform Network Code
UTS	User Testing Services

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MP077 ‘DCC Service Flagging’ Refinement Consultation responses

About this document

This document contains the full non-confidential collated responses received to the MP077 Refinement Consultation.

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

Question 1			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	Yes	We agree that the allowable values for the 'DCC Service Flag' data item should be updated to more accurately reflect device statuses to provide clarity and improve information reliability.
Citizens Advice	Consumer Rep	Yes	<p>It is vital for the consumer smart meter experience and the accountability of the rollout that there is a reliable mechanism for identifying smart devices and their operational state at a property.</p> <p>Left unchecked, poor identification of meter status could undermine the impact of reforms to improve reliability of consumer switching.</p> <p>We see examples of suppliers unclear about whether a smart meter is present and operating at a property. This then leads to consumer billing discrepancies and switching problems. We hope this modification will mean fewer consumers suffer from these issues.</p> <p>It could also be important for consumer safety to ensure that DNO's have accurate visibility of a properties metering status.</p> <p>The inaccuracies in the identification of smart devices also needs to be addressed to support more accurate monitoring of the way in which smart metering systems are operating.</p>
Electricity North West Limited	Electricity Network Party	Yes	We believe that simplifying the process, by aligning the Service flags with what is written in the SEC, to allow Users to identify the status of Devices on a Smart Metering System (SMS) should resolve the issue.



Question 1			
Respondent	Category	Response	Rationale
SSEN	Electricity Network Party	No	SSEN are fully supportive of this Mod and agree that the solution needs to be amended, as it is currently not fit for purpose. We would like to understand the solution further as the DCC PIA does not provide an adequate description of the new status' and how these will help us understand the status at a property e.g. The information about how the N – Non-Active status will allow users to know when a device is Decommissioned versus, when a device is Recovered.
Western Power Distribution	Electricity Network Party	No	<p>We believe that the Modification Report Consultation Legal Text and the DCC Preliminary assessment contradict each other.</p> <p>The proposed solution in the consultation includes A, N and I, however the DCC PIA proposes only flag A and N.</p> <p>We believe that the flags required going forward should include:</p> <ul style="list-style-type: none"> • A – Active • N – Not Active • I – Installed Not Commissioned • S – Suspended <p>We believe that business requirements do not actually match what was agreed in the working group discussion as it was agreed that 'I' was required.</p>
EDF	Large Supplier	No	<p>There is a clear misalignment between the solution set out in the Modification Report and the solution detailed in the DCC Preliminary Impact Assessment. The Modification Report explicitly states (in Section 3) that the solution will include a new 'I' (InstalledNotCommissioned) Flag, and this 'I' status is included in the however there is no reference to this in the DCC Preliminary Assessment. The PA does call out that the 'DSP proposed solution does not match exactly the changes described in the Modification</p>

Question 1			
Respondent	Category	Response	Rationale
			<p>requirements' - but it doesn't seem to refer to this requirement and it certainly doesn't align with the description of the solution in the Report. It is not clear whether the DCC is even able to implement the solution defined in the report, and specifically the new 'I' status.</p> <p>It is not really possible to provide a view on whether we agree with the solution as we don't really know what the proposed solution involves and whether it fully addresses the issues that caused his change to be raised in the first place.</p> <p>It is not clear how and when changes to the MRA and the UNC would be progressed in relation to this change, and how any changes to those codes would be able to be progressed in light of Ofgem's Retail Code Consolidation Significant Code Review (SCR). The MRA is not even due to be in existence by the time that this change is due to be implemented (June 2021) and there are currently no planned REC/UNC release being planned for June 2021 on the basis that this is just before the go live date for Ofgem's Switching Programme SCR (currently scheduled for July 2021). Further clarity is required on how any consequential changes would need to be made and under which Codes - and how the implementation of this change will or may be impacted by the ongoing SRs.</p> <p>The technical solution for this change may also need to be considered in light of the changes being delivered by the Switching Programme. Currently registration information is exchanged between the DCC and Registration Data Providers (RDPs), operating on behalf of Network Operators. The flow of data from the RDPs to the DCC systems for access control/charging purposes are will be largely if not entirely replaced by data from the new Centralised Switching Service (CSS). It is not clear whether the data that currently flows from the DCC systems to the current registration systems (MPAS/Xoserve) via the RDPs should still flow via this route, or should instead be sent to the CSS. It would make no sense to retain the RDPs and their associated cost purely to manage updates to the DCC Service Flag. When this change was raised the hope was that this could be delivered quickly and in</p>

Question 1			
Respondent	Category	Response	Rationale
			advance of the Switching Programme changes. As this is no longer the case, consideration should be given to revisiting the overall technical solution to make sure it aligns with the new systems and technical architecture being delivered by the Switching Programme.
SSE	Large Supplier	No	We do not see how the benefits provided justify the cost of the change as it currently stands. We are fully supportive of improving industry data and looking to remove barriers to maintaining it all accurately, but we have implemented processes to overcome these issues and implementing this proposal would incur a cost.

Question 2: Will there be any impact on your organisation to implement MP077?

Question 2			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	No	No impacts to NGN have been identified as a result of this proposal.
Citizens Advice	Consumer Rep	No	
Electricity North West Limited	Electricity Network Party	No	
SSEN	Electricity Network Party	Yes	As there will be new Status' codes implemented as part of the Modification, SSEN will need to make system changes to handle these. At this time, the implementation effort and on-going impacts are unknown.
Western Power Distribution	Electricity Network Party	Yes	As an RDP we will need to update our systems to be able to receive the new flags. These changes are required through the Master Registration Agreement change process due to flags being determined by the valid set within the Data Transfer Catalogue. We might also be required to make changes to our back end systems based on the updated flag statuses that we could receive.
EDF	Large Supplier	Yes	We will need to make changes to your systems be able to receive and process the updated values for the DCC Service Flag. As noted in our response to question 1 we do not believe it is clear what the values will be and what we might do as a result when we receive them as the detail in the Report and in the PA are not the same.
SSE	Large Supplier	No	It looks like the particular dataflow referred to in this consultation is sent by DCC to MPAS, therefore the impact on SSE is minimal. There may need to be some further analysis to ensure our systems can manage the new flags or accommodate the changes that

Question 2																	
Respondent	Category	Response	Rationale														
			<div>DCC/MPAS would have to implement. Should be a very small impact if any though (details of impacted flow below):</div> <div><div><div>Flow Reference: D0350</div><div><div>Flow Reference: D0350</div><div>Flow Version: 001</div><div>Status: Operational</div><div>Flow Name: Notification of DCC Services at Metering Point</div><div>Flow Description: DCC notifies MPAS that it is providing communications services to a metering point and provides any data updates required for MPAS.</div><div>Flow Ownership: MRA</div></div></div><div><table><thead><tr><th>From</th><th>To</th><th>Version</th></tr></thead><tbody><tr><td>DCC</td><td>MPAS</td><td>10.7</td></tr></tbody></table></div><div><div>Item Reference: J1833</div><div><div>Item Name: DCC Service Flag</div><div>Item Ownership: MRA</div><div>Item Description: A DCC provided flag to indicate the status of the services being provided by the DCC to a Metering Point.</div><div>Units: None</div><div>Valid Set: Values are: ('_' indicates a space character for illustrative purposes only and should not be used in the data item)</div></div><div><table><thead><tr><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>A</td><td>Active</td></tr><tr><td>S</td><td>Suspended</td></tr><tr><td>W</td><td>Withdrawn</td></tr></tbody></table></div></div><div><div>Available Actions</div><div><div>Download:  </div><div>DTC Version: 12.7 View</div><div>Version: 12.7</div><div>Version: 12.7 Compare</div></div></div></div>	From	To	Version	DCC	MPAS	10.7	Value	Description	A	Active	S	Suspended	W	Withdrawn
From	To	Version															
DCC	MPAS	10.7															
Value	Description																
A	Active																
S	Suspended																
W	Withdrawn																

Question 3: Will your organisation incur any costs in implementing MP077?

Question 3			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	No	No costs to NGN have been identified as a result of this proposal.
Citizens Advice	Consumer Rep	No	
Electricity North West Limited	Electricity Network Party	No	
SSEN	Electricity Network Party	Yes	As detailed in question 2, Implementation time, costs and effort are currently unknown.
Western Power Distribution	Electricity Network Party	Yes	<p>We are unable to confirm costs at this time due to the proposed solution being unclear and therefore we are unsure exactly what changes will need to be made.</p> <p>We also believe that consideration of the costs involved as part of the MRA (and gas equivalent changes if applicable) changes should be considered as these will form part of the overall implementation costs of the solution.</p>
EDF	Large Supplier	Yes	The direct cost of implementing DCP077 should be low as it should just be an update to the list of valid values for the DCC Service Flag.
SSE	Large Supplier	No	Further analysis would be required to understand what impact this might have on SSE, but we expect there to be an implementation cost.

Question 4: Do you believe that MP077 would better facilitate the General SEC Objectives?

Question 4			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	Yes	We agree that updating 'DCC Service Flag' allowable values should more accurately reflect device statuses and therefore further SEC Objective a) to facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain by improving the reliability of information to better help operation of smart metering services.
Citizens Advice	Consumer Rep	Yes	<p>We think that Objective A is met because the modification supports the efficient installation and operation of smart meters through more accurate identification of smart metering systems operation.</p> <p>This modification also supports Objective C because without a supplier providing accurate guidance on the smart capability of their devices it risks consumers assuming they have smart metering and do not need to manually monitor meter readings. This modification should mean suppliers are able to provide consumers with more consistent information on the presence and operating capability of their smart meters.</p>
Electricity North West Limited	Electricity Network Party	Yes	We believe that the improvement in the identification of devices on a Smart Metering System together with their status will better facilitate General SEC Objective (a) 'Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain.'
SSEN	Electricity Network Party	No	In its current format, SSEN believe MP077 will not better facilitate General SEC Objective (a) as this will not allow SSEN to understand the actual status of a SMS at a consumer's premise.

Question 4			
Respondent	Category	Response	Rationale
Western Power Distribution	Electricity Network Party	No	We believe, based on all the details provided within the consultation that this modification doesn't better facilitate any of the SEC Objectives and in fact would actually be detrimental to SEC Objectives (a) and (g). We believe that this modification will hinder the efficient operation of Smart Metering Systems and reduce transparency.
EDF	Large Supplier	Yes	Once a clear solution is agreed we believe that MP077 will better facilitate General SEC Objective (a) by ensuring that suppliers are able to understand whether a consumer they are looking to acquire has an active DCC enrolled smart meter as part of the sales/acquisition process, and therefore ensure they offer that consumer appropriate products and tariffs as a result. Making the DCC Service Flag more accurate will also make it more likely that a gaining supplier will be able to operate a smart meter that they gain as the result of a change of supplier as they will have visibility of the capability at an early stage in the switching process.
SSE	Large Supplier	No	Although there are SEC objectives that could be facilitated by this Mod, the fact that we do not support the Mod means we cannot provide a rationale.

Question 5: Noting the costs and benefits of this modification, do you believe MP077 should be approved?

Question 5															
Respondent	Category	Response	Rationale												
Northern Gas Networks	Gas Network Party	Yes	Yes, as the potential improvement in information reliability regarding the ‘DCC Service Flag’ will be of benefit to the industry.												
Citizens Advice	Consumer Rep	Yes	Given the anticipated scale of 45,000 meters impacted and potential risk of not addressing the issue for the rollout and for the future reliability of switching we don’t think the costs are prohibitive at this stage.												
Electricity North West Limited	Electricity Network Party	No	<div>The table showing the breakdown of DCC Implementation costs seems to be incomplete:<table><tr><th colspan="2">Breakdown of DCC implementation costs</th></tr><tr><th>Activity</th><th>Cost</th></tr><tr><td>Design, Build and Pre-Integration Testing (PIT)</td><td>£75,000</td></tr><tr><td>Systems Integration Testing (SIT)</td><td>TBC</td></tr><tr><td>User Integration Testing (UIT)</td><td>TBC</td></tr><tr><td>Implement to Live</td><td>TBC</td></tr></table></div>	Breakdown of DCC implementation costs		Activity	Cost	Design, Build and Pre-Integration Testing (PIT)	£75,000	Systems Integration Testing (SIT)	TBC	User Integration Testing (UIT)	TBC	Implement to Live	TBC
Breakdown of DCC implementation costs															
Activity	Cost														
Design, Build and Pre-Integration Testing (PIT)	£75,000														
Systems Integration Testing (SIT)	TBC														
User Integration Testing (UIT)	TBC														
Implement to Live	TBC														
SSEN	Electricity Network Party	No	Looking at the proposed changes and costs associated, SSEN do not believe that a clear enduring process has been met with the current design approach.												
Western Power Distribution	Electricity Network Party	No	We do not know the costs due to the DCC PIA providing costs for a different solution to that proposed. We also don’t feel that this modification better facilitates the SEC Objectives.												
EDF	Large Supplier	Yes	As the proposer for this modification we continue to believe that there is a problem that needs to be fixed. However there is definitely insufficient clarity on the solution, how it will work in practice and how (and when) it would be implemented to support approval of this change as it stands.												

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Question 5			
Respondent	Category	Response	Rationale
SSE	Large Supplier	No	There would be a cost of implementation and we do not see the benefit.

Question 6: How long from the point of approval would your organisation need to implement MP077?

Question 6			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party		The implementation date should take into consideration any system or file format changes required by parties who receive or send files which contain the 'DCC Service Flag' data item.
Citizens Advice	Consumer Rep		
Electricity North West Limited	Electricity Network Party	6 months minimum	To ensure relevant processes and procedures have been reviewed/updated.
SSEN	Electricity Network Party	N/A	At this time due to the requirement to create, amend and test the necessary changes. SSEN is unsure of the time required to implement the changes.
Western Power Distribution	Electricity Network Party	Unknown	This modification requires a change to our MPRS systems and we are unable to advise what lead time is required until the MRA Change is raised. This is because without the MRA change proposal we do not know exactly what the requirements will be.
EDF	Large Supplier	6 months	This is really driven by the lead time for the consequential changes required to the MRA and UNC - any change to the valid values for a data item would usually require a six month lead time.
SSE	Large Supplier	No comment	Unknown - further analysis is required.

Question 7: Do you agree with the proposed implementation approach?

Question 7			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	Yes	This proposal could be implemented in the June 2021 Major SEC Release.
Citizens Advice	Consumer Rep	Yes	We think this solution should be implemented as soon as possible
Electricity North West Limited	Electricity Network Party	Yes	We are comfortable with the proposed approach for implementation in Jun-21.
SSEN	Electricity Network Party	No	SSEN would like to understand the timeframes required by other impacted industry parties E.g. MRA, to understand if this timeframe is realistic.
Western Power Distribution	Electricity Network Party	No	<p>We have raised our concerns regarding the associated change required under the MRA (and gas equivalent changes if applicable), however this is not mentioned within this consultation.</p> <p>We feel that there will not be a need to batch the 'N' flag updates as the volumes will not exceed what the systems are capable of, and this is because we feel that 'S' should be included for suspended and these could be triggered in mass volumes.</p> <p>In order to implement the proposed changes there will be changes required to MPRS and presently, due to faster switching, there is a change freeze in place.</p> <p>We are also concerned that it appears that there has been no consideration to the SCR and the fact that it is possible that the implementation of these changes might be impacted by the faster switching programme.</p>
EDF	Large Supplier	No	As noted above in our response to question 1 we do not believe that it will be possible to implement this change as part of the June 2021 release.

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Question 7			
Respondent	Category	Response	Rationale
SSE	Large Supplier	No comment	No comment

Question 8: Do you agree that the legal text will deliver MP077?

Question 8			
Respondent	Category	Response	Rationale
Northern Gas Networks	Gas Network Party	Yes	We believe the legal text provided should deliver the Solution set out in the modification.
Citizens Advice	Consumer Rep		
Electricity North West Limited	Electricity Network Party	Yes	We believe the legal text will deliver the intent of this modification.
SSEN	Electricity Network Party	No	The implementation of 3 status' in the legal text do not provide enough information to deliver requirement 1: "Implement a method of understanding if there is a Device currently at a premises"
Western Power Distribution	Electricity Network Party	Yes	We agree that the changes in the legal text match the proposed change in the modification.
EDF	Large Supplier	Yes	As already noted the legal text aligns with the solution defined in the Report but not with the solution defined in the PA – it is not clear which of these is actually proposed to be implemented.
SSE	Large Supplier	No comment	No comment

Question 9: Please provide any further comments you may have

Question 9		
Respondent	Category	Comments
Northern Gas Networks	Gas Network Party	Receivers or senders of data flows, e.g. CDSP, that incorporate the DCC service flag values should be kept informed of the progress of this modification. In order to allow for their own systems updates to be aligned they should be consulted, as early as possible, with reference to timelines. This way the industry can minimise disruption and failures of file flows.
Citizens Advice	Consumer Rep	
Electricity North West Limited	Electricity Network Party	Our understanding is that other DCC-MPAS interfaces are to be replaced by new messages under Ofgem's Switching Programme so shouldn't the implementation of this change be through that Programme to make it more efficient for all parties in the long term. Wont the continued use of the D0350 dataflow result in RDP interface costs still being incurred?
SSEN	Electricity Network Party	N/A
Western Power Distribution	Electricity Network Party	<p>We are very concerned that the DCC PIA does not actually meet the business requirements that were agreed in the working group. We feel that the business requirements should have matched what was discussed in the working group and a PIA requested for these requirements, and then the DSP could propose an alternative solution (only including a new 'N' flag) with justification as to why they believe that this is the better option. The working group can then discuss which option is the best solution for industry.</p> <p>As mentioned previously we are also concerned that appropriate attention to the cross code requirements and SCR have not been considered.</p> <p>We would also like to see the 'S' flag remain. We need to be able to identify whether there is a DCC Smart Meter physically on site as well as whether or not we can communicate with it. If suspended devices are included with either the 'N' or the 'A' status will result in misleading data.</p>

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Question 9		
Respondent	Category	Comments
		<p>Page 10 of the DCC PIA states ' A SMS is said to be 'Decommissioned' if it is removed from the wall', however we believe that there might be situations where a device is decommissioned but is still in situ, for example if a customer wishes to opt out of having smart services.</p> <p>We are concerned about the first paragraph of Section 3.1.2 of the DCC PIA due to the fact that there are currently multiple devices associated to a single MPxN in error. With these anomalies within the SMI we believe that there will be confusion with regards to the correct status to set.</p> <p>On page 11 of the DCC PIA it states '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.' We question this as RDPs will be forced to implement under a Big Bang approach with the MRA (and gas equivalent changes if applicable) changes.</p>
EDF	Large Supplier	
SSE	Large Supplier	No comment