

# **SEC Modification Proposal, SECMP0169 (Existing DSP and FSM Iteration), DCC CR5157**

## **Managing the Consumers Refusal of a Smart Meter**

### **Full Impact Assessment (FIA)**

|                        |                                  |
|------------------------|----------------------------------|
| <b>Version:</b>        | <b>2.2</b>                       |
| <b>Date:</b>           | <b>20<sup>th</sup> June 2025</b> |
| <b>Author:</b>         | <b>DCC</b>                       |
| <b>Classification:</b> | <b>DCC Public</b>                |

## Contents

|          |                                                     |           |
|----------|-----------------------------------------------------|-----------|
| <b>1</b> | <b>Executive Summary .....</b>                      | <b>4</b>  |
| <b>2</b> | <b>Document History .....</b>                       | <b>5</b>  |
| 2.1      | Revision History .....                              | 5         |
| 2.2      | Associated Documents .....                          | 5         |
| 2.3      | Document Information.....                           | 5         |
| <b>3</b> | <b>Context and Requirements .....</b>               | <b>6</b>  |
| 3.1      | Problem Statement .....                             | 6         |
| 3.2      | Business Requirements .....                         | 7         |
| <b>4</b> | <b>Description of Solution .....</b>                | <b>10</b> |
| 4.1      | Solution Overview .....                             | 10        |
| 4.3      | DSP Functional and Technical Solution Changes.....  | 11        |
| 4.3.1    | Configuration.....                                  | 11        |
| 4.3.2    | Smart Metering Inventory .....                      | 11        |
| 4.3.3    | DSP Access Layer .....                              | 11        |
| 4.3.4    | Administration Portal .....                         | 11        |
| 4.3.5    | DUIS and DUGIDS.....                                | 11        |
| 4.3.6    | Security .....                                      | 11        |
| 4.3.7    | Request Management.....                             | 12        |
| 4.3.8    | Data Management.....                                | 12        |
| 4.3.9    | Reporting and Logging .....                         | 12        |
| 4.3.10   | Other Impacted Components .....                     | 12        |
| 4.4      | Critical Software .....                             | 12        |
| 4.5      | Future Service Management .....                     | 13        |
| 4.6      | Reporting.....                                      | 13        |
| 4.7      | Impact on DCC .....                                 | 13        |
| 4.8      | Impact on SEC Parties.....                          | 14        |
| 4.9      | Supported Legal Text .....                          | 14        |
| <b>5</b> | <b>Testing Considerations.....</b>                  | <b>15</b> |
| 5.1      | Pre-Integration Testing (PIT).....                  | 15        |
| 5.2      | Performance Testing .....                           | 15        |
| 5.3      | System Integration Testing (SIT) .....              | 15        |
| 5.4      | User Integration Testing (UIT).....                 | 16        |
| <b>6</b> | <b>Implementation Timescales and Releases .....</b> | <b>17</b> |
| 6.1      | Change Lead Times and Timelines .....               | 17        |
| 6.2      | SEC Release Allocation and Other Code Impacts ..... | 17        |

---

|     |                                                            |           |
|-----|------------------------------------------------------------|-----------|
| 6.3 | Costs and Charges .....                                    | 18        |
| 6.4 | Changes to the Contract .....                              | 18        |
| 7   | <b>RAID.....</b>                                           | <b>20</b> |
|     | Risks .....                                                | 20        |
|     | Assumptions .....                                          | 20        |
|     | Issues .....                                               | 20        |
|     | Dependencies.....                                          | 20        |
|     | <b>Appendix A: Glossary .....</b>                          | <b>21</b> |
|     | <b>Appendix B: Allowable Service Requests .....</b>        | <b>22</b> |
|     | <b>Appendix C: Low Level (Detailed) Requirements .....</b> | <b>22</b> |

# 1 Executive Summary

The Change Board are asked to approve the following:

- Cost for Design, Build, and Pre-Integration Testing (PIT) on the existing Data Service Provider (DSP) platform of £512,181
- Post-PIT costs for solution testing in SIT and UIT, and Implementation of £454,494
- A total of £966,675 for this functional change
- A timescale to complete Design, Build, and PIT of six (6) months, with a further period of four months for integration testing and implementation

## Problem Statement

SECMP0169 proposes a set of arrangements to cater for consumers who wish to refuse to have a Smart Meter installed, or who have a Smart Meter but wish to prevent their Energy Supplier from collecting consumption data remotely.

Due to the dwindling number of heritage meters in the supply chain, and Energy Suppliers' obligations relating to the installation and operation of Smart Meters, it is generally not an option to install a heritage meter at these consumers' premises.

SECMP0169 will implement a flag in the DSP system to identify where a Smart Meter is to be restricted from operating in a fully smart mode, meaning that Service Requests to retrieve consumption data will be rejected, while only Critical, Security and Safety Alerts, and Firmware updates will be allowed. In addition, Alerts sent from a Device will be limited to those deemed essential.

## Benefit Summary

The benefits of implementing this Modification will be:

- consistent and clear advice to consumers who wish to refuse a Smart Meter – remote retrieval of consumption data can be prevented
- clarity for Energy Suppliers when dealing with consumers who wish to refuse a Smart Meter – no need to evaluate each case
- continuity of arrangements for a consumer following Change of Supplier (CoS) – the flag in the DSP is not reset automatically on CoS
- non-essential Device Alerts for consumers requiring privacy of their data will not be forwarded to Suppliers

## 2 Document History

### 2.1 Revision History

| Revision Date | Revision | Summary of Changes                 |
|---------------|----------|------------------------------------|
| 13/06/2024    | 2.01     | Second iteration, CGI-DSP, and FSM |
| 20/06/2025    | 2.2      | Review completed                   |

### 2.2 Associated Documents

This document is associated with the following documents:

| Ref | Title and Originator's Reference | Source | Issue Date |
|-----|----------------------------------|--------|------------|
| 1   | MP169 Business Requirements v0.4 | SECAS  | 15/09/2023 |
| 2   | MP169 Modification Report v0.9   | SECAS  | 21/03/2025 |

References are shown in this format, [1].

### 2.3 Document Information

The Proposer for this Modification is Emslie Law from OVO.

The original Full Impact Assessment was requested of DCC on 11 March 2024. This second FIA relates to the implementation of this Modification on the existing DSP (also known as Current DSP or Legacy DSP2). It was requested on 27<sup>th</sup> May 2025.

A separate third PIA relates to the implementation of this Modification (CR5469) on the Future DSP (also known as the DSP To Be or DSP2).

### 3 Context and Requirements

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

The requirements have been provided by SECAS, the Proposer, and the Working Group.

#### 3.1 Problem Statement

Suppliers are unable to comply with consumer requests to install a smart meter in 'dumb' mode. The SEC does not allow for the Devices on the Smart Metering Inventory to be either installed and not commissioned (this is a transient state and not an enduring one) or to fit the meters without also fitting the DCC provided Communications Hub (as reference above in Gas and Electricity Supply Licence Condition 54.9). There is no concept, by design, of fitting a smart meter in 'dumb' mode.<sup>1</sup>

Suppliers are currently either installing heritage meters or installing the Smart Meter in ways that are, or will, cause problems elsewhere.

Some of the factors that will need consideration as part of any solution are:

| <b>Additional Issues with non-communicating meters</b>                                 |                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue for consideration</b>                                                         | <b>Details</b>                                                                                                                                                                                                                                                                                                                                               |
| Any form of Load (Heating / Hot Water / Electric Vehicle)                              | Any consumer on an Economy 7 tariff (or similar) arrangement relies completely on the Smart Meter communicating.                                                                                                                                                                                                                                             |
| Change of Mode (Credit to Prepayment and vice versa)                                   | This explicit part of Smart Metering; Prepayment will not work on a meter in dumb mode (or when not communicating)                                                                                                                                                                                                                                           |
| Eligibility and non-eligibility                                                        | Potential Network Managed sites with no Wide Area Network (WAN) regimes must have communications.                                                                                                                                                                                                                                                            |
| 'Dumb' meters will need manual reads                                                   | It is likely Suppliers will no longer have meter reading agents, especially for a Smart Meter, so may need the customer to provide reads themselves. Smart Meter displays contain more screens and information and the potential for the customer reading the wrong data is therefore increased. There are billing implications Smart is designed to address |
| DCC / Distribution Network Operator (DNO) flagging the meter as non-communicating      | These will be 'invisible' to the DCC. The DNO currently raise these with the Supplier to 'fix'.                                                                                                                                                                                                                                                              |
| Supplier taking on a meter not recorded in the Smart Metering Inventory (SMI) as Smart | May require meters to be replaced and incur Premature Replacement Charges.                                                                                                                                                                                                                                                                                   |
| Industry standard                                                                      | A new way to manage these installs must be standardised across the industry so that Change of Supplier (CoS) is not impacted, and the new gaining Supplier is aware of the customer                                                                                                                                                                          |

<sup>1</sup> Elsewhere in this document, such meters are referred to as Smart Meters that are operating in 'restricted' mode.

|                                 |                                                                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | preference and situation. There is currently no flag or state to highlight this.                                                                 |
| Availability of Heritage Meters | Such Devices are no longer being made in some circumstances. Stocks are running low.                                                             |
| Supplier Licence Requirements   | Supplier Licence requires the Installing Supplier to configure and maintain a tariff on the system                                               |
| Security and Safety Alerts      | The Smart Metering Solution is designed for these to be provided and sent out. This is part of the Benefits case and solution in place for DNOs. |
| Critical Alerts                 | SEC Parties are required to take action on specific critical or mandated Alerts.                                                                 |

### 3.2 Business Requirements

This Modification and associated changes apply to SMETS2+ Devices only.

Note that DCC have created Low-Level Requirements for this Modification. These are presented in Appendix C.

| Ref. | Requirement                                                                                                                                                                                                        |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Suppliers will be able to notify the DCC of the consumer's preference for Smart functionality.                                                                                                                     |
| 2    | A DCC System flag will be created to indicate if communications with a Device have been reduced due to consumer choice.                                                                                            |
| 3    | The responsible Supplier will be able to request the addition and removal of the DCC System flag, subject to its adherence with all reasonable steps for Smart installations.                                      |
| 4    | Critical, Security and Safety Alerts and Firmware updates will still be sent when communication with a Device has been reduced due to consumer choice.                                                             |
| 5    | The DCC to amend any reporting for which the success/failure of Service Requests relating to energy consumption is a metric to allow for exceptions where communications have been reduced due to consumer choice. |

#### **Requirement 1: Suppliers will be able to notify the DCC of the consumer's preference for Smart functionality.**

At the Working Group meeting in November 2021 the Ofgem representative expressed the view that using Service Reference Variants (SRVs) to notify the DCC could undermine Supplier Licence obligations. The solution was subsequently developed to state that Suppliers should only offer a 'reduction' in Smart functionality once all reasonable steps to install and commission a fully communicative Smart meter have been exhausted. Existing Install and Commissioning processes will be unaffected by the solution; the MP169 solution will simply add an additional, optional step to be taken if a consumer wishes to not have their consumption data retrieved remotely.

Exceptions to this requirement are to be considered through the solution development process. For instance, any consumer on an Economy 7 tariff (or similar) arrangement relies on the Smart meter communicating. Potential Network Managed sites with no Wide Area Network (WAN) must also have communications. In such exceptional cases, where a Smart meter is refused, this needs to be communicated to the customer and the option of reducing communications removed.

Notification of consumer preference should only be sent after the Smart Meter and Communications Hub have been installed and commissioned. It should also be possible to send them if there is a Change of Tenancy (CoT) and the incoming tenant has different preferences to the outgoing tenant.

The DCC will need to amend its reporting on Supplier obligations to install Smart meters to allow for the scenario where a Supplier has installed and commissioned a SMETS2+ Device which subsequently has reduced communications due to consumer preference.

**Requirement 2: A DCC System flag will be created to indicate if communications with a Device have been reduced due to consumer choice.**

The presence of a flag in the DCC Total System would prevent consumer preference being lost in a Change of Supplier (CoS). It will also save the new Supplier from wasting time and resource investigating the reason for lack of communication.

This flag could be held in the DCC System and its presence have the function of suppressing certain Smart functionality. It could also be held outside of the DCC System, for instance in the Priority Service Register. During solution development it was agreed that the most effective option would be for the flag to be applied within the DSP System at Device level.

**Requirement 3: The responsible Supplier will be able to request the addition and removal of the DCC System flag, subject to its adherence with all reasonable steps for Smart installations.**

Suppliers can appoint Other SEC Parties to collect consumption data on their behalf or to offer data services to consumers. While this Modification will not impact these commercial arrangements, it must be ensured that consumers' data privacy is not undermined by allowing Other SEC Parties to remove the DCC System flag. It is therefore a requirement that only the responsible Supplier can request the addition or removal of the DCC System flag, and its addition can only be requested once the Supplier has completed all reasonable steps to install the Device in a fully communicative state.

**Requirement 4: Critical, Security and Safety Alerts, and Firmware updates will still be sent when communication with a Device has been reduced due to consumer choice.**

The Smart Metering solution is designed for Security and Safety Alerts to be provided and sent out. This is part of the benefits case and solution in place for DNOs. SEC Parties are also required to act on specific critical or mandated Alerts. Which Alerts require exceptions and the mechanism for allowing them to be sent will be agreed during the solution development process.

Critical Alerts, such as those relating to Certificate updates, are necessary to ensure the security of the DCC System. Firmware updates will also still need to be possible to prevent issues with Device firmware version compatibility, which may result in the need to replace otherwise healthy Devices.

During solution development, it was agreed Working Group and TABASC that the only messages which should be prevented from sending are those which relate directly to the consumer's consumption.

**Requirement 5: The DCC to amend any reporting for which the success/failure of Service Requests relating to energy consumption is a metric to allow for exceptions where communications have been reduced due to consumer choice.**

---

A full list of the affected reporting was investigated and developed during the Refinement Process. This requirement will need to consider whether the reporting in question requires exceptions for specific Service Requests, related business processes or for the Devices themselves.

## 4 Description of Solution

This second FIA covers the impact of the Modification on the current DSP system and the Future Service Management (FSM) Service Now-based user interface. No impact on the Communication Service Providers (CSP) is anticipated, beyond the need for regression testing.

Change under this Modification will form part of a SEC System Release; DCC has provided, alongside the FIA price to PIT Complete, a price including post-PIT, implementation, and Application Support costs in line with responses to other Modifications.

### 4.1 Solution Overview

The solution for this MP169 IA v2.0 will provide features for maintenance of a 'Restricted' attribute (True/False) for meters and use this attribute when processing Service Requests and Alerts where appropriate.

A new 'Restricted' attribute (True/False) will be added to the data held for each device in the Smart Metering Inventory (SMI). By default, the 'Restricted' attribute will be False for all existing devices at the point this change is applied and will be False for any new devices subsequently added to the Inventory.

A new interface will be provided on the DSP Access Layer (DAL) to allow the DCC, when instructed by the Responsible Supplier, to set (or clear) the 'Restricted' attribute for a device.

The value of the 'Restricted' attribute will be included in the DAL-01 (Read Inventory) Interface and INTL-42 (Notification of SMI Inventory Update) Interface. In addition, it will be included in the response to SRV8.2 Read Inventory requests, and the Device Extracts delivered to the DCC via the Enterprise Systems Interface (ESI).

When processing Service Requests there will be a check to determine whether the 'Restricted' attribute is set to True for that device (in this case the device is termed as being in 'Restricted' mode).

If the device is in 'Restricted' mode, then only a specific set of SRVs shall be allowed to be sent to the device. The list of allowed SRVs shall be a configurable item, agreed with the DCC and subject to an appropriate governance process. The version approved by Technical Architecture and Business Architecture Sub-Committee (TABASC) during the first FIA is appended in Appendix B. In a similar way, such a device will support only a specific set of Alerts shall be allowed to be forwarded from the device to the relevant Service User. The list of allowed Alerts shall also be a configurable item, but has not been provided by either the Working Group or TABASC at this time.

The DCC User Interface Specification (DUIS) interface will be amended to return a new Error Response Code when an SRV is rejected due to the device being in Restricted mode. There will also be a new Warning Response Code returned when a Supplier executes an SRV6.23 Change of Supplier request and becomes responsible for a device that is in 'Restricted' mode. A change to DCC User Gateway Interface Design Specification (DUGIDS) will also be required.

## 4.3 DSP Functional and Technical Solution Changes

The solution for this Modification requires changes to the following DSP components for cases when Restricted Mode is enabled.

### 4.3.1 Configuration

- a list of SRVs allowed to be sent from the DSP to devices in Restricted mode
- a list of Device Alerts allowed to be delivered from devices in Restricted mode

Any changes required for the configuration shall be nominated by the SEC Operations Group, and would be consulted upon. Once the consultation response is approved, changes can be implemented in a Maintenance Release, at no expense to SEC Parties.

### 4.3.2 Smart Metering Inventory

- adjust the Smart Metering Inventory (SMI) data model to add an attribute to devices that indicates their restricted state
- provide a new underlying SMI API allowing Users to mark meter devices (Electricity Smart Metering Equipment (ESME), Gas Smart Metering Equipment (GSME), and associated Gas Proxy Function (GPF) as restricted

### 4.3.3 DSP Access Layer

- a new and additional DAL-43 interface to allow management of the Restricted attribute
- provide 'Restricted' attribute for the following device types: ESME, GSME, GPF in DAL-01 responses and INTL-42 requests

### 4.3.4 Administration Portal

- amend to allow maintenance of Restricted attribute
- display 'Restricted' attribute for the following device types: ESME, GSME, GPF

### 4.3.5 DUIS and DUGIDS

- new generic E72 Response Code for rejection of SRV when a Device is in 'Restricted' mode and therefore that SRV should not be sent to the Device
- new W062301 code for successful submission of SRV 6.23, Change of Supplier where a Device is in 'Restricted' mode
- new 'Restricted' attribute added to SRV 8.2, Read Inventory response

Extracts showing the proposed changes to DUIS are included below.



DUIS Legal Text  
changes for SECMP01

Changes to DUGIDS will be provided as part of the Release.

### 4.3.6 Security

- extend Authorisation component to include a check for 'Restricted' mode. If a Device is restricted, then check if the SRV of a message is in 'allowed' list. If it is not, then stop the SRV.

- extend Device Alert authorisation to check for 'Restricted' mode and if device is restricted then check Alert Code is in 'allowed' list. If it is not, then stop the Device Alert from onward communication.

#### 4.3.7 Request Management

- adjust the strategy for 8.12.x to maintain the restricted state of a replaced GPF where Authorisation responds that a Service Request is not allowed because device is restricted, then the DSP will respond with new DUIS error code
- change "Read Inventory" functions such as those provided by the DAL interface and SRV 8.2 to include the restricted state of a device where applicable
- call northbound authorisation for Device Alerts; where not allowed then write to Discarded Alert log and discard the Alert

Northbound authorisation checks whether an Alert should or should not be sent to the User.

#### 4.3.8 Data Management

- add 'Restricted' attribute to logical and physical data models
- new Automated Programme Interface (API), called by Admin Portal and the FSM, to maintain restricted attribute for devices, including maintenance of the attribute in the motorway cache
- change to GPF device log transfer post processing to copy Restricted attribute
- include 'Restricted' attribute in device object (getDevice and read Inventory)

#### 4.3.9 Reporting and Logging

Any Alerts not delivered due to the device being in 'Restricted' mode will not be recorded in the Service Audit Trail (SAT) log, but will be recorded in a new Discarded Alert log for triage and diagnostic purposes.

- device extract to include 'Restricted' attribute (subject to "Restricted mode reporting" feature being enabled)
- a new Discarded Alert log. Note that the Discarded Alert log is not provided outside of the DSP.

#### 4.3.10 Other Impacted Components

No impacts to the following are anticipated:

- Performance
- Infrastructure
- Disaster Recovery
- DSP Resilience

### 4.4 Critical Software

The Modification and in particular the change of DUIS and MMC Schemas will impact the following components produced by Critical Software:

- Parse and Correlate

- Reference Test Data Set (RTDS)
- DCC Boxed

The RTDS is used by Parse and Correlate (P&C) and this change must be completed and released alongside P&C changes.

DCC Boxed depends on the DUIS schema, uses Parse and Correlate, and includes RTDS. These changes would need to be wrapped up in the SEC Release for this Modification, but the development can be accommodated in a Release timescale.

## 4.5 Future Service Management

The Future Service Management component based on ServiceNow will allow DCC Users to maintain of the Restricted attribute associated with a Device in the SMI. It will also allow Users to view display the 'Restricted' attribute for the following device types: ESME, GSME, and GPF. Changes to the existing FSM will include:

- Update the device class to include an additional field 'Restricted' this will allow values of true / false.
- Update the diagnostics page on the Customer Service Management portal to display the Restricted field value.
- Create a security group to provide RBAC access allow an entitled User to update the restricted value if they are the responsible party on the device.
- Configure a function for a User to request an update to a value through an API
- Build three proxy-APIs to perform an update between DSP and FSM. The FSM integration hub will create pass-through proxy APIs to expose these to FSM
- Update transforms in ServiceNow to allow the data for the new field on the device table to be ingested via the ESI report and real time API

## 4.6 Reporting

Changes to the current reporting produced by the DCC Data Science and Analytics team (DS&A) are required to exclude ESME, GSME, and GPF devices from reports where the Restricted attribute results in Alerts that might otherwise be sent to Users, and SRVs that are stopped at the DSP.

There will be some impact on the existing DS&A reporting, as the output from the DSP will be another Error Response Code that will show up in the SAT data. As there are no specific SEC Obligations or OPR targets for successful execution of SRVs (a request can be rejected/ fail, but still be handled within the Target Response Time) there is no change required, but where DCC report on success or failure (such as in SECMP0242), it would be by reference to specific Response Codes. Changes are required to exclude ESME, GSME, and GPF devices from reports where the Restricted attribute results in Alerts that might otherwise be sent to Users, and SRVs that are stopped at the DSP.

## 4.7 Impact on DCC

DCC will update Service Centre processes and knowledge articles to include verification of and procedures for dealing with 'Restricted' devices as part of Incident triage.

## 4.8 Impact on SEC Parties

SEC Parties will be impacted in the following ways:

- systems and processes for dealing with customers who wish to refuse a Smart Meter and for gaining new customers will need to recognise the need to set and read the 'Restricted' flag
- User Systems will need to be uplifted to use the new DUIS schema

## 4.9 Supported Legal Text

As noted above, changes to DUIS and DUGIDS will be required. While outside of the scope of this FIA, there are likely to be extensive changes to text related to Service Request Processing, Inventory, and Enrolment, as well as operational procedures. SECAS will be responsible for any such changes to legal supporting text.

## 5 Testing Considerations

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

### 5.1 Pre-Integration Testing (PIT)

The DSP PIT Test team will:

- verify new use cases in the DAL and Admin Portal to Set/Clear Restricted mode for applicable devices
- validate the DAL and Admin Portal inventory displays and output in Restricted mode

PIT will include sets of tests to test these use cases:

- only supported SRVs and Device Alerts are processed
- unsupported SRVs are rejected, and Device Alerts are not delivered
- ESI report will also be tested to confirm new field is displayed when Restricted reporting feature switches is ON

PIT will also be carried out by Critical Software and the FSM team to verify their components are fully functional in their own environments.

In all the above cases, a series of regression tests will also be run. Automated testing will be used where possible.

### 5.2 Performance Testing

These changes are not anticipated to have a performance impact, therefore no performance assurance activities have been included in this FIA.

### 5.3 System Integration Testing (SIT)

For each SEC System Release there is a post-PIT Change Request that provides the Integration response for the Release as a whole, covering the functional testing of the change in the scope of the Release, as well as activities that are common to all Change Requests in the scope, e.g. Test Plans, and System Regression testing. This section gives details on the functional change testing for the Modification.

Both the Critical Software (section 4.4) and FSM (section 4.5) component changes will be tested alongside the DSP changes as part of SIT and User Integration Testing (UIT).

Testing will be executed on SMETS2 device sets only. This change does not apply for SMETS1.

The scope of SIT for this Modification comprises:

- verifying that devices can be flagged as 'Restricted' or 'Not Restricted' via FSM
- checking that a User is able to view the 'Restricted' attribute against a device
- swapping devices between 'Restricted' and 'Not Restricted' states
- verifying the SRV 8.2 response returns the new 'Restricted' attribute

- verifying the Device Extract ESI Report includes the new Restricted attribute
- testing that if a Comms Hub is replaced, the 'Restricted' attribute mode remains the same on the new GPF
- ensuring Device Alerts that are unsupported for 'Restricted' mode are rejected and written to the Restricted Alert Log
- processing the supported SRVs for devices in 'Restricted' mode
- processing unsupported SRVs to verify an error is returned to the Service User
- ensuring that Service Audit Trail is updated with validation errors when an SRV is rejected due to a 'Restricted' device as the target

The estimate of the number of tests required is about 1500, with a planned duration of about 50 Working Days (10 weeks).

To carry out the Functional Testing for this Modification, the following Devices are required:

- one (1) SMETS2 device set (EDMI) with CSP North
- two (2) SMETS2 device set (TOSH and WNC) with CSP Central and South
- one (1) 4G Comms Hub device set with the NEWAN (Vodafone)

## 5.4 User Integration Testing (UIT)

UIT testing will confirm that the functionality for SMETS2 devices operating in 'Restricted mode' are working as expected in each UIT test environment.

All SRVs tested will use the updated DUIS version associated with the change. The UIT testing for each meter set will comprise:

- Customer Journey 1 - Install and Commission each meter set
- a selected sample of SRV testing to prove that the sending of relevant SRVs is not 'Restricted'
- update devices to 'Restricted' via FSM
- a selected sample of SRV testing to validate that the device behaviour is now being treated as 'Restricted'
- for SRV 6.23 (CoS), check for a W062301 response
- Over-the-Air (OTA) firmware updates to the 'Restricted' ESME and GSME to check the upgrades are successful
- check Alerts from devices which are Restricted are limited as specified
- check rejected Alerts are recorded in a new log (not the SAT log)
- update devices to not be 'Restricted' via the FSM and Admin Portal
- re-run a selected sample of SRVs to validate that the device behaviour is no longer being treated as 'Restricted'
- decommission the meter set

It is estimated that a total of about 390 tests on two SMETS2 meter sets, with one meter set for each of the CSPs will be required:

- one (1) SMETS2 device set (EDMI) with CSP North
- one (2) SMETS2 device set (TOSH or WNC) with CSP Central and South
- one (1) 4G Comms Hub device set with the NEWAN (Vodafone)

## 6 Implementation Timescales and Releases

This Modification is expected to be included in a SEC Release in June 2025. Implementation timescales will be finalised as part of the relevant SEC Release.

### 6.1 Change Lead Times and Timelines

From the date of approval (in accordance with Section D9 of the SEC), to implement Design, Build and PIT requires a lead time of approximately **six months**. Post-PIT integration testing is expected to have a duration of **four** months.

This Modification would be scheduled alongside other Modifications and CRs, and there might be a period of no activity for this Modification.

Implementation of the Critical Software and FSM changes are less impacting than the DSP changes, and would be scheduled to fit in a planned SEC Release and associated activities.

### 6.2 SEC Release Allocation and Other Code Impacts

This Modification could be implemented as part of the November 2026 SEC Release, however the allocation to a release may be dependent on other Modification timings and the suitability of a release. No functionality overlap with other Modifications has been identified at the time of undertaking this FIA.

### 6.3 Costs and Charges

This section indicates the quote for all phases of application development stage for this Modification. Note these costs assume a release of just this SEC Modification without any other Modifications or Change Requests in the release, which is not truly reflective of what the post-PIT test costs or programme duration will look like. A calculation of those costs will be carried out when the contents of the future Release are finalised, and the post-PIT costs are recalculated through a "Release CR" also referred to as a "Post-PIT CR".

| £ | Design,<br>Build, PIT | SIT     | UIT    | TTO   | App<br>Support | Total          |
|---|-----------------------|---------|--------|-------|----------------|----------------|
|   | 512,181               | 340,526 | 95,282 | 8,362 | 10,324         | <b>966,675</b> |

|                                   |                                                                                                                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                            | The production of detailed System and Service designs to deliver all new requirements.                                                                                                            |
| Build                             | The development of the designed Systems and Services to create a solution (e.g. code, systems, or products) that can be tested and implemented.                                                   |
| Pre-Integration Testing (PIT)     | Each Service Provider tests their own solution to agreed standards in isolation of other Service Providers. This is assured by DCC.                                                               |
| Systems Integration Testing (SIT) | All the Service Provider's PIT-complete solutions for a Release are brought together and tested as an integrated solution, ensuring all SP solutions align and operate as an end-to-end solution. |
| User Integration Testing (UIT)    | Users are provided with an opportunity to run a range of pre-specified tests in relation to the relevant change.                                                                                  |
| Implementation to Live (TTO)      | The solution is implemented into production environments and made ready for use by Users as part of a live service.                                                                               |

Critical Software have indicated there will be no charges for their work on changes associated with this Modification.

DCC is challenging the cost and effort for the FSM implementation.

### 6.4 Changes to the Contract

The DSP contract updates will be detailed within the CAN and will impact the following schedules:

- Schedule 2.1 (DCC Requirements): addition of new requirements for this change
- Schedule 3 (DCC Responsibilities): addition of new DCC Responsibilities to enable achievement of the activities and / or deliverables under this Change

- Schedule 4.1 (Contractor Solution): solution design documents
- Schedule 6.1 (Implementation Planning): addition of new milestones
- Schedule 7.1 (Charges and Payment): revisions to incorporate charges and payment

## 7 RAID

The following risks, assumptions, dependencies, and exclusions have been made in developing this FIA:

### Risks

None at this time.

### Assumptions

| Ref      | Assumption                                                                                                                                                                                                                                                                                       |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP169-A1 | Technical solutions will remain valid until a change in the DCC Total System that impacts this Modification.                                                                                                                                                                                     |
| MP169-A2 | Indicative pricing for the post-PIT functional testing is included. However, DCC In Life Change will provide a separate estimate of other post-PIT charges, and a separate release Change Request will be raised at the start of Implementation activities.                                      |
| MP169-A3 | There is no workflow for the changing of the 'Restricted' attribute. A suitable authorised DCC user can change the flag for a device.                                                                                                                                                            |
| MP169-A4 | Setting a Device as 'Restricted' will be done on a one-by-one basis. There is no bulk update mechanism.                                                                                                                                                                                          |
| MP169-A5 | If the Device is in 'Restricted' mode only a specific set of SRVs shall be allowed to be forwarded from the DSP to the relevant Device. This list has been provided by TABASC prior to approval of this Modification.                                                                            |
| MP169-A6 | Any changes to the Restricted Alerts and SRVs list can be nominated through TABASC and SEC Operations Group, and will be consulted upon by a DCC-led consultation. Once the consultation response is approved, changes can be implemented in a Maintenance Release, at no expense to SEC Parties |

### Issues

None identified at this time.

### Dependencies

|          |                                                                                                                                                                                                                                                       |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MP169-D1 | If the device is in 'Restricted' mode only a specific set of Alerts shall be allowed to be forwarded from the Device to the relevant Service User. This list is to be provided by the Working Group or TABASC prior to approval of this Modification. |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Appendix A: Glossary

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

| Acronym       | Definition                                                     |
|---------------|----------------------------------------------------------------|
| API           | Automated Programme Interface                                  |
| CoS           | Change of Supplier                                             |
| CoT           | Change of Tenancy                                              |
| Comms Hub, CH | Communications Hub                                             |
| CFR           | DCC Change Request                                             |
| CSP           | Communication Service Provider                                 |
| DAL           | DSP Access Layer                                               |
| DCC           | Data Communications Company                                    |
| DNO           | Distribution Network Operator                                  |
| DSP           | Data Service Provider                                          |
| DUGIDS        | DCC User Gateway Interface Design Specification                |
| DUIS          | DCC User Interface Specification                               |
| ESI           | Enterprise Systems Interface                                   |
| ESME          | Electricity Smart Metering Equipment                           |
| FIA           | Full Impact Assessment                                         |
| FSM           | Future Service Management                                      |
| GPF           | Gas Proxy Function                                             |
| GSME          | Gas Smart Metering Equipment                                   |
| I&C           | Installation and Configuration                                 |
| PIA           | Preliminary Impact Assessment                                  |
| PIT           | Pre-Integration Testing                                        |
| ROM           | Rough Order of Magnitude (cost)                                |
| SAT           | Service Audit Trail                                            |
| SEC           | Smart Energy Code                                              |
| SECAS         | Smart Energy Code Administrator and Secretariat                |
| SIT           | Systems Integration Testing                                    |
| SMETS         | Smart Metering Equipment Technical Specification               |
| SMI           | Smart Metering Inventory                                       |
| SRV           | Service Reference Variant                                      |
| TABASC        | Technical Architecture and Business Architecture Sub-Committee |
| UIT           | User Integration Testing                                       |
| WAN           | Wide Area Network                                              |

---

## Appendix B: Allowable Service Requests

The configurable list of SRVs allowed to be sent to a device was agreed by TABASC, and is as follows.



SECMP0169 Allowe  
SRV when Restrictec

## Appendix C: Low Level (Detailed) Requirements

DCC have developed Low Level Requirements for this change, which have been used in the solution development.



LLR Details  
SECMP0169