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# MP080 'Managing DUIS uplifts'

## Modification Report Version 0.3



## About this document

This document is a draft Modification Report. It provides detailed information on the background, issue, solution, costs, impacts and implementation approach. It also summarises the discussions that have been held and the conclusions reached with respect to this Modification Proposal.

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This document also has four annexes:

- **Annex A** contains the business requirements.
- **Annex B** contains the changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full Data Communications Company (DCC) Preliminary Assessment response.
- **Annex D** contains the full Refinement Consultation responses.

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## 1. Summary

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This Proposal was raised by Helen Metcalfe of the DCC.

The DCC User Interface Specification (DUIS) is contained in Smart Energy Code (SEC) Appendix AD. It sets out the technical details for how Users send and receive data from the DCC. Currently, all versions of the DUIS have no designated start or end dates. This means there are multiple versions of the DUIS existing that can't be removed from the SEC due to Users still currently using the earlier versions. This results in the DCC having to maintain the historical versions and expend additional testing costs against these. Additionally, only versions of DUIS v3.0 and higher can support both Smart Metering Equipment Technical Specification (SMETS) 1 and SMETS2 meters, meaning that in the event of a Change of Supplier (CoS), a SMETS 1 meter could lose “smart” functionality.

The Proposed Solution is to include all existing and future DUIS versions in the Technical Specification Applicability Table (TSAT). By allowing these versions to be end dated, it will allow the DCC to manage fewer versions of the DUIS and, in the long term, reduce testing costs.

All SEC Parties will be affected by this Modification Proposal. The proposed implementation date is as part of the November 2020 SEC Release, with DUIS versions 1.0 and 2.0 end-dated in November 2021.

## 2. Background

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### Why are there Multiple DUIS versions?

The DUIS is contained in SEC Appendix AD and sets out the technical details for how Users send and receive data from the DCC. All versions, both current and past, of the DUIS are contained within the SEC. When a new version is created, the old versions remain. This means that at any point in time different Parties can be using different versions of DUIS and therefore the DCC must maintain each historical version as well as the latest version.

Currently, there are four active versions of the DUIS alongside the supporting Message Mapping Catalogue (MMC) and Schema and Parse & Correlate (P&C) software versions, following the introduction of DUIS v3.1 as part of the November 2019 SEC Release. This will increase to a fifth version in the November 2020 SEC Release, with the potential for a new version of DUIS to be created every year.

The latest DUIS version always includes functionality introduced in earlier versions, so there is no functional benefit in continuing to maintain and support all previous versions. It was anticipated that Users would uplift to a new version shortly after this was made available. However, this has not occurred consistently, and some Users have not uplifted beyond the first version of the DUIS. Therefore, a process to manage DUIS uplifts and retire or 'end date' older or historic DUIS versions is needed.

### What is the issue?

Two main issues have been identified.

Firstly, Parties are incurring costs because the DCC is obligated to maintain all previous version of DUIS. Most notably this cost is incurred as part of regression testing for SEC Releases. Given that there are no functionality changes to previous DUIS, Parties are paying additional costs for confirming that the previous versions still operate satisfactorily even though they remain unchanged. In 2019, the DCC advised that there could be around a 10% reduction of Systems Integration Testing (SIT) time and costs if previous DUIS versions were removed from regression testing.

Secondly, a number of Users still use DUIS v1.1 or DUIS v2.0. Only versions 3.0 and above support both SMETS1 and SMETS2 meters. Therefore, Users who remain on DUIS versions 1.1 or 2.0 will not be able to communicate with SMETS1 meters. This creates a risk that impacts directly on Consumers, in that on a Change of Supplier (CoS) event a SMETS1 meter could lose some Smart functionality.

## 3. Solution

### Proposed Solution

The MP080 solution has two parts:

- Listing the DUIS version applicability dates in the TSAT; and
- Mandating an uplift to DUIS version 3.0 or above.

The business requirements can be found in Annex A.

### Moving the DUIS to the TSAT

The DUIS will be added to the TSAT. Within the TSAT each version of the DUIS will have a relevant start and end date applied.

There will be no rule introduced that requires a set lead time for applying end dates to DUIS versions. The start and end dates in the TSAT will be based upon industry consultation and the most appropriate dates applied on a case-by-case basis. It is however noted that Parties expect at least two versions of the DUIS to be supported at any one time.

The DUIS can only be amended by a Modification Proposal or a Government Department for Business, Energy and Industrial Strategy (BEIS) designation (during the transition). The Proposed Solution will amend the TSAT to include the DUIS and change the definition of the TSAT and anywhere it is referenced within SEC Section A 'Definitions and Interpretations' to reflect this.

Any BEIS designation that impacts the DUIS will need to include the required redline changes to the TSAT.

Listing the DUIS in the TSAT will ensure only relevant versions of the DUIS remain supported, reduce testing costs and it will be clear to all Parties when there would be a required transition to the latest DUIS version.

### Mandating uplift to latest DUIS versions

Once the DUIS has been added to the TSAT, relevant start and end dates will be applied. It is proposed to apply the following dates in the TSAT upon implementation of this modification:

DUIS Version	Start Date	End Date
v1.1	21/07/2017	26/11/2021
v2.0	01/02/2018	26/11/2021
v3.0	28/07/2019	Not yet determined
v3.1	28/11/2019	Not yet determined

These changes would mandate that all Parties are using DUIS version 3.0 or above by 26 November 2021 and that both versions 3.0 and 3.1 are supported by the DCC until the dates in the table are amended in the future.

As new versions of DUIS are created in 2020, appropriate end dates will be determined for DUIS v3.0 and v3.1; these will be determined under separate modifications. For the avoidance of doubt it may not be necessary to end date DUIS v3.0 or v3.1 in 2021. However, should it be deemed appropriate to do so the required changes will be made to the TSAT under a corresponding modification.

As part of the solution, the DCC has expressed a desire to provide only a single DUIS impacting update a year, to be incorporated as part of SEC Release. This is expected to be the standard business-as-usual practice, but is not being mandated by this modification. However, if required the Technical Architecture and Business Architecture Sub-Committee (TABASC) can be consulted upon to request additional Release(s) to include DUIS impacting changes if the industry would benefit from an additional DUIS impacting Release.

## 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

Parties who still use DUIS v1.1 or v2.0 will be required to uplift to DUIS v3.0 or v3.1 by the 2021 November Release (26 November 2021).

### DCC System

There will be no impact on the DCC systems.

### SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Section A 'Definitions and Interpretations'
- Schedule 11 'Technical Specification Applicability Tables'

The changes to the SEC required to deliver the Proposed Solution can be found in Annex B.

### Consumers

Whilst there is little impact directly on consumers, any reduced testing costs should come as a pass through to consumers. Any consumer who switches their energy supplier would benefit from a reduced risk of losing their "Smart" functionality when they switch Energy Supplier.

### Other industry Codes

There are no expected impacts on other industry codes.

### Greenhouse gas emissions

There are no expected impacts on greenhouse gas emissions.

## 5. Costs

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### DCC costs

The estimated DCC implementation costs to implement this modification is less than £50,000. There is no breakdown of cost as this was described as a one-off DCC-only cost that doesn't require any Design, Build or testing stages that would be associated with a DCC Systems change. This cost is for the removal of URLs as stated in Section 6 'Costs and Charges' of the Preliminary Assessment. There is no impact on the Service Providers.

More information can be found in the DCC Preliminary Assessment response in Annex C.

### 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

SEC Parties acknowledged there was no individual cost to them in this Modification Proposal. SEC Parties who were either planning to upgrade to DUIS v3.0+ or those already on DUIS v3.0+ both noted they would not be affected. One SEC Party noted that cost would be incurred when a new DUIS version is incorporated, but not directly as a consequence of this Modification Proposal.



## 6. Implementation approach

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### Recommended implementation approach

SECAS is recommending an implementation date of:

- **5 November 2020** (November 2020 SEC Release) if a decision to approve is received on or before 21 October 2020.

For the avoidance of doubt, this is the recommended implementation date for the insertion of the DUIS Versions table into the Technical Specification Applicability Table. This table will state that the end date for DUIS v1.1 and DUIS v2.0 is **26 November 2021**.

The rationale for this implementation date is that the Proposed Solution's end dating will ensure, if this Modification Proposal is approved, that all SEC Parties are given one year to migrate to one of the more recent versions of the DUIS.

As part of the Refinement Consultation the respondents were asked whether they feel this period of one year to migrate is appropriate. All respondents who stated they were still using DUIS v1.1 or v2.0 stated that they were in favour of the one-year window and that the length would be sufficient. The full responses received can be found in Annex D.

## 7. Assessment of the proposal

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### Observations on the issue

The DCC stated that its desired outcome was that by November 2021, all SEC parties would have a version of DUIS that would be able to support and communicate with SMETS1 and SMETS2 meters. It believed this is the main reason for progressing this modification, to ensure smart functionality is not lost on CoS events. The DCC also stated that this solution would reduce the amount of supported DUIS versions, which would lead to a reduction in testing costs. It was observed that these cost savings would be minimal, due to service providers having automated these regression tests. This means any cost-savings will be incurred later on after the versions are removed, rather than from the point of inclusion into the SEC.

### Solution development

#### Enduring Solution

The Working Group discussed the concept of an enduring solution. This was raised initially by the Change Sub-Committee (CSC) and a member enquired into whether an enduring process could be incorporated into the Proposed Solution. The DCC suggested that as part of the solution, this should include an agreed process to amend the DUIS versions in the TSAT without requiring future SEC Modification Proposals.

SECAS suggested that there could be an alternate means of requesting and implementing changes to the TSAT without raising SEC Modification Proposals. Instead, the TSAT, which currently sits as a SEC Schedule, could be removed and made a code defined document. SEC Section A would have an amended definition for the TSAT and include a reference to the document. This would allow the Panel (or a delegated Sub-Committee) to amend the TSAT for any future changes that requires a new DUIS version or striking out an older and unsupported one.

When the Refinement Consultation was issued, the respondents weren't in favour of removing the TSAT from SEC Schedule 11, a stance that was echoed by the TABASC. This was due to a concern that the TSAT should be codified in the SEC and that removing it would remove transparency from the process. It was instead suggested that any future SEC modification should include changes to the TSAT as part of the legal text which either creates or end-dates a DUIS version. This would remove the need for modifications specifically created to introduce and end-date DUIS versions, as they could instead be included as part of DUIS impacting modifications.

#### Frequency of DUIS versions

As part of the enduring approach, questions were raised about the frequency of introducing new DUIS versions. The DCC has been told by its customer base that they would appreciate a single DUIS version update every year. This update would be part of a SEC Systems Release (recently the one scheduled in November every year), which also includes the DCC System impacting changes that change the Technical Specifications. This also raised the query of whether a third iteration of the DUIS could be supported at one time, rather than two being live at any one time post November 2021. These topics were suggested for inclusions as additional questions in the Modification Proposal's Refinement Consultation.

One concern raised was that this concept of introducing a single DUIS update annually conflicts with the SEC Release Management Policy. This policy states that DCC is obligated to have two SEC System Releases a year. They offered a suggestion that a process could be created which is used in other Codes where SEC Parties are advised when a release isn't happening. This was so that if the DCC is attempting to deliver only a single DUIS update a year, that this aligns with what happens in other Codes and that it doesn't conflict with other existing policy and documentation.

SECAS highlights that while there are two SEC Systems Releases a year, these are for any changes that impact the DCC Systems; not all such changes impact the DUIS. The policy (version 3.0) states that whilst there are two SEC Systems Releases per year, the Panel notes the impact that changes to the DUIS, the GB Companion Specification (GBCS) and the Technical Specifications can have on SEC Parties. Therefore, the Panel will endeavour to limit such changes to one of the SEC Systems Releases per year, noting that such decisions will take into consideration the efficiency, urgency and cost of each proposal. The policy also allows for a SEC Systems Release to be converted to a SEC Documentation Release, if this is communicated well in advance.

## **Change of Preliminary Assessment**

The Preliminary Assessment and the design of the Proposed Solution has changed throughout the Refinement Process. Originally, the first Preliminary Assessment returned an “over-specified” solution which cost in excess of £500,000 up to Pre-Integration Testing (PIT) and required potential Communications Service Provider (CSP) and Data Service Provider (DSP) changes. After feedback from SECAS, the DCC undertook a second Preliminary Assessment that addressed the same business requirements but returned a less technical and less expensive solution. This request returned the current Preliminary Assessment (see Annex C) which costs “up to £50,000” according to the assessment, and containing no DCC Systems impacts in the solution. As there is no DCC Systems impact, the DCC confirmed a full Impact Assessment was not required.

## **Additional questions in the Refinement Consultation**

To help assess the solution and ensure it addresses the concerns of industry, additional questions were added to the Refinement Consultation. Respondents were asked if they use an older iteration of DUIS and if the Proposed Solution with a year between moving DUIS versions to the TSAT is an appropriate time period to ensure a full migration to the newer versions of DUIS. Another Refinement Consultation question asked about the preferred frequency of DUIS updates if this Modification Proposal were to be accepted.

## **Support for Change**

### **The TABASC**

When taken to the TABASC in the Development Stage, the Modification Proposal was supported. The TABASC Chair noted the desire for an enduring solution and whether it could avoid using future modifications to change the proposed DUIS table in the TSAT.

When the Modification Proposal was later returned during the Refinement Stage, SECAS and the Proposer had suggested that the TSAT could be lifted from SEC Schedule 11. This way, if the DUIS table was added to the TSAT, it would no longer require SEC modifications to amend the table. The

TSAT would become a 'code defined document' for which any changes would need to be consulted upon before being approved by the TABASC.

The TABASC disagreed with this approach, believing that industry needs good visibility of any changes to the DUIS and any other technical specification that would be started or end-dated in the TSAT. One TABASC member suggested that the introduction and end dating of a DUIS version could be included as part of a SEC modification that affects those areas. SECAS and the Proposer agreed to incorporate this into the solution and if it was the preferred approach of the TABASC then it made sense to make this change. The TABASC confirmed it was supportive of the rest of the proposed changes under this Modification Proposal.

### **The Working Group**

The Modification Proposal was taken to a Working Group meeting where all of the members felt the Proposed Solution had significant benefits. The area of the solution with the largest support was around ensuring the rest of industry had moved to the most recent versions of DUIS. These are the only versions that can support and communicate with both SMETS1 and SMETS2 Devices. The Working Group acknowledged the cost savings that could be made through the Modification Proposal but agreed that it alone would not have been a sufficient reason for change given it only allows for modest savings on regression testing costs.

## **Views against the General SEC Objectives**

### **Proposer's views**

The Proposer believes this Modification Proposal better facilitates General SEC Objectives (a)<sup>1</sup> and (g)<sup>2</sup>.

They believe SEC Objective (a) is better facilitated by improving the provision and operation of smart metering Devices at consumer premises. This is by ensuring that SEC Parties uplift their versions of the DUIS to a version that can communicate with both SMETS1 and SMETS2 meters. This will reduce the likelihood of operational issues.

They believe SEC Objective (g) is better facilitated by making the implantation of the SEC a more efficient process. With fewer versions of the DUIS to support and test against, this will reduce resources managing older documents and in testing scenarios for SEC Releases.

### **Industry views**

The views of industry were sought as part of the Refinement Consultation. Respondents was mostly supportive of the Modification Proposal, with all of the respondents believed that SEC Objectives (a) and (g) were better facilitated.

Some respondents did note an issue with the proposed removal of the TSAT from SEC Schedule 11. Respondents felt this was outside the original scope of the Modification Proposal and that they wouldn't feel comfortable with the TSAT not sitting in the SEC. Those who disagreed with this part of

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<sup>1</sup> Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain

<sup>2</sup> Facilitate the efficient and transparent administration and implementation of the SEC

the solution believed that this Modification Proposal should still proceed as long as the solution was revised to keep the TSAT in SEC Schedule 11

The full Refinement Consultation responses can be found in Annex D.

## Appendix 1: Progression timetable

SECAS plans to take the Modification Proposal to the Panel on 17 April 2020 for approval. If the Panel agrees, a Modification Report Consultation will be issued before the Modification Report is presented to the Change Board to vote for on a decision to approve the proposal.

Progression Timetable	
Action	Date
Draft Proposal raised	6 Aug 2019
Presented to CSC for initial comment	27 Aug 2019
Presented to CSC for final comment and recommendations	24 Sep 2019
Panel converts Draft Proposal to Modification Proposal	11 Oct 2019
Business requirements developed with DCC	21 Oct 2019
Preliminary Assessment requested	18 Nov 2019
Preliminary Assessment returned	17 Jan 2020
Modification discussed with Working Group	5 Feb 2020
Refinement Consultation	17 Feb – 6 Mar 2020
Modification discussed with TABASC	2 Apr 2020
Modification Report approved by Panel	17 Apr 2020
Modification Report Consultation	20 Apr – 11 May 2020
Change Board Vote	27 May 2020

## 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
BEIS	Government Department of Business, Energy and Industrial Strategy
CoS	Change of Supplier
CSP	Communications Service Provider
DCC	Data Communications Company
DSP	Data Service Provider
DUIS	DCC User Interface Specification
MMC	Message Mapping Catalogue
P&C	Parse & Correlate
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMETS	Smart Metering Equipment Technical Specifications
TABASC	Technical Architecture and Business Architecture Sub-Committee
TSAT	Technical Specifications Applicability Table



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