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# MP080 'Managing DUIS uplifts'

## Modification Report Version 0.2

## About this document

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This document is the Modification Report for [MP080 'Managing DUIS uplifts'](#). 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 three annexes:

- **Annex A** contains the business requirements.
- **Annex B** contains the legal text to deliver the Proposed Solution.
- **Annex C** contains the full DCC Preliminary Assessment response.

## 1. Summary

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The Data Communications Company (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 DUIS have no designated start or end dates. This is opposed to being part of the Technical Specification Applicability Table (TSAT) where the other technical specifications documents are listed with start and end dates. This means there are multiple versions of 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 TSAT. By allowing these versions to be end dated, it will allow the DCC to manage fewer versions of DUIS and in the long term reduce testing costs. Because versions of DUIS carry over their functionality, no User migrating to a more recent version of DUIS will have decreased functionality for their Devices. Finally, by moving the DUIS into the TSAT, it will ensure all of the technical specification documents with appropriate start and end dates will be in one central location and will be easier for Users to access this information.

This Proposal was raised by Helen Metcalfe of the DCC on 6 August 2019.

## 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 DUIS are contained within the SEC. As 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 that the DCC must maintain each historical version as well as the latest version.

Currently, there are four active versions of DUIS alongside the supporting Message Mapping Catalogue (MMC) and Schema and Parse and Correlate (P&C) software versions following the introduction of DUIS v3.1 as part of the November 2019 SEC Release. This will likely increase to a fifth version in the November 2020 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 DUIS V1.1. Therefore, we need a process to manage DUIS uplifts and retire or 'end date' older or historic DUIS versions.

### 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 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, DCC was advised that there could be around a 10% reduction of System Integrated Testing (SIT) time and costs if previous DUIS versions were removed from regression testing.

Secondly, a number of Users still use DUIS v1.0 or DUIS v2.0. Only versions of DUIS v3.0 and onwards supports both SMETS1 and SMETS2 meters. Therefore, Users who remain on DUIS versions 1.0 or 2.0 will not be able to communicate with SMETS 1 meters. This creates a risk that impacts directly on Consumers, 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:

- Moving DUIS to the TSAT; and
- Mandating uplift to latest DUIS versions (v3.0 and v3.1)

#### Moving DUIS to the TSAT

DUIS will be added to the TSAT. Within the TSAT each version of 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 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 DUIS to be supported at any one time.

DUIS can only be amended by a Modification or a Government Department for Business, Energy and Industrial Strategy (BEIS) designation (during the transition). The Proposed Solution will amend the TSAT to include DUIS and change the definition of the TSAT and anywhere it is referenced within SEC Section A 'Definitions and Interpretations'. The TSAT will then be removed as a Schedule in the SEC and be referenced in SEC Section A. This would allow for changes to be made to the TSAT and any of its contents relating to DUIS without the need of a SEC Modification Proposal.

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

Placing DUIS in TSAT will ensure only relevant version of 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 DUIS has been added to the TSAT relevant start and end dates will be applied. It is proposed to apply the following dates in TSAT:

DUIS Version	Start Date	End Date
v1.0	21/07/2017	26/11/2021
v2.0	01/02/2018	26/11/2021
v3.0	28/07/2019	TBC
v3.1	28/11/2019	TBC

These changes would mandate that all Parties are using either DUIS v3.0 or DUIS v3.1 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 placed for DUIS v3.0 and v3.1. For 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 TSAT.

As part of the solution, the DCC have 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. However, if required the 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.

### Legal text

The changes to the SEC required to deliver the proposed solution can be found in Annex B.

## 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 v1.0 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'
- Appendix AD 'DCC User Interface Specification'

### 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 according to their Preliminary Assessment. There is no breakdown of cost as in the Preliminary Assessment as this was described as a one-off cost that doesn't require a Design, Build or testing that would usually be associated with the assessment. This cost is for the removal of URLs as stated in Section 6 'Costs and Charges'.

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.



## 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 DUIS Versions into the Technical Specification Applicability Table, such tables will state that the end date for DUIS V1.1 and DUIS V2 is 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 DUIS.

This approach will be reviewed as part of the Refinement Consultation and respondents will be asked whether they feel this period of one year to migrate is appropriate.

## 7. Assessment of the proposal

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### Observations on the issue

The DCC stated that their 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. They believe 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 in the 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 TSAT and include DUIS without requiring future SEC Modification Proposals.

It was suggested that in line with earlier correspondence with the chair of the Technical Architecture and Business Architecture Sub-Committee (TABASC) that there could be an alternate means of requesting and implementing changes to the TSAT without raising SEC Modification Proposals. Instead, the TSAT which sits as Schedule 11 in the SEC could be removed. 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 require a new DUIS version or striking out an older and unsupported one.

As part of the enduring approach, questions were raised about the frequency of introducing DUIS versions. The DCC provided feedback in a Working Group meeting that they have been told by their customer base that they would appreciate a single DUIS version update every year. This update would be a major Release update (currently scheduled in November every year), including the DCC System impacting changes that change the Technical Specifications. This also raised the query of whether this should introduce a third iteration of DUIS that could be supported, 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 a member of the Working Group after the meeting was that this concept of introducing a single DUIS update annually conflicts with the Release Management Policy. This policy states that DCC are obligated to have 2 systems updates 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 are 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.

## Change of Preliminary Assessment

The Preliminary Assessment and the design of the Proposed Solution has changed throughout the Refinement period. 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)/Data Service Provider (DSP) changes. After feedback from SECAS, DCC were able to undertake a new Preliminary Assessment that addressed the same business requirements but returned a less technical and less expensive solution. This request returned the current Preliminary Assessment which cost “up to £50,000” according to the assessment, noting a ten-fold reduction in the cost and containing no Systems impacts in the solution.

## Additional questions in the Refinement Consultation

To help assess the solution and ensure it addresses the concerns of industry, additional questions will be added to the Refinement Consultation. Respondents will be asked if they are using 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 will ask 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 SEC Modifications to change the proposed DUIS table in the TSAT.

### 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>.

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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

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 DUIS to a version that can communicate 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 less versions of DUIS to support and test against, this will reduce resources managing older documents and in testing scenarios for Releases.

### **Industry views**

The views of industry will be sought as part of the Refinement Consultation.

## Appendix 1: Progression timetable

SECAS plans to issue the Modification Proposal to Refinement Consultation on 17 February 2020. From here, industry will be asked to comment on the change of solution and ensure that the non-technical impacting solution addresses the issue that it was raised to deal with.

On the condition that no responses in the Refinement Consultation return any serious concerns or require any extensive clarifications we would proceed to ask the Change Board to agree to request an Impact Assessment on the Modification Proposal, using the new Preliminary Assessment. Following return of the Impact Assessment, we will take the Modification proposal back to the Working Group to discuss the findings of the Refinement Consultation and ensure that members feel any previous concerns have been addressed before proceeding with taking the Modification Proposal to Panel and then to Modification Report Consultation.

Progression Timetable	
Action	Date
Refinement Consultation	17 Feb 20 – 6 Mar 20
Request Impact Assessment at Change Board	25 Mar 20
Discuss at Working Group	4 Apr 20

## 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



If you have any questions on this modification, please contact:

**Harry Jones**

020 7081 3345

[harry.jones@gemserv.com](mailto:harry.jones@gemserv.com)

**Smart Energy Code Administrator and Secretariat (SECAS)**

8 Fenchurch Place, London, EC3M 4AJ

020 7090 7755

[sec.change@gemserv.com](mailto:sec.change@gemserv.com)

# SECMP080 ‘Managing DUIS uplifts’

## Business requirements – version 0.1

### About this document

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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

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This section contains the functional business requirements. Based on these requirements a full solution will be developed.

Business Requirements	
Ref.	Requirement
1	DUIS will be placed into the TSAT document under the SEC
2	End dates for DUIS versions within TSAT will be set as part of a relevant modification after consultation
3	The end dates for DUIS v1.0 and v2.0 (i.e. when they will stop being supported) will be 26 November 2020
4	The end dates for DUIS v3.0 and v3.1 will become TBC on implementation of MP080
5	Any further changes to DUISv3.0 or v3.1 end dates will require a separate Modification

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# MP080 ‘Managing DUIS uplifts’

## Legal text – version 0.1

### About this document

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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 6.25.

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

## Section A ‘Definitions and Interpretations’

### Amend Section A1.1 as follows:

#### TS Applicability Tables

means the document ~~set out in Schedule 11~~ which has the content described at Section A3.33 (The TS Applicability Tables).

### Amend Section A3.33 as follows:

#### The TS Applicability Tables

A3.33 There shall be a document to be known as the “**TS Applicability Tables**”, which ~~shall be set out at Schedule 11 to the Code following its initial designation in accordance with Section X5 (Incorporation of Certain Documents into this Code) by the Secretary of State in reliance on Section X5.4 (Other Technical Specifications), and~~ shall:

- (a) in relation to each Technical Specification, list each of the Versions of that Technical Specification that have been produced;
- (b) in relation to each such Version of that Technical Specification, identify:
  - (i) any Installation Start Date that has been assigned to it;
  - (ii) in the case of each Version of the SMETS with a Principal Version number of 1, the General Installation End Date that has been assigned to it;
  - (iii) in the case of each other Version of the SMETS, any Installation End Date that has been assigned to it (or a statement that no such date has yet been determined);
  - (iv) the Maintenance Start Date;
  - (v) the Maintenance End Date (or a statement that no such date has yet been determined);
  - (vi) the relevant Version(s) of the GBCS;
  - (vii) any Applicability Period relating to any such relevant Version of the GBCS; ~~and~~

(c) in relation to each Version of the GBCS, identify the relevant Version(s) of the CPA Security Characteristics; and

(d) In relation to each version of the DUIS, identify:

(i) the date from which that version becomes applicable; and

(ii) the date after which that version ceases to be applicable (or a statement that no such date has yet been determined).

A3.34 The TS Applicability Tables shall be amended to ensure that it remains accurate and up-to-date:

- (a) on the designation or re-designation of a Technical Specification or the GBCS in accordance with Section X5 (Incorporation of Certain Documents into this Code), by the Secretary of State in reliance on Section X5.6 (Supplementary Provisions); and

- (b) ~~as part of~~following the approval of any modification of the Code which creates a new Version or end dates a current Version of any Technical Specification or of the GBCS or created or end-dates a version of the DUIS in accordance with Section D (Modification Process), subject to any such amendments being consulted upon and approved by the Technical Architecture and Business Architecture Sub-Committee.

A3.35 Where the TS Applicability Tables is amended (including by the means described in Section A3.34) the amendment may have retrospective effect, which is to say that any date specified in the TS Applicability Tables by virtue of that amendment may be a date which falls before the date on which the amendment was made.

A3.36 The information set out in the TS Applicability Tables shall be regarded as conclusive for all purposes of any question as to the:

- (a) Installation Validity Period of any Version of a Technical Specification other than in any case where both:
  - (i) it is a Version of the SMETS with a Principal Version number of 1; and
  - (ii) a Derogation has been granted to any Supplier Party in accordance with Section A4 (Derogation from SMETS1 General Installation End Date), and has not been revoked, specifying an Alternative Installation End Date in respect of that Version of the SMETS;
- (b) Maintenance Validity Period of any Version of a Technical Specification;
- (c) relevant Version(s) of the GBCS in relation to any Version of a Technical Specification;
- (d) Applicability Period of any Version of the GBCS; ~~and~~
- (e) relevant Version(s) of the CPA Security Characteristics in relation to any version of the GBCS; and
- (e)(f) relevant supported version(s) of the DUIS.

## Schedule 11 'Technical Specification Applicability Table'

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This document will no longer be a Schedule.

Add the following Table:

**Table 5 DUIS**

<u>DUIS Version</u>	<u>Start Date</u>	<u>End Date</u>
<u>v1.0</u>	<u>21/07/2017</u>	<u>26/11/2021</u>
<u>v2.0</u>	<u>01/02/2018</u>	<u>26/11/2021</u>
<u>v3.0</u>	<u>28/07/2019</u>	<u>TBC</u>
<u>v3.1</u>	<u>28/11/2019</u>	<u>TBC</u>

# **SEC Modification Proposal, SECMP0080**

**Ensuring a Managed Move to DUIS Version 3.0 or later (Managing DUIS Uplifts)**

**Preliminary Impact Assessment (PIA)**

<b>Version:</b>	<b>0.2</b>
<b>Date:</b>	<b>3<sup>rd</sup> February 2020</b>
<b>Author:</b>	<b>DCC</b>
<b>Classification:</b>	<b>DCC PUBLIC</b>

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# 1 Document History

## 1.1 Revision History

Revision Date	Revision	Summary of Changes
January 2020	0.1	Initial version, internal DCC review
3/02/2020	0.2	2 <sup>nd</sup> version, Proposer and SECAS review, DCC Design Authority review

## 1.2 Associated Documents

This document is associated with the following documents:

Ref	Title and Originator's Reference	Source	Issue Date
1	SECMP0080-Business-Requirements	SECAS	29/11/2019

## 1.3 Document Information

The Proposer for this Modification is Helen Metcalfe of SmartDCC. The original proposal was submitted on 6<sup>th</sup> August 2019.

The Preliminary Impact Assessment was requested of DCC on 20<sup>th</sup> November 2019. A first Preliminary Assessment was provided in January 2020. Following liaison with the SEC MOD Proposer, a second Preliminary Assessment is now provided, for consideration at the SECAS Working Group session on 5<sup>th</sup> February.

The title of the Modification was originally "Ensuring a managed move to DUIS version 3.1" and all records are retained under that title on the SECAS website. However the working title for the Modification is now "Managing DUIS Uplifts" as it includes future DUIS changes.



## 2 Executive Summary

### 1. This preliminary assessment recommends:

- Remove DUIS V1.1 and DUIS V2.0 with effect from November 2021;
- Removal to be zero or minimal cost with no technical or system change, simply removal of these versions from the SEC Document;
- DUIS Versions within the SEC to be included within Technical Specification Applicability Tables which will state an associated validity period.

### BACKGROUND

2. At the time of writing, there are four active versions of the DCC User Interface Specification (DUIS) and Schema alongside the supporting Message Mapping Catalogue (MMC) and Schema and Parse and Correlate (P&C) software versions. Of these, only one version, DUIS V3, supports DCC Services for both SMETS 1 and SMETS 2 meters. (The latest DUIS<sup>1</sup> always includes functionality introduced in earlier versions, so there is no functional benefit to any DCC Customer resulting from DCC continuing to maintain and support all previous versions.)
3. The reasons for putting forward this SEC Modification Proposal are threefold:
  - a. Firstly, many DCC Customers still have early or transitional DUIS Software (DUIS 1.1 and DUIS 2) versions that do not support SMETS 1 meters. This means that, if a SMETS 1 meter churns, it could lose smart functionality until these DCC Customers uplift to DUIS V3 or later versions.

Whilst DCC notes that this issue may be one to be considered as a separate regulatory matter, this issue directly affects consumers. Recent government statements to the press indicate this problem would be solved when meters are connected to the DCC<sup>2</sup>. This is not strictly true until all DCC Customers are using DUIS V3 or later in the live production environment. This SEC Modification Proposal if successful would enable us to collectively agree a proposed route and timeframe to address this issue for consumers with SMETS 1 meters.
  - b. Secondly, an independent report published in 2019 projected that “a strategy to retire older versions of the DUIS could potentially represent a medium sized piece of work and could realise a reduction of the System Integration Testing timelines by an estimated 10%”<sup>3</sup>. DCC undertook to validate this

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<sup>1</sup> For DUIS, please read as DUIS with corresponding Message Mapping Catalogue (MMC) and Parse & Correlate software (P&C) as applicable.

<sup>2</sup> <https://www.telegraph.co.uk/bills-and-utilities/gas-electric/hallelujah-finally-able-demand-fix-dumb-smart-meter-christmas/>

<sup>3</sup> SEC Modification and BEIS Mandated Change Review, 24<sup>th</sup> May 2019 5.5.4 2<sup>nd</sup> para.

contention with DSP as part of the preliminary impact assessment process so that this proposal could be considered from a cost savings point of view.

- c. Thirdly, an enduring solution to manage ‘retiring’ older versions of DUIS going forwards is desirable as part of ‘business as usual’ processing. This would be a regular annual activity, ensuring appropriate notice and routine planning to manage this type of activity is in place with a ‘new DUIS in – oldest DUIS out’ process.

#### **4. To address these, DCC assessed:**

1. Uplift all DCC Customers on to DUIS V3.0 or later in order to ensure all Customers have capability to provide business services for both SMETS 1 and SMETS 2 meters (interoperability);
2. Remove DUIS V1.1 and DUIS V2 as this incurs time and costs with DCC regression testing with no associated increased functionality;
3. Introduce a ‘business as usual’ processing pattern, whereby historic versions of DUIS can be routinely subject to removal of DCC regression testing and maintenance support as we anticipate a new version of DUIS becomes available annually.

##### **4.1 Uplift for all DCC Customers to DUIS V3.0 or later versions (interoperability)**

From a DCC point of view, uplift to a new version of DUIS is a straightforward process to facilitate for our DCC Customers, and those who have adopted DUIS V3.0 thus far have provided positive feedback on the process.

From a Customer point of view, there is effort required in terms of back-end testing to ensure that end to end integrations remain in place for Customer business processing. DCC is informed that Customers would not wish to embark on this activity unless there is a business incentive to do so, or in order to meet a regulatory obligation (no regulatory obligation is in place to ensure all DCC Customers can operate both SMETS 1 and SMETS 2 meters).

DCC is informed that an implied responsibility exists, whereby at Device level, all reasonable steps must be taken to operate any meter enrolled in the DCC and Suppliers have an obligation to migrate SMETS 1 meters within 12 months of eligibility. DCC is advised for this reason, it would not be feasible to implement an effective deadline to uplift all Customers to DUIS V3.0 or later, before July 2021 at the earliest. The projected date for the next DUIS uplift following July would be November 2021.

##### **4.2 Remove DUIS V1.1 and DUIS V2 as these historic DUIS versions incur costs for DCC Customers with no associated increased functionality.**

DCC has liaised with DSP in order to obtain details of projected SIT savings identified in an independent report in 2019. We have informal DSP estimates of

reduction in time (and therefore costs) against regression testing undertaken in the November 2019 Release and projected against known scope for the November 2020 Release. DCC is informed that following changes made during 2019 to automate testing, regression testing time for DUIS V1 and DUIS V2 was approximately 4-5 days for the November 2019 SEC Release, and following further enhancements already made, approximately 1 day for the November 2020 Release.

It appears then, that removing DUIS V1.1 and DUIS V2 will provide a very small quantified time and cost benefit at this stage. This is insufficient benefit to justify (in itself) to justify implementing this change.

#### **4.3 Introduce a 'business as usual' processing pattern, for routine planned removal of historic DUIS versions as new DUIS versions become available.**

DCC and SECAS propose a straight-forward process by which any version of DUIS would have a validity period via the Technical Specification Applicability tables. A SEC Modification proposal can be swiftly progressed to ensure all SEC Parties and DCC Customers are aware, notified and can prepare for the end of a validity period. Following expiry of any DUIS validity period, any obligations on DCC and DCC Service Providers to undertake regression testing of such 'expired' DUIS versions at future releases of new DUIS capability would cease.

Preliminary assessment for technical changes recommended by CGI indicated a cost of £500,000 which has been rejected (Critical Software confirmed no costs). Instead, a solution involving no technical change has been reviewed by DCC Design Authority. Removal of associated DUIS Version web address (URL) is considered optimal, as this would remove Customer access to DUIS versions that are no longer supported. However, it is deemed acceptable to forgo URL removal initially, DCC may remove the URL later, once we confirm that all Customers have completed their uplift.

#### **Timing for implementation to remove DUIS V1.1 and DUIS V2.0**

5. As it is straightforward for a Customer to uplift from DUIS V1 direct to DUIS V3 or later, a phased transition for Customers on DUIS V1.1 to DUIS V2 and then DUIS V3.0 is not required.
6. The latest point at which eligible SMETS 1 meters must be 'migrated' or operated is July 2021. Thus, a recommendation on effective date for implementation for the removal of DUIS V1.1 and DUIS V2 from the SEC is as soon as feasible following July 2021. The projected date for the next new DUIS version following July 2021 is November 2021, and so this is the recommended implementation date for this SEC Modification proposal.

7. This should provide all DCC Customers, including Smaller Suppliers, enough time to plan, execute and complete back-end testing to ensure that end to end integrations are in place for Customer business processing.

## **CONCLUSION**

8. The recommended solution addresses all elements identified within the problem statement. Following implementation in November 2021:
  - a. All DCC Customers will have a DUIS Version that enables them to send and receive messages to and from both SMETS 2 and SMETS 1 meters.
  - b. In terms of cost and time benefits projected in an independent report in 2019, these have already been achieved via some automation of PIT and SIT processes. Modest additional time and cost savings will be made with this change.
  - c. A business as usual process will be in place to manage retirement of historic older versions of DUIS going forwards from November 2021.

### 3 Context and Requirements

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

#### 3.1 Multiple DUIS Versions

The DCC User Interface Specification (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 DUIS are contained within the SEC. As 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 that the DCC must maintain each historical version as well as the latest version.

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

#### 3.2 The Issue

Two main issues were identified at the outset.

Firstly, a number of Users still use DUIS V1 or DUIS V2. Only DUIS V3.0 or later supports both Smart Metering Equipment Technical Specifications (SMETS)1 and SMETS2 meters. Therefore, Users who remain on DUIS versions V1 or V2 will not be able to communicate with SMETS 1 meters. This creates a risk that on a Change of Supplier event a SMETS1 meter could lose some Smart functionality. As a minimum therefore, a managed migration to DUIS V3.0 or later is recommended.

Secondly, Parties are incurring costs because the DCC is obligated to maintain all previous version of DUIS. All DCC Customers incur costs because DCC is obliged to maintain multiple versions of DUIS. These costs manifest themselves within day to day Operations Service Management, and within Testing for any Release as a result of regression test requirements for these older DUIS versions, in order to confirm these previous versions still operate satisfactorily. Given that there are no functionality changes to previous DUIS, Parties have been paying additional costs to support previous versions even though they remain unchanged. However, preliminary impact analysis indicates limited cost savings going forwards due to recent changes in regression testing processes.

A third issue was identified during Working Group discussion – the need to put an enduring business as usual process in place to address routine uplift and retirement of DUIS versions: hence the recommended name change for this SEC Modification proposal – to ‘Managing DUIS uplifts’.

SECMP0080 was raised by the DCC on 06/08/2019 to resolve this issue.

#### 3.3 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	<ul style="list-style-type: none"> <li>DUIS will be placed into the TSAT document under the SEC</li> </ul>
2	<ul style="list-style-type: none"> <li>End dates for DUIS versions within TSAT will be set as part of a relevant modification after consultation</li> </ul>
3	<ul style="list-style-type: none"> <li>The end dates for DUIS V1 and V2 (i.e. when they will stop being supported) will be 26 November 2021</li> </ul>
4	<ul style="list-style-type: none"> <li>The end dates for DUIS V3.0 and V3.1 will become TBC on implementation of SECMP0080</li> </ul>
5	<ul style="list-style-type: none"> <li>Any further changes to DUIS V3.0 or V3.1 end dates will require a separate Modification</li> </ul>

*Table 1: Business Requirements for SECMP0080*

## 4 Description of Solution

Documentation management and technical changes required by the solution are identified in the following sections.

### 4.1 Solution Overview

The SECMP0080 solution can be split into two components:

Enduring DUIS governance

Mandating the first managed uplift via this proposed enduring DUIS Governance, e.g. uplift of all DCC Customers to DUIS V3.0 or later.

#### 4.1.1 Enduring DUIS Governance

DUIS will be added to the Technical Specifications Applicability Tables (TSAT). Within TSAT each version of 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 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 2 versions of DUIS, for example V3.0 and V3.1, to be supported at any one time.

DUIS can only be amended by a SEC Modification or a BEIS designation (during the transition from BEIS to SECAS oversight). Therefore, if a Modification results in a new version of DUIS, the legal text changes for that Modification will include the required changes to the DUIS versions in TSAT. For example, if MPxxx impacts DUIS and requires a new DUIS version, then the legal text for MPxxx will include redline changes to the start and end dates of the new DUIS version and any previous DUIS versions. Equally any BEIS designation that impacts DUIS will include the required redline changes to the TSAT.

Placing DUIS in TSAT will ensure only relevant version of DUIS remain supported and it is clear to all Parties when there would be a required transition to the latest DUIS version.

#### 4.1.2 Mandating the first managed Uplift to DUIS V3.0 or later

DUIS will be added to the Technical Specification Applicability Tables (TSAT) which will provide relevant information regarding start and end dates. For this Modification, it is proposed to apply the following dates in TSAT for DUIS V1.1 and DUIS V2.0:

DUIS Version	Start Date	End Date
v1.1	01/11/2018	26/11/2021
v2.0	05/06/2018	26/11/2021
v3.0	28/07/2019	<i>To be confirmed (TBC)</i>
v3.1	28/11/2019	<i>To be confirmed (TBC)</i>



These changes would mandate that all Parties are using either DUIS V3.0 or DUIS V3.1 by 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 and 2021, appropriate end dates could be applied for DUIS V3.0 and V3.1 via a SEC Modification Proposal.

In terms of the SEC and subsidiary documents, the following parts of the SEC will be impacted:

- Schedule 11 'TS Applicability Tables' (addition of DUIS into the table),
- When the end date occurs, Appendix AD 'DCC User Interface Specification' (removal of DUIS V1.1 and DUIS V2.0 from the SEC and from the SECAS website.)

## **4.2 DCC Solution Overview, impact on process and people**

No DCC system change will be made on the effective date of removal of DUIS V1.1 and DUIS V2.0 from the SEC. DCC Service Desk will be prepared in order to support any queries from DCC Customers in this regard. DCC will monitor use and may remove an associated DUIS Version web address (URL) once all DCC Customers have ceased using these versions of DUIS. As part of DCC In Life change process, where any forthcoming SEC Release has an associated uplifted version of DUIS in scope, the DCC Release Manager will raise a SEC Modification Proposal for the removal of older historic DUIS version going forwards as part of a business as usual process. As part of this process, DCC Compliance will initiate any required contractual schedule changes (e.g. minor contractual amendment to remove support for a particular DUIS version from the DSP contract).



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## 5 Implementation Timescales and Approach

.For this first implementation, the recommended implementation is November 2021 for the removal of DUIS V1.1 and DUIS V2.0 from the SEC. It is likely there will be a 'grace period' of 4 weeks whilst DCC will monitor use, and once all DCC Customers have ceased use, a small change will be made to remove the DUIS web address associated with DUIS V1.1 and DUIS V2.0.

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## **6 Costs and Charges**

As there is no cost associated with this SEC Modification; removal of URLs is projected as very low cost (less than £50K), earliest projected date for these costs to be incurred is January 2022.

## 7 Risks, Assumptions, Issues, and Dependencies

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

### 7.1 Risks

Ref.	Area	Description	Accept
MP80-R01		<p><b>There is a risk that</b> DCC Customers still using DUIS V1.1 and DUIS V2.0 will not plan to implement the uplift in time.</p> <p>In mitigation, SECAS and DCC will work to ensure that all SEC Parties are suitably informed. To note, there is a generous notice period in the lead up time to November 2021, and DCC will ensure communication both with DCC Customers and their Adaptor Providers.</p>	
MP80-R02		<p><b>There is a risk that</b>, before November 2021, Consumers face the risk of loss of Smart functionality if they switch to a Supplier who is not already using DUIS V3.0.</p> <p>This is beyond the scope of this SEC Modification proposal. DCC would welcome additional action to support/address consumer needs in this regard.</p>	

### 7.2 Assumptions

Ref.	Area	Description	Accept
MP80-A01		Following changes made to automate regression testing in PIT and SIT, savings gained as a result of removing historic versions of DUIS are modest, circa 1 day in SIT per DUIS version (at most).	
MP 80- A02		Any Customer can 'uplift' to the latest version of DUIS, they do not need to plan to uplift to the next DUIS version. E.g. a Customer on DUIS V1.1 can uplift straight to DUIS V3.1 if they wish.	
MP 80-A03		The proposed Business as Usual process, whereby a SEC Modification Proposal should be raised to retire historic/older versions of DUIS going forwards, can be efficiently and economically processed.	

### 7.3 Issues

None at this time.

### 7.4 Dependencies

Ref.	Area	Dependency	Impact
MP80-DD01		DCC will not remove Web Location Address (URL) for DUIS V1.1 and DUIS V2.0 until all DCC Customers have uplifted to DUIS V3.0 or later.	Med

