Smart Energy Code

SEC
Smart Energy Code

Stage 02: Initial Modification Report

SECMP0002:

Add New Command to Reset Debt Registers

This Proposal seeks to add a new command to allow users to reset any of the debt registers on a meter.

The recommendation is that this Modification should be:

- progressed as a Path 2: Authority Determined Modification

This Modification Proposal should:

- be progressed through the Refinement Process

Medium Impact:
Changes to GBCS, SMETS, DUIS & MMC are required and will affect Suppliers, Device Manufacturers and the DCC.

What stage is this document in the process?

01	Modification Proposal
02	Initial Modification Report
03	Draft Modification Report
04	Final Modification Report

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SECMP0002
Initial Modification Report

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Version 1.0

Contents

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Any questions?

Contact:
Sasha Townsend

secas@gemserv.com

020 7090 7755

About this document

This document is an Initial Modification Report. It has been issued to the SEC Panel to enable the Panel to carry out its initial consideration of the Modification Proposal.

1. Summary of Modification Proposal

This section provides an overview of SECMP0002. For further details on the Modification Proposal, please refer to subsequent sections.

Defined Terms and acronyms used in this document are listed for reference in the Glossary (Section 9) of this document.

1.1 Summary of Modification

The proposal recommends a new single command to allow Supplier Users to directly reset the Debt Registers on a smart meter.

1.2 Proposed Solution

Add a new remote command to SMETS2 and a new Use Case to GBCS to allow a user to reset the Debt Registers on a meter that is operating in Prepayment mode.

1.3 Impacts

The Proposer has identified that the Modification will likely impact Suppliers, Device Manufacturers and DCC Systems.

Impacted SEC Subsidiary Documents are likely to include, inter alia

- GBCS (Great Britain Companion Specification);
- SMETS2[1] (Smart Metering Equipment Technical Specification 2);
- DUIS (DCC User Interface Specification); and
- MMC (Message Mapping Catalogue).

1.4 Targeted Implementation Date

The proposal targets implementation in a release as soon as possible after DCC Live and is considered for Release 2.0 scheduled for June 2017 or as soon as reasonably practicable thereafter. The Working Group will consider whether the implementation timetable is appropriate (see Supplementary Questions in the Terms of Reference in section 6.5 below).

1.5 Release Management and Testing Requirements

This Modification falls under the Panel's Release Management Policy. The testing requirements will be further informed in the Refinement process and form part of the Working Group considerations.

Implications for Device testing or Assurance Certificates are the responsibility of the relevant SEC Party.

[1] It is acknowledged that some Subsidiary Documents are not yet designated. However, the DCC and industry are working to a baselined set and references here are to that baseline, where applicable. Similarly, some SEC text and Subsidiary Documents are pending revision, subject to consultation conclusions It is anticipated that these baselined Subsidiary Documents and any future SEC changes will have been finalised by the time this Modification completes Refinement and the Modification will be applied to the version of the SEC/Subsidiary Document extant at the time of implementation.

1.6 Proposed progression

This Modification must go through the Refinement Process pursuant to SEC Section D3.9(c) as it affects the DCC Systems, User Systems and/or Smart Metering Systems.

Section 6 of this document contains a detailed timetable, the Working Group constitution and objectives.

2. Why Change?

2.1 What is the issue?

There are a number of operational scenarios where a Supplier will need to eradicate the debt that is displayed to a consumer on their Smart Metering System. The Proposer highlights that the current command set facilitates the resetting of the debt registers by utilising multiple commands. For example:

- The Adjust Debt command only allows for a positive or negative adjustment of these registers, so a reset can be achieved by reading the value and adjusting by the requisite amount. The value of the adjustment would have to take into account any pending payments or time based debt to be able to calculate the accurate amount.
- The other mechanism to achieve a reset is to add a large credit to the meter so that any excess is rolled onto the Meter Balance and then resetting the Meter Balance.

The proposal comments that these two mechanisms are functional but are cumbersome to operate. They could also be potentially confusing to a consumer if they happen to be looking at the meter or In-Home Display (IHD) at the time these operations were being carried out. Moreover, if one of the commands in the chain fails, the full re-set may not have been completed and potentially leaving the debt registers in an inaccurate state.

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What's the issue?

The current command set facilitates the resetting of the debt registers by utilising multiple commands.

3. Proposed Solution

The Proposer has recommended incorpration of a new remote command to SMETS2 and a new Use Case to GBCS, to allow the user to reset the Debt Registers on a meter that is operating in Prepayment mode.

The proposal has identified two methods on how the DCC can expose this new Use Case:

1. Add a new DUIS command and MMC response to reset the registers.
2. Add a new DUIS command that resets or adjusts the debt registers in a similar way to how the meter balance can be adjusted or reset using the same command currently.

The Working Group will consider these options as part of the Refinement Process, and these have been incoporated into the additonal considerations in section 6.5 below.

3.1 Legal Text

The necessary amendments to the SEC and relevant Subsidiary Documents will be prepared during the Refinement Process.

3.2 Applicable SEC Objectives

The below table presents the applicable SEC Objectives identified in the proposal and the Proposers view on how the Modification would better facilitate the achievement of

General SEC Objectives (C1.1)	Proposers View
(a) the first General SEC Objective is to facilitate the efficient provision, installation and operation, as well as interoperability of Smart Metering Systems at Energy Consumers' premises within Great Britain;	The Supplier would be able to make more efficient use of the DCC system by replacing two commands with one. This will reduce the traffic across Supplier and DCC Systems, reducing the risk of failures.
(b) the third General SEC Objective is to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems;	By sending two commands to perform one operation there is a chance that either command could fail or the consumer could be looking at their Smart Metering System at the time that these commands were being applied. The proposed new command would minimise the chances of misleading the Consumer.

What's the solution?

The Proposer has recommended a new remote command to SMETS2 and a new Use Case to GBCS, to allow the user to reset the Debt Registers on a meter that is operating in Prepayment mode.

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4. Impacts & Costs

The following section sets out the intial assessment of the likely impacts arising from SECMP0002. Additional impacts may be identified by the Working Group in the Refinement Process.

4.1 Impacts

Material Impact on Greenhouse Gas Emission
The Proposer envisages little impact.

Impact on Parts of Smart Energy Code or SEC Subsidiary Documents	
SEC Sections, Schedules of Appendices (Subsidiary Documents) likely impacted	Potential Impact
SMETS2 (Smart Metering Equipment Technical Specification 2)	A new command would need to be added to the Home Area Network Command section for each gas and electricity device. This command would only be effective when a meter is operating in prepayment mode.
GBCS (Great Britain Companion Specification)	A new Use Case, with associated new message code would need to be added to the tables in the 'Embedded Use Case' section and any associated entries that would be needed in the mapping tables. The Proposer has assumed that at this stage the new command would need to be a Critical Command and only executable by the Gas or Electricity Import Supplier.
DUIS (DCC User Interface Specification)	A new command variant would need to be created. This new command would either reset the debt registers only or it would allow either reset or adjustment of the debt registers as specified in the parameters of the command. New Error codes may also need to be created, if there is specific validation required.
MMC (Message Mapping Catalogue)	New responses would need to be created for the new command variants.

Impact on other Codes and documents	
Code(s) and Reference	Product Reference
Smart Metering Device Assurance (SMDA)	The Proposer has highlighted that there may be impacts on the SMDA testing regime e.g. as part of any future assurance

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Is there any Impacts?

Yes – there will be impacts to SMETS2, GBCS, DUIS and MMC. The DCC and DCC Users will be impacted.

Impact on Smart Energy Code Party Categories	
Potential Impact	Party Category
• The Proposer is of the view that these new commands will only be exposed to supplier parties as a new command variant which they can evaluate if and when they deploy it, and therefore the level of impact arising from this proposal.	• Large Suppliers • Small Suppliers
• The Proposer has highlighted that processing of the new command would also need to be within the functional capability of SMETS compliant devices.	• Devices

Impact on DCC Systems (Subject to DCC assessment)	
Area of DCC impacted	Potential Impact
DCC	The Proposer has indicated that the new command will need to be implemented in the DCC system.
Data Service Provider (DSP)	To be informed through the Refinement Process.
Communications Service Providers (CSP)	To be informed through the Refinement Process.
Trusted Provider	To be informed through the Refinement Process.

Impact on other Systems	
Area of impact	Potential impact
User Systems	To be informed through the Refinement Process
Smart Metering Systems	To be informed through the Refinement Process
Other (e.g. Security and PKI)	To be informed through the Refinement Process

4.2 Costs

The costs of implementing SECMP 0002 will be identified as it progresses through the Refinement Process. These costs will capture indiactive DCC implementation costs as provided in their impact assessment responses and any SEC Party costs (where provided during the relevant consultations).

5. Implementation

The Proposer has requested that this Modification Proposal to be implemented in June 2017 as part of SEC Release 2.0.

During Refinement, it may become clearer whether June 2017 is achievable under the implementation timetable. In this event, the Working Group should identify this as part of their deliverables and this has been incorporated into the supplementary considerations in section 6.5 below.

5.1 Modification Testing Requirements

The Panel Release Management Policy notes that, as part of the Panel's considerations of a Modification Proposal and the associated implementation timetable and date, the Panel will consider what testing is required and who will be eligible to participate. SEC Section H14 requires the DCC to make provision for Modification Proposal implementation testing as part of its Testing Services.

The testing requirements under the Panel Release Management Policy are yet to be fully defined. It is anticipated that this Modification Proposal may require testing in-line with the SEC Section T arrangements for:

i. DCC Testing (Systems Integration Testing - SIT); and
ii. Interface Testing (IT) with a representative number of Users and DCC to demonstrate the capability of the DCC solution to interoperate with User Systems.

In both cases, the approach for SIT and IT will be informed during the Refinement Process, hence SECAS has added this aspect to the considerations of the Working Group (see section 6.5 below).

It is noted that the final testing scope and arrangements will be integrated under the Panel Release Management Policy approach for "R2".

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When will the Modification be implemented?

The Proposer has requested that this is implemented in June 2017

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6. Progression

6.1 Modification Path

Based on the initial review of the Modification Proposal and subsequent discussion with the Proposer, SECAS recommends that the appropriate Modification Path is: Path 2 - Authority Determined.

6.2 Progression route

The Refinement Process is required for this Modification Proposal as the Proposer has identified that it affects DCC Systems, User Systems, and Smart Metering Systems, which are the SEC criteria for following the Refinement Process (see SEC Section D3.9(c)).

The Refinement Process (SEC Section D6) requires that a Working Group is established by the Panel to undertake the Refinement Process. In outline, the objectives of the Working Group is to:

- Consider the effects of the Modification Proposal on participants, Emissions and Other Energy Codes;
- Evaluate, develop and refine the content of the Modification Proposal, including where the Working Group considers an Alternative Proposal may be relevant, prepare and submit this into the Refinement Process with the Proposers Modification Proposal;
- Evaluate and amend if applicable, the proposed implementation timetable of the Modification Proposal including with regard to consistency with the Panel Release Management Policy;
- Obtain and take into account the views of other relevant Sub-Committees (TBSC, SSC,PMA);
- Obtain assessments from the DCC as to the impact and costs;
- Consider the SEC Objectives that mat be better achieved if the Modification Proposal was implemented;
- Conduct a Consultation(s);
- Consider any representations made to the Working Group by Parties; and
- Deliver a Modification Report to the Panel in respect of the Modification Proposal.

6.3 Working Group membership requirements

SEC Section D6.3 sets out that a Working Group must be at least 5 members with relevant expert knowledge. Therefore we propose that the Working Group should be made up of:

- The Proposer or a person nominated by the Proposer as a duly authorised representative of the Proposer;
- Working Group members:
  - who are broadly representative of the Users likely to be affected by the Modification Proposal, so that the Refinement Process is well informed in this case Suppliers and the DCC, although other interested Parties may come forward;
  - with relevant experience and expertise in relation to the subject matter of the Modification Proposal (Technical Sub-committee (TSC) expertise need not be duplicated as this may be achieved through co-ordination between the WG and TSC); and
- A Chair (see following section)
- A Secretary (provided by SECAS)

- A Modification Analyst (provided by SECAS)

The Working Groups can also be attended by:

- DCC representatives;
- Ofgem representatives;
- DECC representatives; and
- Any interested members from the Technical Sub-Committee (or its Technical and Business Expert Community).

6.4 Convening the Working Group

It is noted that SEC Section D6.3 makes provision for the Panel with the cooperation of the Parties, to establish a standing list of persons with potentially relevant experience who may be willing to serve on Working Groups. As Modification Paths have only recently been enabled such a standing list is not available to the Panel.

Therefore, it is recommended that an open invitation is issued at this time, with a view to using this exercise as a means of identifying the constitution of any future standing membership that can be called upon as a Modifications Working Group.

Modification Working Group members are required to meet the SEC requirements to confirm in writing to SECCo that they agree to serve on that Working Group and to do so in accordance with this Code.

Working Group Chair

Section D6.4 enables the Panel to request that SECAS provides the chair for the Working Group. While the Modification process beds down, it is proposed that to facilitate convening the Working Group in the first instance, SECAS provides the Chair. The Working Group, once constituted, may then proceed to appoint a Chair from within its Membership, if that is the majority view of the Members. This optionality would only be available at the first meeting to preserve continuity.

6.5 Working Group Terms of Reference

To meet the requirements of the Refinement Process set out in SEC Sections D6.8-D6.14 draft standard Terms of Reference are provided in Appendix B. The following questions have been identified for the Working Group to consider in order to fully assess the Modification Proposal.

Working Group Terms of Reference – supplementary questions to consider
What are the materiality of the issue?
Is the solution proposed in this SECMP0002 more efficient than the current command set?
Are there other deficiencies in the current solution that are addressed by SECMP0002?
Which of the two methodologies set out in SECMP0002 is the preferred approach?
What are the detailed changes to the SEC and/or SEC Subsidiary Documents to support this SECMP0002 (and its Alternative(s))?
What are the systems impacts for DCC/User/Smart Meters?
What are the costs and lead times to introduce the solution in this SECMP0002 or its Alternative(s)?
Is the implementation timetable appropriate?
Are Consumers positively or negatively impacted by the Proposed (or any Alternative) solutions and to what extent?
What Modification Implementation Testing is required to implement the Proposed Modification, or any Alternative(s)?
What are the implementation steps and activities required to implement the Proposed (or an Alternative) Solution(s)?
How the views of the relevant Panel Sub-Committee been taken into account?
Has the Refinement Process identified any potential reason that this Modification (or its Alternatives) may require European Commission Notification (noting that the Authority will determine if any such Notification is pursued)?

The above is not intended as an exhaustive list and it is expected that the Working Group will identify and address any other considerations that arise during the Refinement Process.

6.6 Timetable

As the Modifications process has only recently been activated, the timetable in Figure 1 below was put together in discussion with the Proposer and SECAS as a good faith estimate. A number of assumptions underpin this timetable:

- The Proposer has requested that the Modification Proposal is implemented in Release 2.0.
- The proposed timetable below has been built around June 2017 implementation date, noting that the implementation date may need to be flexible to accommodate the necessary implementation (and testing lead times), if the Modification is approved.
- The proposed timetable includes some assumed timescales for the turnaround of DCC's Impact Assessments and the Authority determination based on the indicative timescales provided by these entities.
- If the changes associated with this Modification require EC Notification, the proposed timetable does not currently capture the three month 'stand-still' during EC notification. This is on the basis that any representations received during the stand-still need not necessarily result in any material change to the notifiable document or agreed solution in any way.
- The timetable has been drawn up based on this Modification Proposal progressing without cancellation or suspension under the *Smart Metering Implementation*

[Programme Guidance on Secretary of State involvement with industry-led modifications to the Smart Energy Code during the transition to enduring governance]() issued by DECC.

- The timetable assumes that any Panel Sub-Committee inputs can be fed into the Refinement process at the appropriate time, and this may be subject to alteration.

Modification Timetable	
Activity	Date
Modification Proposal raised	19 February 2016
IMR considered by Panel	11 March 2016
Working Group meetings Indicative activities: • Initial considerations • Legal drafting • Sub-Committee feedback • Alternative(s) identified • Impact Assessments • Detailed evaluation	March 2016 – July 2016
Working Group Consultation	August 2016
Final Working Group meeting: Indicative Activities: • Consultation response summary • WG deliverables met • Assessment for Modification Report	August 2016
Panel reviews Modification Report	9 September 2016
Modification Report phase consultation	September 2016
Change Board vote	19 October 2016
Modification Decision by the Authority	November 2016
Implementation	June 2017

Figure 1: SECMP0002 Timetable

6.7 Grouping this Modification Proposal with others

There are a number of Modification Proposals that are currently entering the SEC process that have implications for a similar set of Parties and SEC Subsidiary Documents. It may be possible to bring efficiencies into their Refinement under one Working Group. For example, whilst the underlying content may not be directly related, each solution entails opening the Technical Specifications. There may be merit in grouping these under the Terms of Reference for a single Working Group so that the implications of changes to the Technical Specifications are consistently understood for the future.

SECAS is of the view that this is entirely consistent with the aim in the SEC of establishing standing Members to serve on Working Groups and will offer both value for money for the Panel budget and a reduction in commitment by Working Group Members who might otherwise have to attend several meetings to progress each Modification discretely.

SECAS considers that there may be potential to group this SECMP0002 with others for consideration by one Working Group and **recommends** that the merits of this are explored further when issuing the invitations for the Working Group.

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7. Panel Initial Assessment

The Panel is requested to **NOTE** the contents of this paper for SECMP0002 and, pursuant to SEC Section D3.6, **AGREE** the following as set out in this Initial Modification Report:

- whether to accept the Modification Proposal;
- it is a Path 2 Modification (taking into account the view expressed by the Proposer);
- that it is necessary for the Modification Proposal to go through the Refinement Process as set out in Section 6.2;
- to establish a Working Group with the membership and Working Group Chair as set out in Section 6.3;
- The supplementary considerations for SECMP0002 to supplement the standard Working Group terms of Reference set out in Section 6.5;
- the Modification progression timetable set out in Figure 1 of Section 6.6;
- whether SECMP0002 should be considered together with any other current Modification Proposal(s); and
- The potential to group SECMP0002 with other Modifications to gain efficiencies in the Refinement Process across a number of potential changes to the Technical Specifications

8. Further Information

More Information is available in:

- Attachment **A**: Modification Proposal
- Attachment **B**: standard Working Group Terms of Reference

For further information, please see the Modification Register page of the SEC website.

9. Glossary

Glossary	
Term	Acronym
Communications Service Providers	CSP
Data and Communication Company	DCC
Data Service Provider	DSP
DCC User Interface Specification	DUIS
Electricity Network Operator	ENO
Great Britain Companion Specification	GBCS
Home Area Network	HAN
In Home Display	IHD
Initial Modification Report	IMR
Interface Testing	IT
Message Mapping Catalogue	MMC
Secretary of State	SoS
Smart Energy Code Administrator and Secretariat	SECAS
Smart Energy Code Company	SECCo
Smart Metering Device Assurance	SMDA
Smart Metering Equipment Technical Specification	SMETS
Systems Integration Testing	SIT
Technical Sub-Committee	TSC