

Stage 01: Initial Modification Report

SECMP0019: Auxiliary Load Control Switches Description Labels

This Modification Proposal recommends the introduction of SEC naming conventions when defining any of the Auxiliary Load Control Switches (ALCS) or HAN Connected Auxiliary Load Control Switches (HCALCS).

P3

The recommendation is that this Modification Proposal should:

- follow Path 3: Self Governance; and
- be progressed through the Refinement Process.

Refine

3

Potential Impact on:

!

- Energy Suppliers
- DCC
- Other Users

What stage is this document in the process?

01	Initial Modification Report
02	Refinement Process
03	Report Phase
04	Final Modification Report

Proposer:

Emslie Law

Emslie.law@sse.com

07767 851549

SECAS Contact:

Samuel Browne

secas@gemserv.com

020 7090 7755

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SECMP0019

Initial Modification Report

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About this document

This document is an Initial Modification Report which enables the SEC Panel to carry out its initial consideration on how this Modification Proposal should be progressed through the Modification Process. The Panel will consider this report at their meeting on 12th August 2016.

1. Summary

This section provides an overview of SECMP0019. For further details on the Modification Proposal, please refer to subsequent sections. Defined terms and acronyms used in this document are listed in the Glossary (Appendix A) of this document.

1.1 Why Change?

Currently suppliers can determine their own naming convention for ALCS. In a Change of Supplier (CoS) event, because of the different nomenclature, new suppliers may be unfamiliar with the current names and apply incorrect settings for each ALCS.

1.2 Solution

The Proposer suggests introducing a standardised naming convention for all possible ALCS and HCALCS. These defined terms would be listed and maintained in a SEC Annex and would be accessible to all Suppliers. This would allow them to apply the correct settings for specific ALCS.

1.3 Potential Impacts

Any Party that is required to either set or read the settings of an ALCS will be impacted. **Suppliers**, who edit and read settings, and **Other Users**, who only read settings, will be the impacted Parties. The **DCC** will also be impacted as they will have to update the DUIS (DCC User Interface Specification). Suppliers, Other Users and the DCC will all have to update their systems, through a backfilling process, to account for the renamed ALCS.

1.4 Proposed progression

SECAS and the Proposer suggest that this Modification Proposal should be progressed as a Path 3 Modification (Self Governance).

SECAS estimate that 6 months will be required for SECMP0019 to go through the Refinement Process (not accounting for any unforeseen delays). This will lead to the Modification Report being submitted back to the SEC Panel for review on the 9th December 2016. The Proposer has requested that SECMP0019 be implemented within the **November 2017 Release**. Section 5 of this document contains a detailed proposed timetable and proposed/recommended Working Group constitution and objectives.

2. Why Change?

2.1 Background

Currently, most load switches operate through timers and separate ring circuits. These are mostly associated with Economy 7¹ or 10² tariffs. One of the benefits of the Smart Metering Implementation Programme (SMIP) is that Electrical Smart Metering Equipment (ESME) will be able to control load switching for different electrical appliances through integrated ALCS and HCALCS.

As variable tariffs become more common, so too will the use of ALCS, allowing Energy Consumers to optimise their electricity consumption by setting appliances to draw electricity at beneficial periods of the day. For example, an ESME could control a water storage heater to draw electricity only in periods of lower tariffs.

The introduction of meter variants supporting ALCS is likely to occur during the second half of 2017. Therefore, the Proposer believes an early introduction of a solution, or an agreed way forward via a Design Note, will assist Suppliers to efficiently support their customers.

2.2 What is the issue?

Currently, suppliers are able to set naming conventions for ALCS as they see fit (for example a “water storage heater” or a “boiler”). In the event of a Change of Supplier (CoS), the new Supplier Party would use the Service Request 7.7 (SR7.7) (ReadAuxiliaryLoadSwitchData) to establish the supplier’s current ALCS setup. As the previous supplier may have a different nomenclature for different ALCS, the new supplier may apply the wrong settings to an ALCS connected device through SR6.14 (UpdateDeviceConfiguration(AuxiliaryLoadControlDescription)).

Incorrectly configured ALCS connected devices may disconnect and inconvenience Energy Consumers and suppliers, as well as possibly cause harm to these devices. For example, if an ALCS disconnected a charging electric vehicle at the time of a tariff switch, it may cause damage to the vehicle battery. Another example would be that a water storage heater could be incorrectly set to disconnect at the switch from low to high tariffs. High tariffs usually apply during daytime, leaving Energy Consumers with no heating during the day.

These issues are likely to arise during a CoS or Change of Tenancy (CoT), where the new supplier would have to assess the definitions of the used naming conventions based on the read response from SR7.7. If confusion does arise, suppliers would require human intervention to determine the tariff implications and time settings required.

¹ Economy 7 tariffs offer cheaper electricity for 7 hours of the day.

² Economy 10 tariffs offer cheaper electricity for 10 hours of the day (but has higher standing charges).

3. Solution

3.1 What's the solution?

The proposed solution is to include a universal naming convention for all ALCS. This could be in the form of an exhaustive list grouping all ALCS used by all suppliers. These names would also need to be defined to avoid any confusion and possible repeats of the same ALCS. The Proposer suggests that this list would be held in the SEC or in an Annex to the SEC. Below is a suggested list for naming all current and anticipated ALCS items:

- Water / Wet Heating
- Boost (Boost can refer to ANY load)
- Top of Tank / Top Element
- Unrestricted Heating
- Bottom of Tank / Bottom Element)
- Overnight Heating
- Electric Boiler Heating
- Resistive Space Heating / Space Heating
- Heat Pump
- Combined Heat and Power
- Electric Vehicle
- Solar / Photo Voltaic Load

The DUIS would mandate the use of this nomenclature. Having access to this list would allow suppliers to confidently apply the correct settings for specific ALCS.

3.2 Requested Implementation

The Proposer has requested that this modification be included in the November 2017 Release. The Working Group will consider this implementation date when recommending an implementation approach to the Panel and the Change Board.

3.3 Views against SEC Objectives

The table below highlights the Proposers view on how this modification would better facilitate the achievement of the SEC objectives.

Proposers views against the SEC Objectives	
General SEC Objective	Proposer views
a) To facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain.	SECMP0019 will increase standardisation and result in efficiency gains by avoiding unnecessary costs relating to energy suppliers' system development and customer service issues, as a result of different ALCS naming conventions and a lack of standardisation.
c) To facilitate Energy Consumers' management of their use of electricity and gas through the	SECMP0019 will improve the Energy Consumer experience by having a clear and consistent way of identifying the ALCS

Proposers views against the SEC Objectives	
General SEC Objective	Proposer views
provision to them of appropriate information by means of Smart Metering Systems.	across suppliers and eliminate confusion.
d) To facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy.	SECMP0019 will support the CoS process by alleviating the risk of certain switches being, inadvertently, left 'off'. This is especially critical when the connected appliance may be critical (for example a "water heater"). Anything that assists in making the CoS process easier and less complex must be investigated and costed accordingly, to the overall programme.

4. Potential Impacts

The following section sets out the initial assessment of the likely impacts arising from SECMP0019. Additional impacts may be identified by the Working Group during the Refinement Process.

Potential Impacts of SECMP0019	
Smart Energy Code Parties	
Suppliers	Suppliers would be impacted as they will need to conform to the defined naming convention.
Networks	No impacts have been identified at the time of writing, however impacts may be identified through the Refinement Process.
DCC	The DCC maintain the DUIS and therefore would need to update this document to mandate the standardised naming conventions.
Other	Other Users would also be impacted as they use SR7.7 (read ALCS settings).
Systems	
DCC Systems	The DCC would need to ensure the mandated naming convention is implemented in the system.
User Systems	Users of the DCC User Interface would need to update their systems.
Smart Metering Systems	No impacts have been identified at the time of writing, however impacts may be identified through the Refinement Process.
Other	Other Users will need to utilise the defined naming convention.
SEC and Subsidiary Documents	
SEC Sections	SEC Section A: Definitions and Interpretation
Subsidiary Documents	The DUIS will need to be updated to mandate this nomenclature for completing SR6.14. The Working Group will need to determine where to keep the list of all ALCS.
Other Industry Codes and Documents	
SECMP0019 will not impact other industry codes.	
Greenhouse gas emissions	
SECMP0019 will not have any impact on Greenhouse Gas Emissions.	

5. Proposed Progression

5.1 Modification Path

SECAS proposes that this modification is progressed as a Path 3: Self-Governance modification. None of the criteria that would define this modification as having a material impact and therefore a Path 2 Modification: Authority Determination (as per SEC Section D2.6 (a), (b), (c), (d) and (e)) are believed to be met.

During the development of the Modification Proposal, if it was identified that the proposal does have a material impact the modification path can be revised if required.

5.2 Progression Timetable

The Proposer has requested that this Modification Proposal be implemented in the November 2017 Release.

This Modification Proposal must go through the Refinement Process pursuant to SEC Section D3.9(c). This is due to it requiring changes to User Systems. SECAS recommends that SECMP0019 undergo a six-month assessment as part of the Refinement Process. This would allow the modification to be comprehensively developed by a Working Group before going to the Modification Report Consultation.

This plan may need to be adapted as the change progresses through the Refinement Process, since its scope and complexity depends on discussions yet to take place at the Working Groups. We will keep the SEC Panel and SEC Parties up-to-date on its progress via the monthly Modification Status Report.

5.3 Working Group

In addition to the Proposer and the Working Group support from SECAS (Chair, Secretary and Modification Analyst), we believe that Working Group membership should consist of mainly suppliers as the Working Group will need to develop agreed naming conventions and definitions for ALCS and HCALCS. SECAS could also aim to invite Other Users who may be impacted if they need to view the existing ALCS setup (users of SR7.7: ReadAuxiliaryLoadSwitchData).

SEC Working Group 1 already has a large contingent of suppliers. Working Group 1 also focuses on modifications relating to changes of technical specifications notably changes to the GBCS and the DUIS. Therefore, SECAS propose that SECMP0019 is refined by Working Group 1.

5.4 Working Group Terms of Reference

In order to assess this modification fully we believe that the Working Group should consider the following specific questions in addition to the Working Groups Terms of Reference (ToR). A complete ToR for this Working Group can be found in attachment A.

Working Group Topics	
Establishing a list of ALCS	Do we have an exhaustive list of names and definitions for all possible ALCS?
Suppliers agree to list of ALCS	Do all Suppliers and Other Users agree to the set of names and definitions for all ALCS?

Working Group Topics	
Location for the list of ALCS naming conventions	Where is the best place to keep this data so that it is as flexible as possible while being mandatory?
Future Proofing SECMP0019 for new items	How do we future proof SECMP0019? While the list may contain names for all existing devices, this may change as new ALCS are added to the market. The Working Group will need to develop a means of updating this list. If this document is added as an Annex to the SEC, a new Modification Proposal will be required to update it.
Presentation of ALCS names	Will the names of the ALCS remain within Industry or will they also be presented to the consumer?
ALCS use cases	Could suppliers give some use cases of how these ALCS will be expected to operate? As these devices do not exist at present, could suppliers familiarise the Working Group with these devices?
Correcting already populated fields (backfilling)	What will be the process for correcting (backfilling) already populated fields?

5.5 Indicative Progression Plan

The following is a high level indicative progression plan. The detail in this plan is subject to change. Changes to the overall timetable, however, are subject to a Panel review.

Note that the project plan has been drafted on the basis of the minimum expected turnaround time for DCC Preliminary Assessments (PA) / Impact Assessments (IA). However, due to the DCC's resource constraints noted in DCC's letter to the Panel dated 6th July 2016, the time required for DCC PAs/IAs may need to be extended. This will impact the modification progression timetable. SECAS is working with the DCC to determine more accurate expected turnaround times for DCC PAs/IAs.

Modification Timetable	
Activity	Date
Modification Proposal raised	14 th July 2016
IMR considered by Panel	12 th August 2016
Working Group meetings Indicative activities: - Initial considerations - Legal drafting - Sub-Committee feedback - Alternative(s) identified - Impact Assessments - Detailed evaluation	August – December 2016
Working Group Consultation	November 2016

Modification Timetable	
Activity	Date
Final Working Group meeting Indicative Activities: • Consultation response summary • Working Group deliverables met • Assessment for Modification Report	November 2016
Panel reviews Modification Report	December 2016
Modification Report phase consultation	January 2017
Change Board vote	January 2017
Modification Decision by the Authority (Path 2) (if required)	February 2017
Implementation	November 2017

6. SEC Panel Decisions

Following the SEC Panel meeting on the 12th August, the Panel has:

- **AGREED** for SECMP0019 to progress to Refinement;
- **AGREED** the progression path (Path 3), refinement by Working Group 1 and the progression timetable as outlined in this IMR;
- **AGREED** that SECAS should chair the Working Group discussions on SECMP0019; and
- **AGREED** the supplementary questions (section 5.4) and the Working Group Terms of Reference (Attachment A).

Appendix A – Glossary and References

Glossary		
Acronym	Term	Plain English Summary
HCALCS	HAN Connected Load Auxiliary Load Control Switch	
ALCS	Auxiliary Load Control Switch	An ALCS switches the auxiliary load on and off according to a calendar held within the ESME that a supplier can update remotely via the DCC.
	DCC Systems	Means the Systems used by the DCC and/or the DCC Service Providers in relation to the Services and/or this Code (Section A1, SEC Stage 3.0). The Proposer may wish to consider anticipated impacts on the DCC Licensee's enterprise systems (e.g. billing) or the Data Service Provider or Communications Service Providers.
CoS	Change of Supplier	
CoT	Change of Tenancy	
DUIS	DCC User Interface Specifications.	The document sets out mechanisms, formats, protocols, and other technical details necessary for Users to send and receive communications to and from the DCC
ESMEs	Electrical Smart Metering Equipment	Electrical Smart Meter.
	Fast-Track Modifications	Means Modification Proposals (Path 4 Modifications) to correct typographical or other minor errors or inconsistencies to the Code (Section D2.8, SEC Stage 3.0).
GBCS	Great Britain Companion Specification	A SEC Subsidiary Document that describes the HAN interfaces of the ESME, GSME, CH, HCALCS, IHD and PPMID.
	General SEC Objectives	Has the meaning given to that expression in Section C1 (SEC Objectives) (Section C1, SEC Stage 3.0). The SEC Objectives are those objectives that the SEC has been designed to achieve.
	Greenhouse Gas Emission	Means emissions of Greenhouse Gases, as defined in section 92 of the Climate Change Act 2008 (Section A1, SEC Stage 3.0).
	Other Systems	Other systems identified in the section Statement of Impact on Central Systems. The Proposer may wish to consider Prepayment vendors, Electricity Central Online Enquire Service (ECOES), Single Centralised Online Gas Enquiry Service (SCOGES), BSC Settlement Systems, etc.
	Path Type	Means the Modification Path to be followed in respect of a Modification Proposal. The type of Path will depend upon the nature of the variation proposed in the Modification Proposal (D2.1, SEC Stage 3.0). The four Modification Paths under the SEC are: • Path 1 Modifications: Authority-led (Section D2.4/D2.5, SEC Stage 3.0) • Path 2 Modifications: Authority Determination (Section D2.6, SEC Stage 3.0) • Path 3 Modifications: Self-Governance (Section D2.7, SEC Stage 3.0) • Path 4 Modifications: Fast-Track Modifications (Section D2.8, SEC Stage 3.0)
	Party Category	Means one of the following categories: (a) the Large Supplier Parties collectively;

		(b) the Small Supplier Parties collectively; (c) the Electricity Network Parties collectively; (d) the Gas Network Parties collectively; or (e) the Other Sec Parties collectively. (Section A1, SEC Stage 3.0).
	Smart Metering Systems	Means a system installed at premises for the purposes of the Supply of Energy to the premises that, on the date it is installed, as a minimum; (a) consists of the apparatus identified in; (b) has the functional capability specified by; and (c) compiles with the other requirements of, the Smart Metering Equipment Technical Specification that is applicable at the date (Section A1, SEC Stage 3.0). In summary, this includes: • Gas Smart Metering Equipment; • Electricity Smart Metering Equipment; • In Home Display; • Prepayment Interface Device; and • HAN Connected Auxiliary Load Control Switch.
SR	Service Requests	A command issued by a DCC User to a device or the DCC.
	Urgent Proposal	Means a Modification Proposal deemed an Urgent Proposal where the Authority directs the Panel to treat the Modification Proposal as an urgent Proposal (whether following a referral by the Panel pursuant to Section D4.5, or at the Authority's own initiation) (Section D4.5/D4.6, SEC Stage 3.0).
	User Systems	Means, in respect of each User (DCC User), the Systems of that User (including, where relevant, those of its Supplier Nominated Agent) used in relation to the Services and/or Smart Metering Systems (Section A1, SEC Stage 3.0). The Proposer may wish to consider Suppliers; Network Operators; Registration Data Providers; Other DCC Users (e.g. Authorised Third Parties / Switching Sites); Supplier Nominated Agents.