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Paper Reference:	**SECP_65_1502_13**
Action:	**For Decision**

SECMP0025 Modification Report

1. Purpose

SECMP0025 'Electricity Network Party Access to Load Switching Information' has previously undergone the Refinement Process and the Report Phase, before being sent back by the Change Board to obtain the full implementation costs. The DCC has now completed its assessment of the costs raised at the Change Board meeting in September 2018. We are recommending that this modification be returned to the Change Board and that the Panel approves the Modification Report, the implementation approach, and that SECMP0025 is an Authority Determined Modification.

This paper provides a high-level summary of the key points. Full details can be found in the Modification Report in Appendix A.

2. Summary of the proposal

What is the issue?

New technology changes, including new types of heating systems, charging of electric vehicles and major increases in customer connected micro generation, have resulted in Electricity Network Parties (ENPs) facing new load management challenges on their networks. Access to information relating to the operation of Auxiliary Load Control Switches (ALCS) and HAN-Connected Auxiliary Load Control Switches (HCALCS) and their associated switching regimes will enable ENPs to maintain the benefits of established network management arrangements and develop new innovative solutions to assist with the planning, operation and management of their distribution networks. For example, ENPs are currently unable to identify opportunities where Demand-Side Response (DSR) could be an economic alternative to traditional reinforcement.

What is the Proposed Solution?

The Proposer, supported by the other ENPs, has proposed to allow ENPs access to ALCS and HCALCS information from the Smart Metering System. This information would enable ENPs to become more responsive as electricity networks become more complex. Additionally, ENPs have requested to be informed when changes are made to existing load switching regimes.

3. Proposed progression

The Change Board, at the Panel's request, agreed at the September 2018 meeting to send back SECMP0025 to the Panel, as they believed further work was needed on the costs provided in the Impact Assessment provided by the DCC. Specifically, full implementation costs of the change were sought, as the costs provided were only up to the end of Pre-Integration testing (PIT).

The DCC have subsequently indicated that they could implement SECMP0025 in the November 2019 SEC Release if the modification is approved by the end of March 2019.

Furthermore, the DCC have informed the Panel that the post-PIT costs for any modification included in the November 2019 Release will be absorbed under the costs for the SMETS1 Enrolment and Adoption changes due to go live around the same time, and so would not be incurred under the modification's implementation costs. This would mean the costs provided would be deemed complete if SECMP0025 was implemented in November 2019.

SECMP0025 has been progressed as an Authority Determined Modification. To facilitate a decision in time for inclusion in the November 2019 Release, we are presenting the Panel with the modification documents for SECMP0025 for approval. We are recommending a shortened Modification Report Consultation period of five Working Days, as nothing has materially changed in the report since the original consultation performed in July 2018. A recommendation could then be made by the Change Board at its meeting on 20 February 2019. This modification would then be submitted to the Authority for determination, which is anticipated to require around 25 Working Days.

Implementation approach

We recommend an implementation approach of:

- **7 November 2019** (November 2019 SEC Release) if a decision to approve is received by 31 March 2019; or
- **25 June 2020** (June 2020 SEC Release) if a decision to approve is received after 31 March 2019 but on or before 25 September 2019.

4. Recommendations

The Panel is requested to:

- **AGREE** that SECMP0025 should be progressed to the Report Phase;
- **AGREE** the duration of the Modification Report Consultation to be five Working Days;
- **APPROVE** the Modification Report;
- **APPROVE** the implementation approach; and
- **AGREE** that SECMP0025 should be progressed as an Authority Determined Modification.

Cordelia Grey

SECAS Team

08 February 2019

Attachments:

- **Appendix A:** SECMP0025 Modification Report
  - **Annex A:** SECMP0025 Solution Design Document
  - **Annex B:** SECMP0025 Legal Text
  - **Annex C:** SECMP0025 DCC Impact Assessment
  - **Annex D:** SECMP0025 Working Group Consultation Responses

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SECMP0025

‘Electricity Network Party Access to Load Switching Information’

Modification Report

Version 1.1

About this document

This document is the Modification Report for SECMP0025 'Electricity Network Party Access to Load Switching Information'. 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** (provided separately) contains the solution design specifications for the proposed solution.
- **Annex B** (provided separately) contains the redlined changes to the SEC required to deliver the proposed solution.
- **Annex C** contains the full Data Communications Company (DCC) Impact Assessment response.
- **Annex D** contains the full responses received to the Working Group Consultation.

1. Summary

Electricity Network Providers (ENPs) are facing new load management challenges on their networks with the emergence of new technology changes, including new types of heating systems, charging of electric vehicles and major increases in customer connected micro generation. Further uncertainty is brought about by ENPs not having oversight of how individual suppliers will develop their customer offerings, e.g. new Time of Use (TOU) tariffs.

The Proposer (SSEN) believes ENPs need access to Auxiliary Load Control Switch (ALCS) and HAN-Connected Auxiliary Load Control Switches (HCALCS) information from the Smart Metering System. This information would enable ENPs to become more responsive as electricity networks become more complex. Additionally, ENPs have requested to be informed when changes are made to existing load switching regimes.

This modification proposes three changes to the SEC:

- ENPs would gain access to Service Request (SR) 6.13 “Read Event Or Security Log” (more specifically ALCS/HCALCS event logs);
- ENPs would gain access to SR7.7 “Read Auxiliary Load Switch Data”; and
- ENPs would receive new Alert(s) (either DCC generated or device generated).

This modification will impact Suppliers, ENPs and the DCC. Central implementation costs will be around £390,000, with additional costs being incurred by affected Parties. If approved, this modification is targeted for inclusion in the November 2019 SEC Release.

2. Background

Use of load-switching patterns

Over time ENPs have developed in-depth knowledge of customer load switching patterns and their impacts on the distribution network. This knowledge has proven to be critical, particularly in designated Load Managed Areas and in areas dominated by off peak or Economy 7 load switching meters. By understanding customer load switching patterns from legacy meters, ENPs have developed their distribution systems in an economic way by investing in network reinforcement or using alternative solutions to manage load on their networks.

What is the issue?

Electricity Distributors (EDs (known as Distribution Network Operators (DNOs) under other electricity-focused industry codes) currently understand how customer load switching impacts their distribution networks. This is particularly critical in designated Load Managed Areas[1] and in areas dominated by off peak / Economy 7 load. This understanding has enabled EDs to develop their distribution systems in an economic way, investing in network reinforcement or using alternative solutions to manage load on their networks.

New technology changes, including new types of heating systems, charging of electric vehicles and major increases in customer connected micro generation, have resulted in ENPs facing new load management challenges on their networks.

Smart Metering Systems are installed at locations where load is controlled directly through the metering system. Suppliers can change load switching regimes on smart metering systems through Auxiliary Load Control Switches (ALCS) or Hand Connected Auxiliary Load Control Switches (HCALCS) without informing ENPs. ENPs experience a further level of uncertainty by not having oversight of how individual suppliers will develop their customer offerings, e.g. new TOU tariffs.

Whilst this may be appropriate in most instances, there are locations where additional controls are required. Amendments to Schedule 8 'Demand Control' of the Distribution Connection and Use of System Agreement (DCUSA) have updated the rules associated with demand control and the avoidance of coincidence of load. This modification draws upon the comprehensive benefit case established by EA Technologies on behalf of SSEN in support of the changes made to DCUSA Schedule 8. ENPs need to have visibility of customer load switching to ensure a prudent and informed management of electricity networks. They need to gain access to the live information relating to load switching regimes sent through service requests and alerts.

Under the current arrangements, ENPs are not advised when changes to smart meter-controlled load switching regimes are made by suppliers. Further, current SEC provisions do not permit ENPs to:

- Receive SR6.13 "Read Event Or Security Log"; or
- Access SR 7.7 "Read Auxiliary Load Switch Data".

Access to information relating to the operation of ALCS and HCALCS and their associated switching regimes will enable ENPs to maintain the benefits of established network management arrangements and develop new innovative solutions to assist with the planning operation and management of their

[1] https://www.dcusa.co.uk/DCUSA%20Document%20Public%20Version/Schedule%208%20v8.5.pdf

distribution networks. For example, ENPs are currently unable to identify opportunities where Demand-Side Response (DSR) could be an economic alternative to traditional reinforcement.

SECMP0025 was raised by SSEN on 18 November 2016 to resolve this issue.

3. Solution

Proposed Solution

The Proposer, SSEN, supported by the other ENPs, has proposed the following:

- The User role of Electricity Distributor is granted access to SR 6.13 “Read Event Or Security Log” in order to read ALCS / HCALCS event logs (and so the existing GB Companion Specification (GBCS) Use Case, ECS35f “Read ALCS Event Log” is replaced with an equivalent Use Case that adds such Electricity Distributor access).
- The User role of Electricity Distributor is granted access to SR 7.7 “Read Auxiliary Load Switch Data” in order to read ALCS Data. From a Device perspective, this would be treated as a ‘Supplementary Party’ read and so would not require changes to the ECS61a “Read HC ALCS and ALCS Data from ESME” Use Case.
- A new DCC Alert will be created to be sent to the ENP following an update to the ALCS / HCALCS calendar on the Electricity Smart Metering Equipment (ESME). This new Alert would either come from the ESME triggered by such a change, or it would be triggered within the DCC, based on the DCC receiving a successful Response from the ESME to Use Case ECS46c “Set HC ALCS and ALCS configuration in ESME (excluding labels)”.

SECMP0025 would also require the following changes to GBCS:

- Changes to the Chapter 20 Mapping Table, i.e. to the SMETS required objects to allow Electricity Distributor access to the ECS35f related objects;
- Replacement of GBCS Use Case ECS35f “Read ALCS Event Log” with an equivalent one to additionally allow Electricity Distributor access; and
- Additions to Table 16.2 to reflect the additional Device Alert (subject to a new Device Alert be used).

The following changes will be required to the DCC User Interface Specification (DUIS).

- SR 6.13 will need to be amended to allow Electricity Distributor access, and a corresponding change to use the replacement ECS35f Use Case. Note this would entail removal of error code E061304, which applies in this SR if ‘LogToRead’ = ‘ALCS Event’.
- SR 7.7 will need to be amended to allow it to be accessed by the User Role of Electricity Network.
- If a DCC Alert is to be used, that Alert will need to be added to DUIS.

Changes may also be required to the Message Mapping Catalogue (MMC) to reflect the replacement Use Case and, if used, the Device Alert.

The Solution Design Specification can be found in Annex A.

Legal text

The changes to the SEC required to deliver the proposed solution can be found in Annex B. Please note that the changes required to SEC Schedule 11 ‘TS Applicability Tables’ will be prepared with the Technical Architecture and Business Architecture Sub-Committee (TABASC) as part of the implementation of this modification (if approved).

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

Electricity Network Providers will be impacted as they will need the capability to process data from the following:

- SR 6.13 (more specifically, ALCS / HCALCS event logs)
- SR 7.7 “Read ALCS data”
- New Alerts (either DCC-generated or device-generated)

If the procurement of devices is carried out by the Suppliers, then they will be impacted as devices must be compliant with the applicable versions of SMETS and GBCS. Additionally, firmware upgrades from earlier versions must introduce settings and functionality as laid out in SMETS and GBCS.

DCC System

This Modification Proposal enables the DCC System to provide access for ENPs to information from the Smart Metering System, relating to load switching, carried out by Smart Meters or Smart Meter connected Devices. It will also enable the Smart Metering System to inform Electricity Network Parties when changes are made to existing load switching regimes. Primary impacts will be on the Data Service Provider (DSP) Systems (multiple connections) within the DCC ecosystem and on Service Request Processing including DUIS.

The full impacts on DCC Systems and DCC’s proposed testing approach can be found in the DCC Impact Assessment response in Annex C.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Schedule 8 ‘GB Companion Specification’ Versions 2.0, 2.1 and 3.1
- Schedule 11 ‘TS Applicability Tables’
- Appendix AD ‘DCC User Interface Specification’ Version 2.0
- Appendix AF ‘Message Mapping Catalogue’

Other industry Codes

There are no impacts anticipated on any other Codes.

Greenhouse gas emissions

There are no Greenhouse Gas Emission impacts anticipated.

5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification is £386,009. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	**Cost**
Design, Build and Pre-Integration Testing (PIT)	£386,009
System Integration Testing (SIT), User Integration Testing (UIT) and Implementation to Live	Not provided

Please note that the costs for SIT, UIT and implementation to live will be covered under the SMETS1 Enrolment and Adoption programme, as long as SECMP0025 is included in the November 2019 SEC Release. These costs would therefore not be incurred as part of this modification in this scenario.

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

SECAS costs

The estimated SECAS costs to implement this modification are two days of effort, amounting to approximately £1,200. The activities which need to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.
- Publication of new version of the SEC on the SEC Website and issuing this to SEC Parties.
- Reviewing and updating any impacted SEC guidance materials.

SEC Party costs

Network Parties' responses to the Working Group Consultation indicated the costs associated with the implementation of this modification. One Party advised that their cost to implement this modification would be between £20,000 and £30,000 and that the majority of this cost would be attributed to system development and testing, in relation to the new Service Request Variants that they would have access to, as well as the new DCC Alerts that would be received.

A further Network Party noted costs would be incurred from investing in an IT system that could process the Service Request Variant responses and alerts and a Large Supplier advised that a cost would be incurred to ensure devices are compliant with the new versions of SMETS and GBCS.

6. Implementation approach

Approved implementation approach

The Working Group is recommending an implementation date of:

- **7 November 2019** (November 2019 SEC Release) if a decision to approve is received on or before 31 March 2019; or
- **25 June 2020** (June 2020 SEC Release) if a decision to approve is received after 31 March 2019 but on or before 25 September 2019.

The DCC have indicated that they could implement SECMP0025 in the November 2019 SEC Release if a decision to approve is received by 31 March 2019.

Furthermore, the DCC have informed the Panel that the post-PIT costs for any modification included in the November 2019 Release will be absorbed under the costs for the SMETS1 Enrolment and Adoption changes due to go live around the same time, and so would not be incurred under the modification's implementation costs.

7. Discussions and development

Discussions of business requirements and the PA

The Working Group identified discrepancies in the DCC Preliminary Assessment, and the business requirements outlined in the Solution Design Specification (SDS) which were addressed.

To meet Business Requirement 3[2] in the SDS, the Preliminary Assessment identified two potential events that could trigger the new DCC Alert, both relating only to the case where the Supplier had chosen to future date an ALCS configuration change:

- The DCC receiving a Future Dated Device Alert 0x8F66 relating to the successful update of the AuxiliaryLoadControlSwitchesCalendar; and
- The DCC receiving a Future Dated Device Alert 0x8F66relating to the successful update of the AuxiliaryLoadControlSwitchesCalendar(SpecialDays)

The Working Group noted that it would be useful to receive DCC Alert 0x8F66 relating to the successful update of the Auxiliary Load Control Switches Calendar.

SECAS noted that the Preliminary Assessment had not included the specific requirement for the DCC to act as a Supplier for (EDs) to be able to test SECMP0025's functionality. The DCC agreed that this functionality would add a significant cost to the estimate presented in the Preliminary Assessment for SECMP0025. The DCC noted that this testing functionality does not currently exist and would need to be built as a bespoke solution.

The DCC noted that the cost of testing would be drawn out in the Impact Assessment. Specifically, the System Integration Testing (SIT) costs and the User Integration Testing (UIT) costs for the DCC operating as a Supplier in test environments would be drawn out as separate costs. This would allow Electricity Distributors to make an informed decision on whether to progress the alternative 'friendly supplier' route.

The Working Group noted that a possible workaround to this would be for a "friendly supplier" to allow Distributors to test the new functionality. The Proposer noted this comment and noted that Distributors would initiate talks with Supplier Parties regarding possible testing of SECMP0025.

The DCC suggested adding a DCC Alert whenever an ALCS or HCALCS label changed. The Proposer and the Working Group noted that this may be beneficial depending on the additional DCC cost. The Working Group therefore agreed to request this functionality as an option in DCC IA. Members agreed this would offer the industry sufficient information on whether to include this functionality into the final solution for SECMP0025.

Following the Impact Assessment, the Working Group agreed to include this Alert as part of the solution.

2 "The DCC would create a new DCC Alert to notify the relevant ED whenever the DCC receives a successful Response from an Electricity Smart Metering Equipment (ESME) to change the ALCS configurations, which may include an ALCS Calendar change (so a successful Response to a 'ECS46c Set HC ALCS and ALCS configuration in ESME (excluding labels)' Command)".

Modification Path type

The Working Group considered the Path type for the modification. SECAS advised the Working Group that the modification could be progressed as a Self-Governance modification because it does not have a material impact on consumers, competition, security of supply or any other criteria outlined in SEC Section D2.6.

It had been considered that if SECMP0025 remains an Authority Determined modification, it would not make the June 2019 SEC Release and would have to be implemented as part of the November 2019 Release, due to the lead time required by the DCC to implement the changes. The DCC advised that, if the Panel agrees to change the progression path for SECMP0025 to Self-Governance, the modification could still be included in the June 2019 release. A member emphasised that the sooner this modification is implemented the sooner ALCS data backlog for ENPs can be back-filled.

The Working Group sought views regarding the Path Type in the Working Group Consultation. Respondents were mixed in their views as to whether SECMP0025 should remain an Authority Determined modification or switch to Self-Governance. However, further delays to the progression of SECMP0025 due to the Working Group wanting to put more work into building the benefits case meant, at the time, the modification could not be implemented until the November 2019 Release, irrespective of the Path type.

When the Panel originally considered the Modification Report, the Authority (at that time, BEIS) indicated that it should remain an Authority Determined modification.

Consideration of the implementation costs

The Working Group discussed the costs outlined in the DCC's Impact Assessment, noting that the total figure of £386,009 did not include costs associated with SIT, UIT and Implementation to Live. The Working Group asked whether the DCC could provide a more detailed breakdown of the costs and when they will know the implementation and testing costs. The DCC advised that the costs presented in the Impact Assessment only include their capital expenditure, development costs and initial testing. The costs incurred by Service Providers as part of implementation can only be derived at the end of the implementation phase. The DCC highlighted that the full final costs tend to be lower than the cost that is indicated in the Impact Assessment as these are worst case scenario costs (assuming the modification will be implemented in isolation of anything else). Where a modification is implemented alongside other modifications or DCC changes with similar system impacts, the costs will be lower.

The Working Group suggested that the DCC insert a caveat to explain this in the costings section of IAs. The DCC agreed that this is something they can look at. The DCC also noted that work is being carried out to see how modifications can be clustered for implementation as a cost saving exercise. The biggest challenge that has been identified is, if a modification in a cluster cannot be progressed, how would the costs be reconciled.

SECAS asked the DCC whether a generalisation could be applied to costs in the future. For example, as part of the Impact Assessment there could be two sets of costs, one showing the usual worst-case scenario and another showing what the cost may be should a modification be implemented with other modifications or DCC changes of a similar nature. The DCC advised that they will take this suggestion away and see what could be done, noting that applying a more generalised estimate may be possible.

Following receipt of the SIT, UIT and Implement to Live costs anticipated for SECMP0023 'Correct Units of Measure for Uncontrolled Gas Flow Rate', made known following the Panel's decision as part

of its consideration of the June 2019 SEC Release, the Panel requested that full implementation costs be provided in Modification Reports before they are submitted for decision. As the SECMP0025 Modification Report had already been submitted for Modification Report Consultation, the Panel requested the Change Board subsequently send the Modification Report back to the Panel to allow this to happen.

In December 2018, the DCC informed the Panel that the post-PIT costs for any modification included in the November 2019 Release would be absorbed under the costs for the SMETS1 Enrolment and Adoption changes due to go live around the same time, and so would not be incurred under the modification's implementation costs. In January 2019, the DCC also noted that the 12-month lead time for SECMP0025 originally provided could be shortened. If a decision to proceed was received by 31 March 2019, SECMP0025 could therefore be implemented in the November 2019 Release, meaning the costs up to PIT already provided would be deemed the complete costs for SECMP0025.

8. Conclusions

Benefits and drawbacks

The Proposer and the Working Group have identified the following benefits and drawbacks in implementing this modification:

Benefits

The Working Group has identified the following benefits:

- Network Operators will have access to more types of information from new Service Request Variants and Alerts from ALCS and HCALCS. This will enable them to monitor what is happening on low voltage networks more accurately, and ultimately make more informed decisions regarding network management and reinforcement. These data items will also be used alongside individual customers load behaviour to assess Networks incidence faults and asset condition.

  Alignment of customer load switching times is likely to have a significant impact upon distribution network peak loading, to the extent that some networks may become overloaded if the switching times are changed from their present values. As Suppliers change existing metering systems for smart meters, the load switching times applied to ALCS and HCALCS may change and thus impact distribution network peak load. Providing ENPs with the ability to access load switching information (in particular the switching calendar) in Smart Meters will enable them to better understand the nature of a peak load problem. This will allow them to be better placed to consider alternative smart solutions as alternatives to expensive network reinforcement schemes which would ultimately be borne by customers.

  In order to scale the magnitude of the potential benefit, a typical ENP high voltage reinforcement scheme costs £100,000. Each of the 14 ENPs will implement many such schemes each year. If, as a result of being able to better understand load being switched on the network, a smart Demand Side Response solution could be implemented such that the traditional reinforcement scheme could be avoided or deferred, there is the potential to save significant capital investment. Avoiding four such reinforcement schemes could save £400,000 per annum and deliver sufficient savings to cover the cost of this modification. There is the same possibility to avoid or defer low voltage reinforcement schemes, which although cheaper (typically £20,000 each) are far more plentiful.

  In the north of Scotland, the cost to reinforce areas of the distribution network affected by an increase in peak load, driven by the application of different customer load switching times, is likely to be significantly higher than the £100,000 mentioned above due to the topography of the network (i.e. large distances between “load centres” and the need to provide supplies to many individual islands within the principle island groups). The increased distance means that extra high voltage network reinforcement will be necessary at a significantly higher cost, including submarine cable cost averaging £3.2m per scheme, to the extent that avoiding a single network reinforcement would more than cover the cost of this modification.

  A study carried out for Scottish Hydro Electric Power Distribution (SHEPD) by EA Technology (EATL) into the Study of the Benefits of the Radio Teleswitch System (RTS) concluded that if the present diversity associated with the current RTS system, whereby peak demands are managed by customer switching times, is lost as a consequence of different load switching

times being implemented, the financial implications could be in excess of £700m in the SHEPD area.

In summary, allowing ENP access to the functionality as set out in this modification, has the potential to deliver savings far in excess of the cost of the modification.

- Access to this data will also give ENPs the evidence they need to help them develop other innovative solutions to assist with the planning, operation and maintenance of their networks. This will enable them to better protect the assets they are responsible for and will ensure that the electricity supply is secure and sustainable.
- The ENPs are working on developing a Response Back Connectivity model which seeks to prevent grid overloading; having visibility of customer load switching data will better facilitate the development of this model.
- The implementation of this modification now will give ENPs a two-year lead time to use this information in preparation for the reinforcement of the network as a result of the deployment of Smart Meters.
- This modification will support the emerging Distribution System Operator (DSO) capability as part of an integral ability to shape the future energy sector.

Drawbacks

The only drawback identified by the Working Group is that ENPs will need to carry out a data reconciliation exercise in their systems following its implementation so that ALCS information is up to date for all the Smart Metering Systems.

Proposer's rationale against the General SEC Objectives

Objective (e)[3]

The Proposer believes that SECMP0025 will better facilitate SEC Objective (e) as having access to smart meter data associated with the operation of ALCS and HCALCS will enable ENPs to develop innovative solutions to assist with the planning, operation and maintenance of their networks. This in turn will help them maintain and develop economical, efficient and co-ordinated systems of electricity distribution as required by their distribution licences.

Working Group members' views

The Working Group believes that SECMP0025 will better facilitate SEC Objective (e), as this solution will better contribute to the delivery of a secure and sustainable Supply of Energy.

The Working Group agreed with the Proposer's rationale that access to smart meter data associated with the operation of ALCS and HCALCS will enable ENPs to develop innovative solutions to assist with the planning, operation and maintenance of their networks. This in turn will help them maintain and develop economical, efficient and coordinated systems of electricity distribution as required by their distribution licences.

[3] Facilitate such innovation in the design and operation of Energy Networks (as defined in the DCC Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy.

Consultation respondents' views

The majority of Working Group Consultation respondents agreed SECMP0025 better facilitated SEC Objective (e), noting that it would help ensure that a secure and sustainable supply of electricity can be delivered to consumers and that it would support the nascent DSO capability as part of integral ability to shape the future energy sector.

One respondent noted that there needed to be a clearer through line drawn between improved access to switching information and facilitating innovation in the design and operation of Energy Networks. Additionally, the respondent noted there needed to be clearer articulation of the direct benefits of this modification included in the Modification Report. The Proposer and other ENPs have since provided the cost benefits information contained in the 'Benefits' section above.

The full responses received can be found in Annex D.

Appendix 1: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	**Full term**
ALCS	Auxiliary Load Control Switches
DCC	Data Communications Company
DCUSA	Distribution Connection and Use of System Agreement
DMR	Draft Modification Report
DSO	Distribution System Operator
DSR	Demand Side Response
DUIS	DCC User Interface Specification
EATL	EA Technology
ED	Electricity Distributors
ENP(s)	Electricity Network Parties
GBCS	Great Britain Companion Specification
HCALCS	Home Area Network Connected Auxiliary Load Control Switches
RTS	Radio Teleswitch System
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SHEPD	Scottish Hydro Electric Power Distribution plc
SR	Service Request
TOU	Time of Use

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

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Data Communications Company

SEC Modification Proposal

- DCC Impact Assessment (IA) - FINAL

- Mod Proposal Ref: SECMP 0025, CR243

- Mod Proposal Title: Electricity Network Party Access to Load Switching Information

- Mod Path: Path 2 - Authority determination

Version:	**1.25**
Date:	**22/01/19**
Author:	**DCC**
Classification:	**DCC PUBLIC**

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1 Introduction

1.1 Document Purpose

The purpose of this DCC Impact Assessment (IA) is to provide the relevant Working Group with the information requested in accordance with SEC Section D6.9 and D6.10.

1.2 Previous information provided by DCC

This IA is provided further to a DCC Preliminary Assessment (PA), which was returned to the Working Group on 22nd May 2017. This document builds on the information previously provided as part of the PA, clarifying and refining the impact of this SEC Modification on DCC.

This DCC Impact Assessment was requested of DCC on 12th July 2017. It has been updated with further information about testing costs and expected duration, as of January 2019.

1.3 DCC Contact Details

Please raise any queries regarding this DCC Impact Assessment using the contact details provided below.

Name	DCC - SEC Modification queries
Contact email	Mods@smartdcc.co.uk

1.4 Modification description

The Proposer of this modification summarises the change as follows:

This proposal seeks to enable Electricity Network Parties to have access to information from the Smart Metering System relating to load switching carried out by Smart Meters or Smart Meter connected Devices. It also proposes that the Smart Metering System informs Electricity Network Parties when changes are made to existing load switching regimes..

1.5 Requirements

The requirements for this modification have been developed by the Working Group during the Refinement phase. The impact on DCC has been assessed against the Business Requirements and the corresponding draft legal text set out in the Solution Design Document – SECMP0025 Solution document v2.5 effective 12th July 2017.

Based on the discussions at the Working Group, DCC considers the requirements for SECMP 0025 to be **STABLE** (low risk of change). DCC is not aware of any Working Group discussions relating to changes to requirements or assumptions. Where the requirements set

out in the Solution Design Document above change, DCC will be required to carry out further impact assessment.

2 Impact on DCC's Systems, Processes and People

This section describes the impact of SECMP 0025 on DCC's Services and Interfaces that impact Users and/or Parties.

2.1 Summary

- This Modification Proposal enables the DCC System to provide access for Electricity Network Parties to information from the Smart Metering System relating to load switching carried out by Smart Meters or Smart Meter connected Devices. It will also enable the Smart Metering System to inform Electricity Network Parties when changes are made to existing load switching regimes.

- Impacted Systems, Processes and People:

    - Primary impacts on DSP Systems (multiple components) within the DCC ecosystem:

        - Service Request Processing including DCC User Interface Specification

2.2 Impacts on DCC Services and Interfaces

The following table describes the detailed impacts of SECMP 0025 on DCC's Systems and Processes.

Ref	Impact on DCC	User or Party Impact
001	**Service Request processing – Changes to SRV6.13** Starting from the supported DUIS version, SRV 6.13 shall use the newly introduced GBCS Use Case ECS35g in place of ECS35f for both Electricity Import Supplier (EIS) and Electricity Network Party (ENP user roles for devices that support the new Use Case. For devices that do not support the new Use Case, the existing ECS35f Use Case shall be used for the EIS role and the request shall be rejected for the ENP role with error code E061304, as it would be in any earlier DUIS version. ECS35g will return exactly the same data in the payload as ECS35f. This will require changes to Request Management, Transform, and Data Management	GBCS Change New version of the DUIS SEC Subsidiary Document (SSD) and associated DUIS XML Schema to be created by DCC and implemented within both the DCC Systems and User Systems (where required). Note: DCC data systems will provide support for at least two DUIS versions, thus maintaining backwards compatibility and giving users time to implement the changes within their systems. At some point support for older use cases will be removed and users will need to use the new use case, but this is dependent upon Release Planning and support for the new use case within deployed ESME's, this is outside the scope of this Impact Assessment.

Ref	Impact on DCC	User or Party Impact
002	**Service Request processing – Changes to SRV 7.7** SRV 7.7 shall be available to the Electricity Network Party starting only from the Supported DUIS version. ACB shall consider ENP as an URP and use the existing UC ECS61a (with no change in access rules) to allow the ENP to read the data. This is an exceptional use of URP pattern in a KRP scenario and requires DCC Data Systems to change the Access Control to allow Electricity Network Parties to submit SRV 7.7. This will require changes to Request Management, and Data Management	New version of the DUIS SEC Subsidiary Document (SSD) and associated DUIS XML Schema to be created by DCC and implemented within both the DCC Systems and User Systems (where required).

003	**Service Request processing – New DCC Alert and changes to processing the Response to SRV 6.14.2 'Update Device Configuration (Auxiliary Load Control Scheduler)'** A new DCC Alert of type ALCSHCALCSConfigurationChange shall be introduced to notify the Electricity Network Parties in the event of any of the following scenarios. The associated DCC Alert Code (NXX) shall be finalised during the design stage. • Upon successful completion of Service Request 6.14.2 Update Device Configuration (Auxiliary Load Control Scheduler) – GBCS Use Case ECS46c. OR • Future Dated Execution of Instruction Alert (DLMS COSEM) Alert (Alert Code 0x8F66 and Message Code 0x00CC) corresponding to AuxiliaryLoadControlSwitchesCalendar received by the DCC Data Systems. OR • **[Optional]**Upon successful completion of Service Request 6.14.1 Update Device Configuration (Auxiliary Load Control Descriptions) The relevant Electricity Network Parties are determined as per the CR193 solution being implemented as part of Release 1.4 Local Delivery is supported for SRV 6.14.2 and the new DCC Alert shall be triggered when successful Responses to these SRVs are received via SRV 8.13 Return Local Command Response. [**Optional**] The same is applicable for SRV6.14.1 as well. This will require changes to Request Management.	New version of the DUIS SEC Subsidiary Document (SSD) and associated DUIS XML Schema to be created by DCC and implemented within both the DCC Systems and User Systems (where required) to support the definition of a new DCC Alert.

Ref	Impact on DCC	User or Party Impact
004	**Parse and Correlate** The changes required to implement this SECMOD will affect the Parse service. Parse and Correlate will accommodate this change by: Replacing the existing GBCS Use Case ECS35f 'Read ALCS Event Log' with the new replacement Use Case ECS35g. DUIS/MMC schema deployment Provide support for the existing Use Case for users of GBCS / DUIS / MMC v1.0 Add test cases to exercise the Use Case replacement Add test cases to exercise the new Use Case Documentation updates and release tasks	Updated Parse and Correlate software

3 Impact on Security

This section describes the impact DCC considers SECMP 0025 will have on Security of DCC's Total System.

DCC has carried out a security risk assessment for SECMP 0025 and determined that **there are no material security risks** associated with the implementation of DCC's proposed solution.

4 Testing Considerations

This Impact Assessment includes the cost to develop and deliver this SEC Modification up to and including Pre-Integration Testing (PIT). The cost for Systems Integration Testing (SIT) and User Integration Testing (UIT) will be determined once the full scope of the release that this SEC Mod is allocated to is finalised; the cost will apply to the release and not to an individual SEC Modification.

4.1 Systems Integration Testing

Systems Integration Testing (SIT) is the testing of the DCC Total System, which brings together the components, e.g., DSP and CSP Systems, to allow testing of the end-to-end solution by DCC. SIT is carried out for every DCC System release and incorporates the test and integration of multiple changes.

During the Transitional phase of the Smart Metering Implementation Programme (SMIP) the SIT environment and associated services are primarily used to provide integration testing to support implementation. At this stage in the programme the SIT environment is required to support the integration of SMETS1 systems into the DCC ecosystem, with the associated costs already being incurred by Users. Because Users are already paying for SIT, DCC considers that SIT costs should not be included in this assessment. This position will be reviewed once the incorporation of SMETS1 systems is complete.

4.2 User Testing

User Integration Testing (UIT) is referred to as User Testing in the SEC. User Testing of Modification Proposals is provided using the Modification Implementation Testing Service. It enables Users to run specific tests to support their implementation of a change. DCC expects that User Testing will be required to support User's implementation of this modification.

Individual changes are collected into a DCC release. In order to achieve more efficient User Testing for all parties, the DCC will coordinate specific testing requirements for all changes that comprise a release (which may include defect fixes and changes to DCC Internal Systems along with Modification Implementation Testing) and will issue a testing release approach document.

Modification Implementation Testing is only one of several Testing Services provided to Users under the SEC, and mostly comprises the provision of testing facilities (such as a Test Lab), the User Integration Testing (UIT) environment and DCC staff to support testing. The costs associated with the provision of Modification Implementation Testing are largely fixed costs common to the provision of all of the Testing Services.

5 Implementation Timescales and Releases

5.1 Change Lead Times

From the date of approval (in accordance with Section D9 of the SEC), to implement the changes proposed DCC requires a lead time of: 8 **months**.

5.2 Consideration against Other Changes

None currently identified.

6 DCC Costs and Charges

Implementation Costs							
Implementation Phase:	**Design**	**Build**	**Pre-Integration Testing**	**System Integration Testing**	**User Testing**	**Implementation to Live**	**Total**
SECMP0025	Included	Included	Included	*Not included*[1]	*Not included*[2]	*Not included*[3]	£386,009
Implementation costs – supplementary Information							
Implementation cost assumptions	*A. Costs are exclusive of VAT and any applicable finance changes* *B. The majority of the costs above represent labour costs*						

[1] At this stage in the SMIP the SIT environment is required to support the integration of SMETS1 systems into the DCC ecosystem, with the associated costs already being incurred by Users. Because of this DCC considers that SIT costs should not be included in this assessment.
[2] The costs associated with Modification Implementation Testing are largely fixed costs for providing all of the Testing Services. As such the costs of Modification Implementation Testing are not included in this assessment.
[3] Individual changes are collected into a DCC release in order to make implementation as efficient as possible. Because of this DCC does not consider it appropriate to provide separate implementation costs for each individual change.

	C. Costs provided for Design, Build, and Pre-Integration Testing are quotes provided by the Service Providers and assuming there is no scope change can be considered the final costs. DCC have reviewed and challenged the costs from the Service Providers to ensure this reflects best price to date. *D. Service Providers were asked what the costs for System Integration Testing would be. Their initial estimate was provided and is reflected above. DCC considers that further reduction in these costs may be possible as part of final contract negotiations.* *E. Costs provided for User Testing and Implementation to Live are an initial estimate created by DCC and may differ from final costs provided by the Service Providers as part of a contracted solution for the approved release.* *F. A reduction of circa 20% in costs can be assumed for Systems Integration Testing and User Testing and a reduction of circa 33% in costs can be assumed for Implementation to Live* *G. User Testing estimates provided above represent an incremental cost to the existing testing arrangements that are in place and provided for by DCC as part of the existing cost base. The testing environments that the DCC provides as part of Testing Services will be open to all User Roles and multiple Users within each User Role to ensure that any Users wishing to test this SEC Modification are able to do so. These cost estimates have been provided on the assumption that the test environment would be made available for a minimum of 15 working days to enable Users to test the changes associated with this SEC Modification. The User Testing costs assume there will be 15 days of User Testing with up to 10 Users undertaking testing.* H. *The split of costs between Design, Build and Pre-Integration testing phases has been derived by DCC from the Service Provider submissions.*
Explanation of Implementation Phases	*DCC's implementation costs are provided by Implementation Phases. The following describes the purpose of each phase:* • *Design: The production of detailed System and Service designs to deliver all new requirements.* • *Build: The development of the designed Systems and Services to create a solution (e.g. code, systems, or products) that can be tested and implemented.* • *Pre-Integration Testing: Each Service Provider tests its own solution to agreed standards in isolation of other Service Providers. This is assured by DCC.*

	• *Systems Integration Testing: All Service Providers PIT complete solutions are brought together and tested as an integrated solution, ensuring all Service Provider solutions align and operate as an end-to-end solution.* • *User Integration Testing: Users are provided with an opportunity to run a range of pre-specified tests in relation to the relevant change.* • *Implementation to Live: The solution is implemented into production environments and ready for use by Users as part of a live service. This service is subject to implementation costs.*

6.1 On-going Operational Costs

None identified.

6.2 Impact on Charges

The following section describes the potential impact on Charges levied by DCC in accordance with the SEC.

DCC notes that SECMP 0025 does not propose any changes to the charging arrangements set out in SEC Section K. DCC has made the assumption that, in the absence of an agreed alternative arrangement by the Working Group, the costs associated with the implementation of SECMP 0025 will be allocated to DCC's fixed cost base and passed through to Parties via Fixed Charges.

7 RAID

The detail below provides a summary of the risks, assumptions, issues, dependencies and clarifications observed during the production of a DCC Impact Assessment. DCC requests that the Working Group considers this section and considers any material matters that have been identified during this Impact Assessment phase. Any changes may impact the proposed solution, implementation costs and/or implementation timescales.

7.1 Risks

Ref	Risk Description	Probability	Impact
	None identified		

7.2 Assumptions

DCC would like to confirm the validity of assumptions listed below with the Working Group. These assumptions have been used in the creation of this DCC Impact Assessment. Any changes to the assumptions may require DCC to undertake further assessment, prior to the contracting and implementation of this change.

Ref	Assumption Description	Assumption Accepted
A-001	This impact assessment has assumed an 'as is' baseline of the R2.0 specifications and these changes are expected to be implemented as part of DUIS version m.n and MMC version m.n.	Yes

Ref	Assumption Description	Assumption Accepted
A-002	DUIS XSD – Request and Response schemaVersion attributes will be used to indicate change to the schema	Yes
A003	MMC XSD – Response schemaVersion attribute will be used to indicate change to the schema	Yes
A004	The existing GBCS Use Case ECS35f will not be changed at all, e.g. to include access to the Electricity Network Party from a given GBCS version.	Yes
A005	The new GBCS Use Case ECS35g will return exactly the same data in the payload as ECS35f	Yes
A006	GBCS Use Case ECS35f will be replaced by Use Case ECS35g. The existing Use Case name (Read ALCS Event Log) will be used, and the new Message Code is 0x00FD.	Yes
A007	SRV7.7 – ED's will be able to run this SRV from DUIS version m.n, MMC version m.n regardless of the ESME GBCS version.	Yes
A008	Due to the DUIS XSD and Parse software impacts, a new MMC XSD will be required.	Yes
A009	SRV 6.14.2 shall be added to the list of SRV's to be processed via SRV 8.13, if delivered locally, so that the new DCC Alert to the Electricity Network Party can be generated and sent.	Yes

Ref	Assumption Description	Assumption Accepted
A010	NXX is used as the place holder alert code for the new DCC Alert. The actual alert code shall be finalised after approval of this change request.	Yes

7.3 Issues

Ref	Issue Description	Severity	Priority
	None Identified		

7.4 Dependencies

Ref	Dependency	Dependency Accepted
	None identified	

7.5 Clarifications Required

Ref	Clarification	Status
	None identified	

Appendix A – Design Specification Updates

This section sets out DCC's proposed changes required to DUIS because of this Modification Proposal. The changes are indicative and are designed to support the Working Group Consultation.

Latest Version -These changes are indicated against DCC User Interface Specification (version v2-0-draft-3)

DUIS Changes

SR 6.13 Read Event or Security Log

Section 3.8.63 Read Event Or Security Log – Table 161 ReadEventOrSecurityLog, shall be amended as per:

Service Request Name	ReadEventOrSecurityLog
Service Reference	6.13
Service Reference Variant	6.13
Eligible Users	Import Supplier (IS) Gas Supplier (GS) Electricity Distributor (ED) Gas Transporter (GT) Registered Supplier Agent (RSA)
Security Classification	Non Critical
BusinessTargetID - **Device Type applicable to this request**	Electricity Smart Meter (ESME) Gas Smart Meter (GSME) Gas Proxy Function (GPF) Communications Hub Function (CHF)
Can be future dated?	No
On Demand?	Yes
Capable of being DCC Scheduled?	No
Command Variants applicable to this Request - (Only one populated)	1 - Send (Non-Critical) 2 - Return for local delivery (Non-Critical) 3 - Send and Return for local delivery (Non-Critical)
Common Header Data Items	See clause 3.4.1.1 **Error! Reference source not found.**
Data Items Specific to this Service Request	See Specific Data Items Below
Possible responses from this Service Request	These are the possible responses applicable to this Service Request. Please see clause **Error! Reference source not found.** for more details o n processing patterns • Acknowledgement • Service Response from Device – GBCSPayload • Response to a Command for Local Delivery Request – LocalCommand Format Also see Response Section below for details specific to this request

Response Codes possible from this Service Request	See clause 3.5.10 **Error! Reference source not found.** for Common Response Codes	
GBCS Cross Reference	Electricity	Gas
GBCS v2.0 MessageCode	0x0048 (Device event log) 0x0049 (Device security log) 0x0093 (CHF event log) 0x0094 (CHF security log) 0x00B9 (ESME power event log) 0x00BA (ESME HAN ALCS event log)	0x0014 (Device event log) 0x00A1 (Device security log)
GBCS v2.0 Use Case	ECS35a (Device event log) ECS35b (Device security log) ECS35c (CHF event log) ECS35d (CHF security log) ECS35e (ESME power event log) ECS35f (ESME HAN ALCS event log)	CS10a (Device event log) CS10b (Device security log)
GBCS vn.0 MessageCode	0x0048 (Device event log) 0x0049 (Device security log) 0x0093 (CHF event log) 0x0094 (CHF security log) 0x00B9 (ESME power event log) 0x00FD (ESME HAN ALCS event log)	0x0014 (Device event log) 0x00A1 (Device security log)
GBCS vn.0 Use Case	ECS35a (Device event log) ECS35b (Device security log) ECS35c (CHF event log) ECS35d (CHF security log) ECS35e (ESME power event log) ECS35g (ESME HAN ALCS event log)	CS10a (Device event log) CS10b (Device security log)

Section 3.8.63.3 Specific Validation for this Request, table shall be amended as per:

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Read Log Period validation.

Response Code	**Response Code Description**
E061301	Log To Read / Device Type mismatch. The Log to Read is not applicable to the Device Type
E061304	Invalid User Role. The ALCS Event Log is not available to the requesting User Role. Only the IS and ED User Roles are eligible to read this log OR The User Role is ED and the ESME firmware version is not certified to GBCS vn.0 or later.

SR 8.13 Return Local Command Response

The following table lists the Service Requests Responses and Device Alerts needed by the DCC Systems from Users via the return Local Command Response Service Request if these are collected from execution of Local Commands on Devices. Note that a HHT will receive all Alerts / Responses from all HAN Devices whilst it is connected; these may or may not be related to the execution of Local Commands.

Service Request Responses
3.2 - Restrict Access For Change Of Tenancy
6.8 - Update Device Configuration (Billing Calendar)
6.14.1 – Update Device Configuation (Auxilliary Load Control Descriptions)
6.14.2 – Update Device Configuration (Auxilliary Load Control Scheduler)
6.15.2 - Update Security Credentials (Device)
6.23 - Update Security Credentials (CoS)
8.7.1 - Join Service (Critical)
8.7.2 - Join Service (Non-Critical)
8.8.1 - Unjoin Service (Critical)
8.8.2 - Unjoin Service (Non-Critical)
8.11 – Update HAN Device Log
8.12.1 - Restore HAN Device Log
8.12.2 - Restore Gas Proxy Function Device Log
11.2 – Read Firmware Version
11.3 - Activate Firmware

SR 7.7 Read Auxiliary Load Switch Data

Section 3, Table 12 Service Request Matrix – The entry for SR 7.7 shall be amended as per:

Service Request Name	Service Reference	Service Reference Variant	Critical	On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Service Request	Eligible User Roles
Read Auxiliary Load Switch Data	7.7	7.7	No	Yes	DSP	No	No	IS ED OU

Section 3.8.92.1 Read Auxilliary Load Switch Data

Table shall be amended as per:

Service Request Name	ReadAuxiliaryLoadSwitchData
Service Reference	7.7
Service Reference Variant	7.7
Eligible Users	Import Supplier (IS) Electricity Distributor (ED) Other User (OU)
Security Classification	Non Critical
BusinessTargetID - **Device Type applicable to this request**	Electricity Smart Meter (ESME)
Can be future dated?	DSP
On Demand?	Yes
Capable of being DCC Scheduled?	No
Command Variants applicable to this Request (Only one populated)	1 – Send (Non-Critical) 2 – Return for local delivery (Non-Critical) 3 – Send and Return for local delivery (Non-Critical)
Common Header Data Items	See clause 3.4.1.1
Data Items Specific to this Service Request	See Specific Data Items Below
Possible responses from this Service Request	These are the possible responses applicable to this Service Request. Please see clause 3.5 **Error! Reference source not found.** for more details on processing patterns • Acknowledgement • Service Response (from Device) – GBCSPayload

	• Response to a Command for Local Delivery Request – LocalCommand Format Also see Response Section below for details specific to this request	
Response Codes possible from this Service Request	See clause 3.5.10 **Error! Reference source not found.** for Common Response Codes	
GBCS Cross Reference	Electricity (ALCS and HCALCS)	
GBCS MessageCode	0x00BB	
GBCS Use Case	ECS61a	

New DCC Alert

Section 3.6.3.4 DCC Alert Codes – Add an additional row as per:

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient
NXX	ALCS/HCALCS configuration change	ALCS/HCALCS configuration changed on ESME	Upon successful completion of Service Request 6.14.2 Update Device Configuration (Auxilliary Load Control Scheduler) OR [Optional] Upon successful completion of Service Request 6.14.1 Update Device Configuration (Auxilliary Load Control Descriptions) OR Future Dated Execution Of Instruction Alert (DLMS COSEM) Alert (Alert Code 0x8F66 and Message Code 0x00CC) corresponding to AuxiliaryLoadControlSwitchesCalendar received by the DCC Data Systems	ED

Section 3.6.4 – Table 36 DCC Alert Codes / Response Codes Cross Reference – add an additional row as per:

Alert Code	Response Code
Nxx	I0

Section 3.9 Table 256 DCC Alert (sr:DCCAlert) data items – add an additional row as per:

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
ALCSHCALCSConfigurationChange	The trigger event indicates the ESME's ALCS/HCALCS configuration has changed	sr:ALCSHCALCSConfigChange	Nxx	None	N/A

Section 3.9 DCC Alert Messages – add a new sub-section after 3.9.16 as per:

3.9.zz ALCSHCALCS Configuration Change

3.9.zz.1 Specific Data Items for this DCC Alert

ALCSHCALCS Data Items Definition

Data Type / Data Item	Description / Allowable values	Type	Mandatory	Default	Units
ESMEDeviceID	The Device ID of the ESME for which the ALCS / HCALCS configuration has changed	sr:EUI (see Section 3.10.1.3 EUI)	Yes	None	N/A

MMC Changes

SR 6.13 Responses – Section 5.60.2.1.6 HCALCS Event Log, amend Table 158 as per:

Data Item	GBCS v2.0 Electricity Response	GBCS vn.0 Electricity Response
GBCSHexadecimalMessageCode	0x00BA	0x00FD
GBCS Use Case (for reference - not in header)	ECS35f	ECS35g

SR7.7 Responses – Section 5.89.2 MMC Output Format, amend Table 207 as per:

Data Item	Electricity Response (HCALCS or ALCS)
GBCSHexadecimalMessageCode	0x00BB
GBCS Use Case (for reference - not in header)	ECS61a
SupplementaryRemotePartyID	sr:EUI (as set out in DUIS Section 3.10 Shared Data Types) Where originator is Unknown Remote Party or Electricity Distributor
SupplementaryRemotePartyCounter	xs:nonNegativeInteger Where originator is Unknown Remote Party Or Electricity Distributor