SEC
Smart Energy Code

This document is classified as **White** in accordance with the Panel Information Policy. Information can be shared with the public, and any members may publish the information, subject to copyright.

Smart Energy Code

MP090

‘Incorporation of Non GBCS Non Mandated Alerts into the SEC’

Modification Report

Version 0.2

12 June 2020

Corporate member of Plain English Campaign
Committed to clearer communication
592

About this document

This document is a Modification Report. It currently sets out the background, issue, solution, impacts, costs, implementation approach and progression timetable for this modification, along with any relevant discussions, views and conclusions. This document will be updated as this modification progresses.

Contents

1. Summary 3
2. Issue 4
3. Solutions 5
4. Impacts 6
5. Costs 8
6. Implementation approach 9
7. Assessment of the proposal 10

Appendix 1: Progression timetable 12

Appendix 2: Glossary 13

This document also has two annexes:

- **Annex A** contains the business requirements for the solutions.
- **Annex B** contains the full Data Communications Company (DCC) Preliminary Assessment response.

Contact

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

Eessa Mansoor

020 3970 1105

Eessa.mansoor@gemserv.com

1. Summary

This proposal has been raised by Emslie Law from SSE.

Many DCC Users only recognise Alerts defined in the Great Britain Companion Specifications (GBCS). As a result, DCC Users' systems have not been designed to recognise Non GBCS Non Mandated (NGNM) Alerts that are not defined in the GBCS. These Alerts are currently being sent to DCC Users with no contextual information and no means to disable them. To monitor and manually define these Alerts is an inefficient working practice, especially if the DCC User deems the Alert unnecessary. This will continue until the NGNM Alerts are migrated into the Smart Energy Code (SEC).

There are three options when migrating the NGNM Alerts into the SEC, each with different levels of functionality associated with them, and therein predicted different costs.

- Migrate the NGNM Alerts into GBCS Table 16.2 only
- Migrate the NGNM Alerts into GBCS Table 16.2, with associated changes to the DCC Parse and Correlate software
- Migrate the NGNM Alerts into GBCS Table 16.2, with associated changes to the DCC Parse and Correlate software, and make them configurable by DCC Users

The costs range from minimal to approximately £230,000 depending on the solution option, with a three-month lead time for the required DCC System changes. All SEC Parties will be impacted. This modification is recommended for implementation in the November 2021 SEC Release as this will make changes to the GBCS.

2. Issue

What are the current arrangements?

Device Alerts are unsolicited messages sent by Devices to DCC Users e.g. a Supplier. SEC Schedule 8 'GB Companion Specification' defines the structure of the Alerts and contains a listing of Alerts, distinguishing between mandated and non-mandated Alerts. These GBCS Mandated Alerts and GBCS Non-Mandated Alerts can be found in Table 16.2 within the GBCS.

NGNM Alerts are Alerts that are built into Devices by Device manufacturers. These conform to GBCS formats but are not included in GBCS Table 16.2.

Suppliers and manufacturers have a general (but non regulatory) responsibility to ensure all Alerts supported by their Devices beyond those specified in the SEC are captured in the Non-GBCS Non-Mandated Alerts Register on the SEC Website until they are adopted into the SEC.

What is the issue?

Providing the Alert is in the correct format, the GBCS Parse & Correlate software allows any Alerts (whether they are included in GBCS or not) sent by Devices to be passed to the DCC User.

Many DCC Users only recognise Alerts defined in the GBCS as when the Smart Metering Implementation Programme (SMIP) was in its infancy Non GBCS Alerts were not expected to be in use. As a result, DCC Users' systems have not been designed to recognise NGNM Alerts.

As these are currently not included in the GBCS, the Parse & Correlate software provides the Alert code but does not provide a description of the problem the Alert is communicating. Suppliers therefore receive Alerts but are unable to identify the reason for them. Whilst Suppliers could access this information from the SEC website, this would be highly manually intensive. Alternatively, each Supplier could amend their systems to incorporate the Alert codes from the SEC website, but this would involve a large number of individual system changes.

Additionally, whilst a Supplier may know which NGNM Alerts to expect from meters and Devices installed by themselves, they will continually inherit meters and Devices for which they were not the original installer and will be unaware of NGNM Alerts on Devices that have 'churned' to them.

What is the impact this is having?

Depending on the individual Alert either the Supplier or the Network Operator can configure the Alerts by setting them on or off according to their business needs. In order to make NGNM Alerts configurable these would need to be included in GBCS Table 16.2 and be added to the DCC User Interface Specification (DUIS) Schema. If this is not implemented, Suppliers and Network Operators will receive large numbers of Alerts which have no description and which they are not able to stop receiving.

3. Solutions

Proposed Solution

The Proposer's Proposed Solution is to migrate the NGNM Alerts into GBCS Table 16.2 only. This means that these Alerts will not have the descriptions relayed to the DCC Users by the DCC Parse and Correlate software, and the DCC User will not be able to configure these Alerts using DUIS Service Requests.

This is expected to have no impact on the DCC Systems, and therefore no DCC costs.

Alternative Solutions

The Working Group has developed two Alternative Solutions for consultation:

Alternative Solution 1

The first alternative is to migrate the NGNM Alerts into GBCS Table 16.2, with associated changes to the DCC Parse and Correlate software. This mean that these Alerts will have the descriptions relayed to the DCC Users, but the DCC User will not be able to configure these Alerts.

This will have an impact on the DCC Parse and Correlate software, and therefore incur a DCC cost.

Alternative Solution 2

The second alternative is to migrate the NGNM Alerts into GBCS Table 16.2, with associated changes to the DCC Parse and Correlate software and make them configurable by DCC Users. This mean that these Alerts will have the descriptions relayed to the DCC Users and be configurable by them.

This will have further impacts on the DCC Systems, and therefore an expected higher DCC cost than Alternative Solution 1.

The table below summarises the features that would be available under each option:

Solution features			
Functionality	**Proposed**	**Alternative 1**	**Alternative 2**
Migrate NGNM Alerts into GBCS	✓	✓	✓
Update DCC Parse and Correlate software		✓	✓
Make Alerts configurable by DCC Users			✓

The business requirements can be found in Annex A.

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

Depending on the solution selected there will be varying levels of impact.

Proposed Solution

Devices may generate and send the Alerts according to their manufacturing configuration. The DCC system is not impacted by this solution. As now, Suppliers and Network Operators will not have the context of these NGNM Alerts and would need to manually search for the meaning of these Alerts.

Alternative Solution 1

Suppliers and Network Operators will have the context of these NGNM Alerts and would no longer need to manually search for the meaning of these Alerts. Suppliers will not be able to configure these Alerts and an error message will be returned to the Supplier if an attempt is made to configure the Alert.

Alternative Solution 2

Suppliers will have the context of these NGNM Alerts and would be able to configure them off if they do not want to receive these Alerts.

DCC System

The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Preliminary Assessment response in Annex B.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

SEC documents impacted by each solution			
SEC Documents	**Proposed**	**Alternative 1**	**Alternative 2**
Schedule 8 'GB Companion Specifications'	X	X	X
Appendix AD 'DCC User Interface Specifications'		X	X
Appendix AF 'Message Mapping Catalogue'			X

The changes to the SEC required to deliver each solution will be developed and provided during the Refinement Process.

Consumers

There is no impact on Consumers identified.

Other industry Codes

There is no impact on other industry Codes identified.

Greenhouse gas emissions

There is no impact on Greenhouse gas emissions identified.

5. Costs

DCC costs

Proposed Solution

There are no DCC Costs associated with the Proposed Solution.

Alternative Solution 1

The estimated DCC implementation costs to implement this modification is £21,147. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	**Cost**
Design, Build and Pre-Integration Testing (PIT)	£21,147
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC

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

Alternative Solution 2

The estimated DCC implementation costs to implement this modification is £230,150. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	**Cost**
Design, Build and Pre-Integration Testing (PIT)	£230,150
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC

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

SECAS costs

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

- Updating the SEC and releasing the new version to the industry.

SEC Party costs

Costs to SEC Parties will be sought during the Refinement Consultation.

6. Implementation approach

Recommended implementation approach

SECAS is initially recommending an implementation date of:

- **4 November 2021** (November 2021 SEC Release) if a decision to approve is received on or before 4 May 2021

The November 2021 SEC Release is the next viable SEC Systems Release that this modification can be included in which is expected to contain GBCS changes.

7. Assessment of the proposal

Solution development

Configuration

The Alert codes allocated to the NGNM Alerts were indicative of configurable Alerts. For this reason, the first Preliminary Assessment detailed the solution to allow these Alerts to be configurable (functionality for the DCC User to turn them on and off). However, at the Working Group the Proposer stated that was not what was required. SECAS challenged this, explaining that these Alert Codes indicated they should be configurable, which was further discussed at the Department of Business, Energy and Industrial Strategy (BEIS) led Technical Specifications Issue Resolution Sub-Group (TSIRS). The recommendation was that all solution options should be assessed and leave it up to the Modification Process to select the favoured option.

A second Preliminary Assessment was performed against two other solution options. This was shared for discussion at the June 2020 Working Group.

Discussion on the solution options

Following the outline of SECAS' proposed next steps, the Working Group were asked which of the two alternative solution options they preferred. The Proposer highlighted that the current solution used to address the issue aligns closely with the first alternative solution option, and that there would need to be a strong justification to configure Alerts as the price difference between the two alternative options is vast. It was asked whether these Alerts could be configured on the Device or via the DCC. The consensus was that most Alerts can be configured on the Device.

Working Group members commented that the first alternative option seems most sensible from a price perspective. The Proposer expressed that if Alerts are not currently configurable then there isn't a justification to make such Alerts configurable in the future. The Proposer also stated that though it would be beneficial to make these Alerts configurable, the cost of implementing the second alternative option is not justifiable.

The Working Group was expressing a preference for alternative solution 1. However, it was agreed that all of the solution options should be put forward in the Refinement Consultation to obtain broader input.

Support for Change

The three options were presented to a second Working Group. The Proposer confirmed that the preferred option was Alternative Solution 1 and that Alternative Solution 2 was significantly more expensive without a business case for making that change. The Working Group agreed that Alternative Option 1 was the preferred option however, they considered that another Party may want to implement Alternative Option 2. The Proposer agreed that if this was the case another Party could raise a draft proposal to implement this, although they would have to justify it with a sound business case.

Views against the General SEC Objectives

Proposer's views

The Proposer believes this modification would better facilitate SEC objective (a) as it supports the efficient provision, installation and operation, as well as interoperability of Smart Metering Systems. The implementation of NGNM alerts into the GBCS would ensure DCC Users' systems can recognise these alerts.

Appendix 1: Progression timetable

Once this Refinement Consultation is complete SECAS and the Proposer will review the responses and request the Impact Assessment.

Timetable	
Event/Action	**Date**
Draft Proposal raised	16 Oct 2019
Presented to CSC for comment and recommendations	29 Oct 2019
Panel converts Draft Proposal to Modification Proposal	15 Nov 2019
First Preliminary Assessment requested	15 Nov 2019
First Preliminary Assessment returned	11 Feb 2020
Modification discussed with Working Group	4 Mar 2020
Second Preliminary Assessment requested	15 Apr 2020
Second Preliminary Assessment returned	11 May 2020
Modification discussed with Working Group	3 Jun 2020
Refinement Consultation	12 Jun – 3 Jul 2020
Impact Assessment costs approved by Change Board	24 Jun 2020
Impact Assessment requested	7 Jul 2020
Impact Assessment returned	18 Sep 2020
Modification Report approved by Panel	16 Oct 2020

Appendix 2: Glossary

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

Glossary	
Acronym	**Full term**
BEIS	Department for Business, Energy and Industrial Strategy
DCC	Data Communications Company
DUIS	DCC User Interface Specification
GBCS	Great Britain Companion Specification
NGNM	Non GBCS Non Mandated
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
TSIRS	Technical Specification Issues Resolution Sub-group