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DP204

‘Incorporation of Category 3 Issue Resolution Proposals into the SEC – Batch 8’

Modification Report

Version 0.2

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Managed by



About this document

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

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This document also has one annex:

- **Annex A** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.

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1. Summary

This proposal has been raised by Eric Taylor from SMETS Design Ltd.

Issue Resolution Proposals (IRPs) identify and resolve issues in the Technical Specifications documents of the SEC. The Technical Specification Issue Resolution Sub-group (TSIRS) has determined all solutions and has requested these be progressed as a Modification Proposal for implementation into the SEC. Implementation of these IRPs will ensure Devices operate as they are intended.

The Proposed Solution is to incorporate these IRPs into the SEC.

The Data Communications Company (DCC) has performed an assessment of these IRPs and consider them to be non-DCC System impacting and not requiring any DCC System testing. There is therefore no DCC costs associated with their implementation.

The modification will affect Suppliers, Other SEC Parties and the DCC. There will be no DCC costs, but Device Manufacturers and Suppliers will incur costs from providing new firmware to accommodate the changes. This is a Self-Governance Modification and is targeting the November 2022 SEC Release.

2. Issue

What are the current arrangements?

IRPs identify issues within the SEC Technical Specification documents and put forward a solution to the identified problem. In the early stages of the Smart Metering Implementation Program (SMIP), the Department for Business, Energy and Industrial Strategy (BEIS) took the lead in developing the SEC Technical Specifications. As part of this, BEIS also took responsibility for receiving and responding to issues raised internally, by the DCC, and by other interested parties. Since its inception, several hundred issues have been raised in relation to Technical Specifications through the TSIRS. In some cases, these queries have been resolved by providing an explanation of the Specifications, whilst others have resulted in proposed amendments to the Specifications in the form of IRPs. The IRP solutions identified have been developed by the TSIRS.

What is the issue?

The individual IRP details for this modification can be found on the Smart Energy Code Administrator and Secretariat (SECAS) website link [here](#). These documents reflect the issue, background information and details of the solution that has been discussed and agreed at TSIRS. They are an integral part of the SEC modification.

The IRPs included in this proposal, listed below, require changes to the Great Britain Companion Specification (GBCS) and the Smart Metering Equipment Technical Specifications (SMETS) with initial key impacts identified below.

IRP638 'Clarifications following TS1358'

GBCS section 13.3.5.10 contains a requirement that in practice can never be met. Therefore, this misleading reference needs to be removed.

IRP641 'Debt to Clear definition query'

There is a discrepancy between the glossary definition of Debt to Clear and the more detailed definition in the SMETS2.

IRP643 'Snapshots for multiple GSME actions'

The Technical Specifications require that Gas Smart Metering Equipment (GSME) undertake a number of actions at the same time, e.g., at midnight.

If these actions include the taking of a snapshot as well as steps that may update a value in that snapshot, then the order the GSME carries them out is important, in terms of the accuracy of data provided to Consumers and DCC Users.

IRP645 'Clarity on Event/Alert Code information'

GBCS Table 16.2 'Event and Alert Codes' contains incorrect data in the 'ESME/GSME Alert Always ON' column. This data contradicts the text within the GBGS and needs to be deleted to avoid confusion.

IRP650 'Correct SMETS refs in GBGS Table 16.2 for EC35g'

GBGS Table 16.2 'Event and Alert Codes' contains incorrect references for two fields for Failure or Success in changing or maintaining Auxiliary Controller state. These references need to be updated to the correct references.

IRP651 'Preventing Double Band End Devices changing band after I&C'

A Device (other than a Communications Hub) that can operate on 2.4 Gigahertz (GHz) and Sub GHz bands, but not both at the same time, should effectively become single band once installed and commissioned. The Device should only be able to operate on the other band if it is subsequently factory reset and installed and commissioned again. The current wording in the specification needs amending to remove ambiguity over this intent.

IRP652 'Aligning Alerts Table Configuration Responsibility'

GBGS Table 16.2 'Event and Alert Codes' contains incorrect information for a number of Alerts in column Q 'ESME / GSME Event/Alert Configuration Responsibility'. These need to be updated to specify configuration is not possible. There have also been improvements identified for the Excel notes for columns F, Q and AB. These will be improved as part of this IRP.

IRP653 ‘Clarify CCS01 UC text to more clearly state intent’

The previously implemented IRP510 ‘CH behaviour on 2nd CCS01’ provided information on Communications Hub behaviour when presented with two “join” commands consecutively. It has been identified that the text within the use case does not provide sufficient clarity and this aims to update that, to ensure the Communications Hub behaviour is as the original updated intended. It is noted that the current Communications Hubs all behave as per this proposed clarification text.

IRP654 ‘Query related to attributes of twin element meter’

GBCS Table 7.4 ‘Device Requirements’ contains some incorrect references, affecting the clarity on some requirements for Twin Element Electricity Smart Metering Equipment (ESME). This is in relation to the Primary and Secondary Active Import Registers.

IRP656 ‘Correcting referencing in GBCS Alerts Table’

GBCS Section 16.1.1 references two Alert types, namely ‘Y (1)’ and ‘Y (2)’ depending on the specific data that the Alert is required to contain. However, there are a few instances within Table 16.2 ‘Event and Alert Codes’ in relation to Auxiliary Proportional Controllers (APC) Alerts where the field is populated with (Y). These need to be amended to match the definitions in GBCS section 16.1.1.

What is the impact this is having?

These IRPs address discrepancies within the Technical Specifications that require correcting, or additional clarification. They have caused confusion amongst some SEC Parties and may continue to do so if not amended. Therefore, the TSIRS has discussed these issues and agreed that improvements are required to the Technical Specifications to address this.

Impact on consumers

The changes should not have an impact on consumers as they clarify Device behaviour and update referencing within the Technical Specification.

3. Solution

The Proposed Solution is to incorporate these IRPs into the SEC to add clarity and consistency to the Technical Specification. These changes have been discussed and approved by the TSIRS as part of the closure of each IRP.

A summary of the solutions to the current issues has been set out in the table below.

Solutions of the IRPs included in this modification				
IRP Ref	Impacted Technical Specification	Impacted Users	Devices Impacted	IRP solution
IRP638	GBCS v4.x	None	None	Correct references
IRP641	SMETS	None	None	Correct references
IRP643	GBCS v4.x	Suppliers	GSME	Insert recommendation on behaviour. Suppliers should be aware of differing behaviours
IRP645	GBCS v4.x	Device Manufacturers Suppliers	None	Provide clarification
IRP650	GBCS v4.x	None		Correct references
IRP651	GBCS v4.x	Device Manufacturers	GSME IHD PPMID HCALCS SAPC	Provide clarification – It is understood no Devices are in production that behave differently.
IRP652	GBCS v4.x	DCC Service Users	None	Provide clarification
IRP653	GBCS v4.x	Communications Hub Manufacturers	Communications Hub	Provide clarification
IRP654	GBCS v4.x	Device Manufacturers	ESME	Provide clarification
IRP656	GBCS v4.x	None	None	Correct references

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

Breakdown of Other SEC Party types impacted			
	Shared Resource Providers		Meter Installers
✓	Device Manufacturers		Flexibility Providers

Although Suppliers are not directly affected by the modification, they will be impacted by the clarifications and confirmation of Device behaviours.

Device Manufacturers will benefit from the additional clarifications delivered into the next version of the GBCS.

Although there are no DCC System changes, the DCC will be impacted by an uplift to the specifications.

DCC System

The DCC has identified these IRPs as 'Category 3' and therefore do not have any impacts on the DCC Systems or require any testing.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Schedule 8 'Great Britain Companion Specification' (GBCS)
- Schedule 9 'Smart Metering Equipment Technical Specifications' (SMETS)
- Schedule 11 'Technical Specification Applicability Tables' (TSAT)

Technical specification versions

These changes will be applied to the next Sub-Version of the following Technical Specification series at the time the modification is implemented:

- GBCS v4.x
- SMETS Glossary v5.x

These changes will also be applied to any new Principal Versions of these documents that subsequently become effective on or before the implementation date.

Devices

Devices impacted			
	Electricity Smart Metering Equipment		Gas Smart Metering Equipment
	Communications Hubs		Gas Proxy Functions
	In-Home Displays		Prepayment Meter Interface Devices
	Standalone Auxiliary Proportional Controllers		Home Area Network Connected Auxiliary Load Control Switches
	Consumer Access Devices		Alternative Home Area Network Devices

It is not expected that these IRPs will have any impact on Device behaviour as they update cross references, provide clarification to existing requirement, or add recommended behaviour as opposed to mandating behaviour.

Consumers

There will be no impact to consumers from this modification.

Other industry Codes

No other industry Codes are impacted by this proposal.

Greenhouse gas emissions

This proposal will have no effects on greenhouse gas emissions.

5. Costs

DCC costs

There is no impact on the DCC system so there will be no DCC costs to implement this modification.

SECAS costs

The estimated SECAS implementation cost to implement this as a standalone modification is one day of effort, amounting to approximately £600. This cost will be reassessed when combining this modification in a scheduled SEC Release. The activities needed to be undertaken for this are:

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

SEC Party costs

It is not expected that SEC Parties will incur specific costs from this modification, however there would be costs incurred from an uplift to a new version of the Technical Specification, as all with all uplifts.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **3 November 2022** (November 2022 SEC Release) if a decision to approve is received on or before 3 August 2022; or
- **29 June 2023** (June 2023 SEC Release) if a decision to approve is received after 3 August 2022 but on or before 29 March 2023.

As these are document only changes and do not affect Device behaviour SECAS recommends that they are targeted for the earliest possible SEC Release. The Technical Specifications are only updated once per year, therefore if a decision is not received in time for implementation to November 2022, then the fallback Release is currently expected to be June 2023.

7. Assessment of the proposal

Areas for assessment

Sub-Committee input

SECAS engaged with the Chairs from the Operations Group (OPSG), the Technical Architecture and Business Architecture Sub-Committee (TABASC), the Security Sub-Committee (SSC) and the Smart Metering Key Infrastructure Policy Management Authority (SMKI PMA) to confirm what input is required from these forums. SECAS and the Chairs agreed that the TABASC should review and provide confirmation on the issues, but that no other input was needed.

Observations on the issue

Are there impacts on Devices?

SECAS does not expect that these clarification and reference updates will impact current Device behaviour. Device Manufacturers were presented with these IRPs and agreed that November 2022 implementation would be suitable.

Solution development

The issues and the solutions have been discussed and agreed upon by the TSIRS. Although the TSIRS is a BEIS led group, various SEC Parties are represented. The TSIRS agreed the solutions and agreed they should be implemented into the SEC. Please note, no business case analysis is performed by the TSIRS.

8. Case for change

Business case

These are document only changes and therefore there will be no DCC system costs associated with the modification. As Device behaviour should not be impacted, it is not expected that SEC Parties will incur costs from this modification. Therefore, the costs will be limited to SECAS time and effort for implementation.

The benefit for the modification is that the Technical Specifications currently contain incorrect information and therefore SEC Parties will be provided with greater clarity from these improvements.

Views against the General SEC Objectives

Proposer's views

The Proposer believes that this modification will better facilitate SEC Objective (a)¹ as the implementation of the IRPs will reduce the risk of future operational issues arising.

Views against the consumer areas

Improved safety and reliability

This change is positive in this area as the clarity on Technical Specifications will ensure Devices operate as intended.

Lower bills than would otherwise be the case

This change is neutral in this area.

Reduced environmental damage

This change is neutral in this area.

Improved quality of service

This change is neutral in this area.

Benefits for society as a whole

This change is neutral in this area.

Final conclusions

The TSIRS, which encompasses many different SEC Parties, has discussed each issue and developed each solution and has recommended they be included within the SEC.

The benefit for the modification is that the Technical Specifications currently contain incorrect information and therefore SEC Parties will be provided with greater clarity from these improvements.

These are document only changes and therefore there will be no DCC system costs associated with the modification. As Device behaviour should not be impacted, it is not expected that SEC Parties will

¹ Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain

incur costs from this modification. Therefore, the costs will be limited to SECAS time and effort for implementation.

Appendix 1: Progression timetable

SECAS will present this Draft Proposal to the Change Sub-Committee (CSC) on 21 June 2022 for approval to proceed directly to the Report Phase as a Self-Governance Modification. Following this the modification will be issued for Modification Report Consultation and subsequent Change Board vote.

Timetable	
Event/Action	Date
Draft Proposal raised	10 May 2022
Draft Proposal presented to CSC for comment	17 May 2022
Presented to TABASC for feedback	16 Jun 2022
Draft Proposal converted to Modification Proposal	21 Jun 2022
Modification Report approved by CSC	21 Jun 2022
Modification Report Consultation	22 Jun – 12 Jul 2022
Change Board Vote	27 Jul 2022

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
APC	Auxiliary Proportional Controller
BEIS	Department of Business, Energy and Industrial Strategy
CH	Communications Hub
CSC	Change Sub-Committee
DCC	Data Communications Company
ESME	Electricity Smart Metering Equipment
GBCS	Great Britain Companion Specification
GHz	Gigahertz
GSME	Gas Smart Metering Equipment
HCALCS	Home Area Network Connected Auxiliary Load Control Switch

Glossary	
Acronym	Full term
IHD	In Home Display
IRP	Issue Resolution Proposals
OPSG	Operations Group
PPMID	Prepayment Meter Interface Device
SAPC	Standalone Auxiliary Proportional Controller
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMETS	Smart Metering Equipment Technical Specifications
SMIP	Smart Metering Implementation Program
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee
TSAT	Technical Specifications Applicability Tables
TSIRS	Technical Specifications Issue Resolution Sub-group