

This document is classified as **Clear** in accordance with the Panel Information Policy. Recipients can distribute this information to the world, there is no limit on disclosure. Information may be shared without restriction subject to copyright.



# MP137

## ‘Sharing Information on Defects and Issues’

### Modification Report

Version 0.5

8 November 2023

Corporate member of  
Plain English Campaign  
Committed to clearer  
communication

592



## About this document

---

This document is a draft 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.....	3
3. Solution .....	4
4. Impacts .....	5
5. Costs .....	6
6. Implementation approach .....	7
7. Assessment of the proposal .....	7
Appendix 1: Progression timetable .....	12
Appendix 2: Glossary .....	12

This document also has three annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains the Data Communications Company (DCC) Preliminary Assessment.
- **Annex C** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.

## Contact

---

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

**Elizabeth Woods**

020 4566 8335

[elizabeth.woods@gemserv.com](mailto:elizabeth.woods@gemserv.com)

## 1. Summary

---

This Modification Proposal has been raised by Ralph Baxter of Octopus.

Currently, there is no approach allowing Smart Energy Code (SEC) Parties and the Data Communications Company (DCC) to share information on known issues with Devices, or their compatibility, (except Communications Hubs) except via open forums, due to the commercially sensitive information surrounding the Devices. Though some Suppliers may have information to support the resolution of some Device issues, there is no accessible means to share such information across the industry. Consequently, the lack of an industry approach to tackling issues and defects posed by Devices and Device Model Combinations (DMC) means that issue fixes are slow for the end energy consumer.

This issue was discussed at the March 2020 SEC Panel meeting<sup>1</sup> and members agreed it should be progressed despite the commercial difficulties.

The Proposed Solution is for the DCC to build and maintain a database which can store issues and defects reported to it. The database will be populated from reports from Parties to the DCC where an issue or defect AND a fix has been identified.

This modification will impact all SEC Parties and the DCC. The costs for the DCC to make this change will be approx. £15,000-£25,000 with an additional Full Time Employee (FTE) also required to manage the database on an enduring basis. This modification is targeted for the June 2024 SEC Release and will be progressed as a Self-Governance modification.

## 2. Issue

---

### What are the current arrangements?

Interoperability issues are a key concern within the smart metering problem. The DCC runs a 'Top Issues Forum' where issues, defects and unusual Device behaviour can be discussed by Parties experiencing problems with interoperability. However, this forum operates without the recording of the issues and resolutions discussed to adhere to commercial sensitivity. Whilst this approach benefits the discussions and the confidence of Parties to discuss problems, it hinders the ability for relevant information to be shared to wider stakeholders.

### What is the issue?

With no approach which allows SEC Parties and the DCC to share information on known issues and Devices, except via forums such as the DCC's Top Issues Forum, those who cannot attend are not aware of potential fixes that may help with interoperability problems. Despite Parties raising issues, which are discussed and potential fixes being identified or agreed, this information, which would help resolve interoperability issues for many Parties, is not widely available.

---

<sup>1</sup> [SECP 78 1303 minutes](#)

### What is the impact this is having?

In the past few years, the lack of shared information, that some deem to be commercially sensitive, has led to the industry facing issues that may have a fix but it cannot be widely distributed or discussed. Following deployment of Devices into the field, the industry has recognised that Devices behave differently depending on the combination of Devices and firmware versions within a Home Area Network (HAN). Due to the commercial sensitivities regarding each manufacturer's Devices, issues are not openly discussed and therefore some DMCs that have a known fix may not be fixed because of the lack of information exchange.

When a Supplier gains a Device following a Change of Supplier (CoS), it may not operate in the same manner as the Devices that the Supplier installed itself due to the differing DMCs in the field. The variations of DMCs continue to grow across industry as the rollout continues. Therefore, the ability to share reliable and up to date information has increasing significance to ensure Devices maintain interoperable.

#### Impact on consumers

The lack of an industry approach to sharing fixes and workarounds for problems is slower than it could be if the information were easily shared.

## 3. Solution

---

### Proposed Solution

The Proposed Solution is for the DCC to develop and maintain a standalone database where an issue, defect or unusual Device behaviour can be recorded. This would apply to any Device. Any fixes that are identified can also be recorded on the database although issues and defects where fixes are not known will not be excluded from being recorded. This database will be initially populated with information that has already been gathered and is being held in the DSMS around Communications Hub issues and fixes. An FTE of the DCC will validate any reports submitted by Parties to ensuring correct data, any references to fixes and consistent presentation of data. There is also an option to require validation of the report by the manufacturer of the Device/Devices. Incidences where a fix has been identified and recorded on the database will be passed to Smart Energy Code Administrators and Secretariat (SECAS) monthly for publication on the SECAS website. SEC Parties can easily access and search the information to identify if what they are experiencing is a previously reported behaviour and identify if there is a fix for the problem that are experiencing.

The solution will require a disclaimer on the database as per the legal advice to ensure that those who view the database do not make assumptions about Device manufacturers from the information available.

## 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
✓	Meter Asset Providers		

The DCC will be required to develop and maintain the database. Suppliers, Network Parties and Manufacturers will be able to report issues, defects and fixes but will have a more easily accessible repository of information.

### DCC System

There are no changes to DCC Total Systems but the DCC will be required to develop and maintain a database.

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:

- Section H 'DCC Services'

### Consumers

This modification will have a positive impact on consumers as it will enable SEC Parties to identify fixes for interoperability problems more quickly, to enable a fix rather than potentially weeks of a Smart Metering System (SMS) not working and/or the inconvenience of replacement of Devices.

### Other industry Codes

This modification will have no impact on other industry Codes.

## Greenhouse gas emissions

This modification will not impact greenhouse gas emissions.

## 5. Costs

### DCC costs

There will be no DCC Total System impacts, however the DCC will be required to build and maintain a stand-alone database to hold issues, defects and fixes.

The estimated DCC implementation costs to implement this modification is £15,000-£25,000 plus ongoing costs of one FTE. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£15,000 - £25,000
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC (likely one FTE)

Based on the existing requirements, the total fixed price cost for a DCC Impact Assessment is £3,500 and would be expected to be completed in 30 Working Days.

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

### SECAS costs

The estimated SECAS implementation cost to implement this as a stand-alone modification is half a 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

We anticipate there will be no SEC Party costs but this will be confirmed during the Refinement Consultation.

## 6. Implementation approach

---

### Recommended implementation approach

SECAS is recommending an implementation date of:

- **7 November 2024** (November 2024 SEC Release) if a decision to approve is received on or before 7 August 2024; or
- **27 February 2025** (February 2025 SEC Release) if a decision to approve is received on or before 27 November 2025.

No DCC Total System changes are required and there are no technical specification changes. The DCC has stated that this will take approximately three months to implement from decision. The earliest Release it could be included in is the November 2024 Release.

## 7. Assessment of the proposal

---

### Areas for assessment

#### Views of the Change Sub-Committee

SECAS advised that this modification had previously been presented to the Panel, who had acknowledged the commercial sensitivity. However, the Panel highlighted the direct incentive to share information between Parties for interoperability purposes, whilst making sure that end Consumers are not impacted when switching Suppliers.

The CSC noted that the 'material vulnerabilities' provisions could be called upon to get around any commercial or legal blockers for sharing the data but felt this would be excessive.

#### Views of the DCC

The DCC considered that this modification would need legal advice depending on the information being proposed to be shared as it could potentially hold commercially sensitive information. They also noted [SECMP0009 'Centralised Firmware Library'](#) and how the result left Manufacturers unhappy due to information being shared as it could impact the meter manufacturer's commercially. As a result, the DCC raised a concern around the lack of clarity on what information is confidential or commercially sensitive information. The DCC advised if the information is openly discussed in forums, it is possible that the information is no longer confidential under SEC Section M4 'Confidentiality'. The DCC believed that they could not share information around Devices as this information had been provided to the DCC in confidence by manufacturers.

#### Views of the Sub-Committees

The Security Sub-Committee (SSC) was keen to be kept informed of the progress of this modification, particularly where defects and issues affected security aspects. It also enquired how this would be

policed to ensure everyone is both sharing information and using the information provided in a fair and equitable manner.

### Sub-Committee input

SECAS has engaged with the Chairs from the Operations Group (OPSG), the Technical Architecture and Business Architecture Sub-Committee (TABASC), the SSC and the Smart Metering Key Infrastructure Policy Management Authority (SMKI PMA) to confirm what input is required from these forums. SECAS believes the following Sub-Committees will need to provide the following input to this modification:

Sub-Committee input	
Sub-Committee	Input sought
OPSG	The OPSG were keen to understand the impacts on interoperability
SMKI PMA	The SMKI PMA did not believe this was relevant to them
SSC	The SSC wanted to be kept up to date for how any defects and issues with security implications in the database would be dealt with
TABASC	The TABASC wanted to be kept up to date with any business process changes

### Observations on the issue

The DCC suggested that to implement a solution it would be necessary to progress a SEC modification, an approach which was endorsed by the Panel.

### Views of Device Manufacturers

SECAS received feedback from Manufacturers regarding the commercial sensitivity surrounding the Draft Proposal. They expressed their concerns regarding the commercial considerations around what information is shared around defects and when. They agreed that there was an issue and were supportive for a co-ordinated approach.

### Solution development

#### Base data

Originally the Proposer had asked that the information held by the DCC in its DSMS was used to populate the new database. Whilst the DSMS is accessible by any Supplier it is not easily searchable as the information is held in 'free text format'. Initially the DCC believed that it would be possible to make the information already gathered available. This led to the development of the Proposed Solution. However, the DCC then expressed concerns around the commercial confidentiality of the information provided to them. The Preliminary Assessment was therefore requested without the specific request to use the historical information already accumulated in the DSMS. The DCC has agreed that extracting the information from the DSMS is technically not a problem if the legal concerns can be addressed and that the Preliminary Assessment is applicable to providing a database with no additional cost if the DCC need to import the historical information.



## Legal issues

### *Bias*

Manufacturers were concerned from the beginning of this modification around commercially sensitive issues. The main concern was that if the database was open to anyone to search then purchasing decisions could be based on the information on defects recorded in the database against a particular manufacturer. Manufacturers and the Energy and Utilities Alliance (EUA) were concerned that this could adversely affect the reputation of Manufacturers who came forward with information whilst protecting those who did not offer information freely. During the Working Group discussions Suppliers understood these concerns but stated that purchasing decisions had likely been completed some time ago and Suppliers were unlikely or unable to change their contracts with Manufacturers now. The DCC was also concerned about this aspect of sharing the information. SECAS requested that the SEC Lawyer review these concerns and the SEC Lawyer indicated that they could be overcome by a prominent disclaimer at the front of the database that 'no recommendations are made or intended'.

### *Confidentiality*

The DCC were also concerned about the information in terms of the circumstances under which it was provided to them stating 'Publishing data provided by Device manufacturers to DCC could be seen as a breach of confidence and leave DCC open to charges of not operating a "fair" system.'

SECAS requested that the SEC Lawyer review these concerns and the SEC Lawyer indicated that most could be overcome by a disclaimer at the front of the database. They stated that whether or not the existing DCC data if provided by manufacturers is used for the new database will be a policy decision. They also stated that the existing data may be considered crucial to the utility of the new database and that populating a new database with the new data will not be sufficient (at least for some time). They stated that it warrants careful consideration and [confidentiality] should be weighed against the benefits of using the existing defect data. They stated that information provided by Suppliers was not confidential as this would be 'Supplier data'.

### *Other concerns*

The Change Sub-Committee (CSC) had indicated that 'material vulnerabilities' provisions could be called upon to get around any commercial or legal blockers but felt this would be of extreme solution options. The DCC had also commented that if the information is openly discussed in forums, it is possible that the information is no longer confidential under SEC Section M4 'Confidentiality'.

***We seek views in the Refinement Consultation around whether Parties think the benefit of the information that is currently stored in DSMS relating to Devices to assist in the resolution of interoperability issues outweighs the risks to manufacturers confidentiality and the potential that manufacturers may not be forthcoming with information in the future if they know it will be shared.***

## Manufacturers concerns

Manufacturers expressed concern from the beginning of this modification that publishing data on issues and defects was unfair on them. They believed this would lead to a situation where a Supplier looking to purchase Devices could easily search the database and judge purchasing decisions purely based on the number of defects listed against a manufacturer.

SECAS were sensitive to these concerns and spent many months facilitating meetings to establish under what circumstances manufacturers would be happy to share issue and defect data. Manufacturers were concerned about reputational damage from Suppliers being able to search the number of defects recorded against one manufacturer which may impact purchasing decisions. Manufacturers were also concerned about Suppliers being able to submit issues and defects to the database in case they were not 'real issues' but instead some error caused by the way in which Suppliers were using the Devices/Business processes.

During Working Group discussions manufacturers stated that they issued Release notes with each Device which they were happy to provide to Suppliers with whom they did not have a contract but picked up their Devices through customer churn. Suppliers responded to this by highlighting that Release notes were very high level and did not go into detail about what Device behaviours could be observed during interoperability issues. They also stated that when new firmware was issued (to any Device within a SMS) after the publication of Release notes, the Release notes would not cover any interoperability issues that may be seen as a result of the new firmware version.

Manufacturers also pointed out that in at least one instance they had made voluntary amendments to their Devices to accommodate a Communications Hub defect and aid interoperability.

**We seek views as part of a Refinement Consultation as to whether:**

- **Parties consider that manufacturers would suffer reputational damage through the data relating to their Devices being made freely available and searchable**
- **access to data would deter manufacturers from submitting issues, defects and/or fixes**
- **Supplier reports of issues and defects should be validated by manufacturers and/or an employee of the DCC**

### **DMC/firmware issues**

Working Group discussions highlighted that DMCs were key information in establishing where interoperability issues were occurring. Some Suppliers believed that the DMC information was critical, and manufacturers believed that providing data by allowing SEC Parties to only search on DMC would provide an additional level of anonymity. However, the feasibility of search for a specific DMC, considering the total number of DMCs available was questioned. Working Group members also believed that the information should also include the firmware versions that the Devices of an SMS were operating on.

***We seek views in the Refinement Consultation as to what level of DMC should be searchable:***

- ***Should just a Device model be searchable or should it be limited to an Electricity Smart Metering Equipment (EMSE)/ Gas Smart Metering Equipment (GSME) and Communications Hub combination?***
- ***How critical is it that firmware versions be included bearing in mind that DMCs including firmware version would potentially mean thousands of combinations?***

### **Making manufacturer input mandatory**

There were some discussions around making manufacturer input mandatory. Manufacturers were concerned about the level of resourcing this would need on an ongoing basis. The DCC favoured this approach, but other parties were less convinced.

***We seek views in a Refinement Consultation on whether manufacturer should be obligated to provide issues and defect information to the DCC.***

### **Validation of reports**

The DCC included in their Preliminary Assessment a FTE to provide validation of reports that came in from Suppliers. This was to ensure that manufacturers concern around erroneous reports were addressed.

***We seek views in a Refinement Consultation on whether an FTE is required to validate the reports from all sources to ensure spurious reports of issues are not recorded as a valid issue.***

### **Alternative options investigated**

#### SMDA

SECAS investigated several other alternatives during the Refinement Process. These included building and maintenance of the database by the Smart Metering Device Assurance Scheme. SECAS and the Proposer considered this could be an appropriate home for this issue. During the investigations it was discovered that the DCC receive approximately 5000 reports per week and the SMDA Scheme confirmed that it was not able to handle this level of contact. Initial high-level discussions also established that SMDA were unlikely to be able to provide a cheaper solution than the DCC were offering. SMDA would not be able to access any of the information currently held within the DSMS. It was also highlighted that Parties already report these issues to the DCC as incidents and any submission of data to another source would be duplication of effort on the part of the Party making the report.

#### Inclusion in the DSMS procurement

SECAS and the Proposer had discussions with the DCC to secure additional functionality in the new DSMS system, however the re-procurement was stopped and re-started with an expected implementation date in 2025. The Proposer felt this was worth pursuing but would not provide a guaranteed nor short term solution.

#### Wiki

The Proposer was keen to use a 'wiki' to allow Parties to access and update the information. SECAS requested a second Preliminary Assessment specifically around the use of a 'wiki'. The DCC response indicated that a Request for Proposal (RFP) would need to be issued since the DCC don't have the knowledge or expertise to provide this functionality. It highlighted that this would be costly and likely be a lengthy process.

#### SECAS

In response to the Proposer raising the issue at OPSG in July 2022 SECAS set up a 'OneNote' area as a trial and gave access to OPSG members to provide details of issues. SECAS communicated this through OPSG however it was rarely used by Parties. OPSG also suggested other options such as a 'WhatsApp group' but none has been successful to date.

## Appendix 1: Progression timetable

Timetable	
Event/Action	Date
Draft Proposal raised	20 Jul 2020
Present to CSC for initial comment	28 Jul 2020
Input sought from Sub-Committees and Parties	Jul – Aug 2020
Present to CSC for final comment and recommendations	25 Aug 2020
Panel converts Draft Proposal to Modification Proposal	11 Sep 2020
SECAS, DCC and Proposer develop straw man solution	Sep – Oct 2020
Engagement with Suppliers and manufacturers	Oct 2020
Discuss at Working Group	4 Nov 2020
Update presented to Panel	13 Nov 2020
Modification discussed with Working Group	3 Mar 2021
Modification discussed with Working Group	6 Oct 2021
Preliminary Assessment requested	25 Oct 2021
Preliminary Assessment returned	27 May 2022
Legal clarifications sought	29 Jul – 5 Aug 2022
Modification discussed at the Working Group	7 Sep 2022
Preliminary Assessment requested	28 Sep 2023
<i>Preliminary Assessment returned</i>	<i>27 Oct 2023</i>
<i>Refinement Consultation</i>	<i>8 Nov 2022 – 29 Nov 2022</i>
<i>Modification discussed with Working Group</i>	<i>6 Dec 2023</i>
<i>Request Impact Assessment costs at Change Board</i>	<i>20 Dec 2023</i>
<i>Impact Assessment requested</i>	<i>21 Dec 2023</i>
<i>Impact Assessment returned</i>	<i>16 Feb 2024</i>
<i>Modification discussed at Working Group</i>	<i>6 Mar 2024</i>
<i>Modification presented to CSC for progression to Report Phase</i>	<i>19 Mar 2024</i>
<i>Modification Report Consultation</i>	<i>20 Mar – 10 Apr 2024</i>
<i>Change Board vote</i>	<i>24 Apr 2024</i>

## 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
CoS	Change of Supplier
CSC	Change Sub-Committee
CSP	Communication Service Provider
DCC	Data Communications Company
DMC	Device Model Combination
DSMS	DCC Service Management System
ESME	Electricity Smart Metering Equipment
FTE	Full Time Employee
GSME	Gas Smart Metering Equipment
HAN	Home Area Network
OPSG	Operations Group
PIT	Pre-Integration Testing
RFP	Request for Proposal
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMDA	Smart Metering Device Assurance
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SMS	Smart Metering System
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee
UIT	User Integration Testing