

# **SEC Modification Proposal, SECMP0141, DCC CR4242**

## **SRV Visibility for Devices on the Self Service Interface (SSI)**

### **Preliminary Impact Assessment (PIA)**

<b>Version:</b>	<b>0.2</b>
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<b>Author:</b>	<b>DCC</b>
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## 1 Executive Summary

SECMP0141 proposes changes to the Self Service Interface (SSI) to allow Supplier Parties and the Network Operators to view the titles of the Service Request Variants (SRV) sent to the Devices they own, and the corresponding Service Responses from the Device.

Supplier Parties are currently unable to view SRVs or Service Responses from other Service Users that they receive on their Devices. This is due to an obligation in the Smart Energy Code (SEC) that states only an individual User can view the SRVs and Service Responses they send or receive. This leads to SRVs and Service Responses being received by Supplier Parties without visibility or information of the triggering requests.

The Change Board are asked to approve one of the following options for Full Impact Assessment:

**Option A**, Allow a Responsible Supplier to see all SRVs and Service Responses sent by all Users to a Device they own

- Total cost to complete the Full Impact Assessment of £14,162
- A timescale to complete the Full Impact Assessment of 30 working days
- ROM costs for SECMP0141, up to the end of Pre-Integration Testing (PIT) of up to £150,000

**Option B**, Allow a Responsible Supplier and Network Operator to see all SRVs and Service Responses sent by all Users to a Device they own

- Total cost to complete the Full Impact Assessment of £14,162
- A timescale to complete the Full Impact Assessment of 30 working days
- ROM costs for SECMP0141, up to the end of Pre-Integration Testing (PIT) of up to £150,000

### Benefits

The main beneficiaries of the change will be Supplier and Network Operator parties who will have visibility or information of the triggering requests associated with SRVs and Service Responses sent by all Users to a device they own. This will address current issues where other User's activity may be high priority or have security implications.

## 2 Document History

### 2.1 Revision History

Revision Date	Revision	Summary of Changes
09/04/2021	0.2	Initial version, DCC and DSP review

### 2.2 Associated Documents

This document is associated with the following documents:

Ref	Title and Filename	Source	Issue Date
1	MP141-Business Requirements-v0.3	SECAS	07/08/2020
2	Modification Report, DP141-Modification-Report-v0.3.pdf	SECAS	09/10/2020

References are shown in this format, [1].

### 2.3 Document Information

The Proposer for this Modification is Clive Hallam of DCC. The original proposal was submitted on 24<sup>th</sup> August 2020.

The Preliminary Impact Assessment was requested of DCC on 19<sup>th</sup> March 2021.

## 3 Context and Requirements

In this section, the context of the Modification, assumptions, and the requirements are stated.

The problem statement and requirements have been provided by SECAS and the Proposer.

### 3.1 Problem Statement

Supplier Parties are currently unable to view Service Request Variants (SRVs) or Service Responses from other Service Users that they receive on their Devices. This is due to an obligation in the Smart Energy Code (SEC) that states only an individual User can view the SRVs and Service Responses they send or receive. This therefore leads to SRVs and Service Responses being received by Supplier Parties without visibility or information of the triggering requests, which is causing issues where they may be high priority or have security implications. A change is required to alter the SSI and to provide the Service Audit Trail (SAT) information for all SRVs and Service Responses to, or from, any meter a User owns.

### 3.2 Business Requirements

This section contains the considerations and assumptions for each business requirement.

Req.	Requirement
1	Allow Responsible Supplier to see all SRVs and Service Responses sent by all Users to a Device they own via the SSI.
2	Allow Network Operator to see all SRVs and Service Responses sent by all Users to a Device they own via the SSI.

*Table 1: Business Requirements for SECMP0141, CR4242*

Note that the Working Group requested two solution options, Option A covering requirement 1, with Option B covering requirements 1 and 2.

#### 3.2.1 Requirement 1: Allow Responsible Supplier to see all SRVs and Service Responses sent by all Users to a Device they own via the SSI

This requirement needs a solution which will allow the Responsible Supplier of a Device they own to be able to view all SRVs and Service Responses sent to said Device by all Users. This will allow the Responsible Supplier to view all SRVs and Service Responses on any Device they own via the SSI, so that they can make an informed decision on whether to action them.

The 'all Users' in the requirement title applies to the following User roles:

- Other User
- Another Supplier Party
- Registered Supplier Agent (RSA)
- Network Operator
- Any future User role added after approval of the Modification Proposal

### **3.2.2 Requirement 2: Allow Network Operator to see all SRVs and Service Responses sent by all Users to a Device they own via the SSI**

This requirement needs a solution which will allow the Network Operator of a Device they hold a certificate on to be able to view all SRVs and Service Responses sent to said Device by all Users. This will allow the Network Operator to view all SRVs and Service Responses on any Device they hold a certificate on via the SSI, so that they can make an informed decision on whether to action them.

The 'all Users' in the requirement title applies to the following User roles:

- Other User
- Supplier Party
- Registered Supply Agent (RSA)
- Another Network Operator
- Any future User role added after approval of the Modification Proposal

## **3.3 Scope**

In this Modification, the term *Device* specifically applies to all Devices that are connected to the Home Area Network (HAN).

Based on discussions at the Working Group, DCC assumes that Device Alerts are not in scope of this change and, thus, Supplier Parties and Network Operators will remain unable to see Device Alerts sent to other Service Users. Other Suppliers or Network Operators should not be able to access data considered as confidential by a competitor within the SRV or Service Response payload. There should be no option to view the payload (contents) of the Service Requests or Responses, but any Service Responses related to the Service Requests will be listed.

This solution will be applicable to both SMETS1 and SMETS2 Devices.

## **4 Description of Solution**

The SSI will be modified to allow the Supplier Parties and the Network Operators to view the titles of the Service Requests sent to the Devices they own, and the corresponding Service Responses from the Device.

The information presented to the Service Users is based on the details of the transactions recorded within the SAT logs. No changes are expected to the SAT logs in terms of format or content. The access control rules of the Service Audit Trail screen will be revised to allow both Supplier Parties and the Network Operators to see all the Service Requests and Service Responses associated with the Devices they own.

For the Service User roles other than Supplier Party and Network Operator, the existing functionality will remain unchanged.

The Service Requests and Service Responses sent by other Service Users will be available only via the SSI Service Audit Trail screen. The revised access control rules implemented under this Modification will not be applicable to the reports generated based on the Service Audit Trail data.

The technical changes required for Solution Option A and Option B follow the same approach and, therefore, are not separated in terms of affected components and required support within this Preliminary Impact Assessment.

### **4.1 SSI Changes**

SSI changes to allow Supplier Parties and Network Operators to view the titles of Service Requests and Service Responses that have been associated with the Devices they own.

### **4.2 Security Impact**

No changes are expected to the existing DSP security controls as a result of this change. The implementation will, however, be security assured during the implementation phase. This includes reviewing designs, test artefacts and providing consultancy to the implementation and test teams.

A more detailed Security impact will be carried out as part of the Full Impact Assessment.

### **4.3 Data Management**

Data Management needs to provide the access control information required by the SSI to decide the level of information presented to a Service User.

### **4.4 Technical Specifications and Documentation**

There are no changes to any of the Technical Specifications.

Updates to the SEC will be required to allow the sharing of data specific to this Modification to the required parties.

SSI support materials should be updated to reflect these changes.

### **4.5 Infrastructure Impact**

There will be no change to the infrastructure design as a result of this change. Additional processing and storage will be required; however, these are not sufficiently large to warrant

the procurement of additional compute power or storage as part of this Modification. Note that the aggregated impact of many such changes to the DSP solution will ultimately result in a reduction of the available processing headroom assumed as part of the original DSP agreement. As such, DSP may need to raise a Change Request (CR) for the provision of additional infrastructure should the DCC Total System experience performance problems that are the direct result of such changes.

The change does not impact the DSP resilience or Disaster Recovery implementation.

## **4.6 Integration Impact**

An initial estimate of the costs for integration (PIT) testing of the Modification are included in this PIA.

The SIT team will conduct testing to verify that for all devices which are owned by the Supplier Parties and Network Operators that they will have the ability to view both the Service Requests sent to the devices and the responses from the devices that may be have been sent by other User Roles.

A new test scenario and test script will need to be created for SMETS1 and SMETS2 to view the titles of the Service Requests sent to the devices that Suppliers and Network Operators own, and the corresponding Service Responses.

A defined number of SRVs will be selected and multiple User Roles will execute those SRVs to enable validation of the functional change as part of SIT testing.

SIT costs are not included in this PIA.

No additional User Integration Testing (UIT) is assumed to be required for this change. However DCC is reviewing whether SSI changes should require UIT in future.

## **4.7 Application Support**

No changes to Application Support are expected.

## **4.8 Service Impact**

The introduction of this new Service User facing functionality has some potential to result in user queries that are passed through to the DSP Applications Management Support team. It is thought that this may result in less than ten additional calls per month. A more detailed service impact will be completed as part of the CR4242 Full Impact Assessment.

No changes to SLAs or reporting are expected as a result of this change.



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## **5 Implementation Timescales and Approach**

Notwithstanding in which release this change is implemented, based on the currently stated requirements, the elapsed time for DSP implementation will be approximately 3 months following the provision of full commercial cover.

The release lifecycle duration will be confirmed as part of the FIA. As currently planned, the Modification does not need to be part of a full SEC Release, and could be part of a Maintenance release.

## 6 Costs and Charges

The scope of supply under this PIA includes design, development (build), system testing, and testing within the PIT environments.

The Rough Order of Magnitude cost (ROM) shown below describes indicative costs to implement the functional requirements as assumed now. The price is not an offer open to acceptance. It should be noted that the change has not been subject to the same level of analysis that would be performed as part of a Full Impact Assessment and as such there may be elements missing from the solution or the solution may be subject to a material change during discussions with the DCC. As a result the final offer price may result in a variation.

The table below details the cost of delivering the changes and Services required to implement this Modification. For a PIA, only the Design, Build, and PIT indicative costs are supplied.

£	Design, Build and PIT, DSP Cost Range
Option A	£0 - £150,000
Option B	£0 – £150,000

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. It includes Unit Testing (also referred to as System Testing), Performance Testing and Factory Acceptance Testing by the Service Provider or supplier.
Pre-Integration Testing (PIT)	Each Service Provider tests its own solution to agreed standards in isolation of other Service Providers. This is assured by DCC.

Based on the existing requirements, the fixed price cost for a Full Impact Assessment is **£14,162** for either option and would be expected to be completed in 30 days.

## Appendix A: Risks, Assumptions, Issues, and Dependencies

The tables below provide a summary of any Risks, Assumptions, Issues, and Dependencies (RAID) observed during the production of this PIA. DCC requests that the Working Group considers this section and considers any material matters that have been identified. Changes may impact the proposed solution, implementation costs and/or implementation timescales.

### Assumptions

These assumptions have been used in the creation of this PIA. Any changes to the assumptions may require DCC to undertake further assessment, prior to the contracting and implementation of this change.

Ref	Description	Status/Mitigation
MP141-DA1	Assumes Device Alerts are not in scope of this change and, thus, Supplier Parties and Network Operators will remain unable to see Device Alerts sent to other Service Users	Open
MP141-DA2	Assumes the rights for a Service User to view the SRVs sent by other Service Users and the associated Service Responses will be formalised by way of SEC	Open
MP141-DA3	The right for the DSP to provide the information to the Service Users through the SSI, in accordance with the Modification, will be built into this SEC Modification as a statutory instrument	Open

## Appendix B: Glossary

The table below provides definitions of the terms used in this document.

Acronym	Definition
CR	DCC Change Request
DCC	Data Communications Company
DSP	Data Service Provider
FIA	Full Impact Assessment
HAN	Home Area Network
PIA	Preliminary Impact Assessment
PIT	Pre-Integration Testing
ROM	Rough Order of Magnitude (cost)
RSA	Registered Supplier Agent
SAT	Service Audit Trail
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMETS	Smart Metering Equipment Technical Specification
SRV	Service Request Variant
SSI	Self Service Interface
UIT	User Integration Testing