

SIP Consultation

Consultation on proposed
changes to the Self-Service
Interface
– New SSI screen to support
“Firmware Distribution
Tracking” (SIP#7)

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1. Background

The Self-Service Interface (SSI) is a web-based portal which allows Users to obtain information about, and interact with, DCC Services. The requirements of which are set out in section H8 of the Smart Energy Code (SEC). Any changes to the SSI are required to be processed following the SSI Change Governance Process.

As part of the changes associated with SEC Modification SECMP0007 'Firmware updates to IHDs and PPMIDs', the DCC proposes the introduction of functionality to support a new "**Firmware Distribution Tracking**" feature.

SECMP0007 enables the DCC Systems to track the progress of a User's firmware update request at Device level that the DCC supports Update Firmware services from Users for (ESME, GSME, PPMID and HCALCS), and to identify the different stages of firmware update processing. Once this data is stored within the DCC Systems, this data can be made available to Users for query and display purposes via the SSI, though note that this will not include firmware tracking for Communications Hubs.

This represents new functionality to the SSI and is presented here as an SSI Improvement Proposal (SIP); this proposal has been allocated the reference SIP#7. This SIP has presented and discussed with Users at the February 2021 DCC Design Release Forum, along with example screenshots.

Section 2 of this consultation provides details of the proposed changes to the SSI linked to SECMP0007 and section 3 presents example screenshots of those proposed changes.

Section 4 asks Users for their views on the proposed changes.

Section 5 provides details of the next steps DCC will take.

Section 6 provides details on how to respond to questions posed.

2. SSI Issue and SSI Improvement Proposal

2.1. The Issue

Currently, there is limited Tracking that occurs within the DCC Systems to monitor and report back to Users on the progress of their Update Firmware Service Requests sent to the DCC.

As part of the solution to support SEC Modification SECMP0007 a new "**Firmware Distribution Tracking**" functionality available on the SSI for all SMETS2 Device Types that the DCC supports Update Firmware services for (excluding the Comms Hub) is proposed.

This new Firmware Distribution Tracking functionality will track the progress of a User's Update Firmware Service Requests at Device level through the DCC Systems and update/report on the different stages of the firmware update processing from receipt through to completion, including any error notifications.

Each User's Update Firmware Service Requests sent to the DCC, and their associated "Processing Status" values, will be available for query and visible to them via a new SSI **Firmware Distribution Tracking** screen. This change will provide additional information to Users and allow them to monitor DCC firmware delivery performance more closely than is currently possible.

2.2. SSI Improvement Proposal

SSI#7: New SSI screen to support " <i>Firmware Distribution Tracking</i> "	
Problem Statement	Currently, there is limited Tracking that occurs within the DCC Systems to monitor and report back to Users on the progress of their Update Firmware Service Requests sent to the DCC.
Proposer	SECMP0007 working group
Description (confirming if adding, removing or amending functionality)	<p>A new "<i>Firmware Distribution Tracking</i>" SSI screen is proposed to be added to the SSI. This functionality will enable Users to track the progress of their firmware updates sent to the DCC by querying details of recent firmware update distribution requests held within the DCC Data Systems. The functionality will be available for all SMETS2 Device Types that the DCC supports Update Firmware services for (ESME, GSME, PPMID and HCALCS, excluding CHs).</p> <p>No other functionality will be amended or removed.</p>
Benefits	<p>This new functionality will:</p> <ul style="list-style-type: none"> • Enable Users to monitor the progress of their Update Firmware Service Requests sent to the DCC and determine their current 'Processing Status' to identify where the request is up to in the overall processing cycle. • Ensure Users can access the newly stored Firmware Distribution Tracking data
SEC Parties Impacted	<p>Large Suppliers</p> <p>Small Suppliers</p>
Anticipated Cost Range	This cost has been covered through the SEC Modifications Process via SECMP0007, and as such represents no additional cost to Industry.
Anticipated timescale to develop and deliver	Implementation of the new SSI screen is planned for the next scheduled SEC Release in November 2021 providing sufficient lead-time for the delivery processes and Release governance to complete.

The new "*Firmware Distribution Tracking*" SSI screen will enable Users to query details of recent firmware update distribution requests held within the DCC Data Systems. Users will be able to view the last recorded processing status of a device using this new SSI screen. This functionality will allow single device look up, and not allow batch updates to be queried.

In this new SSI use case, an authenticated User can search for and view details of Devices and Service Requests related to firmware distribution using one of two criteria,

- Service Request ID or
- DeviceID

This new feature is intended for use as a diagnostic tool to understand the progress and current status of a particular Update Firmware Service Request, or Update Firmware request for a particular specified device.

Please note that the new SSI screen is not intended to provide wider reporting information, for example of the rollout progress of a new firmware version to a large estate of devices. As such the new SSI use case provides a single User specified DeviceID / ServiceRequestID search value. It does not support multiple search criteria via an input list/file.

As such, the firmware distribution tracking data used as the data source has only a relatively short retention window, [30] days, before being deleted. Older data pertaining to Update Firmware Service Requests continues to be available via the existing Service Audit Trail use case, which remains unchanged.

Each different stage within the firmware update processing has been allocated a distinct "Processing Status" within the DCC Systems and each Update Firmware Service Request received by DCC and successfully validated will be tracked against these Processing status values and updates stored as and when the processing status changes for each Device.

Each Firmware Distribution Request for a specified Target DeviceID will have its "Processing Status" value set to one of the following status values to identify the different stages of firmware update processing, each of these states are supported by existing system alerts or values and require no additional DSP amendments:

- Rejected by DSP
- Accepted by DSP
- Not Accepted by CSP
- Approved for Distribution
- Failed CH Transfer
- Successful CH Transfer
- Not Delivered at HAN
- Successful HAN Transfer
- Activation Failed
- Firmware Activated
- Reset by DCC

An additional "Completion Status" shall also be visible alongside each Update Firmware Request being tracked with an overall status value of either:

- In Progress
- Failed
- Complete

If there is a need to reset the status of a device manually, where the User disagrees with the displayed Processing Status value, then the DCC Service Centre will be able to use a new interface provided within the SSMI to update this record to a status of "Reset by DCC" which resets the Processing status of a device and allows for the re-sending of the Update Firmware Request and the Firmware Distribution Tracking to start again.

Firmware Distribution Tracking history via the SSI screen is only available for monitoring Devices that are SMETS2 or later, that are not type 2 and are not Comms Hubs.

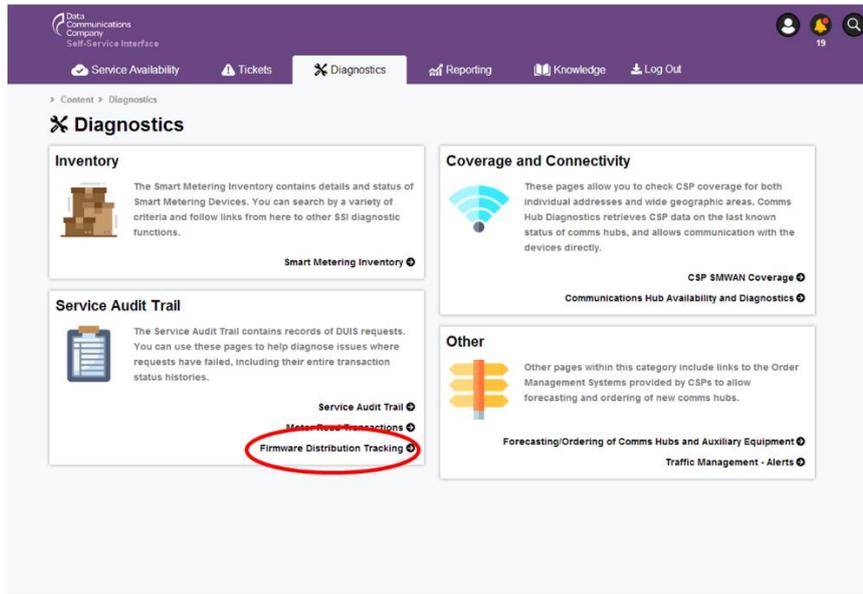
Initially, as part of the Nov 2021 SEC Release, Firmware Distribution Tracking will begin by tracking Firmware Updates to ESME and GSME devices only, but the Firmware Distribution Tracking will be extended to additional Device Types for PPMID and HCALCs when the DCC Systems supports the E2E distribution of firmware updates to these Devices at a later date.

The Firmware Distribution Tracking mechanism and display available to Users via the new SSI screen will be common to all device types.

3. Example Screenshots

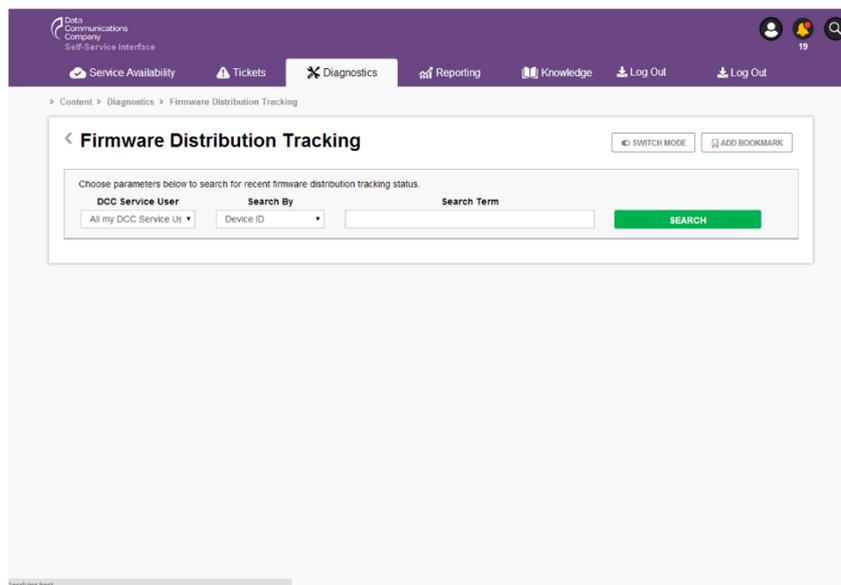
The following provides detail on the new functionality use and example screenshots to show how this new functionality will appear.

From the diagnostics tab in the SSI, the user should select “Firmware Distribution Tracking” under “Service Audit Trail”.

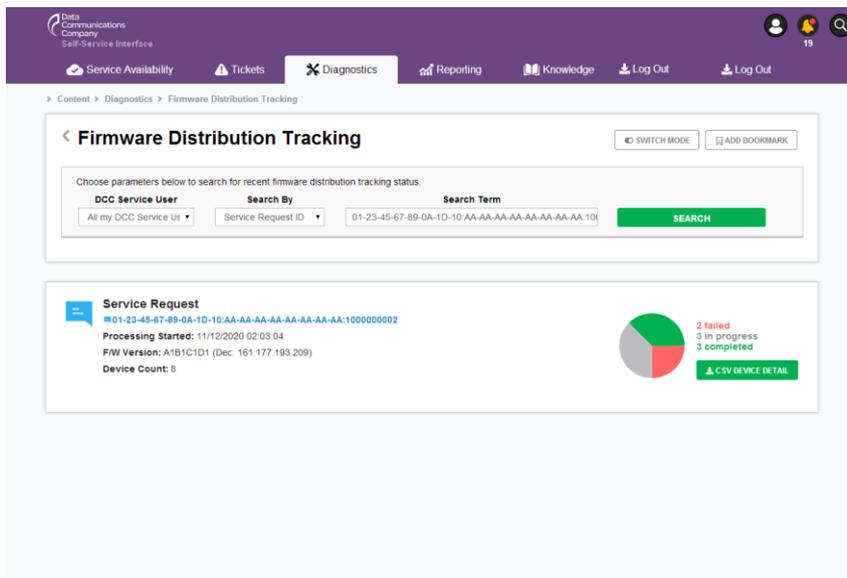


The user will be presented with the initial search form where search criteria can be entered. The user will have the option to select to search by “Service Request ID” or “Device ID” and enter the required search value in the “Search Term” field.

Users should note that this new feature is intended for use as a diagnostic tool to understand the progress and current status of a particular Update Firmware Service Request, or Update Firmware request for a particular specified device and so at least one of these “search by” criteria must be selected for query.

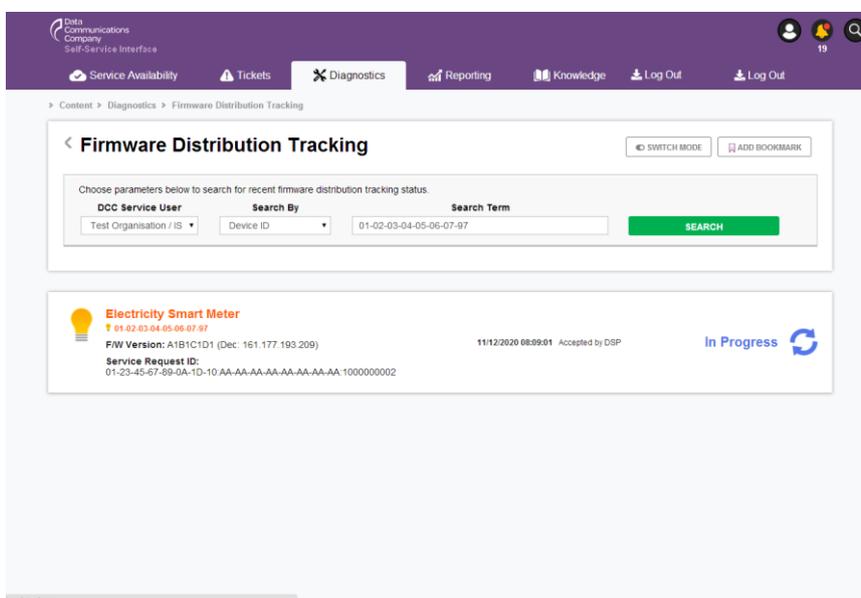


Results for searched "Service Request ID" will be displayed as below and results can be downloaded in CSV file format which will include details of the Service Request ID, Firmware Version, Device ID, Current Status, Current Status Reason, and Current Status Update Time and Date.

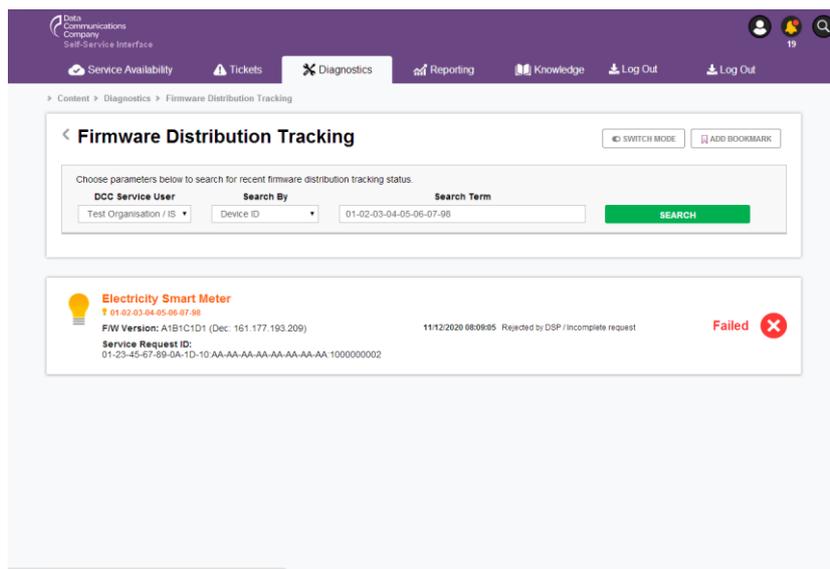


Results for searched "Device ID" will be displayed as below and results will include details of the one of the three possible Completion Status values ('In Progress', 'Failed' or 'Complete') as displayed on the screenshots below.

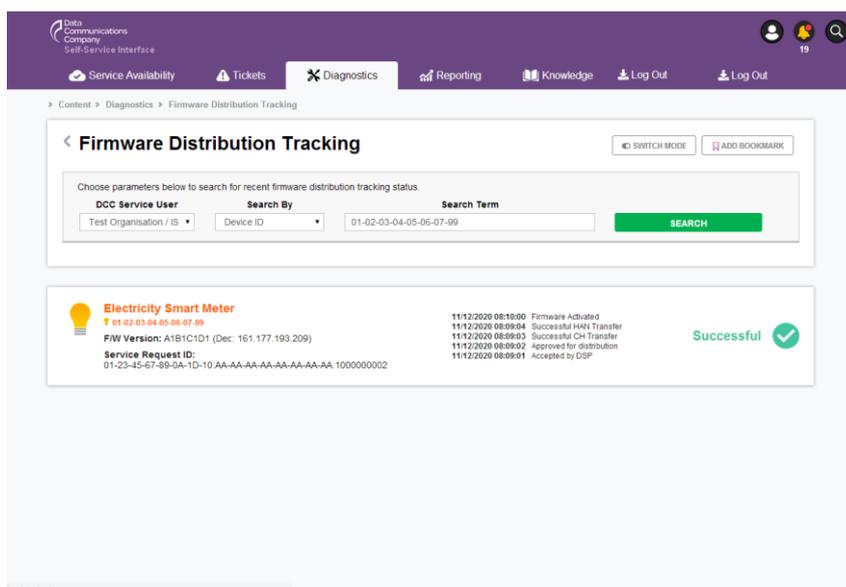
Results for searched "Device ID" where the Update Firmware Service Request has a Completion Status value of "In Progress" will be displayed as below.



Results for searched "Device ID" where the Update Firmware Service Request has a Completion Status value of "Failed" will be displayed as below.



Results for searched "Device ID" where the Update Firmware Service Request has a Completion Status value of "Successful" will be displayed as below.



4. Consultation Question

Question 1

Do you agree to the additions to the SSI as described? If not, please provide a rationale for your response.

5. Next Steps

These are the next steps following the consultation closure on 26 March 2021.

DCC will review and collate consultation responses and consider any relevant refinements to the SIP. The refined SIP and collated consultation responses will be provided to the SEC Panel or delegated Sub-Committee for approval or rejection as we move through the SSI Change Governance Process.

6. How to respond

Please provide responses by 17:00 on 26 March 2021 to DCC at:
consultations@smartdcc.co.uk

DCC will complete a summary of questions, comments and responses to be shared with SEC Operations Group and be added to the documentation of the consultation.

Consultation responses may be published on our website www.smartdcc.co.uk. Please state clearly in writing whether you want all or any part, of your consultation response to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential. Please note that responses in their entirety (including any text marked confidential) may be made available to the Department of Business, Energy and Industrial Strategy (BEIS) and the Gas and Electricity Markets Authority (the Authority). Information provided to BEIS or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004). If BEIS or the Authority receive a request for disclosure of the information we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.