Data
Communications
Company

SSI Reporting Specification

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DCC Baseline Technical Documents

Contents

1 Introduction

1.1 Purpose

The purpose of this document is to describe the presentation and functionality of reports delivered through the DCC Self-Service Interface for use by DCC Service Users, in order for those users to be able to understand the services provided, to integrate their IT infrastructure with the DCC Data Systems and to plan their testing and training strategies.

1.2 Scope

This document describes the reports for the initial design scope.

1.3 Referenced Documents

Key	Document Title	Issue	Dated
SSI_IS	SSI Interface Specification	1.1	04/08/2014
SSI_COCO	Self-Service Code of Connection	1.2	04/08/2014

2 Overview

2.1 Context

This document is intended to be read in conjunction with the Self-Service Interface Design Specification **{SSI_IS}**, which in its reporting use case (UC_Reporting_001 – Section 5.8) describes the method of navigating to and accessing reports, but hands off to this document to describe the exact operation of the reporting.

This document describes the generic structure and operation of all reports delivered through the Self-Service Interface, and then describes each individual report in terms of its description, inputs, outputs, and any other relevant report specific detail.

2.2 Common Report Operation

Self-Service Interface reports have a common method of presentation and operation:

- The DCC Service User accesses the report and is presented with a page providing:

    o The title of the report

    o A description of the report and its purpose

    o A list of input parameters

    o A "Next" button

- The input parameters are report specific, but may consist of:

    o Dropdown lists allowing the DCC Service User to select a value from a number of pre-defined options

    o Text boxes allowing the DCC Service User to enter textual input

    o Checkboxes allowing the DCC Service user to provide Boolean inputs

- The DCC Service User chooses input parameters and presses the "Next" button.

- If any inputs are invalid, the page is re-displayed with invalidation messages

- The DCC Service User is presented with a list of possible output fields, with a checkbox next to each, and a set of default fields selected.

- The DCC Service User changes the output field selects if desired, then presses the "Generate Report" button.

- The report is generated and displayed to the user in a tabular, paged format. The user may page through the data or sort it by any column.

- A count of the number of records returned in the report will be displayed.

- A "Download as CSV" button will be presented. Pressing this will result in a CSV download of the report data (note that the data will be ordered according to its original presentation, and the CSV file will contain all data for the report, not just the currently visible page).

- Note: If the number of output fields chosen exceeds a configured value *[9]*, the user will not be shown a tabular GUI view, and will instead be presented only with the option to download the CSV file.

- Note: If the number of records returned by the report exceeds a configured threshold *[500]*, it will be deemed not suitable for interactive browsing. In such cases a small

number of rows *[20]* will be displayed on screen to provide an indication of data format and to allow simple visual validation that the data content is as expected, along with the option to download a CSV version of the entire report output.

3   Access Control

Data provided by reports will be restricted to data defined to be available to the SMKI Organisation ID/s that the DCC Service User is associated with as part of their authentication with the Self-Service Interface. Please refer to the Self-Service Interface Design Specification **{SSI_FS}** section 3.1 for details of authentication, and section 2.16 for details of organisational entities and their use as a means of access control to data.

The table below shows the level of access available to reports as a result of organisation type roles - note that the DCC Service User must also have job type roles (as defined in {SSI_IS} section 3.3 Table 3 permitting them to access the reporting area of the Self-Service Interface. In the table below:

- F indicates that the role gives full access to the use case,

- C indicates that the role gives conditional access (based upon organisation membership).

- N indicates that the role does not give access to the use case

Report	EIS	EES	GIS	ENO	GNO	OU	SNA	EIS
RSMI_001 Installation Status Smart Meter report	C	C	C	C	C	N	C	C
RSMI_002 Smart Metering Device Status and Firmware Report	C	C	C	C	C	N	C	C
RSMI_003 Smart Metering Devices Status and Model Report	C	C	C	C	C	N	C	C
RSMI_004 Comms Hub SME Report	F	F	F	N	N	N	N	F
RSAT_001 Monthly Transaction Report	C	C	C	C	C	C	C	C
RSAT_002 Smart Metering Device Transaction Report	C	C	C	C	C	N	C	C

4 Report Definitions

4.1 Installation Status Smart Meter Report

4.1.1 RSMI_001 Installation Status Smart Meter Report

Data Sources and Frequency

This use case draws its data from a reporting copy of the DCC Smart Metering Inventory, in the same manner and with the same update frequency as the UC_Inventory_001 use case in the SSI Interface Design Specification **{SSI_IS}**

Summary

Enables DCC Service Users to run reports against the Smart Metering Inventory to show Smart Meters by postcode, fuel type and device status.

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "RSMI_001 Installation Status Smart Meter Report" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

Report Inputs

The user enters the following parameters:

Input Parameter	Definition
DCC Service User Organisation	Dropdown for selection of DCC Service User Organisation (SMKI Organisation ID)
Postcode	Optional text field. Wildcards at the end of postcode strings are accepted (e.g. KT*)
Fuel Type	Dropdown, values include: - Electricity - Gas - Both
Device Status	Checkboxes allowing inclusion of each of the following statuses: - Pending - Installed Not Commissioned - Commissioned - Decommissioned - Withdrawn - Suspended
Commissioning Date Start	Optional - Date (DD/MM/YYYY text field with

Input Parameter	Definition
	date picker)
Commissioning Date End[1]	Optional - Date (DD/MM/YYYY text field with date picker)

Report Outputs

*Outputs marked with a * indicate that they are checked by default on the output field selection page.*

Field Name	Data Type
* Device ID	String(23)
* Device Status Effective From Date	Date (DD/MM/YYYY)
* Device Model	String(50)
* SMI Status	String(26)
* MPxN	String(13), Null where not applicable
* Fuel Type	String(1) – "G"(as), "E" (lectricity), "B"(oth), Null where not applicable
* Energy Direction	String(1) – "I"(mport),"E"(xport), Null where not applicable
* Meter Consumer Type	String(1) – "D"(omestic), "N" (on-Domestic),"U" (nknown), Null where not applicable
* UPRN	String(12), Null where not applicable
Manufacturer	String(100)
Device Type	String(6) – "ESME", "GSME", "CHF", "GPF","HCALCS","PPMID","IHD"
SMETS Variant Type	String(10)
SMETS Version	String(10)
Firmware Version	String(10)
Firmware Version Status	String(8)
CSP region	String(1) – "N", "C", "S", "U"
Property postcode	String(8), Null where not applicable
DCC Compliant	String(1) – "Y", "N"
DCC Approved	String(1) – "Y", "N"

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[1] Note that the Commissioning Date range must be a maximum of 3 months

4.2 Smart Metering Devices Status and Firmware Report

4.2.1 RSMI_002 Smart Metering Devices Status and Firmware Report

Data Sources and Frequency

This use case draws its data from a reporting copy of the DCC Smart Metering Inventory, in the same manner and with the same update frequency as the UC_Inventory_001 use case in the SSI Interface Design Specification **{SSI_IS}**

Summary

Enables DCC Service Users to run reports against the Smart Metering Inventory to show Devices that are currently part of their portfolio, filtered by postcode, device status, device type, manufacturer, firmware version and firmware status.

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "RSMI_002 Smart Metering Devices Status and Firmware Report" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

Report Inputs

The user enters the following parameters:

Parameters(s) Available	Contents
DCC Service User Organisation	Dropdown for selection of DCC Service User Organisation (SMKI Organisation ID)
Postcode	Optional text field. Wildcards at the end of postcode strings are accepted (e.g. KT*)
Device Status	Checkboxes allowing inclusion of each of the following statuses: - Installed Not Commissioned - Commissioned - Suspended
Device Type	Checkboxes allowing inclusion of each of the following types: - Electricity Smart Meter - Gas Smart Meter - Gas Proxy Function - Communications Hub Function - HCALCS - PPMID - IHD
Device Manufacturer	Dropdown list of device manufacturers that exist within the DCC Smart Metering Inventory

Firmware Version	Optional text field (max. 10 chars)
Firmware Version Status	Checkboxes allowing inclusion of each of the following statuses: **(Not yet defined by DCC)**
Device Model	Dropdown list of device models that exist within the DCC Smart Metering Inventory
DCC Compliant	Dropdown Any/Yes/No
DCC Approved	Dropdown Any/Yes/No

Report Outputs

*Outputs marked with a * indicate that they are checked by default on the output field selection page.*

Field Name	Data Type
* Device ID	String(23)
Device Status Effective From Date	Date (DD/MM/YYYY)
* Device Model	String(50)
* SMI Status	String(26)
* MPxN	String(13) Null where not applicable
Fuel Type	String(1) – "G"(as), "E" (lectricity), "B"(oth) Null where not applicable
Energy Direction	String(1) – "I"(mport),"E"(xport) Null where not applicable
Meter Consumer Type	String(1) – "D"(omestic), "N" (on-Domestic),"U" (nknown) Null where not applicable
UPRN	String(12) Null where not applicable
Manufacturer	String(100)
Device Type	String(6) – "ESME", "GSME", "CHF", "GPF","HCALCS","PPMID","IHD"
* SMETS Variant Type	String(10)
* SMETS Version	String(10)
* Firmware Version	String(10)
* Firmware Version Status	String(8)
CSP region	String(1) – "N", "C", "S" Null where not applicable
Property postcode	String(8) Null where not applicable
* DCC Compliant	String(1) – "Y", "N"
* DCC Approved	String(1) – "Y", "N"

4.3 Smart Metering Devices Status and Model Report

4.3.1 RSMI_003 Smart Metering Devices Status and Model Report

Data Sources and Frequency

This use case draws its data from a reporting copy of the DCC Smart Metering Inventory, in the same manner and with the same update frequency as the UC_Inventory_001 use case in the SSI Interface Design Specification **{SSI_IS}**

Summary

Enables DCC Service Users to run reports against the Smart Metering Inventory to show Devices that are currently part of their portfolio, filtered by postcode, device status, device type and model. This is similar to RSMI_002 but with different input and output fields.

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "Report 2" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

Report Inputs

The user enters the following parameters:

Parameters(s) Available	Contents
DCC Service User Organisation	Dropdown for selection of DCC Service User Organisation (SMKI Organisation ID)
Postcode	Optional text field. Wildcards at the end of postcode strings are accepted (e.g. KT*)
Device Status	Checkboxes allowing inclusion of each of the following statuses: - Installed Not Commissioned - Commissioned - Suspended
Device Type	Checkboxes allowing inclusion of each of the following types: - Electricity Smart Meter - Gas Smart Meter - Gas Proxy - Communications Hub Function - HCALCS - PPMID - IHD
Device Model	Dropdown list of device models that exist within the DCC Smart Metering Inventory
Device Manufacturer	Dropdown list of device manufacturers that exist within the DCC Smart Metering Inventory

Report Outputs

*Outputs marked with a * indicate that they are checked by default on the output field selection page.*

Field Name	Data Type
Device ID	String(23)
Device Status Effective From Date	Date (DD/MM/YYYY)
* Device Model	String(50)
* SMI Status	String(26)
* MPxN	String(13) Null where not applicable
Fuel Type	String(1) – "G"(as), "E" (lectricity), "B"(oth) Null where not applicable
Energy Direction	String(1) – "I"(mport),"E"(xport) Null where not applicable
Meter Consumer Type	String(1) – "D"(omestic), "N" (on-Domestic),"U" (nknown) Null where not applicable
* UPRN	String(12) Null where not applicable
* Manufacturer	String(100)
Device Type	String(6) – "ESME", "GSME", "CHF", "GPF","HCALCS","PPMID","IHD"
* SME Variant	String(10)
* SMETS Version	String(10)
Firmware Version	String(10)
Firmware Version Status	String(8)
CSP region	String(1) – "N", "C", "S" Null where not applicable
Property postcode	String(8) Null where not applicable
DCC Compliant	String(1) – "Y", "N"
* DCC Approved	String(1) – "Y", "N"

4.4 Communications Hub With No Attached Devices Report

4.4.1 RSMI_004 Communications With No Attached Devices Report

This report is subject to a change request in progress

Data Sources and Frequency

This use case draws its data from a reporting copy of the DCC Smart Metering Inventory, in the same manner and with the same update frequency as the UC_Inventory_001 use case in the SSI Interface Design Specification **{SSI_IS}**

Summary

Gives DCC Service Users the ability to report on Communications Hubs where neither an ESME (electricity meter) or GSME (gas meter) is present.

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "RSMI_004 Communications Hub SME Report" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

Report Inputs

The user enters the following parameters:

Parameters(s) Available	Contents
DCC Service User Organisation	Dropdown for selection of DCC Service User Organisation (SMKI Organisation ID)
CSP	Checkboxes allowing inclusion of each of the following CSP: Arqiva Telefonica

Report Outputs

*Outputs marked with a * indicate that they are checked by default on the output field selection page.*

Field Name	Data Type
* Device ID	String(23)
Device Status Effective From Date	Date (DD/MM/YYYY)
Device Model	String(50)
* SMI Status	String(26)
Manufacturer	String(100)
CSP	String(1) – A / T
SMETS Variant Type	String(10)
SMETS Version	String(10)
Firmware Version	String(10)
Firmware Version Status	String(8)
DCC Compliant	String(1) – "Y", "N"
DCC Approved	String(1) – "Y", "N"

Additional Details

- Only devices that are communications hubs are included in the report output

4.5 Monthly Transaction report

4.5.1 RSAT_001 Monthly Transaction report

Data Sources and Frequency

This report draws its data from the Service Audit Trail database, and reflects the current view of that system (which itself may have up to one hour latency from live transactions)

Summary

Enables DCC Service Users to run reports against the Service Audit Trail to see aggregated monthly transactions filtered by month, CSP region, Meter Consumer Type and Service Reference Variant:

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "RSAT_001 Monthly Transaction report" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

Report Inputs

The user enters the following parameters:

Parameters(s) Available	Contents
DCC Service Users	Checkboxes for each of the SMKI Organisations that the user represents. It is mandatory that at least one is checked. Each DCC Service User will be represented as its SEC Party and SEC Role.
Month	Dropdown for calendar month
CSP Region	Checkboxes allowing inclusion of each of the following regions: North Central South
Meter Consumer Type	Dropdown containing possible meter consumer types from the DCC Smart Metering Inventory
Service Reference Type (On Demand/Future Dated/Meter Scheduled)	Checkboxes allowing inclusion of each of the following types: On Demand Future Dated Meter Scheduled

Report Outputs

Field Name	Data Type
Service User ID	String(23) - EUI64
CSP Region	String(1) – "N", "C", "S", "U"
Domestic/Non domestic/Unknown	String(1) – "D"(omestic), "N" (on-Domestic),"U" (nknown)
Service Reference Variant	String(7)
Service Reference Name	String(100)
On Demand/Future Dated/Meter Scheduled	String(1) – "O", "F", "M"
Identification of Core / Elective Service Request	String(1) – "C", "E"
Number of Service Requests	Number

Additional Details

- Note that DCC Service User chosen as inputs search against DCC Service User IDs in the Service Audit Trail (e.g. actual message originators), not the Meter Inventory and Registration Database.

4.6   Smart Metering Device Transaction report

4.6.1   RSAT_002 Smart Metering Device Transaction report

Data Sources and Frequency

This report draws its data from the Service Audit Trail database, and reflects the current view of that system (which itself may have up to one hour latency from live transactions), as well as postcode data from the DCC Smart Metering Inventory, in the same manner and with the same update frequency as the UC_Inventory_001 use case in the SSI Interface Design Specification **{SSI_IS}**

Summary

Report enables Service Users to run reports against the Service Audit Trail to see transactions for a device based on transaction dates, postcodes and device IDs

Preconditions

- The DCC Service User has authenticated against their Identity Provider and gained access to the Self-Service Interface

- The DCC Service User has navigated to the "Reporting" section of the Self-Service Interface and chosen "RSAT_002 Smart Metering Device Transaction report" from the list of displayed reports

- The DCC Service User has appropriate privileges to be able to run the specific report in question (as per Section 3)

- Event Logs are excluded from the report

Report Inputs

The user enters the following parameters:

Parameters(s) Available	Contents
DCC Service Users	Checkboxes for each of the SMKI Organisations that the user represents. It is mandatory that at least one is checked. Each DCC Service User will be represented as its SEC Party and SEC Role.
Date From	DD/MM/YYYY with date picker
Date To[2]	DD/MM/YYYY with date picker
Device ID	Mandatory EUI-64 Device ID

Report Outputs

Fields Returned	Data Type

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[2] It should be noted that the maximum date range for this report is 3 months

Date	Date (DD/MM/YYYY)
Service User ID	String(23) - EUI64
Device ID	String(23) - EUI64
MPxN	String(13)
Service Reference Variant	String(7)
Service Reference Name	String(100)

Additional Details

- Note that DCC Service User(s) chosen as inputs search against DCC Service User IDs in the Service Audit Trail (e.g. actual message originators), not registration data.

Appendix A   Glossary

Acronym	Definition
CSP	Communications Service Provider
DCC	Data Communications Company
DSP	Data Services Provider
EES	Electricity Export Supplier
EIS	Electricity Import Supplier
ENO	Electricity Network Operation
GIS	Gas Import Supplier
GNO	Gas Network Operation
IDP	Identity Provider
OU	Other User
SMKI	Smart Meter Key Infrastructure
SNA	Supplier Nominated Agent
SSI	Self-Service Interface