

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.

MP279 ‘June 2025 SEC Release & DUIS Housekeeping Changes’

Annex A

Legal text – version 1.1

About this document

This document contains the redlined changes to the SEC that would be required to deliver this Modification Proposal.

SEC Section A – Definitions and Interpretations

These changes have been redlined against SEC Section A version 46.0.

Amend Section A as follows:

~~Tailored Assurance Service (CTAS)~~ means the scheme of that name which is administered by NCSC, or any successor to that scheme

~~Certified Cyber Security~~ means the scheme of that name which is administered by

~~Consultancy (CCSC)~~ NCSC or any successor to that scheme.

~~Central~~ntified Products List means those entries on the Central Products List which identify SMETS2+Device Models

SEC Section D – Modification Process

These changes have been redlined against SEC Section D version 11.0.

Amend Section D2.6 as follows:

D2.6 Unless it is an Authority-initiated Modification, a Modification Proposal that proposes variations to this Code that satisfy one or more of the following criteria shall have the status of an Authority Determined-initiated Modification:

- (a) the variations are likely to have a material effect on existing or future Energy Consumers;
- (b) the variations are likely to have a material effect on competition in the Supply of Energy or Commercial Activities connected with the Supply of Energy;
- (c) the variations are likely to have a material effect on the environment, on access to or privacy of Data, on security of the Supply of Energy, and/or on the security of Systems and/or Smart Metering Systems;
- (d) the variations are likely to have a material effect on the arrangements set out in Section C (Governance) or this Section D; and/or
- (e) the variations are likely to unduly discriminate in their effects between one Party (or class of Parties) and another Party (or class of Parties).

Amend Section D2.7 as follows:

Self-Governance Modification

D2.7 A Modification Proposal that is not an Authority-initiated Modification, an Authority Determined Modification or a Fast Track Modification shall have the status of a **Self-Governance Modification**.

Amend Section D9.5 as follows:

Fast-Track Modifications

D9.5 In the case of a Fast-Track Modification, any decision of the Panel under Section D3.612(d) to approve the Modification Proposal shall be final, subject to the following:

SEC Section F – Smart Metering Systems Requirements

These changes have been redlined against SEC Section F version 24.0.

Amend Section F2.1 (a) as follows:

F2.1 The Panel shall establish and maintain a list (the "Central Products List") of:

- (a) the SMETS2+ Device Models for which the Panel has received all the Assurance Certificates required for the Physical Device Type relevant to the Device Model (known as the ~~Central~~ntified Products List);
- and

SEC Section G – Security

These changes have been redlined against SEC Section G version 26.0.

Amend Section G14.3 as follows:

G14.3 The CPA Transition Approach Document may include, without limitation, some or all of the following:

- (g) variations in the arrangements for issuing of CPA Certificates, and/or the addition or removal of Device Models to or from the ~~Centralized~~ Products List;

SEC Appendix D – SMKI Registration Authority Policies and Procedures

These changes have been redlined against SEC Appendix D version 9.0.

Amend Section 4.1.4 as follows:

4.1.4 Director or Company Secretary ceasing to be eligible to act on behalf of a Party, RDP, Manufacturer or SECCo

Where Director or Company Secretary ceases to be eligible to act on behalf of a Party, RDP, Manufacturer or SECCo in respect of the procedures set out in the SMKI RAPP:

- a) the Director or Company Secretary themselves, or a Senior Responsible Officer (SRO) whose identity has previously been verified by the DCC, shall advise the Service Desk of the change;
- b) the DCC shall confirm such information from the relevant Nominee Details Form, in order to provide confidence that the request is from a Director, Company Secretary or SRO; and
- c) if b) is successful, the DCC shall update the DCC's records of authorised individuals for the Party, RDP, or SECCo and shall no longer consider the individual to be able to act on behalf of that Party, RDP or SECCo.

SEC Appendix Q – IKI Certificate Policy

These changes have been redlined against SEC Appendix Q version 8.0.

Amend Section 1.4.1 as follows:

1.4.1 Appropriate Certificate Uses

(A) The ICA shall ensure that IKI Certificates are Issued only:

- (i) to Eligible Subscribers; and
- (ii) for the purposes of either authenticating the Subject to the SMKI Services or signing files related to Threshold Anomaly Detection, the ~~Central~~ertified Products List and the SMKI Recovery Procedure that are sent to the DCC.

Amend Annex A: Definitions and Interpretations as follows:

IKI File Signing	means the Issuing ICA when performing the function of Issuing
Certification Authority	Certificates to Authorised Responsible Officers for the purpose
Or (CA)	of signing files related to Threshold Anomaly Detection, SMKI Recovery Procedure and the Central <u>ertified</u> Products List sent to the DCC.

Amend Section 5.3.1 as follows:

5.3.1 Qualification, Experience and Clearance Requirements

(A) The ICA shall ensure that all ICA Personnel must:

- (i) be appointed to their roles in writing;
- (ii) be bound by contract to the terms and conditions relevant to their roles;
- (iii) have received appropriate training with respect to their duties;
- (iv) be bound by contract not to disclose any confidential, sensitive, personal or security-related Data except to the extent necessary for the performance of their duties or for the purposes of complying with any requirement of law; and
- (v) in so far as can reasonably be ascertained by the ICA, not have been previously relieved of any past assignment (whether for the ICA or any other person) on the grounds of negligence or any other failure to perform a duty.

(B) The ~~DCC~~ICA shall ensure that all ICA Personnel have, as a minimum, passed a Security Check to BS7858 standard, or an equivalent standard which updates or replaces it, before commencing their roles in line with SEC Section G 4.6

SEC Appendix R – Common Test Scenarios Document

These changes have been redlined against SEC Appendix R version 6.0.

Amend Section 8.1.11 as follows:

8.1.11. ~~Other Registered Supplier Agent (RSA)~~ User (OU) Role

Appendix AD ‘DCC User Interface Specification’

These changes have been redlined against Appendix AD version 5.3.

Amend Section 1.3 as follows:

1.3 Defined Terms

Initial Retry Period means the period of time as defined in clause 2.10.1 (Retry Processing), commencing from the issuance of the first command for delivery to Devices and concluding at the initiation of the Back-off period. ~~that the DCC shall wait prior to retrying the sending of a Command where it fails on the first attempt.~~

Amend Section 1.4.7.5 as follows:

1.4.7.5 Top Up Device SRV 2.2

This clause is a supplement to clause 3.8.9

The clause 3.8.9 definition of the UTRN data item shall, for SMETS1 Service Requests, not apply.

For SMETS1 Service Requests with a Command Variant value of 1, the UTRN data item shall contain a SMETS1 UTRN.

For SMETS1 Service Requests with a Command Variant value of 2 or 3, the UTRN data item shall contain a 20 digit string (each digit taking a value of 0-9) representing value in pence, using leading zeros as necessary to give a 20 digit length.

Where the Service Request has a Command Variant value of 2 or 3, the DCC shall send a synchronous response detailing whether the Service Request has passed initial validation.

Where the Service Request has a Command Variant value of 2, the Authorisation Check associated to E5 allows the Device’s SMI Status to be ‘Suspended’.

Where the Service Request has a Command Variant value of 2 or 3 and is successfully validated by the DCC, the DCC shall generate a SMETS1 UTRN.

Where the Service Request has a Command Variant value of 1 or 3, the DCC shall then send the SMETS1 UTRN contained within or resulting from the Service Request to the Device.

Amend Section 1.4.7.13 as follows:

1.4.7.13 Update Firmware SRV 11.1

This clause is a supplement to clause 3.8.123.

SRV 11.1 shall be supported for SMETS1 CHF's and SMETS1 PPMIDs as well as Smart Meters, and the processing in clause 3.8.123.5 shall apply.

Following the receipt by DCC of a successfully authenticated Update Firmware Service Request to distribute firmware to a SMETS1 CHF or SMETS1 PPMID, if there is, according to the Smart Metering Inventory, a GSME on the same home area network as that Device then the DCC shall issue DCC Alert with code N57 to inform the Gas Supplier of the Service Request.

Amend Section 1.4.7.14 as follows:

1.4.7.14 Activate Firmware SRV 11.3

This clause is a supplement to clause 3.8.125.

SRV 11.3 shall be supported for SMETS1 CHF's, SMETS1 PPMIDs as well as SMETS1 Smart Meters.

In clause 3.8.125.4, where the target Device type is ~~is~~ SMETS1 CHF, then the additional DCC processing related to Firmware Version and Device Status updates shall also apply to the associated GPF.

Where the Service Request relates to a SMETS1 CHF or SMETS1 PPMID and the Business Originator ID does not relate to the Responsible Supplier for the SMETS1 ESME on the same home area network then the DCC shall return a Response containing an error code of E4 indicating failure.

Where the DCC produces a SMETS1 Response indicating successful activation of SMETS1 CHF or SMETS1 PPMID firmware, if there is, according to the Smart Metering Inventory, ~~a~~ GSME on the same home area network as that Device then the DCC shall issue a DCC Alert with code N57 to inform the Responsible Gas Supplier of the activation.

Amend Section 1.4.11.2 as follows:

1.4.11.2 Countersigned SMETS1 Response and Alert Format

The diagram below illustrates the structure of a Countersigned SMETS1 Response or Countersigned SMETS1 Alert.

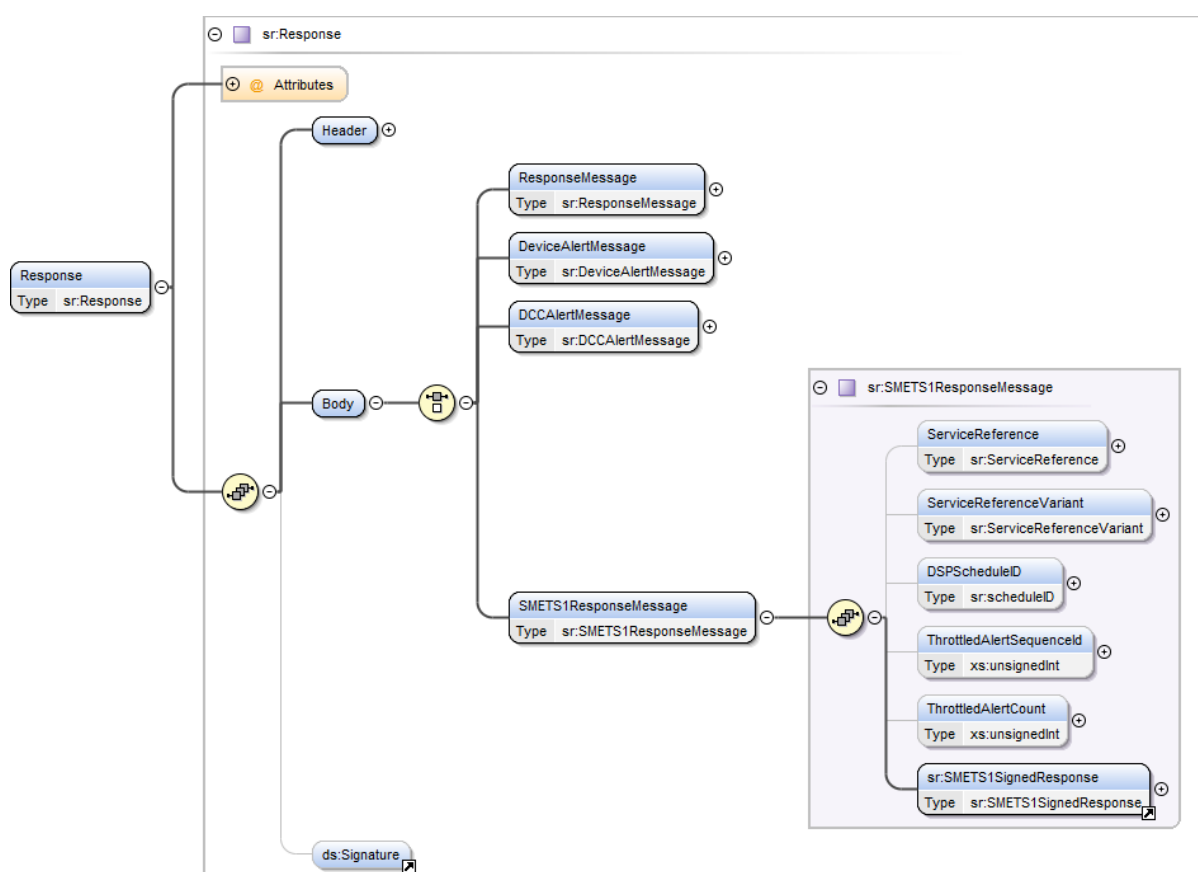


Figure 1 : Overall structure of a Countersigned SMETS1 Response or Alert

The SMETS1 Response Message shall contain the following Common Objects as further defined with the DUIS XML Schema:

Data Item	Description	Type	Mandatory	Valid Values
ServiceReference	Identifier that signals the particular Service Reference to DCC (and is driven from the User's selection of Request)	sr:ServiceReference (See 3.10.1.5)	Yes	As per the Request

ServiceReferenceVariant	Identifier that signals the particular Service Reference Variant to DCC (and is driven from the User's selection of Request)	sr:ServiceReferenceVariant (See 3.10.1.6)	Yes	As per the Request
DSPScheduleID	Schedule ID generated by the DCC Systems Valid Set: ≥ 0 and ≤ 1000000000000	sr:scheduleID (Restriction of xs:nonNegativeInteger)	Present for DCC Scheduled requests	See description
ThrottledAlertSequenceId	An optional data item that identifies that this Alert Code is currently subject to throttling by the DCC Data Systems. If this attribute is included in the Alert then it indicates the sequence number for this Alert message since Alert throttling began.	xs:unsignedInt	No	As per Table 43
ThrottledAlertCount	An optional data item used to indicate the number of Alerts that have been consolidated by DCC Data Systems since the last Alert was forwarded to the Service User.	xs:unsignedInt	No	As per Table 43
SMETS1SignedResponse	Message created and signed by the S1SP. It contains a SMETS1 Response or a SMETS1 Alert	sr:SMETS1SignedResponse (see clause 1.4.11.3)	Yes	See description

Table 4: SMETS1ResponseMessage Format

Amend Section 1.4.11.5 to the following:

1.4.11.5 SMETS1 Alerts

Clause 3.6.2 shall not apply in relation to SMETS1 Devices.

The DCC shall not generate the following Alerts:

- N13 for On Demand Service Request if a S1SP N55 Alert is already generated indicating failure of that On Demand Request
- N13 for Future Dated (Device) Service Request if a S1SP N55 Alert is already generated indicating failure of that Future Dated (Device) Request
- N11 for Future Dated (DSP) Service Request if a S1SP N55 Alert is already generated indicating failure of that Future Dated (DSP) Request

- N11 for DCC Scheduled Service Request is a S1SP N55 alert is already generated indicating failure of that DCC Scheduled Request

Amend Section 3.1 as follows:

3 MESSAGES SENT OVER THE INTERFACE

3.1 Service Request Matrix

For each Service Request, this section sets out the following attributes:

- Service Request Name
- Service Reference
- Service Reference Variant
- whether the Service Request is Critical or Non-Critical
- modes of operation which vary how the Service Request or Signed Pre-Command will be executed.
- whether or not the Service Request is a Non-Device Service Request
- the User Roles eligible to submit the Service Request
- whether the Service Request is available as a SMETS1 Service Request

User Role Reference	User Role Description
IS	Import Supplier
ES	Export Supplier
GS	Gas Supplier
RSA	Registered Supplier Agent
ED	Electricity Distributor
GT	Gas Transporter
MDR	Meter Data Retriever
OU	Other User

Table 17: User Roles

The following table (the “Service Request Matrix”) sets out these attributes (i.e. the ones referred to above) for each Service Request. The description of Eligible User Roles is only a summary, as further qualifications concerning Eligible User Roles are set out in the DCC User Interface Services Schedule.

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Update Import Tariff (Primary Element)	1.1	1.1.1	Yes	Yes	Device	No	No	IS GS	Yes
Update Import Tariff (Secondary Element)	1.1	1.1.2	Yes	Yes	Device	No	No	IS	No
Update Price (Primary Element)	1.2	1.2.1	Yes	Yes	Device	No	No	IS GS	Yes
Update Price (Secondary Element)	1.2	1.2.2	Yes	Yes	Device	No	No	IS	No
Update Meter Balance	1.5	1.5	Yes	Yes	No	No	No	IS GS	Yes
Update Payment Mode	1.6	1.6	Yes	Yes	Device	No	No	IS GS	Yes
Reset Tariff Block Counter Matrix	1.7	1.7	Yes	Yes	No	No	No	IS	No
Update Prepay Configuration	2.1	2.1	Yes	Yes	Device	No	No	IS GS	Yes
Top Up Device	2.2	2.2	No	Yes	No	No	No	IS GS	Yes
Update Debt	2.3	2.3	Yes	Yes	No	No	No	IS GS	Yes
Activate Emergency Credit	2.5	2.5	Yes	Yes	No	No	No	IS GS	Yes
Display Message	3.1	3.1	No	Yes	DSP	No	No	IS GS	No
Restrict Access For Change Of Tenancy	3.2	3.2	No	Yes	DSP	No	No	IS GS	Yes
Clear Event Log	3.3	3.3	No	Yes	No	No	No	IS GS	Yes
Update Supplier Name	3.4	3.4	No	Yes	DSP	No	No	IS GS	No
Disable Privacy PIN	3.5	3.5	No	Yes	No	No	No	IS GS	No

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Read Instantaneous Import Registers	4.1	4.1.1	No	Yes	DSP	No	No	IS GS ED GT MDR	Yes
Read Instantaneous Import TOU Matrices	4.1	4.1.2	No	Yes	DSP	No	No	IS GS ED GT	Yes
Read Instantaneous Import TOU With Blocks Matrices	4.1	4.1.3	No	Yes	DSP	No	No	IS ED	Yes
Read Instantaneous Import Block Counters	4.1	4.1.4	No	Yes	DSP	No	No	GS	Yes
Read Instantaneous Export Registers	4.2	4.2	No	Yes	DSP	Yes	No	ES ED MDR	Yes
Read Instantaneous Prepay Values	4.3	4.3	No	Yes	DSP	No	No	IS GS	Yes
Retrieve Change Of Mode / Tariff Triggered Billing Data Log	4.4	4.4.2	No	Yes	DSP	No	No	IS GS	Yes
Retrieve Billing Calendar Triggered Billing Data Log	4.4	4.4.3	No	Yes	DSP	No	No	IS GS	Yes
Retrieve Billing Data Log (Payment Based Debt Payments)	4.4	4.4.4	No	Yes	DSP	No	No	GS IS	Yes
Retrieve Billing Data Log (Prepayment Credits)	4.4	4.4.5	No	Yes	DSP	No	No	GS IS	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Retrieve Import Daily Read Log	4.6	4.6.1	No	Yes	DSP	Yes	No	IS GS MDR	Yes
Retrieve Export Daily Read Log	4.6	4.6.2	No	Yes	DSP	Yes	No	ES MDR	No
Read Active Import Profile Data	4.8	4.8.1	No	Yes	DSP	Yes	No	IS GS ED GT MDR OU	Yes
Read Reactive Import Profile Data	4.8	4.8.2	No	Yes	DSP	Yes	No	IS ED OU	Yes
Read Export Profile Data	4.8	4.8.3	No	Yes	DSP	Yes	No	ES ED <u>MDR</u> OU	Yes
Read Network Data	4.10	4.10	No	Yes	DSP	Yes	No	IS GS ED GT	Yes
Read Tariff (Primary Element)	4.11	4.11.1	No	Yes	No	No	No	IS GS OU	Yes
Read Tariff (Secondary Element)	4.11	4.11.2	No	Yes	No	No	No	IS OU	No
Read Maximum Demand Import Registers	4.12	4.12.1	No	Yes	DSP	Yes	No	IS ED	No
Read Maximum Demand Export Registers	4.12	4.12.2	No	Yes	DSP	Yes	No	ES ED	No
Read Prepayment Configuration	4.13	4.13	No	Yes	DSP	No	No	IS GS	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Read Prepayment Daily Read Log	4.14	4.14	No	Yes	DSP	Yes	No	IS GS	No
Read Load Limit Data	4.15	4.15	No	Yes	DSP	Yes	No	IS ED	Yes
Read Active Power Import	4.16	4.16	No	Yes	No	Yes	No	IS ED	Yes
Retrieve Daily Consumption Log	4.17	4.17	No	Yes	DSP	Yes	No	IS GS ED GT MDR OU	No
Read Meter Balance	4.18	4.18	No	Yes	DSP	No	No	IS GS	Yes
Create Schedule	5.1	5.1	No	No	No	No	Yes	IS ES GS ED GT MDR OU	Yes
Read Schedule	5.2	5.2	No	No	No	No	Yes	IS ES GS ED GT MDR OU	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Delete Schedule	5.3	5.3	No	No	No	No	Yes	IS ES GS ED GT MDR OU	Yes
Read Device Configuration (Voltage)	6.2	6.2.1	No	Yes	No	No	No	IS RSA ED	Yes
Read Device Configuration (Randomisation)	6.2	6.2.2	No	Yes	No	No	No	IS RSA ED	No
Read Device Configuration (Billing Calendar)	6.2	6.2.3	No	Yes	No	No	No	IS RSA GS	Yes
Read Device Configuration (Identity Exc MPxN)	6.2	6.2.4	No	Yes	No	No	No	IS ES GS RSA ED GT OU	Yes
Read Device Configuration (Instantaneous Power Thresholds)	6.2	6.2.5	No	Yes	No	No	No	IS RSA	Yes
Read Device Configuration (MPxN)	6.2	6.2.7	No	Yes	No	No	No	IS ES GS RSA ED GT OU	No

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Read Device Configuration (Gas)	6.2	6.2.8	No	Yes	No	No	No	GS RSA GT	Yes
Read Device Configuration (Payment Mode)	6.2	6.2.9	No	Yes	No	No	No	IS GS RSA	Yes
Read Device Configuration (Event and Alert Behaviours)	6.2	6.2.10	No	Yes	No	No	No	IS GS ED	No
Update Device Configuration (Load Limiting General Settings)	6.4	6.4.1	Yes	Yes	Device	No	No	IS	Yes
Update Device Configuration (Load Limiting Counter Reset)	6.4	6.4.2	No	Yes	DSP	No	No	IS	Yes
Update Device Configuration (Voltage)	6.5	6.5	No	Yes	DSP	No	No	ED	Yes
Update Device Configuration (Gas Conversion)	6.6	6.6	Yes	Yes	No	No	No	GS	Yes
Update Device Configuration (Gas Flow)	6.7	6.7	Yes	Yes	No	No	No	GS	Yes
Update Device Configuration (Billing Calendar)	6.8	6.8	Yes	Yes	No	No	No	IS GS	Yes
Synchronise Clock	6.11	6.11	Yes	Yes	No	No	No	IS GS	Yes
Update Device Configuration (Instantaneous Power Threshold)	6.12	6.12	No	Yes	DSP	No	No	IS	Yes
Read Event Or Security Log	6.13	6.13	No	Yes	No	No	No	IS GS ED GT RSA	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Update Device Configuration (Auxiliary Load Control Description)	6.14	6.14.1	Yes	Yes	No	No	No	IS	No
Update Device Configuration (Auxiliary Load Control Scheduler)	6.14	6.14.2	Yes	Yes	Device	No	No	IS	No
Update Device Configuration (Auxiliary Controller Scheduler)	6.14	6.14.3	Yes	Yes	Device	No	No	IS	No
Update Security Credentials (KRP)	6.15	6.15.1	Yes	Yes	Device	No	No	IS GS ED GT	Yes
Update Security Credentials (Device)	6.15	6.15.2	Yes	Yes	No	No	No	IS GS	No
Issue Security Credentials	6.17	6.17	Yes	Yes	No	No	No	IS GS	No
Set Maximum Demand Configurable Time Period	6.18	6.18.1	No	Yes	DSP	No	No	ED	No
Reset Maximum Demand Registers	6.18	6.18.2	No	Yes	DSP	No	No	ED	No
Set Device Configuration (Import MPxN)	6.20	6.20.1	No	Yes	DSP	No	No	IS GS	No
Set Device Configuration (Export MPAN)	6.20	6.20.2	No	Yes	DSP	No	No	ES	No
Request Handover Of DCC Controlled Device	6.21	6.21	No	Yes	DSP	No	No	IS GS	Yes
Configure Alert Behaviour	6.22	6.22	No	Yes	No	No	No	IS GS ED	No
Update Security Credentials (CoS)	6.23	6.23	No	Yes	DSP & Device	No	No	IS GS	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Retrieve Device Security Credentials (KRP)	6.24	6.24.1	No	Yes	No	No	No	IS GS ED GT	Yes
Retrieve Device Security Credentials (Device)	6.24	6.24.2	Yes	Yes	No	No	No	IS GS	No
Set Electricity Supply Tamper State	6.25	6.25	Yes	Yes	No	No	No	IS	Yes
Update Device Configuration (daily resetting of Tariff Block Counter Matrix)	6.26	6.26	Yes	Yes	No	No	No	IS	No
Update Device Configuration (RMS Voltage Counter Reset)	6.27	6.27	No	Yes	DSP	No	No	ED	Yes
Set CHF Sub GHz Configuration	6.28	6.28	No	Yes	No	No	No	IS GS	No
Request CHF Sub GHz Channel Scan	6.29	6.29	No	Yes	No	No	No	IS GS	No
Read CHF Sub GHz Configuration	6.30	6.30	No	Yes	No	No	No	IS GS RSA	No
Read CHF Sub GHz Channel	6.31	6.31	No	Yes	No	No	No	IS GS RSA	No
Read CHF Sub GHz Channel Log	6.32	6.32	No	Yes	No	No	No	IS GS RSA	No
Enable Supply	7.1	7.1	Yes	Yes	No	No	No	IS	Yes
Disable Supply	7.2	7.2	Yes	Yes	No	No	No	IS GS	Yes
Arm Supply	7.3	7.3	Yes	Yes	No	No	No	IS GS	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Read Supply Status	7.4	7.4	No	Yes	No	No	No	IS ES GS RSA ED GT	Yes
Activate Auxiliary Load	7.5	7.5	Yes	Yes	No	No	No	IS	No
Deactivate Auxiliary Load	7.6	7.6	Yes	Yes	No	No	No	IS	No
Read Auxiliary Load Switch Data	7.7	7.7	No	Yes	DSP	No	No	IS ED OU	No
Reset Auxiliary Load	7.8	7.8	Yes	Yes	No	No	No	IS	No
Add Auxiliary Load To Boost Button	7.9	7.9	No	Yes	DSP	No	No	IS	No
Remove Auxiliary Load From Boost Button	7.10	7.10	No	Yes	DSP	No	No	IS	No
Read Boost Button Details	7.11	7.11	No	Yes	DSP	No	No	IS OU	No
Set Randomised Offset Limit	7.12	7.12	Yes	Yes	No	No	No	IS	No
Set Auxiliary Controller State	7.13	7.13	Yes	Yes	No	No	No	IS	No
Read Auxiliary Controller Configuration Data	7.14	7.14	No	Yes	DSP	No	No	IS ED OU	No
Read Auxiliary Controller Operational Data	7.15	7.15	No	Yes	DSP	No	No	IS ED OU	No
Limit APC Level	7.16	7.16	Yes	Yes	No	No	No	None	No
Commission Device	8.1	8.1.1	Yes	Yes	No	No	No	IS GS	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Read Inventory <i>(Current and Future Suppliers may use this Service Request)</i>	8.2	8.2	No	No	No	No	Yes	IS ES GS RSA ED GT MDR OU	Yes
Decommission Device	8.3	8.3	No	No	No	No	Yes	IS GS	Yes
Update Inventory	8.4	8.4	No	No	No	No	Yes	IS ES GS RSA ED GT OU	Yes
Service Opt Out	8.5	8.5	No	No	DSP	No	No	None	No
Service Opt In	8.6	8.6	No	No	No	No	Yes	None	No
Join Service (Critical)	8.7	8.7.1	Yes	Yes	No	No	No	IS GS	Yes
Join Service (Non-Critical)	8.7	8.7.2	No	Yes	No	No	No	IS GS OU	Yes
Unjoin Service (Critical)	8.8	8.8.1	Yes	Yes	No	No	No	IS GS	Yes
Unjoin Service (Non-Critical)	8.8	8.8.2	No	Yes	No	No	No	IS GS OU	Yes
Read Device Log	8.9	8.9	No	Yes	DSP	No	No	IS GS OU	Yes
Update HAN Device Log	8.11	8.11	No	Yes	DSP	No	No	IS GS OU	Yes

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Restore HAN Device Log	8.12	8.12.1	No	Yes	No	No	No	IS GS	No
Restore Gas Proxy Function Device Log	8.12	8.12.2	No	Yes	No	No	No	IS GS	No
Return Local Command Response	8.13	8.13	No	No	No	No	Yes	IS GS	No
Communications Hub Status Update- Install Success	8.14	8.14.1	No	No	No	No	Yes	IS GS	No
Communications Hub Status Update - Install No SM WAN	8.14	8.14.2	No	No	No	No	Yes	IS GS	No
Communications Hub Status Update. – Fault Return	8.14	8.14.3	No	No	No	No	Yes	IS GS <u>RSA</u>	No
Communications Hub Status Update – No Fault Return	8.14	8.14.4	No	No	No	No	Yes	IS GS <u>RSA</u>	No
Request Customer Identification Number	9.1	9.1	No	Yes	No	No	No	OU	No
Update Firmware	11.1	11.1	No	No	No	No	Yes	IS GS	Yes
Read Firmware Version	11.2	11.2	No	Yes	DSP	No	No	IS ES GS RSA ED GT OU	Yes
Activate Firmware	11.3	11.3	Yes	Yes	Device	No	No	IS GS	Yes
Update PPMID Firmware	11.4	11.4	No	No	No	No	Yes	IS GS	No

Managed by

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Available in relation to SMETS1 Devices
				On Demand	Future Dated Response Pattern	DCC Scheduled	Non-Device Request		
Request WAN Matrix	12.1	12.1	No	No	No	No	Yes	IS ES GS RSA ED GT OU	No
Device Pre-notification	12.2	12.2	No	No	No	No	Yes	IS ES GS RSA ED GT OU	Yes
Record Network Data (GAS)	14.1	14.1	No	Yes	No	Yes	No	GT	No

Table 18: Service Request Matrix

Amend Section 3.2.4 as follows:

3.2.4 Authorisation

The DCC shall verify that the User has permission to send the Service Request or Pre-Command as per the following steps and where authorisation checks are failed the following Response Code shall be added by the DCC to the Service Response that is sent to the sending User;

Authorisation Check	Process	Response Code
Validate the User Role	The sending organisation (User) as determined from the Business Originator ID and their associated User Role are checked to confirm it is a valid SEC party / User Role combination	E1
Verify that the User Role is allowed to use the Service Request or Signed Pre-Command	This is a User Role based check for the mapping between Service Requests and User Roles (see clause 3.1 - Service Request Matrix) i.e. that the User Role is that of a User within an Eligible User Role for that Request.	E2
Verify the status of the User	This is a status based check to find out if the User is suspended (not allowed to run that Service Request or Signed Pre-Command) at the time when the Service Request or Signed Pre-Command is received	E3
Verify that the User, in the User Role defined in the Service Request is an Eligible User for the Device	This check is based on the Registration Data associated with the Device via MPxN lookup. Check that the User is an Eligible User in respect for that Device for the period that the Service Request pertains to. The checks for eligibility are as follows:- - Confirm (using the Registration Data) that the User ID used to send the Request is that of a User that is an Eligible User for the Request. - Authorisation is performed using the Device specified in the BusinessTargetID except for Non-Device Service Requests, where the BusinessTargetID is specified in the Service Request itself. Note that this check is not applied for Critical Service Requests or Critical Signed Pre-Commands or for a limited number of specific Service Requests as documented in the Service Request Processing Document and stated explicitly within each Service Request definition in clause 3.8. Requests from a User that had ceased to be a registered Party more than 24 months ago will be rejected by the DCC Systems.	E4

Authorisation Check	Process	Response Code
Verify that the Service Request or Signed Pre-Command is applicable to the Device status	This is a check to confirm that the target Device has a status within the Smart Metering Inventory that enables the User to send it the particular Service Request or Signed Pre-Command This check is not applicable to Service Requests 8.2 (Read Inventory) and 12.1 (Request WAN Matrix) or to Critical Service Requests or Signed Pre-Commands. With the exception that it is applied for Signed Pre-Commands when the Device Status is 'Recovery'. Devices can only be communicated with in response to a Request if they are in a status of 'Commissioned', 'InstalledNotCommissioned', 'Whitelisted', 'Pending' or 'Recovered' in the Smart Metering Inventory. The DCC shall, where the Device has a Smart Metering Inventory (SMI) Status of '-Suspended' prevent any Non-Critical Service Requests from being processed with the exception of, Service Requests 11.1 (Update Firmware), 11.2 (Read Firmware Version), 11.4 (Update PPMID Firmware) and 6.23 (Update Security Credentials (CoS)). The DCC shall, where a Device has a Smart Metering Inventory (SMI) Status of 'Recovery' prevent any Service Requests relating to that Device from being processed with the exception of Non-Device Service Requests (subject to their specific validation).Note that where a Device has an SMI Status of 'Recovered' the Device's SMI Status immediately prior to it having the SMI Status of 'Recovery' shall be used in validation.	E5

Authorisation Check	Process	Response Code
Verify that the Service Request or Signed Pre-Command is available for Local Command Services	This is a check to confirm that a Service Request or Signed Pre-Command is available to Users for local delivery to a Device using Local Command Services including additional reference to the requesting User Role and SMI Status combination. A Service Request or Signed Pre-Command is not available to Users for local delivery using Local Command Services where the Service Request or Signed Pre-Command is one of the following; - A Service Reference Variant of -8.1.1 – Commission Device - A Future Dated Service as defined by clause 2.6.3 In addition, a Service Request or Signed Pre-Command can only be delivered locally in the following combinations of requesting User Role and SMI Status of the target Device: - Where the User Role of the sender is either IS, ES or GS, the target Device within the request must have an SMI Status of either <u>“Pending”</u>, <u>“Whitelisted”</u>, <u>“InstalledNotCommissioned”</u> or <u>“Commissioned”</u>. - Where the User Role of the sender is either ED, GT, RSA or OU, the target Device within the request must have an SMI Status of either <u>“InstalledNotCommissioned”</u> or <u>“Commissioned”</u>. Note that where a Device has an SMI Status of ‘Recovered’ the Device’s SMI Status immediately prior to it having the SMI Status of ‘Recovery’ shall be used in validation.	E17
Verify that the Device exists	This is a check to confirm that the target Device within the Service Request or Signed Pre-Command exists Note that this check is only applicable to Service Requests and Signed Pre-Commands that are addressed to a specified Device. For Non-Device Service Requests this Response Code (E19) shall be returned if the BusinessTargetID is not the DCC Access Control Broker ID.	E19

Table 22: Authorisation checks

Amend Section 3.6.2.2 as follows:

3.6.2.2 Device Alert Body Format

The DCC shall, where a Device raises an Alert, construct a message to the User conforming to the devicealert message format. This message combines the GBCSPayload received from the Device with the Alert Code extracted from the GBCSPayload.

Data Item	Description	Type	Mandatory	Valid Values
AlertCode	Code indicating the alert or reason for the alert to be generated GBCS includes '0x' at the start of such codes. This definition uses a hexBinary representation for valid values.	xs:hexBinary	Yes	See GB Companion Specification for base list and apply hexBinary representation of these GBCS defined values
ThrottledAlertSequenceId	An optional data item that identifies that this Alert Code is currently subject to throttling by the DCC Data Systems. If this attribute is included in the Alert then it indicates the sequence number for this Alert message since Alert throttling began.	xs:unsignedInt	No	As per Table 43
ThrottledAlertCount	An optional data item used to indicate the number of Alerts that have been consolidated by DCC Data Systems since the last Alert was forwarded to the Service User.	xs:unsignedInt	No	As per Table 43
GBCS Payload	See GB Companion Specification for Details of the format of the GBCS Alert	xs:base64Binary	Yes	See GB Companion Specification for message construction.

Table 38: Device Alert Body

Amend Section 3.6.3.2 as follows:

3.6.3.2 DCC Alert Body Format

The DCC shall, where the DCC Systems raises a DCC Alert, construct a message to the User with the Body element conforming to the DCCAlertMessage format. This message is generated by the DCC Systems as a result of a trigger event.

Data Item	Description	Type	Mandatory	Valid Values
DCCAlertCode	Code indicating the alert or reason for the Alert to be generated by DCC	Restriction of xs:string (Enumeration)	Yes	See clause 3.6.3.4
DCCAlert	This is body specific content dependent on the DCCAlertCode being sent. See clause 0 for body specific format.	sr:DCCAlert See clause 0	Yes	See clause 0
ThrottledAlertSequeunceID	An optional data item that identifies that this Alert Code is currently subject to throttling by the DCC Data Systems. If this attribute is included in the Alert then it indicates the sequence number for this Alert message since Alert throttling began.	xs:unsignedInt	No	As per Table 43
ThrottledAlertCount	An optional data item used to indicate the number of Alerts that have been consolidated by DCC Data Systems since the last Alert was forwarded to the Service User.	xs:unsignedInt	No	As per Table 43

Table 40: DCC Alert Body

Amend Section 3.6.3.4 as follows:

3.6.3.4 DCC Alert Codes

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
AD1	Power Outage Event	Power Outage Event received from CSP	Communications Service Provider (CSP) notification of loss of DC power as detected at the Communications Hub in the Consumer Premises for a time equal to or greater than three (3) minutes	IS ED (User ID with User Role IS / ED for an Electricity Smart Meter associated with the Communications Hub Function reporting the Power Outage) GS GT (User ID with User Role GS / GT for a Gas Smart Meter associated to the Communications Hub Function reporting the Power Outage)	SMETS 2+
N1	Electricity Smart Meter Decommission or withdrawal	Decommissioning or withdrawal of an Electricity Smart Meter Device	Upon successful completion of Service Request: - Decommission Device (8.3) - or Service Opt Out (8.5) for an Electricity Smart Meter Device	ED and, if applicable, ES	All
N2	Gas Smart Meter Decommission or withdrawal	Decommissioning or withdrawal of Gas Smart Meter Device	Upon successful completion of Service Request: - Decommission Device (8.3) - or Service Opt Out (8.5) for a Gas Smart Meter Device	GT	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N3	Cancellation of “Future Dated Response Pattern (DSP)” requests because of Change of Tenancy	Cancellation of “Other User” “Future Dated Response Pattern (DSP)” Commands not yet submitted to the Devices in the Electricity or Gas Smart Metering System	Upon successful completion of Service Request Restrict Access for Change of Tenancy (3.2)	All applicable Future Dated (DSP) request senders	All
N4	Schedule removal because of Change of Tenancy	Removal of “Other User” “DCC Scheduled” schedules for Devices in the Electricity or Gas Smart Metering System	Upon successful completion of Service Request Restrict Access for Change of Tenancy (3.2)	All applicable Schedule “owners”	All
N5	Schedule removal because of Device withdrawal	“DCC Scheduled” schedule removal	Upon successful completion of Service Request Service Opt Out for a Device (8.5) For Gas Smart Meter withdrawals, schedule removal are additionally applicable to Gas Proxy Function	All applicable Schedule “owners”	SMETS 2+
N6	Schedule removal because of Device decommission	“DCC Scheduled” schedule removal	Upon successful completion of Service Request Decommission Device for a Device (8.3)	All applicable Schedule “owners”	All
N7	“DSP Scheduled” / “Future Dated Response Pattern (DSP)” access control failure	“DCC Scheduled” / “Future Dated Response Pattern (DSP)” access control failure (Authorisation, Device status, GBCS compatibility check)	“DCC Scheduled” / “Future Dated Response Pattern (DSP)” Command generation access control failure	Schedule “owner” / “Future Dated Response Pattern (DSP) request sender	All
N8	Device removed from Inventory-Pending Status expired	Removal of Device from Inventory	Device in a status of ‘Pending’ for > 36 months	Original User that requested addition of the Device to the DCC Inventory	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N9	Communications Hub Decommission	Decommission of Communications Hub	Upon successful completion of Service Request Decommission Device for a Communications Hub (8.3)	All Responsible Suppliers for that CH function, other than the IS / GS that instigated the Decommissioning ED GT	All
N10	“Future Dated Response Pattern (Device)” Command time-out	“Future Dated Response Pattern (Device)” Command time-out	“Future Dated Response Pattern (Device)” Command response not received from the device within the Target Response Time from the ExecutionDateTime	“Future Dated Response Pattern (Device)” request sender	SMETS 2+ Device
N11	“DSP Scheduled” / “Future Dated Response Pattern (DSP)” Command time-out	“DCC Scheduled” / “Future Dated Response Pattern (DSP)” Command time-out	“DCC Scheduled” Schedule instance / “Future Dated Response Pattern (DSP)” Command not sent to or response not received from the Device within the Target Response Time from the ExecutionDateTime	Schedule “owner” / “Future Dated Response Pattern (DSP)” request sender	All
N12	Failure to deliver Command to Device	Failure to deliver Command to Device	Failure to receive an acknowledgement notification from a CSP or S1SP via the SM WAN for an “On Demand” or “Future Dated” Command	Request sender	All
N13	Failure to receive Response from Device	Failure to receive Response from Device	Failure to receive a response from a Device for an “On Demand” Command or “Future Dated” Command Acknowledgement	Request sender	All
N14	Sequenced Request Failure	Sequenced Request Failure	Previous Command in sequence failed or timed-out	Request sender	All
N15	Sequenced Request received out of order	Sequenced Request received out of order	Preceding Request not received during “Wait Period”	Request sender	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N16	Device Identity Confirmation	Device Identity Confirmation by Responsible Supplier – either first setting (as part of Installation and Commissioning process) or update to previous setting	Upon successful receipt of Service Response Code I0 from Service Request Update HAN Device Log (initial setting) (8.11) OR Upon successful processing of a Service Request 8.4 Update Inventory for an update to MPxN	ED GT	All
N17	Schedule removal because of CoS	Previous Responsible Supplier “DCC Scheduled” schedule removal	Upon successful completion of Service Request Update Security Credentials (CoS) (6.23)	Previous IS Previous GS	All
N18	Firmware Version / Hash mismatch	Firmware Version / Hash mismatch	Firmware Hash calculated by CSP or S1SP doesn't match Firmware Version	Update Firmware request sender	All
N19	Firmware Distribution Device ID identification failure	Firmware Distribution Device ID identification failure	CSP or S1SP unable to identify Communications Hub Device Id a Firmware Image is to be sent to	Update Firmware request sender	All
N20	Firmware image provided is too large	Firmware image provided is too large	CSP or S1SP unable to process request, because the Firmware Image is too large	Update Firmware request sender	All
N21	Unknown Firmware Version	Unknown Firmware Version	CSP or S1SP unable to process request, because it doesn't recognise the Firmware Version	Update Firmware request sender	All
N22	Failure to deliver Update Firmware Command to CSP	Failure to deliver Update Firmware Command to CSP	Failure to receive an acknowledgement notification from a CSP or S1SP via the SM WAN for an Update Firmware Command	Update Firmware request sender	All
N23	Failure to receive Update Firmware Command Validation response from CSP	Failure to receive Update Firmware Command Validation response from CSP	Failure to receive Update Firmware Command Validation response from CSP	Update Firmware request sender	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N24	Successful Communications Hub Function Whitelist Update	Communications Hub Function Whitelist Update	The DCC has received positive confirmation that the requested addition to the Communications Hub Function's whitelist resulted in establishing communications with the Device	Update HAN Device Log request sender	All
N25	Potentially Unsuccessful Communications Hub Function Whitelist Update	Communications Hub Function Whitelist Update	The DCC has not received positive confirmation that the requested addition to the Communications Hub Function's whitelist resulted in establishing communications with the Device	Update HAN Device Log request sender	All
N26	Update Security Credentials (CoS)– access control failure	Update Security Credentials (CoS)– access control failure	Request has failed CoS Party access control, processing within CoS Party, CoS specific anti-replay checks, CoS specific Anomaly Detection Threshold (ADT) checks or, for Future Dated Requests, DSP access control at the point the Request is to be sent to the CoS Party	Update Security Credentials (CoS) request sender	All
N27	Device CoS	New Import Supplier for Device	Upon successful completion of Service Request Update Security Credentials (CoS) (6.23)	Previous IS Previous GS	All
N28	Device Suspended	Device Suspended	Suspension of Device	IS GS ED GT	All
N29	Device Restored from Suspension	Device Restored from Suspension	Restoration of Device following Previous Suspension	IS GS ED GT	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N30	CHF Device Log Restored	CHF Device Log Restored	Upon successful completion of Service Request 8.12.1 Restore HAN Device Log	GS IS All Responsible Suppliers for the CHF, other than the IS / GS that submitted the Request	SMETS 2+
N31	GPF Device Log Restored	GPF Device Log Restored	Upon successful completion of Service Request 8.12.2 Restore GPF Device Log if the sender is not the GS.	GS IS All Responsible Suppliers for the CHF, other than the IS / GS that submitted the Request	SMETS 2+
N33	Cancellation of Future Dated Response Pattern (DSP) requests because of Device Decommission	Cancellation of all Future Dated Response Pattern (DSP) Services not yet submitted to the Device	Upon successful completion of Service Request 8.3 Decommission Device for a Device	All applicable Future Dated Response Pattern (DSP) Request senders	All
N34	Cancellation of Future Dated Response Pattern (DSP) requests because of CHF Decommission	Cancellation of all Future Dated Response Pattern (DSP) Services not yet submitted to the CHF and its associated GPF	Upon successful completion of Service Request 8.3 Decommission Device for a Device	All applicable Future Dated Response Pattern (DSP) Request senders	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N35	Cancellation of Future Dated Response Pattern (DSP) requests because of Device Withdrawal	Cancellation of all Future Dated Response Pattern (DSP) Services not yet submitted to the Device	Upon successful completion of Service Request 8.5 Service Opt Out for a Device	All applicable Future Dated Response Pattern (DSP) Request senders	SMETS 2+
N36	Cancellation of Future Dated Response Pattern (DSP) requests because of CHF Withdrawal	Cancellation of all Future Dated Response Pattern (DSP) Services not yet submitted to the CHF and Devices in its Whitelist	Upon successful completion of Service Request 8.4 Update Inventory for a CHF Withdrawal	All applicable Future Dated Response Pattern (DSP) Request senders	SMETS 2+
N37	Schedule removal because of CHF Withdrawal	“DCC Scheduled” schedule removal for ESME, GSME and GPF in the Whitelist	Upon successful completion of Service Request 8.4 Update Inventory for a CHF Withdrawal	All applicable Schedule “owners”	SMETS 2+
N38	Cancellation of Future Dated Response Pattern (DSP) requests because of CoS	Cancellation of all “Future Dated (DSP)” Services not yet submitted to the Device from the previous Responsible Supplier	Upon successful completion of Service Request 6.23 Update Security Credentials (CoS)	Previous IS Previous GS	All
N39	PPMID Alert	A PPMID Device generates an Alert as defined by GBCS	PPMID Alert received by the DSP Access Control Broker	IS for the Primary Import MPAN in the Smart Metering System GS for the Import MPRN in the Smart Metering System	SMETS 2+
N40	Schedule removal because of Device Suspension	“DSP Scheduled” schedule removal	Suspension of Device	All applicable Schedule “owners”	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N41	Cancellation of “Future Dated (DSP)” requests because of Device Suspension	Cancellation of all “Future Dated (DSP)” Services not yet submitted to the Device	Suspension of Device	All applicable Future Dated (DSP) Request senders	All
N42	Security Credentials updated on the device	Security Credentials updated on Device by Service Request 6.15.1 or 6.21	Success Response from Update Security Credentials where the Remote Party whose certificate has been placed on the Device is not the sender of the Service Request	The Remote Party whose certificate has been placed on the Device.	All
N43	PPMID Removal	A PPMID Device has been removed from the HAN via Service Request 8.11	Success Response from Update HAN Device Log (Remove) where the removed Device is a PPMID. DCC Alert is only sent if the PPMID device was joined to both an ESME and the GSME as identified by the Smart Metering Inventory.	All Responsible Suppliers for the CHF, other than the IS / GS that submitted the Service Request	SMETS 2+
N44	Recovery Complete (ACB Credentials)	Recovery is complete and at least one of the KRP Device Security Credentials on the Device has been replaced with those from an ACB Certificate	Recovery is complete and KRP Device Security Credentials on the Device replaced by those from an ACB by the Recovery Process	IS GS	SMETS 2+
N45	Recovery Complete	Recovery is complete and all required Device Security Credentials on the Device have been replaced	Recovery is complete and Device Security Credentials on the Device have been replaced by the Recovery Process	IS GS ED GT	SMETS 2+
N46	Quarantined Request – Anomaly Detection User Threshold Breach	An Anomaly Detection User-specific volume threshold has been exceeded	Request quarantined, because an Anomaly Detection User-specific volume threshold has been exceeded	Service Request / Signed Pre-Command sender	All
N47	Quarantined Request – Anomaly Detection DCC Threshold Breach	An Anomaly Detection DCC system-wide volume threshold has been exceeded	Request quarantined, because an Anomaly Detection DCC system-wide volume threshold has been exceeded	Service Request / Signed Pre-Command sender	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N48	Quarantined Request – Anomaly Detection Attribute Limits Breach	An Anomaly Detection Attribute Limit has been breached	Request quarantined, because an Anomaly Detection Attribute Limit has been breached	Service Request / Signed Pre-Command sender	SMETS 2+
N49	Firmware Version Updated in the Smart Metering Inventory	Device's Firmware Version updated in the Smart Metering Inventory	Upon successful completion of Service Request 11.2 Read Firmware Version where the target Device is an ESME, GSME, HCALCS, PPMID or CHF and the Firmware Version returned by the Device is different from that in the SMI and it matches an entry on the CPL with a status of "Current"	IS GS (Only sent if the IS / GS did not submit the Service Request)	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N50	Firmware Version no longer valid on the CPL	Device's Firmware Version updated in the Smart Metering Inventory, and Device Status set to 'Suspended'	Upon successful completion of Service Request 11.2 Read Firmware Version where the target Device is an ESME, GSME, HCALCS, PPMID or CHF and the Firmware Version returned by the Device is different from that in the SMI and it matches an entry on the CPL with a status of <u>"Removed"</u> OR Upon completion of Service Request 11.3 Activate Firmware where the Firmware Version returned by the Device is different from that in the SMI and it matches an entry on the CPL with a status of <u>"Removed"</u> OR Future Dated Firmware Activation Alert (Alert Code 0x8F66 or 0x8F67 and Message Code 0x00CA) received by the DCC Systems where the Firmware Version returned by the Device is different from that in the SMI and it matches an entry on the CPL with a status of <u>"Removed"</u> OR PPMID Firmware Activation Alert (Alert Code 0x8F8B) received by the DCC Systems where the Firmware Version returned by the Device is different from that in the SMI and it matches an entry on the CPL with a status of <u>"Removed"</u>	IS GS	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N51	Invalid Firmware Version	Device's Firmware Version is unknown (not in the CPL) Device's Firmware Version updated in the Smart Metering Inventory and Device Status set to 'Suspended'	Upon successful completion of Service Request 11.2 Read Firmware Version where the target Device is an ESME, GSME, HCALCS, PPMID or CHF and the Firmware Version returned by the Device is different from that in the SMI and it doesn't match an entry on the CPL OR Upon completion of Service Request 11.3 Activate Firmware where the Firmware Version returned by the Device is different from that in the SMI and it doesn't match an entry on the CPL OR Future Dated Firmware Activation Alert (Alert Code 0x8F66 or 0x8F67 and Message Code 0x00CA) received by the DCC Systems where the Firmware Version returned by the Device is different from that in the SMI and it doesn't match an entry on the CPL OR PPMID Firmware Activation Alert (Alert Code 0x8F8B) received by the DCC Systems where the Firmware Version returned by the Device is different from that in the SMI and it doesn't match an entry on the CPL	IS GS	All
N52	GSME Firmware Version Mismatch	GSME's Firmware Version returned by the GPF is different from that in the Smart Metering Inventory	Upon successful completion of Service Request 11.2 Read Firmware Version where the target Device is GPF and the GSME Firmware Version returned by the GPF is different from that in the SMI	GS	All

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N53	Command not delivered to ESME	Receipt by the DCC Access Control Broker of an Alert 0x8F84 - Failure to Deliver Remote Party Message to ESME (as defined by GBCS) from the CHF (Please note that DCC Alert N53 does not replace existing N12 or N13 DCC Alerts from the DCC, which will continue to be produced to confirm the DCC processing of the relevant Service Request. DCC Alert N53 is triggered by the CHF Alert and should be regarded as additional information which may be used by the User to adjust the frequency of requests being sent to the relevant ESME device. It is likely that after receipt of a DCC Alert N53 a User shall receive a subsequent DCC Alert N13 at the end of the Final Retry Period for the Service Request sent if applicable)	Receipt by the DCC Access Control Broker of an Alert from a Communications Hub Function with Alert Code 0x8F84 and Message Code 0x00D5	Request sender	SMETS 2+
N54	Dual Band CH Sub GHz Alert	The DCC Systems receive a Sub GHz Alert	A Sub GHz Alert is received by the DCC Access Control Broker as defined by GBCS section 16.1, being one of: - Alerts without specific payload: 0x8F21 (Duty Cycle fallen below Normal-Limited Duty Cycle Threshold) 0x8F22 (Critical Duty Cycle Action Taken) 0x8F23 (Duty Cycle fallen below Limited-Critical)	IS GS	SMETS 2+

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
			- Duty Cycle Threshold) ○ 0x8F24 (Regulated Duty Cycle Action Taken) ○ 0x8F25 (Duty Cycle fallen below Critical-Regulated Duty Cycle Threshold) ○ 0x8F27 (Sub GHz Channel Scan initiated) ○ 0x8F29 (Three Lost GSME Searches Failed) ○ 0x8F2B (Sub GHz Channel not changed due to Frequency Agility Parameters) • Alerts with specific payload: ○ 0x8F20 (Limited Duty Cycle Action Taken) ○ 0x8F26 (Sub GHz Channel Changed) ○ 0x8F28 (Sub GHz Channel Scan Request Assessment Outcome) ○ 0x8F2A (Sub GHz Configuration Changed) ○ 0x8F2C (Message Discarded Due to Duty Cycle Management) ○ 0x8F2D (No More Sub GHz Device Capacity)		
N55	SMETS1 Service Provider Alert	DCC Alert initiated by a SMETS1 Service Provider	The trigger is indicated in the S1SPAlert code provided in the DCC Alert. The payload is delivered in the S1SPAlert format; see section 3.9.15	Service Request sender	SMETS 1

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N56	SMETS1 Service Provider Provision of prepayment top-up UTRN	DCC Alert containing a prepayment top-up UTRN -provided by a SMETS1 Service Provider	The trigger is a User request for a prepayment top-up. The UTRN is delivered in the S1SPAlert format; see section 3.9.15.	Service Request sender	SMETS 1
N57	SMETS1 CHF or SMETS1 PPMID Firmware notification	See clauses 1.4.7.13 and 1.4.7.14.	See clauses 1.4.7.13 and 1.4.7.14.	Gas Supplier for the GSME on the same home area network	SMETS 1
N58	ALCS/HCALCS configuration change	ALCS/HCALCS configuration changed on ESME	Upon successful completion of Service Request 6.14.2 Update Device Configuration (Auxilliary Load Control Scheduler) OR Upon successful completion of Service Request 6.14.1 Update Device Configuration (Auxilliary Load Control Descriptions) OR Upon successful completion of Service Request 6.14.3 Update Device Configuration (Auxiliary Controller Scheduler) OR Future Dated Execution Of Instruction Alert (DLMS COSEM) Alert (Alert Code 0x8F66 and Message Code 0x00CC) corresponding to AuxiliaryLoadControlSwitches Calendar received by the DCC Data Systems	ED	SMETS 2+
N59	Firmware update in progress	DCC Alert indicating that the CSP's checks are passed and the image will be sent to the Comms Hub for processing.	Notification from CSP indicating completion of validation.	All Responsible Suppliers for the Device, other than the IS / GS that submitted the Service Request	SMETS 2+

DCC Alert Code	Alert Name	Event	Trigger	DCC Alert Recipient	Device Applicability
N60	Failed to deliver Firmware image to Comms Hub	Failed to deliver Firmware image to Comms Hub	Notification from CSP indicating that the image could not be delivered to the Comms Hub.	Update Firmware request sender	SMETS 2+
N61	Firmware image successfully delivered to Comms Hub	Firmware image successfully delivered to Comms Hub	Notification from CSP indicating that the image has been successfully delivered to the Comms Hub.	Update Firmware request sender	SMETS 2+
N62	Comms Hub Alert	A Comms Hub generates a Device Alert as defined by GBCS	An Alert from a Comms Hub is received by the DSP Access Control Broker.	IS GS	SMETS 2+
N63	ECoS Alert	The ECoS Party sends a message to DSP for delivery to the relevant User	A notification from the ECoS Party is received by the DSP Access Control Broker	IS GS	All
N64	Comms Hub Firmware Activation	Successful Comms Hub Firmware Activation	Upon receiving a Response from Comms Hub in response to the Activate Firmware request (GBCS Use Case CS06) sent by the CSP via DCC Data Systems.	All Responsible Suppliers	SMETS 2+
N65	CoS Certificate Alert	A Device is installed with a Certificate in its CoS Party Trust Anchor Cell that is not an active CoS Party Certificate.	DSP detects that a newly installed Device holds an Certificate in its CoS Party Trust Anchor Cell that does not align with an active CoS Party Certificate.	IS GS	SMETS 2+
N999	DUIS Version Mismatch	User's DUIS version is incompatible with the DCC Alert or Service Response to be sent	The DCC Alert or Service Response is not compatible with the DUIS version used by the User	Recipient of the incompatible DCC Alert or Service Response	All

Table 41: DCC Alert Codes

Amend Section 3.8.27.2 as follows:

3.8.27.2 *Specific Data Items for this Request*

The data items applicable depend on whether the Service Request is executed on an On Demand or DCC Scheduled basis.

For execution of this Service Request as an On Demand Service, the RetrieveImportDailyReadLog XML element defines this Service Request.

RetrieveImportDailyReadLog (On Demand) Definition

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
ExecutionDateTime	A User shall only add this Data Item to the Service Request where they require the Service Request to be executed at a future date and time. The UTC date and time the User requires the command to be executed on the Device Date-time in the future that is either $\leq$ current date + 30 days or the date = '3000-12-31T00:00:00Z'	xs:dateTime	No	None	UTC Date-Time
ReadLogPeriod	The Start and End Date-Times for which the data is required	sr:ReadLogPeriod (see clause 3.10.1.14)	Yes	None	N/A
KAPublicSecurityC redentials	The Key Agreement Public Security Credentials (of the requesting party) to be used where the request is from an Unknown Remote Party (e.g. <u>Meter Data Retriever</u> and Old Responsible Supplier) with respect to the BusinessTargetID specified within the Service Request.	sr:Certificate (xs:base64Binary)	Responsible Supplier: N/A Old Responsible Supplier: Yes MDR: Yes Mandatory for User Roles IS/GS that do not have their credentials on the Device when sending the Service Request e.g. Old Suppliers	None	N/A

--	--	--	--	--	--

Table 136: RetrieveImportDailyReadLog (sr:ReadLogFutureDataTableAndURPCredentials) data items

Amend Section 3.8.43.2 as follows:

3.8.43.2 Specific Data Items for this Request

CreateSchedule Definition

Data Item	Description / Valid Set	Type	Mandatory	Default	Units
ScheduleFrequency	The frequency of which the required service reference is executed Valid set - Daily - Weekly (The specified Service Request will be scheduled once a week, on the Schedule Start Date day of the week.) - Monthly (The specified Service Request will be scheduled once a month, on the Schedule Start Date day of the month, where possible. For those months where the Schedule Start Date day of the month doesn't exist, the Service Request will be scheduled on the last day of that month.) - Quarterly (The specified Service Request will be scheduled once every three months, with Scheduled Start Date as for Monthly.) - Half-Yearly (The specified Service Request will be scheduled once every six months, with Scheduled Start Date as for Monthly.) - Yearly (The specified Service Request will be scheduled once every 12 months, with Scheduled Start Date as for Monthly.)	sr:ScheduleFrequency (Restriction of xs:string (Enumeration))	Yes	None	N/A
ScheduleStartDate	The UTC date that the scheduled repeating request is required to commence from Valid date in the future	xs:date	Yes	None	UTC Date

ScheduleEndDate	The UTC date that the scheduled repeating request is required to cease, or if not present then the repeating schedule shall remain in force until deleted by the User or by the DCC Systems, e.g. because of Device Decommission Valid date in the future $\geq$ ScheduleStartDate	xs:date	User Role IS, GS, ES, ED, GT, MDR: No User Role OU: Yes	None	UTC Date
ScheduleExecutionStartTime	The UTC start time after which a scheduled Command (invoked by the schedule) may be run Valid Time	xs:time	No	00:01:00	UTC Time
KAPublicSecurityCredential	The Key Agreement Public Security Credentials, associated with the User submitting the Request that will be relied upon for Sensitive data Responses. Only applicable to those Scheduled Service Requests that can be submitted by User Roles for which the Device doesn't hold Security Credentials.	sr:Certificate (xs:base64Binary)	User Role IS, ES, ED: N/A User Role GT (where Response includes sensitive data and Device Type = Gas Smart Meter): Yes User Role MDR, OU (where Response includes sensitive data): Yes	None	N/A
DSPScheduledServiceReference	Reference of the Service Request to be Scheduled. Valid Set: see clause 3.1, where DCC Scheduled column in table is set to "Yes"	sr:DSPScheduledServiceReference (Restriction of xs:string (Enumeration))	Yes	None	N/A
DSPScheduledServiceReferenceVariant	Reference Variant of the Service Request to be Scheduled. Valid Set: see clause 3.1, where DCC Scheduled column in table is set to "Yes"	sr:DSPScheduledServiceReferenceVariant (Restriction of xs:string (Enumeration))	Yes	None	N/A

DeviceID	This is the Device ID to which the DCC Schedule is targeted.	sr:EUI (See clause 3.10.1.3)	Yes	None	N/A
Choice of Service Request XML Element to be Scheduled	Name and Request Data Items corresponding to DSPScheduledServiceReferenceVariant to be Scheduled, choice of:		Yes	None	N/A
	DSPRetrieveImportDailyReadLog DSPRetrieveExportDailyReadLog DSPReadActiveImportProfileData DSPReadReactiveImportProfileData DSPReadExportProfileData DSPReadNetworkData DSPReadPrepaymentDailyReadLog DSPRetrieveDailyConsumptionLog	sr:ReadLogPeriodOffset			
	DSPReadInstantaneous Export Import Registers DSPReadMaximumDemandImportRegisters DSPReadMaximumDemandExportRegisters DSPReadLoadLimitData DSPReadActivePowerImport	sr:DSPReadData			
	DSPRecordNetworkDataGAS	sr:RecordNetworkDataGAS			

Table 157: CreateSchedule (sr:DSPSchedule) data items

Amend Section 3.8.106.3 as follows:

3.8.106.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Device Existence validation.

Response Code	Response Code Description
E080405	The Device Status is not applicable to the Device Type
E080406	The Device Status transition is not valid
E080407	The Device ID does not exist in the Smart Metering Inventory or its status is not valid for the requested update
E080408	The Request does not include any details to be updated
E080409	The Device Type / Manufacturer / Model / Firmware Version data resulting from the changes specified by the User does not match the DCC list of equipment that has been approved for use
E080410	The User is not authorised to execute the Service Request to update the detail specified
E080411	Request to update Device Status not applicable to the Device Type
E080412	The Device Status transition is not valid

E080413	The requested MPxN update isn't suitable for the specified Device.
E080414	The Device Status does not allow the MPxN to be updated. The Device Status must be one of <u>“Whitelisted”</u> , <u>“Installed Not Commissioned”</u> or <u>“Commissioned”</u> if the MPxN update is to succeed.
E080415	The User is not the Registered Supplier Party for the new MPxN specified within the UpdateMPxN part of the Service Request.

Amend Section 3.8.107.3 as follows:

3.8.107.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Execution Date Time and Public Security Credentials validation.

Response Code	Response Code Description
E080501	The Device is associated to a Domestic MPxN
E080502	The Device Status is <u>“Withdrawn”</u> (this particular check and Response Code is not expected to be reached in this DUIS version, as the generic Authorisation Check associated to Response Code E5 will fail prior to this check being carried out)
E080503	The Certificate Type is not applicable to the Device Type

Amend Section 3.8.108.3 as follows:

3.8.108.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Device Existence validation.

Response Code	Response Code Description
E080601	The Opt In Date is not a date in the future
E080602	The Device Type is not correct
E080604	The Device Status is not <u>“Pending”</u>
E080606	The Device Type is invalid
E080607	The User is not the registered organisation of any of the MPxNs in the Service Request

Amend Section 3.8.111.3 as follows:

3.8.111.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for 'Other Device' Existence validation.

Response Code	Response Code Description
E080801	This Response Code is not used. The DCC Systems Smart Metering Inventory is no longer checked for the join status of the 'Other Device'

Amend Section 3.8.112.3 as follows:

3.8.112.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for 'Other Device' Existence validation.

Response Code	Response Code Description
E080801	This Response Code is not used. The DCC Systems Smart Metering Inventory is no longer checked for the join status of the 'Other Device'
E080821	The User Role is not authorised to Unjoin this Device Type
E080822	The User is not authorised to Unjoin these Gas Smart Meter / Gas Proxy Function

Amend Section 3.8.118.3 to the following:

3.8.118.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Request, the general Authorisation Checks as defined below shall not be carried out.

- A Response Code of E4 as defined in clause 3.2.4 "Verify that the User, in the User Role defined in the Service Request is a Eligible User for the Device"
- a Response Code of E5 as defined in clause 3.2.4 "Verify that the Service Request or Signed Pre-Command is applicable to the Device status"

Response Code	Response Code Description
E081401	The Device Type of the Device being notified is not CHF
E081402	The install date & time supplied is a future date
W081401	The CHF Device status is not 'InstalledNotCommissioned', which is the only valid status compatible with this Service Request. Note: Status of the Device for the CHF and the associated GPF will be updated to InstalledNotCommissioned if it is still in the Pending State.

Amend Section 3.8.119.3 to the following:

3.8.119.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Request, the general Authorisation Checks as defined below shall not be carried out.

- A Response Code of E4 as defined in clause 3.2.4 “Verify that the User, in the User Role defined in the Service Request is a Eligible User for the Device”
- a Response Code of E5 as defined in clause 3.2.4 “Verify that the Service Request or Signed Pre-Command is applicable to the Device status”

Response Code	Response Code Description
E081401	The Device Type of the Device being notified is not CHF
E081402	The install date & time supplied is a future date
W081401	The CHF Device status is not ‘InstalledNotCommissioned’, which is the only valid status compatible with this Service Request. Note: Status of the Device for the CHF and the associated GPF will be updated to InstalledNotCommissioned if it is still in the Pending State.

Amend Section 3.8.120.3 as follows:

3.8.120.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Request, the general Authorisation Checks as defined below shall not be carried out.

- A Response Code of E4 as defined in clause 3.2.4 “Verify that the User, in the User Role defined in the Service Request is a Eligible User for the Device”
- a Response Code of E5 as defined in clause 3.2.4 “Verify that the Service Request or Signed Pre-Command is applicable to the Device status”

Where a User with a User Role of RSA submits the Service Request then a specific validation check will be carried out for Response Code E5 as described in the table below.

Response Code	Response Code Description
E5	The User Role is RSA and the CHF Device Status is not Pending
E081401	The Device Type of the Device being notified is not CHF
E081405	The user reference date & time supplied is a future date
W081401	The CHF Device status is not ‘Decommissioned’.

Amend Section 3.8.121.3 as follows:

3.8.121.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Request, the general Authorisation Checks as defined below shall not be carried out.

- A Response Code of E4 as defined in clause 3.2.4 “Verify that the User, in the User Role defined in the Service Request is a Eligible User for the Device”

- a Response Code of E5 as defined in clause 3.2.4 “Verify that the Service Request or Signed Pre-Command is applicable to the Device status”

Where a User with a User Role of RSA submits this Request then a specific validation check will be carried out for Response Code E5 as described in the table below.

Response Code	Response Code Description
E5	The User Role is RSA and the CHF Device Status is not Pending
E081401	The Device Type of the Device being notified is not CHF
E081405	The User reference date & time supplied is a future date
W081401	The CHF Device status is not ‘Decommissioned’.

Amend Section 3.8.123.3 as follows:

3.8.123.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests.

For this Service Request and as an exception, the Authorisation Check associated to E5 allows the Device’s SMI Status to be ‘Suspended’

Response Code	Response Code Description
E110101	The Firmware Version is not approved. The Firmware version ID does not align with an entry on the Central Products List.
W110101	The Update Firmware Warning contains between one and five lists of Device IDs for which the validation failed for each DeviceID: • InvalidDeviceIDList . The DeviceID does not exist or the User is not the Meter or HCS Import Supplier • NotCommissionedDeviceIDList. The Meter status is not ‘Commissioned’ or ‘Suspended’ or the Device is not a Meter or a HCS • NotApplicableFirmwareDeviceIDList. The Firmware Version is not applicable to the Device • OtherRequestsInProgressList. The Device already has another Firmware update request in progress.InvalidGBCSVersionList. The CHF associated with the HCS Device has a GBCS Version prior to v4.1, or the HCS Device currently has a GBCS Version that is prior to v4.1.
E110102	The firmware is not marked as active in the Central Products List and Smart Metering Inventory.
E110103	The DCC Systems calculated Hash value over the Manufacturer Image part of the FirmwareImage provided by the User within the Service Request differs from that held in the CPL for the specified FirmwareVersion.
E110105	The firmware image is not constructed as per the GBCS definition, i.e. the FirmwareImage does not contain both an OTA Header and a Firmware Image concatenated together-, or where the Target Device is a SMETS2+ Device, the Length of the base64 encoded version of the GBCS defined Firmware “OTA Upgrade Image” exceeds 1024000.

Amend Section 3.8.123.4 as follows:

3.8.123.4 *Specific Data Items in the Response*

This Service Request synchronous response is defined in the XSD
DSPUpdateFirmwareWarning XML element, which contains the list(s) of Device IDs that
failed DCC Authorisation / Validation. The DCC shall return the following data items which
are specific to this Service Request for Successful Responses

DSPUpdateFirmwareWarning Definition:

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
InvalidDeviceIDList	Comma separated list of Device IDs for which the User ID is not the Import Supplier or the DeviceIds don't exist. Containing a minimum of <u>one+</u> Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = “([A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2})”))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
NotCommissionedDeviceIDList	Comma separated list of Device IDs which aren't in a status of “_Commissioned_” or “_Suspended_” or the Device is not a Meter or a HCALCS. Containing a minimum of <u>one+</u> Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
NotApplicableFirmwareDeviceIDList	Comma separated list of Device IDs for which the Firmware is not applicable. Containing a minimum of <u>one+</u> Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A

OtherRequestsInProgressList	Comma separated list of Device IDs for which another Firmware Update request is in progress. Containing a minimum of one Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
InvalidGBCSVersionList	Comma separated list of Device IDs for which either; - the HCALCS DeviceID for which the GBCS Version of the associated CHF is prior to v4.1 - HCALCS Device IDs for which the current GBCS Version is prior to v4.1	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A

Table 255: DSPUpdateFirmwareWarning (sr:DSPUpdateFirmwareWarning) data items

Amend Section 3.8.124.3 to the following:

3.8.124.3 Specific Validation for this Request

See clause 3.2.5 for general validation applied to all Requests and clause 3.10.2 for Execution Date Time validation.

For this Service Request and as an exception, the Authorisation Check associated to E5 allows the Device's SMI Status to be 'Suspended'.

Amend Section 3.8.124.4 as follows:

3.8.124.4 Additional DCC System Processing

Upon receipt of a Response to this Service Request containing a Firmware Version value:

- if the Target Device Type is ESME, GSME, HCALCS, PPMID or CHF and the Firmware Version returned by the Device matches an entry on the CPL for that Device Model, but is different from that stored in the SMI, the DCC Systems shall update the Firmware Version in the SMI to the value returned by the Device. Note that updating the Firmware Version may also update the Device's GBCS Version in the SMI.
 - If the target Device is CHF, the associated GPF Firmware Version shall also be updated.

- If the Firmware Version entry on the CPL for that Device Model has a status of “Current” and the Read Firmware Version Service Request was not submitted by the Responsible Supplier, DCC Alert N49 shall be sent to the Responsible Supplier.
- If the Firmware Version entry on the CPL for that Device Model has a status of ~~“Removed”~~, the SMI Firmware Version shall be updated, and the Device Status shall ~~be~~ set to ‘Suspended’ (where the target Device is CHF, the associated GPF Device Status shall also be set to ‘Suspended’). In this case DCC Alert N50 shall be sent to the Responsible Supplier. In addition, DCC Alert N28 will be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter to notify the ~~“Suspension”~~ of the Device. All DSP Future Dated and Scheduled Service Requests shall be deleted for the ‘Suspended’ Device(s) and DCC Alerts N40 and N41 will be sent to the ~~Service~~ Users responsible for those Service Requests.
- Where the DeviceFirmwareVersion for the specified Device is now the current valid version, and the Device Status was ‘Suspended’ and the Firmware Version returned by the Device matches an entry on the CPL for that Device Model with a status of “Current”, the DCC Systems shall update the Device Status to the status it held immediately prior to its ~~“Suspension”~~ and DCC Alert N29 will be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter.
- if the Target Device Type is ESME, GSME, HCALCS, PPMID or CHF and the Firmware Version returned by the Device does not match an entry on the ~~CPL~~ for that Device Model, but is different from that stored in the SMI, DCC Alert N51 will be sent to the Responsible Supplier ~~and~~ the SMI Firmware Version will ~~be~~ updated with the Firmware Version returned by the Device. The Device’s GBCS Version in the SMI will not be updated since there is no CPL entry on which to base an update.
 - As there is no entry on the CPL, the Device Status of the Device shall be set to ‘Suspended’ and an additional DCC Alert N28 shall be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter.
 - If the target Device is CHF, the associated GPF Firmware Version shall also be updated and the GPF Device Status shall also be set to ‘Suspended’.
 - All DSP Future Dated and Scheduled Service Requests shall be deleted for the ‘Suspended’ Device(s) and DCC Alerts N40 and N41 will be sent to the ~~Service~~ Users responsible for those Service Requests.

if the Target Device Type is GPF and the GSME Firmware Version returned by the GPF is different from that stored in the SMI, DCC Alert N52 will be sent to the Responsible Supplier as a warning and the SMI Firmware Version will not be updated.

Amend Section 3.8.125.1 as follows:

3.8.125.1 Service Description	
Service Request Name	ActivateFirmware
Service Reference	11.3
Service Reference Variant	11.3
Eligible Users	Import Supplier (IS) Gas Supplier (GS)
Security Classification	Critical
BusinessTargetID - Device applicable to this request	Electricity Smart Meter (ESME) Gas Smart Meter (GSME) HAN Connected Auxiliary Load Control Switch (HCALCS)
Can be future dated?	Device
On Demand?	Yes
Capable of being DCC Scheduled?	No
Command Variants applicable to this Request (Only one populated)	For Service Request 4 – Transform For Signed Pre-Commands, choice of: 5 - Send (Critical) 6 - Return for local delivery (Critical) 7 - Send and Return for local delivery (Critical)
Common Header Data Items	See clause 3.4.1.1
Data Items Specific to this Service Request	See Specific Data Items Below
Possible responses from this Service Request	These are the possible responses applicable to this Service Request. Please see clause 3.5 for more details on processing patterns - Acknowledgement - Response to Transform Request - PreCommand Format - Service Response from Device – GBCSPayload - Service Response (from Device) - FutureDatedDeviceAlertMessage - Response to a Command for Local Delivery Request – LocalCommand Format Also see Response Section below for details specific to this request
Response Codes possible from this Service Request	See clause 3.5.10 for Common Response Codes
GBCS Cross Reference	Electricity (ESME) Gas Electricity (HCALCS)
GBCS version earlier than v4.1 MessageCode	0x0012 0x0012 N/A
GBCS version earlier than v4.1 Use Case	CS06 CS06 N/A
GBCS v4.1 or later MessageCode	0x0012 0x0012 0x0012
GBCS v4.1 or later Use Case	CS06 CS06 CS06

Amend Section 3.8.125.4 as follows:

3.8.125.4 Additional DCC System Processing

The DCC Systems shall monitor all Responses received to this Service Request.

Where the DCC identifies any Response where the current Firmware Version returned by the Device matches an entry on the CPL for that Device Model and that Firmware Version is different to the value currently held in the Smart Metering Inventory for that Device, an update to the Smart Metering Inventory shall be made by the DCC.

The DCC Systems shall update the DeviceFirmwareVersion data item within the Smart Metering Inventory to record the new DeviceFirmwareVersion value for the specified Device ID received in the Response. Where the DeviceFirmwareVersion for the specified Device is now the current valid version, and the Device Status was ‘Suspended’ and the Firmware Version returned by the Device matches an entry on the CPL for that Device Model with a status of “Current” the DCC Systems shall update the Device Status to the status it held immediately prior to its ~~“S~~suspension” and DCC Alert N29 will be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter.

If the Firmware Version returned by the Device matches an entry on the CPL for that Device Model with a status of ~~“Removed”~~, the SMI Firmware Version will be updated, and the Device Status will be set to ‘Suspended’. In this case DCC Alert N50 will be sent to the Responsible Supplier. In addition, DCC Alert N28 will be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter to notify the ~~“S~~suspension” of the Device. All DSP Future Dated and Scheduled Service Requests shall be deleted for the ‘Suspended’ Device(s) and DCC Alert N40 and N41 will be sent to the ~~Service~~-Users responsible for those Service Requests.

If the Firmware Version returned by the Device is invalid (doesn’t match an entry on the CPL for that Device Model) and that Firmware Version is different to the value currently held in the Smart Metering Inventory for that Device, DCC Alert N51 will be sent to the Responsible Supplier and the Smart Metering Inventory Firmware Version will be updated with the Firmware Version returned by the Device. As there is no entry on the CPL, the Device Status of the Device will be set to ‘Suspended’ and an additional DCC Alert N28 will be sent to the Responsible Supplier and to the Electricity Distributor or Gas Transporter. All DSP Future Dated and Scheduled Service Requests shall be deleted for the ‘Suspended’ Device and DCC Alerts N40 and N41 will be sent to the ~~Service~~-Users responsible for those Service Requests.

Amend Section 3.8.126.3 as follows:

3.8.126.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Service Request and as an exception, the Authorisation Check associated to E5 allows the Device's SMI Status to be 'Suspended'

Response Code	Response Code Description
E110401	The Firmware Version is not approved. The Firmware version ID does not align with an entry on the Central Products List.
W110401	The Update Firmware Warning contains between one and five lists of Device IDs for which the validation failed for each DeviceID: • InvalidDeviceIDList . The DeviceID does not exist or the User is not the Import Supplier or Gas Supplier for a Meter connected to the same HAN as the PPMID. • NotCommissionedDeviceIDList. The PPMID status is not 'Commissioned' or 'Suspended' or the Device is not a PPMID • NotApplicableFirmwareDeviceIDList. The Firmware Version is not applicable to the PPMID • OtherRequestsInProgressList. The PPMID already has another Firmware update request in progress. • InvalidGBCSVersionList. The CHF associated with the PPMID Device has a GBCS Version prior to v4.1.
E110402	The firmware is not marked as active in the Central Products List and Smart Metering Inventory.
E110403	The DCC Systems calculated Hash value over the Manufacturer Image part of the FirmwareImage provided by the User within the Service Request differs from that held in the CPL for the specified FirmwareVersion.
E110405	The firmware image is not constructed as per the GBCS definition, i.e. the FirmwareImage does not contain both an OTA Header and a Firmware Image concatenated together, or the Length of the base64 encoded version of the GBCS defined Firmware "OTA Upgrade Image" exceeds 1024000.

Amend Section 3.8.126.4 as follows:

3.8.126.4 Specific Data Items in the Response

This Service Request synchronous response is defined in the XSD DSPUpdateFirmwareWarning XML element, which contains the list(s) of Device IDs that failed DCC Authorisation / Validation.

The DCC shall return the following data items which are specific to this Service Request for Successful Responses

DSPUpdatePPMIDFirmwareWarning Definition:

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
InvalidDeviceIDList	Comma separated list of Device IDs for which the User ID is not the Import Supplier or Gas Supplier or the DeviceIds don't exist. Containing a minimum of 1 Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = "[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}-[A-Fa-f0-9]{2}"))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
NotCommissionedDeviceIDList	Comma separated list of Device IDs which aren't in a status of "Commissioned" or "Suspended" or the Device is not a PPMID. Containing a minimum of 1 Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
NotApplicableFirmwareDeviceIDList	Comma separated list of Device IDs for which the Firmware is not applicable. Containing a minimum of 1 Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A

OtherRequestInProgressList	Comma separated list of Device IDs for which another Firmware Update request is in progress. Containing a minimum of 1 Device ID, each as defined by sr:EUI	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A
InvalidGBCSVersionList	Comma separated list of Device IDs for which the CHF associated with PPMID device has a GBCS version prior to v4.1	sr:DeviceIDList (Restriction of xs:string (minLength = 23 pattern = as for InvalidDeviceIDList above))	No The Response will contain at least one of the 5 Lists and it could contain all of them	None	N/A

Table 257.2: DSPUpdatePPMIDFirmwareWarning (sr:DSPUpdatePPMIDFirmwareWarning) data items

Amend Section 3.8.126.5 as follows:

3.8.126.5 Additional DCC System Processing

The DCC Systems shall calculate a Hash over the Manufacturer Image part of the FirmwareImage provided by the User within the Service Request and ensure that the Hash calculated matches that held in the CPL for the specified FirmwareVersion. Where the DCC identifies any mismatch in Hash values, a Response Code of E110403 shall be returned to the User.

The DCC Systems shall monitor all Device Alerts received from the PPMID indicating the activation outcome (Alert Code 0x8F8B) received as a consequence of sending this Service Request.

Where the DCC identifies any Device Alert where the current Firmware Version returned by the Device matches an entry on the CPL for that Device Model and that Firmware Version is different to the value currently held in the Smart Metering Inventory for that Device, an update to the Smart Metering Inventory shall be made by the DCC.

The DCC Systems shall update the DeviceFirmwareVersion data item within the Smart Metering Inventory to record the new DeviceFirmwareVersion value for the specified Device ID received in the Response. Where the DeviceFirmwareVersion for the specified Device is now the current valid version, and the Device Status was ‘Suspended’ and the Firmware Version returned by the Device matches an entry on the CPL for that Device Model with a status of “Current” the DCC Systems shall update the Device Status to the status it held immediately prior to its “~~S~~suspension” and DCC Alert N29 will be sent only to the Responsible Supplier.

If the Firmware Version returned by the Device matches an entry on the CPL for that Device Model with a status of ~~“Removed”~~, the SMI Firmware Version will be updated, and the Device Status will be set to ‘Suspended’. In this case DCC Alert N50 will be sent to the Responsible Supplier. In addition, DCC Alert N28 will be sent only to the Responsible Supplier to notify the ~~“Suspension”~~ of the Device. All DSP Future Dated and Scheduled Service Requests shall be deleted for the ‘Suspended’ Device and DCC Alerts N40 and N41 will be sent to the ~~Service~~ Users responsible for those Service Requests.

If the Firmware Version returned by the Device is invalid (doesn’t match an entry on the CPL for that Device Model), and that Firmware Version is different to the value currently held in the Smart Metering Inventory for that Device, DCC Alert N51 will be sent to the Responsible Supplier –and the Smart Metering Inventory Firmware Version will be updated with the Firmware Version returned by the Device. As there is no entry on the CPL, the Device Status of the Device will be set to ‘Suspended’ and an additional DCC Alert N28 will be sent only to the Responsible Supplier. All DSP Future Dated Service Requests shall be deleted for the ‘Suspended’ Device and DCC Alerts N41 will be sent to the ~~Service~~ Users responsible for those Service Requests.

If the Firmware Version returned by the Device is invalid (doesn’t match an entry on the CPL for that Device Model), and that Firmware Version is different to the value currently held in the Smart Metering Inventory for that Device, DCC Alert N51 will be sent to the Responsible Supplier –and the Smart Metering Inventory Firmware Version will be updated with the Firmware Version returned by the Device. As there is no entry on the CPL, the Device Status of the Device will be set to ‘Suspended’ and an additional DCC Alert N28 will be sent only to the Responsible Supplier. All DSP Future Dated Service Requests shall be deleted for the ‘Suspended’ Device and DCC Alerts N41 will be sent to the ~~Service~~ Users responsible for those Service Requests.

Amend Section 3.8.127.3 to the following:

3.8.127.3 *Specific Validation for this Request*

See clause 3.2.5 for general validation applied to all Requests.

For this Request, the general Authorisation Checks as defined below shall not be carried out.

- a Response Code of E4 as defined in clause 3.2.4 “Verify that the User, in the User Role defined in the Service Request is an Eligible User for the Device” or
- a Response Code of E5 as defined in clause 3.2.4 “Verify that the Service Request or Signed Pre-Command is applicable to the Device status”

Response Code	Response Code Description
E120101	No premises can be identified from the Request

E120102	No SM WAN data exists for the requested location (property)
E120103	No SM WAN coverage data available for CSP Region

Amend Section 3.8.127.4 to the following

3.8.127.4 Specific Data Items in the Response

This Service Response is defined in the XSD ResponseMessage DSPWANMatrix element, which contains the SM WAN connectivity details.

Request WAN Matrix Service Request Response Data Items DSPWANMatrix Definition

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
Request	Input details of the Request, i.e. UPRN or Partial Address	sr:RequestWANMatrix	Yes	None	N/A
DSPWANMatrixResponse	Array of responses for each CSP Region	Sr:DSPWANMatrixResponse	Yes	None	N/A

Table 260: DSPWANMatrix (sr:DSPWANMatrix) data items

DSPWANMatrixResponse Definition

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
CSPRegion	The CSP Region the address is associated with Valid set: - North - Central - South 4G Central 4G South 4G North	sr:CSPRegion (Restriction of xs:string (Enumeration))	Yes	None	N/A
CSPRegionResponseCode	The outcome for a single CSP Region Valid set: - I0 - E120101 - E120102 - E120103	sr:ResponseCode	Yes	None	N/A

CoverageAvailability	Coverage Availability Valid set: - true. (Yes) - false. (No)	xs:boolean	CSPRegion ResponseCo de = 10: Yes Otherwise: N/A	None	N/A
AnticipatedCoverageDate	If Coverage Availability is set to false, the anticipated date when Coverage will be available. If no Coverage is planned then this date will be set to '3000-12-31T00:00:00Z'	xs:date	Coverage Availability = false: Yes Otherwise: N/A	None	N/A
WANTechnology	The WAN technology to be used for this location The allowable values shall be in line with Equipment names as defined and maintained within Annex E of the CH INSTALLATION AND MAINTENANCE SUPPORT MATERIALS	sr:WANTechnol ogyType (Restriction of xs:string (maxLength = 30))	CSPRegion ResponseCo de = 10: Yes Otherwise: N/A	None	N/A
ConnectivityLikelihood	The likely Connectivity strength Valid set: - High - Medium - Low	Restriction of xs:string (Enumeration)	CSPRegion ResponseCo de = 10: Yes Otherwise: N/A	None	N/A
AuxiliaryEquipmentRequired	Free text with details of any required auxiliary equipment, if any	Restriction of xs:string (maxLength = 50)	No	None	N/A
AdditionalInformation	Free text providing additional information	Restriction of xs:string (maxLength = 250)	No	None	N/A

Table 260a: DSPWANMatrixResponse (sr:DSPWANMatrixResponse) data items

Amend Section 3.9.1 as follows:

DCC Alert Messages

Specific Data Items in the DCC Alert Message

Each Alert Code being reported as a DCC Alert shall conform to the DCC Alert format as defined in 3.6.3 DCC Alerts - DCCAlertMessage Format. The DCC shall ensure that the Body of each DCC Alert (DCCAlert XML element) conforms to one of the DCC Alert formats as defined in the table below:

DCCAlert Definition

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
PowerOutageEvent	The trigger event indicates that a device power has failed	sr:PowerOutageEvent See 3.9.2	AD1	None	N/A
DeviceStatusChangeEvent	The trigger event indicates that a Device's SMI Status has changed	sr:DeviceStatusChangeEvent See 3.9.3	N1, N2, N8, N9, N16, N28 and N29, N44, N45	None	N/A
DSPScheduleRemoval	The trigger event indicates that a DCC Schedule is to be deleted	sr:DSPScheduleRemoval See 3.9.4	N4, N5, N6, N17, N37 and N40	None	N/A
CommandFailure	The trigger event indicates that a Command has failed	sr:CommandFailure See 3.9.5	N3, N7, N10, N11, N12, N13, N14, N15, N33, N34, N35, N36, N38, N41 and N53	None	N/A

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
FirmwareDistributionFailure	The trigger event indicates that a Firmware Distribution Command to the CSP has failed, at least for some of the Devices	sr:FirmwareDistributionFailure See 3.9.6	N18, N19, N20, N21, N22 and N23	None	N/A
UpdateHANDeviceLogResult	The trigger event indicates if a Command to Update a Communications Hub Whitelist Update. (addition ONLY) has succeeded or no Alert has been received by the DCC.	sr:UpdateHANDeviceLogResult See 3.9.7	N24 and N25	None	N/A
ChangeOfSupplier	The trigger event indicates if an Update Security Credentials (CoS) has succeeded or has failed the CoS Party access control	sr:ChangeOfSupplier See 3.9.8	N26 and N27	None	N/A
DeviceLogRestored	The trigger event indicates that the CHF or GPF Device Log has been restored	sr:DeviceLogRestored (See clause 3.9.9)	N30, N31	None	N/A
<u>PPMIDAlert</u>	<u>The trigger event indicates an Alert has been generated by the PPMID Device</u>	<u>sr:PPMIDAlert</u> <u>(See clause 3.9.10)</u>	<u>N39</u>	<u>None</u>	<u>N/A</u>
<u>SecurityCredentialsUpdated</u>	<u>The trigger event indicates receipt of a success Response from Update Security Credentials where the Remote Party whose certificate has been placed on the Device is not the sender of the Service Request</u>	<u>sr:SecurityCredentialsUpdated</u> <u>(see clause 3.9.11)</u>	<u>N42</u>	<u>None</u>	<u>N/A</u>

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
<u>PPMID Removal</u>	<u>The trigger event is receipt of a successful Response from Update HAN Device Log (Removal) where the removed Device is a PPMID that was joined to both an ESME and the GSME</u>	<u>sr:PPMIDRemoval</u> <u>(See clause 3.9.12)</u>	<u>N43</u>	<u>None</u>	<u>N/A</u>
<u>QuarantinedRequest</u>	<u>The trigger event indicates that the Service Request has been quarantined, because an Anomaly Detection volume threshold or attribute limit has been breached</u>	<u>sr:QuarantinedRequest</u> <u>(See clause 3.9.17)</u>	<u>N46, N47, N48</u>	<u>None</u>	<u>N/A</u>

<u>FirmwareVersionMismatch</u>	<u>N49. The trigger event indicates there is a mismatch between the Device's Firmware Version in SMI and that returned by the Read Firmware Version Service Request and that the version returned by the Device matches an entry on the CPL with a status of "Current"</u> <u>N50. The trigger event indicates there is a mismatch between the Device's Firmware Version in SMI and that returned by the Read Firmware Version Service Request, the Activate Firmware Service Request or the Future Dated Firmware Activation Alert and that the version returned by the Device matches an entry on the CPL with a status of 'Removed'</u> <u>N51. The trigger event indicates there is a mismatch between the Device's Firmware Version in SMI and that returned by the Read Firmware Version Service Request, the Activate Firmware Service Request or the Future Dated Firmware Activation Alert and the version returned by the Device doesn't match an entry on the CPL</u> <u>N52. The trigger event indicates there is a mismatch between the</u>	<u>sr:FirmwareVersionMi smatch (See clause 3.9.13)</u>	<u>N49, N50, N51, N52.</u>	<u>None</u>	<u>N/A</u>
--------------------------------	--	--	--------------------------------	-------------	------------

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
	GSME's Firmware Version in SMI and that returned by the Read Firmware Version Service Request where the target Device is GPF				
DualBandCHAlert	The trigger event indicates an Alert has been generated by the Dual Band CHF Device	sr: DualBandCHAlert (See clause 3.9.14)	N54	None	N/A
S1SPAlertDSP	Used for conveying an S1SP Alert N55: The trigger event indicates that a SMETS1 Service Provider reports a Service Request validation error or other notification. N56: The trigger event is the provision of a prepayment top-up UTRN in response to a Service Request where SRV is 2.2	sr: S1SPAlertDSP (See clause 3.9.15)	N55, N56	None	N/A
SMETS1CHFirmwareNotification	See Clauses 0 and 0.	sr: SMETS1CHFirmware Notification (See clause 3.9.18)	N57	None	N/A
ALCSHCALCSCConfigurationChange	The trigger event indicates the ESME's ALCS/HCALCS/APC configuration has changed	sr: ALCSHCALCSCConfigurationChange (See clause 3.9.19)	N58	None	N/A
FirmwareUpgradeRequested	This Alert is used to share the list of Devices that have been approved by CSPs for firmware update.	sr: FirmwareUpgradeRequested (See clause 3.9.20)	N59	None	N/A
CSPFirmwareDeliveryStatus	The trigger event indicates a notification has been generated by the CSP in relation to the transfer of a firmware image to a Comms Hub.	sr: CSPFirmwareDeliveryStatus (See clause 3.9.21)	N60, N61	None	N/A

DCC Alert Format / Data Item	Description / Allowable values	Type	Mandatory for Alert Codes	Default	Units
CommsHubAlert	The trigger event indicates an Alert has been generated by the Comms Hub	sr:CommsHubAlert (See clause 3.9.22)	N62	None	N/A
ECoSAlert	The trigger event indicates that the ECoS Party has generated an ECoS Alert.	sr:ECoSAlert (See clause 3.9.23)	N63	None	N/A
CoSCertificateAlert	The trigger event indicates that a Device has been installed with a CoSCertificate in its CoS Trust Anchor Cell that does not allign with an active CoS Party.	sr:CosCertificateAlert (See clause 3.9.24)	N65	None	N/A
CommsHubFirmwareActivation	The trigger event indicates that a new version of Firmware has been activated on a SMETS2+ Comms Hub.	sr:FirmwareVersionActivation (See clause 3.9.25)	N64	None	N/A
DUISVersionMismatch	The trigger event indicates that the DCC Alert or Service Response to be sent to the User is not compatible with their DUIS XSD version	sr:DUISVersionMismatch (See clause 3.9.16)	N999	None	N/A

Table 262: DCCAlert (sr:DCCAlert) data items

Amend Section 3.9.3 as follows:

3.9.3 Device Status Change Event

Specific Data Items for this DCC Alert

DeviceStatusChangeEvent Data Items:

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
DeviceID	The Device ID which status is changing.	sr:EUI (See clause 3.10.1.3)	Yes	None	N/A
DeviceStatusChange	The type of Device Status Change.	sr:DeviceStatusChange	Yes	None	N/A

Table 264: DeviceStatusChangeEvent (sr:DeviceStatusChangeEvent) data items

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
MeterIdentity	Meter Identity details	sr:MeterIdentity	DCC Alert N16: Yes Otherwise: N/A	None	N/A
MeterDecommissioning OrWithdrawal	Device Decommissioning / Withdrawal details	sr:MeterDecommissioningOrWithdrawal	DCC Alert N1 or N2: Yes Otherwise: N/A	None	N/A
DeviceRemovedFromInventory	Device in a status of 'Pending' for > 36 months has been removed from Inventory	sr:DeviceRemovedFromInventory (empty – included in the XML to describe DCC Alert type)	DCC Alert N8: Yes Otherwise: N/A	None	N/A
CHFDecommissioning	Communications Hub Function Decommissioned	sr:CHFDecommissioning (empty – included in the XML to describe DCC Alert type)	DCC Alert N9: Yes Otherwise: N/A	None	N/A
DeviceSuspended	Device Suspended	sr:DeviceSuspended OrRestored (empty – included in the XML to describe DCC Alert Type)	DCC Alert N28: Yes Otherwise: N/A	None	N/A
DeviceRestored	Device Restored from Suspension	sr:DeviceSuspended OrRestored (empty – included in the XML to describe DCC Alert Type)	DCC Alert N29: Yes Otherwise: N/A	None	N/A
RecoveryCompleteACB Credentials	SMKI recovery procedure is complete - at least one of the KRP Certificates on the Device has been replaced with an ACB Certificate	sr:RecoveryCompleteACBCredentials	N44: Yes Otherwise: N/A	None	N/A

Data Item	Description / Allowable values	Type	Mandatory	Default	Units
RecoveryComplete	SMKI recovery procedure is complete - all required Certificates on the Device have been recovered. i.e all relevant ACB Certificatess have been replaced with Supplier/Network Operator certificates	sr:RecoveryComplete (empty – included in the XML to describe DCC Alert Type)	N45: Yes Otherwise: N/A	None	N/A

Table 265: DeviceStatusChange (sr:DeviceStatusChange) data items

Amend Section 3.9.15.3 as follows:

3.9.15.3 S1SP Alert Codes in DCC Alerts

This section specifies the meaning associated with the SMETS1 Service Provider codes which can be sent to DCC ~~Service~~ Users in DCC Alerts which are Countersigned S1SPAlerts.

S1SP Alerts may contain an S1SP Alert Code as defined here or a Response Code as defined in 3.5.10.

An S1SP Alert Code consists of a four letter prefix followed by a number. S1SP Alert Code types are:

- SMETS1 UTRN. Prefix ‘S1UT’;
- SMETS1 Validation Error. Prefix ‘S1VE’;
- SMETS1 Communication Error. Prefix ‘S1CE’; or
- other condition also indicated by prefix ‘S1’

The DCC shall maintain and publish to all Users the list of S1SP Alert descriptions and, for each such description the associated S1SP Alert Code.

The DCC shall publish such information regarding an S1SP Alert at least [10] working days before any such S1SP Alert is created in relation to a SMETS1 Service Request operated through the DCC.

SEC Appendix AJ – SEC Variation Testing Approach Document

These changes have been redlined against Appendix AJ version 4.0

Amend Section 3.2. as follows:

3.2. Technical Specification Versioning

Release 2.0 of the DCC Systems will be the first release of the DCC Systems that will support Devices that may comply with different versions of GBCS, SMETS and CHTS according to the entry for the Device Model in the ~~Central~~rtified Products List.

SEC Appendix AS – ECoS Transition and Migration Approach Document

These changes have been redlined against Appendix AS version 3.0

Amend Section 1.17 as follows:

- 1.17 Prior to the addition of a new Device Model to the ~~Central~~^{ertified} Products List within the ECoS Migration Period, Supplier Parties intending to install Devices of that new Device Model shall ensure that, where reasonably practicable, testing is completed to demonstrate that ECoS Migration can be successfully performed on Devices of that Device Model, including the successful processing of a CoS Update Security Credentials Service Request (Service Reference Variant 6.23) after ECoS Migration has taken place.