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SECMP0028 ‘Prioritising Service Requests’

Request for information responses

About this document

This document contains the collated responses received to the SECMP0028 Request for information.

Summary of the proposal

What is the issue?

The Proposer notes that periods of high Service Request (SR) volumes going through the DCC Systems will result in Service Request queuing and increased processing times. As a consequence, consumers may be adversely impacted. This is because increased processing times for Service Requests driven by Energy Consumers (prepayment meter top ups) could cause consumers being off supply for longer periods than necessary.

Under current arrangements, Service Requests are processed in the order of which they are received and there is no mechanism for prioritising SRs during high volume periods. The Proposer believes that the SEC arrangements have been primarily drafted to cater for Credit customers and do not adequately cater for Prepayment customers.

The Proposer has highlighted that delays to the processing of SRs driven by Consumers, i.e. SR 2.2 'Top Up Device', may lead to negative impacts on the Consumer experience. This is because this SR could action the enabling or disabling of supply for Prepayment customers. It has also been noted that delays to the processing of these SRs could also cause the User to resend the same SR until the desired response is received, which may amplify the high volume periods further, causing further delayed Target Response Times.

Links to SECMP0067 'Service Request Traffic Management'

[SECMP0067 'Service Request Traffic Management'](#) sought to define a maximum system capacity, operating threshold and appropriate Service User allocations. The solution was that when the DCC System reaches this operating threshold, traffic management of the Service Requests would become active. Service Users who exceeded their allocation when the System was working at near maximum capacity would then have their requests managed down to either their stated allocation or the operating threshold (whichever was greater). This was meant to prevent Service Users crowding out others who are using the System by adhering to the allocations.

SECMP0067 was rejected by the Authority, who reasoned that evidence had not been provided to adequately demonstrate that the modification would better facilitate the General SEC Objectives. The Authority were of the view that the positive effects identified by the Change Board against SEC Objective (a) did not justify the costs of this modification given the outstanding issues.

Solution

To reduce potential impacts on consumers, the Proposer suggests adding a priority ranking to each Service Request. During periods of high Service Request volumes, where a queue to form, this would result in the DCC processing higher priority Service Requests first. Among these high priority Service Requests would be Service Requests relating to pre-payment top up and ensuring supply is available for vulnerable consumers.

Question 1: Has your organisation encountered a problem with Consumer-driven SRs being delayed during periods of high system traffic?

SECMP0028 aims to introduce a prioritisation system at times of high DCC System traffic, to ensure that Service Requests driven by Consumers are processed in a timely manner. This is intended to avoid potential delays when Consumers attempt to top up their Prepayment meters.

Question 1			
Respondent	Category	Response	Rationale
Western Power Distribution	Networks Party	No	We don't believe we have yet experienced any issues as a result of high system traffic. Note that we are still in the early stages of understanding smart meter data that is available and therefore are not sending SRV's in the volumes that we expect to. It is also worth noting that the penetration levels of smart meters is still low.
Bulb	Large Supplier	No	At current traffic rates Bulb has not been negatively impacted by high traffic. [Confidential information omitted.] As we start to see this level of increase for DCC enabled meters we will become more susceptible to potential traffic issues. Looking at the most common reasons for our members to contact us, queries related to top ups are the highest. If top ups become impacted by traffic issues, suppliers will be more at risk in having to deal with more member enquiries.
Utilita Energy Limited	Large Supplier	N/A	This question is premature. This modification looks to provide an element of futureproofing and safeguarding to the DCC network for when it is operating at its maximum, given that DCC capacity is not infinite. This question is focussed on User experience to date, which will not be reflective of User experience in upcoming years. The volume of Service Requests travelling through the DCC network at this current time is considerably less than the volume of Service Requests which will travel through the DCC network in the future - there are still millions of SMETS1 meters to be migrated to the DCC, millions of SMETS2 meters to be installed onto the DCC network, and undoubtedly new DCC Users still to enter the market utilising the DCC. All scenarios will lead to a considerable increase in traffic, and

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Question 1			
Respondent	Category	Response	Rationale
			once these scenarios are realised, there will be far greater risk of consumer driven SRs such as top ups being delayed. The impact of this could see vulnerable customers going off supply.
British Gas	Large Supplier	No	Delays experienced haven't been related to system traffic issues.
Octopus Energy	Large Supplier	Yes	This is particularly problematic when it affects I&C, as it results in requirements to remote commission (if the meter has this capability) and a poor customer experience i.e. a delay in full smart capability.
ScottishPower Energy Retail Ltd.	Large Supplier	No	We have not encountered any such problem and, given the likely costs to implement these proposals, would call upon those who would support SECMP0028 to provide evidence that they have been affected by the issues it identifies.

Question 2: Do you think the issues SECMP0028 seeks to resolve are similar to the issues SECMP0067 sought to resolve?

The rationale for SECMP0067 was to activate a traffic management system when the DCC System reaches its operating threshold. SECMP0067 was rejected by the Authority, as the operational benefit was thought to be outweighed by the implementation costs.

Question 2			
Respondent	Category	Response	Rationale
Western Power Distribution	Networks Party	Yes	SECMP0028 is similar to the SECMP0067 Proposed Solution of creating a Priority Service Request List, and posed the same issues as before, only that individual Service Request activity couldn't be constrained.
Bulb	Large Supplier	Yes	The fundamental issues that SECMP0028 and SECMP0067 are trying to tackle is ensuring that the right service requests are unaffected. Service requests that are marked as critical, such as Top Up Device, should have security in performance. Without this, it causes a higher risk for members with Smart PAYG to lose energy supply. At Bulb, we view this as one of the worst possible scenarios for our members.
Utilita Energy Limited	Large Supplier	No	SECMP0067 looked to throttle Users who were exceeding their allocation and scale those Users back when the DCC was reaching its operational threshold. This modification does look at a working model for when the DCC is reaching its operational limits but doesn't look to throttle any Users. The modification enables priority SR's, particularly SR's around supply continuation, to be prioritised during periods of high traffic. Scaling back of Users is not suggested, only that the most important SRs are granted priority status and not subject to any delays - delays which could result in consumers' being off supply for longer than necessary if no solution is implemented.
British Gas	Large Supplier	No	SECMP0028 is specific to prioritising PP SRs. SECMP0067 was to manage capacity.
Octopus Energy	Large Supplier	Yes	For differing reasons, but the expectation would be that the solution could cover both eventualities.

Question 2			
Respondent	Category	Response	Rationale
ScottishPower Energy Retail Ltd.	Large Supplier	Yes	Fundamentally, the proposers' concerns seem to be the same: i.e. that at times of network stress a risk will be introduced that prepayment customers will be unable to vend. However, we are not persuaded that this is the case. In April 2020, we responded to the Modification Consultation for SECMP0067 with the suggestion that it be rejected. That view was, in part, based on the costs, which simply did not appear to have been weighed against the benefits in any meaningful way. We were also not persuaded that the change was really needed, particularly as other initiatives were already seeking to reduce levels of extraneous network traffic; nevertheless, we indicated our willingness to revisit the matter once these initiatives had time to deliver. In our view, these initiatives did yield the improvements expected of them and, as a consequence, numbers of Device Alerts have reduced greatly while network capacity has increased. This has been particularly noticeable in C&S, where the promise of 4G Hubs will serve to further improve capacity.

Question 3: If SECMP0028 were to progress, what do you believe are the criteria by which SRs should be awarded 'priority' status?

SECMP0028 was presented to the Working Group on 7 April 2021. While one member agreed that any prioritisation of Service Requests would need to include prioritising Prepayment top-ups, believing they were among the most crucial of Service Requests that need accepting in the event of a DCC System failure, other members highlighted different Service Requests they believed should be given priority. One member stated that SRV 7.4 'Read Supply Status' should be prioritised given that Network Operators use it to ensure their consumer's supplies are restored after an outage. Other members believed there were other valid Service Requests related to ensuring Certificates are correctly placed on meters.

Question 3			
Respondent	Category	Response	Rationale
Western Power Distribution	Networks Party		Priority 1 Supply affecting (i.e. top up and read supply status) Priority 2 Certificate Activity Priority 3 Outage and extreme over voltage alerts Priority 4 Everything else
Bulb	Large Supplier	Yes	The main criteria are ensuring that a member has continuity of supply. Any SR that affects this functionality should be marked as 'priority'. This logic can be seen through the following SR's. 'Top Up Device' which delivers positive credit balance to the meter. 'Activate Emergency Credit' which gives Bulb the ability to prevent members from going off supply in the event of any financial difficulties a member can be experiencing.
Utilita Energy Limited	Large Supplier	Criteria and priority ranking	We have applied a priority ranking system to Service Requests from 1-4, with 1 being the highest priority. 1 – any Service Request relating to customers' continuation of supply should be the highest priority. This will ensure that during periods of high traffic, prioritisation is appropriately applied to prevent potentially vulnerable customers from going off supply 2 – any Service Request relating to on-site activities where there are engineers actively waiting for Service Responses to complete installations. 3 – any Service Request which could indirectly impact supply and/or is likely to be being

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Question 3			
Respondent	Category	Response	Rationale
			sent in response to a customer request (potentially live, such as during call centre contact) 4 – any other Service Request which doesn't fall into the above 3 categories. Please see full ranking in the table on Page 9 of this document.
British Gas	Large Supplier		A yes or no response isn't relevant for the question. We do not believe PP SRs need to be prioritised. Customers can top up and the message land later to the supplier. Our view is that any Install and Commission messages whilst an engineer is on site should take precedence. We also believe that managing messages via capacity allocated, to date, has been effective. We are also concerned that prioritising SRs could increase the risk of denial of service security breaches or make a DoS achieved quicker.
Octopus Energy	Large Supplier	Yes	Agreed that there should be a priority for prepay commands (specifically reconnections and top ups to allow reconnections). However, we should also be mindful of SRs relating to the I&C process, as these can result in additional visits to resolve and a poor customer experience that has a detrimental effect on the Smart program.
ScottishPower Energy Retail Ltd.	Large Supplier	No	A significant drawback with the proposals is that all Users will have their own view as to what is critical. As all Users pay for the system, it would be inappropriate to assess the priorities of one User over another.

Service Request Name	Service Reference	Service Reference Variant	Critical	Modes of Operation				Eligible User Roles	Priority
				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	<u>3</u>
Update Import Tariff (Secondary Element)	1.1	1.1.2	Yes	Yes	Device	No	No	IS	<u>3</u>
Update Price (Primary Element)	1.2	1.2.1	Yes	Yes	Device	No	No	IS GS	<u>3</u>
Update Price (Secondary Element)	1.2	1.2.2	Yes	Yes	Device	No	No	IS	<u>3</u>
Update Meter Balance	1.5	1.5	Yes	Yes	No	No	No	IS GS	<u>3</u>
Update Payment Mode	1.6	1.6	Yes	Yes	Device	No	No	IS GS	<u>3</u>
Reset Tariff Block Counter Matrix	1.7	1.7	Yes	Yes	No	No	No	IS	<u>3</u>
Update Prepay Configuration	2.1	2.1	Yes	Yes	Device	No	No	IS GS	<u>1</u>
Top Up Device	2.2	2.2	No	Yes	No	No	No	IS GS	<u>1</u>
Update Debt	2.3	2.3	Yes	Yes	No	No	No	IS GS	<u>3</u>

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Activate Emergency Credit	2.5	2.5	Yes	Yes	No	No	No	IS GS	<u>3</u>
Display Message	3.1	3.1	No	Yes	DSP	No	No	IS GS	<u>4</u>
Restrict Access For Change Of Tenancy	3.2	3.2	No	Yes	DSP	No	No	IS GS	<u>4</u>
Clear Event Log	3.3	3.3	No	Yes	No	No	No	IS GS	<u>4</u>
Update Supplier Name	3.4	3.4	No	Yes	DSP	No	No	IS GS	<u>4</u>
Disable Privacy PIN	3.5	3.5	No	Yes	No	No	No	IS GS	<u>4</u>
Read Instantaneous Import Registers	4.1	4.1.1	No	Yes	DSP	No	No	IS GS ED GT	<u>4</u>
Read Instantaneous Import TOU Matrices	4.1	4.1.2	No	Yes	DSP	No	No	IS GS ED GT	<u>4</u>
	4.1	4.1.3	No	Yes	DSP	No	No	IS	<u>4</u>

Read Instantaneous Import TOU With Blocks Matrices								ED	
Read Instantaneous Import Block Counters	4.1	4.1.4	No	Yes	DSP	No	No	GS	<u>4</u>
Read Instantaneous Export Registers	4.2	4.2	No	Yes	DSP	No	No	ES ED	<u>4</u>
Read Instantaneous Prepay Values	4.3	4.3	No	Yes	DSP	No	No	IS GS	<u>3</u>
Retrieve Change Of Mode / Tariff Triggered Billing Data Log	4.4	4.4.2	No	Yes	DSP	No	No	IS GS	<u>4</u>
Retrieve Billing Calendar Triggered Billing Data Log	4.4	4.4.3	No	Yes	DSP	No	No	IS GS	<u>4</u>
Retrieve Billing Data Log (Payment Based Debt Payments)	4.4	4.4.4	No	Yes	DSP	No	No	GS IS	<u>4</u>
Retrieve Billing Data Log (Prepayment Credits)	4.4	4.4.5	No	Yes	DSP	No	No	GS IS	<u>4</u>
Retrieve Import Daily Read Log	4.6	4.6.1	No	Yes	DSP	Yes	No	IS GS	<u>4</u>
Retrieve Export Daily Read Log	4.6	4.6.2	No	Yes	DSP	Yes	No	ES	<u>4</u>
Read Active Import Profile Data	4.8	4.8.1	No	Yes	DSP	Yes	No	IS GS ED	<u>4</u>

								GT OU	
Read Reactive Import Profile Data	4.8	4.8.2	No	Yes	DSP	Yes	No	IS ED OU	<u>4</u>
Read Export Profile Data	4.8	4.8.3	No	Yes	DSP	Yes	No	ES ED OU	<u>4</u>
Read Network Data	4.1	4.1	No	Yes	DSP	Yes	No	IS GS ED GT	<u>4</u>
Read Tariff (Primary Element)	4.11	4.11.1	No	Yes	No	No	No	IS GS OU	<u>4</u>
Read Tariff (Secondary Element)	4.11	4.11.2	No	Yes	No	No	No	IS OU	<u>4</u>
Read Maximum Demand Import Registers	4.12	4.12.1	No	Yes	DSP	Yes	No	IS ED	<u>4</u>
Read Maximum Demand Export Registers	4.12	4.12.2	No	Yes	DSP	Yes	No	ES ED	<u>4</u>
Read Prepayment Configuration	4.13	4.13	No	Yes	DSP	No	No	IS GS	<u>4</u>
Read Prepayment Daily Read Log	4.14	4.14	No	Yes	DSP	Yes	No	IS GS	<u>4</u>

Read Load Limit Data	4.15	4.15	No	Yes	DSP	Yes	No	IS ED	<u>4</u>
Read Active Power Import	4.16	4.16	No	Yes	No	Yes	No	IS ED	<u>4</u>
Retrieve Daily Consumption Log	4.17	4.17	No	Yes	DSP	Yes	No	IS GS ED GT OU	<u>4</u>
Read Meter Balance	4.18	4.18	No	Yes	DSP	No	No	IS GS	<u>3</u>
Create Schedule	5.1	5.1	No	No	No	No	Yes	IS ES GS ED GT OU	<u>4</u>
Read Schedule	5.2	5.2	No	No	No	No	Yes	IS ES GS ED GT OU	<u>4</u>
Delete Schedule	5.3	5.3	No	No	No	No	Yes	IS	<u>4</u>

								ES GS ED GT OU	
Read Device Configuration (Voltage)	6.2	6.2.1	No	Yes	No	No	No	IS RSA ED	<u>4</u>
Read Device Configuration (Randomisation)	6.2	6.2.2	No	Yes	No	No	No	IS RSA ED	<u>4</u>
Read Device Configuration (Billing Calendar)	6.2	6.2.3	No	Yes	No	No	No	IS RSA GS	<u>4</u>
Read Device Configuration (Identity Exc MPxN)	6.2	6.2.4	No	Yes	No	No	No	IS ES GS RSA ED GT OU	<u>4</u>
Read Device Configuration (Instantaneous Power Thresholds)	6.2	6.2.5	No	Yes	No	No	No	IS RSA	<u>4</u>
Read Device Configuration (MPxN)	6.2	6.2.7	No	Yes	No	No	No	IS ES GS RSA ED GT OU	<u>4</u>
Read Device Configuration (Gas)	6.2	6.2.8	No	Yes	No	No	No	GS RSA GT	<u>4</u>

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Read Device Configuration (Payment Mode)	6.2	6.2.9	No	Yes	No	No	No	IS GS RSA	<u>4</u>
Update Device Configuration (Load Limiting General Settings)	6.4	6.4.1	Yes	Yes	Device	No	No	IS	<u>4</u>
Update Device Configuration (Load Limiting Counter Reset)	6.4	6.4.2	No	Yes	DSP	No	No	IS	<u>4</u>
Update Device Configuration (Voltage)	6.5	6.5	No	Yes	DSP	No	No	ED	<u>4</u>
Update Device Configuration (Gas Conversion)	6.6	6.6	Yes	Yes	No	No	No	GS	<u>4</u>
Update Device Configuration (Gas Flow)	6.7	6.7	Yes	Yes	No	No	No	GS	<u>4</u>
Update Device Configuration (Billing Calendar)	6.8	6.8	Yes	Yes	No	No	No	IS GS	<u>4</u>
Synchronise Clock	6.11	6.11	Yes	Yes	No	No	No	IS GS	<u>2</u>
Update Device Configuration (Instantaneous Power Threshold)	6.12	6.12	No	Yes	DSP	No	No	IS	<u>4</u>
Read Event Or Security Log	6.13	6.13	No	Yes	No	No	No	IS GS ED GT RSA	<u>4</u>
Update Device Configuration (Auxiliary Load Control Description)	6.14	6.14.1	Yes	Yes	No	No	No	IS	<u>4</u>
Update Device Configuration (Auxiliary Load Control Scheduler)	6.14	6.14.2	Yes	Yes	Device	No	No	IS	<u>4</u>
Update Security Credentials (KRP)	6.15	6.15.1	Yes	Yes	Device	No	No	IS	<u>4</u>

								GS ED GT	
Update Security Credentials (Device)	6.15	6.15.2	Yes	Yes	No	No	No	IS GS	<u>4</u>
Issue Security Credentials	6.17	6.17	Yes	Yes	No	No	No	IS GS	<u>4</u>
Set Maximum Demand Configurable Time Period	6.18	6.18.1	No	Yes	DSP	No	No	ED	<u>4</u>
Reset Maximum Demand Registers	6.18	6.18.2	No	Yes	DSP	No	No	ED	<u>4</u>
Set Device Configuration (Import MPxN)	6.2	6.20.1	No	Yes	DSP	No	No	IS GS	<u>4</u>
Set Device Configuration (Export MPAN)	6.2	6.20.2	No	Yes	DSP	No	No	ES	<u>4</u>
Request Handover Of DCC Controlled Device	6.21	6.21	No	Yes	DSP	No	No	IS GS	<u>4</u>
Configure Alert Behaviour	6.22	6.22	No	Yes	No	No	No	IS GS ED	<u>4</u>
Update Security Credentials (CoS)	6.23	6.23	No	Yes	DSP & Device	No	No	IS GS	<u>4</u>
Retrieve Device Security Credentials (KRP)	6.24	6.24.1	No	Yes	No	No	No	IS	<u>4</u>

								GS ED GT	
Retrieve Device Security Credentials (Device)	6.24	6.24.2	Yes	Yes	No	No	No	IS GS	<u>4</u>
Set Electricity Supply Tamper State	6.25	6.25	Yes	Yes	No	No	No	IS	<u>4</u>
Update Device Configuration (daily resetting of Tariff Block Counter Matrix)	6.26	6.26	Yes	Yes	No	No	No	IS	<u>4</u>
Update Device Configuration (RMS Voltage Counter Reset)	6.27	6.27	No	Yes	DSP	No	No	ED	<u>4</u>
Set CHF Sub GHz Configuration	6.28	6.28	No	Yes	No	No	No	IS GS	<u>4</u>
Request CHF Sub GHz Channel Scan	6.29	6.29	No	Yes	No	No	No	IS GS	<u>4</u>
Read CHF Sub GHz Configuration	6.3	6.3	No	Yes	No	No	No	IS GS RSA	<u>4</u>
Read CHF Sub GHz Channel	6.31	6.31	No	Yes	No	No	No	IS GS RSA	<u>4</u>
Read CHF Sub GHz Channel Log	6.32	6.32	No	Yes	No	No	No	IS GS RSA	

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Enable Supply	7.1	7.1	Yes	Yes	No	No	No	IS	<u>1</u>
Disable Supply	7.2	7.2	Yes	Yes	No	No	No	IS GS	<u>1</u>
Arm Supply	7.3	7.3	Yes	Yes	No	No	No	IS GS	<u>1</u>
Read Supply Status	7.4	7.4	No	Yes	No	No	No	IS ES GS RSA ED GT	<u>1</u>
Activate Auxiliary Load	7.5	7.5	Yes	Yes	No	No	No	IS	<u>1</u>
Deactivate Auxiliary Load	7.6	7.6	Yes	Yes	No	No	No	IS	<u>3</u>
Read Auxiliary Load Switch Data	7.7	7.7	No	Yes	DSP	No	No	IS OU	<u>4</u>
Reset Auxiliary Load	7.8	7.8	Yes	Yes	No	No	No	IS	<u>1</u>
Add Auxiliary Load To Boost Button	7.9	7.9	No	Yes	DSP	No	No	IS	<u>4</u>
Remove Auxiliary Load From Boost Button	7.1	7.1	No	Yes	DSP	No	No	IS	<u>4</u>
Read Boost Button Details	7.11	7.11	No	Yes	DSP	No	No	IS OU	<u>4</u>
Set Randomised Offset Limit	7.12	7.12	Yes	Yes	No	No	No	IS	<u>4</u>

Commission Device	8.1	8.1.1	Yes	Yes	No	No	No	IS GS	<u>2</u>
Read Inventory (Current and Future Suppliers may use this Service Request)	8.2	8.2	No	No	No	No	Yes	IS ES GS RSA ED GT OU	<u>4</u>
Decommission Device	8.3	8.3	No	No	No	No	Yes	IS GS	<u>2</u>
Update Inventory	8.4	8.4	No	No	No	No	Yes	IS ES GS RSA ED GT OU	<u>4</u>
Service Opt Out	8.5	8.5	No	No	DSP	No	No	IS GS	<u>4</u>
Service Opt In	8.6	8.6	No	No	No	No	Yes	IS GS	<u>4</u>
Join Service (Critical)	8.7	8.7.1	Yes	Yes	No	No	No	IS GS	<u>2</u>

Join Service (Non-Critical)	8.7	8.7.2	No	Yes	No	No	No	IS GS OU	<u>2</u>
Unjoin Service (Critical)	8.8	8.8.1	Yes	Yes	No	No	No	IS GS	<u>2</u>
Unjoin Service (Non-Critical)	8.8	8.8.2	No	Yes	No	No	No	IS GS OU	<u>2</u>
Read Device Log	8.9	8.9	No	Yes	DSP	No	No	IS GS OU	<u>2</u>
Update HAN Device Log	8.11	8.11	No	Yes	DSP	No	No	IS GS OU	<u>2</u>
Restore HAN Device Log	8.12	8.12.1	No	Yes	No	No	No	IS GS	<u>2</u>
Restore Gas Proxy Function Device Log	8.12	8.12.2	No	Yes	No	No	No	IS GS	<u>4</u>
Return Local Command Response	8.13	8.13	No	No	No	No	Yes	IS GS	<u>4</u>
Communications Hub Status Update- Install Success	8.14	8.14.1	No	No	No	No	Yes	IS GS	<u>2</u>
	8.14	8.14.2	No	No	No	No	Yes	IS	<u>2</u>

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Communications Hub Status Update - Install No SM WAN								GS	
Communications Hub Status Update. – Fault Return	8.14	8.14.3	No	No	No	No	Yes	IS GS	<u>4</u>
Communications Hub Status Update – No Fault Return	8.14	8.14.4	No	No	No	No	Yes	IS GS	<u>4</u>
Request Customer Identification Number	9.1	9.1	No	Yes	No	No	No	OU	<u>4</u>
Update Firmware	11.1	11.1	No	No	No	No	Yes	IS GS	<u>4</u>
Read Firmware Version	11.2	11.2	No	Yes	DSP	No	No	IS ES GS RSA ED GT OU	<u>4</u>
Activate Firmware	11.3	11.3	Yes	Yes	Device	No	No	IS GS	<u>4</u>
Request WAN Matrix	12.1	12.1	No	No	No	No	Yes	IS ES GS RSA ED GT OU	<u>2</u>

Device Pre-notification	12.2	12.2	No	No	No	No	Yes	IS ES GS RSA ED GT OU	<u>2</u>
Record Network Data (GAS)	14.1	14.1	No	Yes	No	Yes	No	GT	<u>4</u>