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MP244

‘Device Alerts for Smart Meter credit replenishment’

Modification Report

Version 0.7

13 November 2024



About this document

This document is a draft Modification Report. It currently sets out the background, issue, and progression timetable for this modification, along with any relevant discussions, views, and conclusions. This document will be updated as this modification progresses.

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This document also has three annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full DCC Preliminary Assessment response.
- **Annex D** contains the Refinement Consultation responses.

Contact

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1. Summary

This proposal has been raised by Kevin Clark on behalf of Utilita Energy Ltd.

When a Smart Meter has been installed successfully, a Supplier can configure the Device to perform in Prepayment mode, as well as triggering specific Alerts and notifications depending on a variety of scenarios. When a Supplier receives a particular Alert or notification, they can take remedial actions to rectify issues if required.

The Proposer has identified scenarios whereas a Supply could be cut off through reaching certain credit limits. If this scenario were to happen frequently, it may identify a trend where a prepayment energy consumer may be self-disconnecting or rationing their credit.

If a Supplier wishes to retrieve an update on the status of the Device following the receipt of a credit exhaustion alert, they can send Service Reference Variant (SRV) 7.4 '*Read Supply Status*' request to the Device. This SRV may be sent multiple times over the course of a scenario where loss of supply is caused by credit exhaustion, adding potentially unnecessary traffic to the Data Communications Company (DCC) System.

If the Supply remains off, there may be a need to visit the site of Supply to investigate the issue, as well as take behind the scenes remedial actions.

The Proposed Solution for this issue is therefore the introduction of a new Device Alert that would notify Suppliers of Supply re-enablement, following this period of disconnection.

The DCC Preliminary Assessment shows costs to implement a new Alert will be between £60,000 - £200,000, with Manufacturers indicating costs of £1.7m – £2m. This modification is targeted for the June 2026 SEC Release. It will impact Suppliers, the DCC and Other SEC Parties and is progressing as a Self-Governance modification.

2. Issue

What are the current arrangements?

Once a Smart Meter has been successfully installed and is operating as expected, a Supplier can take steps to configure the Device to perform certain actions dependant on a specific scenario. For example, a Supplier may send SRV 3.8.6 '*Update Payment Mode*' should they wish to set the credit mode of the Device, alongside establishing a Disablement Threshold for the Device. The Disablement Threshold is specified by the Smart Energy Code (SEC) Appendix AD '*DCC User Interface Specification*' (DUIS) Section 3.8.6.2 '*UpdatePaymentMode Definition*' as 'the threshold in Currency Units (CU) for controlling when to disable the Supply'.

The Great Britain Companion Specification (GBCS) Section 16.2 '*Event and Alert Codes*' states if the Disablement Threshold of a Device is exceeded, a Supplier will receive an Alert called '*Credit Below Disablement Threshold (prepayment mode)*' along with the matching Alert code '*0x8F0F*'. This informs the Supplier some form of action is required to re-establish the Supply. There is an alternative scenario that can return a similar Alert to a Supplier, called '*Emergency Credit Exhausted*' which is accompanied by Alert code '*0x81AA*'.

There are multiple actions a Supplier can take, for example:

- Submit an SRV 7.4 'Read Supply Status' request to the Device in order to ascertain the current status of the Device;
- Contact the consumer to inform them of the issue and encourage them to top up the Device; or
- Potentially reach out to third parties who may attend the site to investigate if the issue persists.

What is the issue?

The Proposer has identified that although an Alert is sent to the Supplier to inform them of an issue, for example Alert 0x8F0F 'Credit Below Disablement Threshold (prepayment mode)', the Device will not automatically inform the Supplier that the Supply has been re-enabled through some form of remedial action. A Supplier will not receive an update or Alert on the Disablement Threshold issue in relation to Supply re-enablement until they manually take some form of action such as sending SRV 7.4 'Read Supply Status' to the Device.

What is the impact this is having?

The Proposer has advised that SRV 7.4 'Read Supply Status' may need to be triggered multiple times over the course of an event. This means the Supplier is attributing time & resource to retrieving the status of the Supply, in conjunction to taking remedial action to resolve any outstanding issues. A direct consequence of submitting an increased volume of Service Requests (SR) is the potential of increasing traffic within the DCC System, possibly leading to increased response times, as well as adversely affecting DCC messaging limits.

Impact on consumers

A Supplier will be unable to provide accurate information to the consumer about the state of their supply unless they manually initiate SRV 7.4 when questioned about the Supply. This may have an impact on services offered by Suppliers to consumers experiencing difficulties with their Supply, such as offering welfare checks, providing discretionary or emergency credit, or accurately responding to Supply faults and/or concerns.

3. Solution

Proposed Solution

The Proposer would like to implement a new Device Alert called 'Supply Enabled'. This Alert would be triggered following the restoration of power to a Supply, and in combination with the Device being fully functional. The Proposer has requested the Alert be applicable to Smart Metering Equipment Technical Specifications (SMETS2) Devices. This Alert would be passed on to Suppliers by the DCC. Suppliers would need to build internal processes to then enable them to take appropriate action when these were received if they choose to.

The Alert would be triggered in a specific scenario, included below:

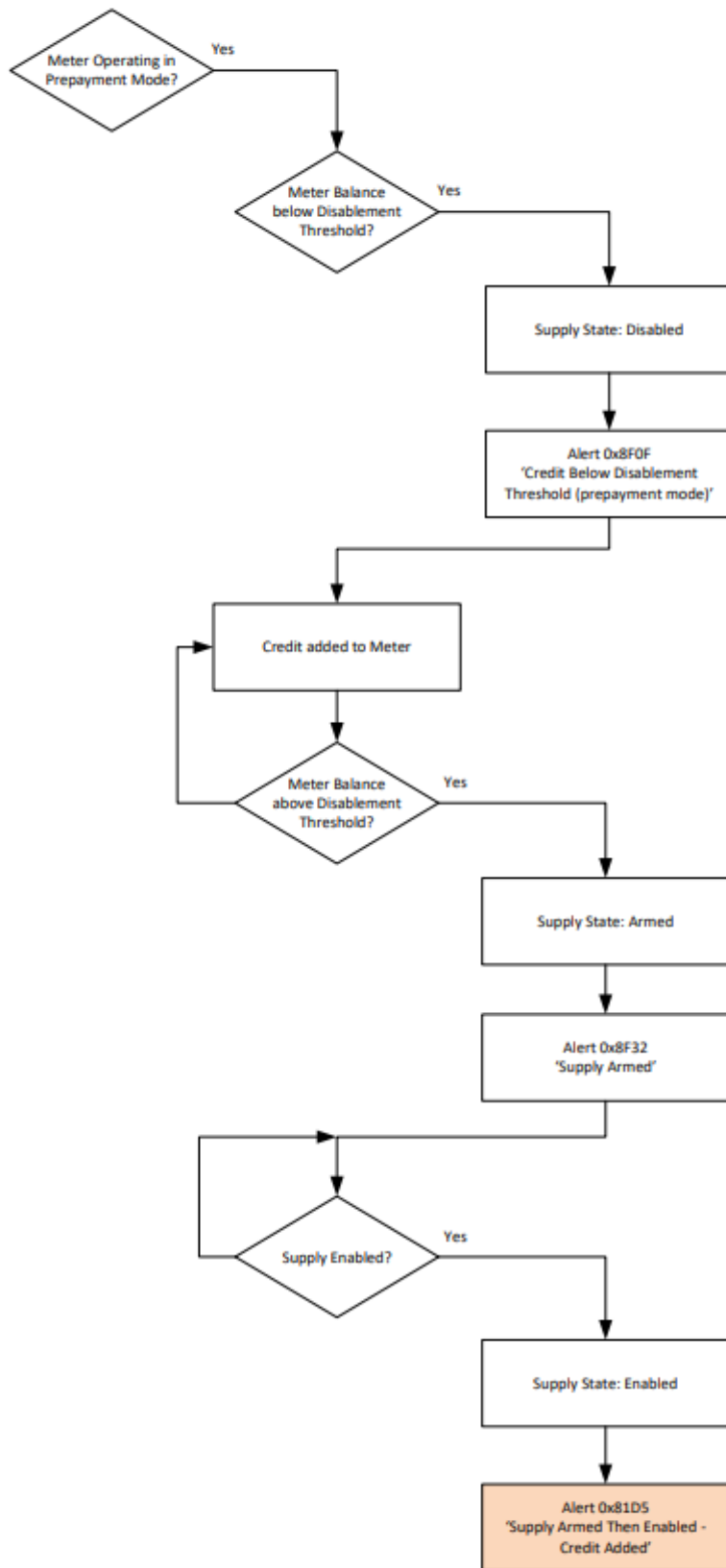


Figure 1 Process Flow for Supply Enabled New Aler

Managed by

4. Impacts

This section summarises the impacts that would arise from the implementation of this modification.

SEC Parties

SEC Party Categories impacted			
✓	Large Suppliers	✓	Small Suppliers
	Electricity Network Operators		Gas Network Operators
✓	Other SEC Parties	✓	DCC

Breakdown of Other SEC Party types impacted			
	Shared Resource Providers		Meter Installers
✓	Device Manufacturers		Flexibility Providers
	DCC Other Users		MAPs/ MAMs

This modification would positively impact Suppliers as it would allow a single Device Alert to be received once Supply has been established, eliminating the need to send multiple SRV 7.4 requests via the DCC System, causing avoidable traffic. This would then positively impact the DCC, as traffic would be reduced.

The modification does have a significant impact on Manufacturers as there would be a requirement to introduce a new Alert to Devices, at a cost that would not generally be required when manufacturing Devices.

DCC Systems

DCC System changes

The implementation of a new Device Alert would require System changes to the DCC, including changes to the Data Service Provider (DSP) to include the new Device Alert in accordance with GBCS, DUIS and the Message Mapping Catalogue (MMC). It would also require changes to Parse and Correlate to support the MMC schema definition.

While there is no specific requirement relating to reporting, a new Alert is likely to impact the current DCC Data Science and Analytics reporting of SRVs and Alerts.

The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Preliminary Assessment response in Annex C.

DCC System traffic

The DCC System traffic would be positively impacted by this modification as it would reduce the number of SRV 7.4 requests that are sent to the System when a consumer is off supply.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Schedule 8 'Great Britain Companion Specification'
- Schedule 9 'Smart Metering Equipment Technical Specifications 2'
- Appendix AD 'DCC User Interface Specification'
- Appendix AF 'Message Mapping Catalogue'

The changes to the SEC required to deliver the proposed solution can be found in Annex B.

Technical specification versions

The affected documents will have minor uplifts as a result of this modification.

Devices

Devices impacted			
✓	Electricity Smart Metering Equipment	✓	Gas Smart Metering Equipment
✓	Communications Hubs	✓	Gas Proxy Functions
✓	In-Home Displays	✓	Prepayment Meter Interface Devices
✓	Standalone Auxiliary Proportional Controllers	✓	Home Area Network Connected Auxiliary Load Control Switches
✓	Consumer Access Devices	✓	Alternative Home Area Network Devices

This modification will impact Electricity Smart Metering Equipment (ESME) and Gas Smart Metering Equipment (GSME) that are operating in Prepayment mode. The configurable Alert is designed to be sent by Devices operating in Prepayment mode only.

Consumers

This modification will impact Consumers indirectly. While the solution may help a number of consumers, the cost of the modification will be levied in part upon Suppliers, and this will impact consumers' bills.

Other industry Codes

This modification will not impact other industry Codes.

Greenhouse gas emissions

This modification will not impact greenhouse gas emissions.

5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification will be determined in the Full Impact Assessment. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£60,000 – 200,000
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC

More information can be found in the DCC Preliminary Assessment response in Annex C.

SECAS costs

The estimated SECAS implementation cost to implement this as a stand-alone modification is one day of effort, amounting to approximately £600. This cost will be reassessed when combining this modification in a scheduled SEC Release. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.

SEC Party costs

Manufacturers will incur costs of £1.7m-£2m associated with introducing a new Alert to Devices. Other SEC Party costs have not been disclosed by respondents to the Refinement Consultation. However, one respondent highlighted there is potential for costs to be incurred as a result of changes to their systems to accommodate the new Device Alert.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **25 June 2026** (June 2026 SEC Release) if a decision to approve is received on or before 25 June 2025; or
- **24 June 2027** (June 2027 SEC Release) if a decision to approve is received after 25 June 2025 but on or before 24 June 2026.

The modification impacts documents which are only uplifted once per year:

- DUIS (June)

- SMETS and GBCS (November)

As there are currently no planned uplifts to the GBCS or SMETS in the near future, SECAS recommends accommodating the SMETS/GBCS changes within a June SEC Release and uplifting all three documents in one Release as opposed to implementing changes within the June and November SEC Releases separately. This approach would be a one-time only occurrence, and the usual updates to the relevant specifications would then return to their 'normal' schedule.

7. Assessment of the proposal

Areas for assessment

How will SEC Parties be impacted by this change?

There is a high potential that many SEC Parties could be directly impacted by any prospective changes. Parties responding to the Refinement Consultation highlighted there would be an impact on their systems to include the new Device Alert. It would also require a change to their vulnerable customer support team as the monitored Alerts would change to include the one detailed in this modification report.

Sub-Committee input

The Smart Energy Code Administrator and Secretariat (SECAS) has engaged with the Chairs from the Operations Group (OPSG), the Technical Architecture and Business Architecture Sub-Committee (TABASC), the Security Sub-Committee (SSC) and the Smart Metering Key Infrastructure Policy Management Authority (SMKI PMA) to confirm what input is required from these forums. SECAS believes the following Sub-Committees will need to provide the following input to this modification:

Sub-Committee input	
Sub-Committee	Input sought
OPSG	Do you think the proposed solution is operationally appropriate?
SMKI PMA	We do not believe this has any SMKI impacts
SSC	We do not believe this has any security impacts
TABASC	How complex would these changes be to implement across the industry?

Observations on the Issue

Business Case from the Proposer

The Proposer has provided some information to support their reasoning for the requirement of this change, which is outlined below:

The Electricity Supply License and Gas Supplier License Condition 27A.1 requires Suppliers to identify and offer additional support to prepay customers that Self-Disconnect or Self-Ration. In order to do this an accurate understanding of the customers Supply status is a necessity. A "Supply Restored" notification would enable Suppliers to identify customers who may be Self-Disconnecting based not only on the duration off Supply, but also frequency of disconnect events. This would additionally allow Suppliers to build an accurate history of these events and begin to identify patterns in Self-Disconnecting customers.

The increased confidence in Supply status that this Alert would bring would allow Suppliers to take a proactive approach to protecting vulnerable customers from being without basic needs of energy and heating as we will be able to contact the customer at the right time and have the right information to discuss what support that customer needs, preventing future occurrences of Self-Rationing or Self-Disconnecting and keeping these customers on Supply. This is the primary benefit of this proposal and one which we believe Ofgem should take active interest in.

In addition, there are occasions where the initial Off-Supply Alert is not generated, due to occurring within a Non-Disconnect Window, and this Alert would potentially be able to notify Suppliers of disconnects that would otherwise be hidden, potentially masking Self-Disconnecting Customers that require support but cannot be identified at this point in time.

There are significant reputational advantages for the Smart Metering Implementation Programme (SMIP) in being able to proactively manage and support vulnerable customers Self-Disconnect behaviours, especially with the increased focus on this specific customer group. If Industry is able to consistently offer the right level of support to these customers, when it is needed, the perceived benefit of the SMIP will be improved alongside the reputation of pre-pay as a payment method. This proposed new Alert is a key foundation in enabling Suppliers to begin building this proactive approach.

An automated Alert would have a positive impact on the traffic across DCC network, as the Alert would be a singular message trip as opposed to the call and receipt trip that utilising a SR would generate. This Alert would also drastically reduce the need to use the 7.4 'Read Supply Status' SR, as Suppliers would have an accurate status of their Supplies at any given moment, thus removing the need to query Supply points in their portfolio in order to check if they are on or off Supply.

Views of the Change Sub-Committee

Change Sub-Committee (CSC) members noted concerns of cost, impact to systems across the industry, and a minimal benefit the change would yield. It was noted that changes to the SMETS, DUIS and GBCS documents would be needed as part of implementing a new Device Alert. This would be accompanied by long timescales to implement the changes, as well as the cost of implementation across the industry.

The CSC highlighted that a significant business case would be required to support the cause of the Proposal should this move on through the modification process. The CSC agreed that the proposal should remain within the development stage to continue building the relevant case needed to move forwards.

Following the meeting, SECAS re-visited the business processes utilised by the Proposer and their organisation to better understand why the proposed changes are required. As a result of this review, the proposal has been re-scoped to better represent the issue raised.

SECAS presented the re-scoped proposal to CSC. The CSC noted that this issue had been raised before but the expected costs would likely outweigh any benefit. The CSC discussed the need to obtain estimated costs of the modification to draw a conclusion on this matter, and as such the modification was approved to move to the Refinement Process.

Device Manufacturer feedback

SECAS presented this issue to Gas Smart Metering Equipment (GSME) Manufacturers via an Energy and Utilities Alliance (EUA) meeting. Manufacturers were concerned about the financial aspect of this

proposal. The shared opinion was this proposal would be expensive to implement across the industry, and members were curious as to whether other Suppliers were supportive of the proposal.

A member was concerned about the potential of causing 'Alert Storms' within the DCC System. Members noted that an automated Alert could be triggered more frequently than the current sending of a SR 7.4 request, possibly overloading DCC System capacity.

In relation to supporting consumers with the management of their credit value, one member commented that it should be up to the consumer how they wish to manage the credit value of their Device.

Following further discussion with Manufacturers, SECAS received offline comments supporting the modification; one Manufacturer pointed that the provision of the additional 'Supply Enabled' Alert would not cause a significant challenge to introduce into Electricity Smart Metering Equipment (ESME) and GSME firmware. They caveat this by saying they would require a long enough window for this to be introduced. This would mean that they would prefer the Alert not be dictated by a certain Technical Specifications Applicability Tables (TSAT) last install date. They concluded that they are in favour of any improvements to specifications that would assist Suppliers in identifying and supporting vulnerable consumers.

Solution development

Implementing New SMETS1 Alerts

The initial business requirements included functionality for both SMETS1 and SMETS2 Devices. It was noted during the EUA meeting that there will be no certification for new SMETS1 Devices moving forward, so whilst existing Devices technically could support this change, any new versions would likely not be supported. It was noted that the re-certification of Devices was still a possibility. Therefore, the solution would be suitable for SMETS2 Devices, but more difficult to implement with SMETS1 Devices.

This argument was echoed by a member of the Working Group, who noted the need for the proposed Device Alert, but shared concerns over the Alert being mandated for SMETS1 Devices as there is no robust mechanism in place for SMETS1 firmware versions. At present, SMETS1 firmware is subject to contractual relationships between Suppliers and Manufacturers.

As a result of this feedback, the Proposer de-scoped SMETS1 Devices from the Business Requirements of the Proposed Solution.

Non-GBCS Non-Mandated Alert Pathway

As part of developing the business requirements, the argument of following a Non-Mandated GBCS Device Alert pathway was highlighted by members of different forums.

At Working Group, a member noted that the preferred pathway for Manufacturers would be a Non-GBCS Non-Mandated Alert. This allows Manufacturers to individually decide whether or not to adopt this Alert, but without an obligation to do so. If the Alert was included within the GBCS, all Manufacturers would be required to adopt this Alert, and there is a likelihood of high implementation costs as a result. This view was echoed by the TABASC.

The Proposer noted that they will seek to explore the Non-GBCS Non-Mandated Alert pathway if the modification proves unsuccessful.

As part of exploring alternative routes, the Proposer approached a Manufacturer to discuss the possibility of introducing a Non-GBCS Non-Mandated Alert. The Manufacturer expressed their preference for the Alert to follow the Modification path and be adopted as a Mandated Alert.

It should also be noted that a Non-GBCS/Non-Mandated Alert cannot be made configurable and once a Device has been instructed to send this particular Alert, there is no option to turn this off. It would therefore become a nuisance Alert if the consumer were to switch Supplier.

It may also require different processes for different Devices, which goes against the aim of the solution to simplify processes, as well as bringing an improvement to supporting vulnerable consumers.

Configurable or Non-Configurable Alert

During the SECAS workshop with the Proposer and the DCC, the DCC advised the impacts would be different, depending on which route the solution would be developed. If the Alert was to be mandatory all Suppliers would receive the Alert in relation to 'Supply Re-Enablement'. There would be no option to switch the Alert off. This option would be a 'text-only' change to DUIS requiring minor amendments.

If the Alert was to be designed as configurable, a DCC User could choose whether they receive the Alert, and in which scenarios it applies to. However, if this route is pursued, there would be a more significant impact to DUIS, including a DUIS Schema amendment. Working Group members recommended the proposed Device Alert should be mandatory to reduce DCC costs.

The same information was presented to TABASC, and the Sub-Committee's views differed from the Working Group's recommendation. TABASC members noted that, if implemented, they would recommend the Alert be configurable, so Users have choice in relation to receiving it.

Based on this feedback, the Proposer decided to progress with a configurable Device Alert, in line with the recommendation from TABASC.

8. Case for change

Business case

The new Device Alert will benefit Suppliers as it would provide an improvement on identifying self-disconnecting and self-rationing Consumers, enabling them to act proactively in supporting them. It would also benefit DCC System traffic, as the Alert would replace having to send multiple SRV 7.4 'Read Supply Status', which is the current workaround.

The implementation of the modification would be in June 2026 at the earliest, and Devices that contain this Alert may take some time before they are rolled out by Manufacturers. The costs of the modification are significant, and the current workaround does provide Suppliers with the same information, albeit at the expense of an increase in DCC System traffic.

As part of Working Group discussions, it was highlighted that aside from DCC and Manufacturers' costs, the industry may be faced with an underlying cost – retiring older or outdated Devices prematurely as a result of the changes proposed. SECAS confirmed that Device firmware upgrades may fail due to a number of reasons (e.g. poor signal area) and as long as the Device is within the Install Validity Period (IVP) and Maintenance Validity Period (MVP) dates, there would be no need to carry out a firmware upgrade for the proposed changes.

Views against the General SEC Objectives

Proposer's views

The Proposer believes this modification better facilitates SEC objective (c)¹ as it would provide Suppliers with a way of identifying self-rationing and self-disconnecting Consumers, which would then facilitate their ability to provide appropriate support.

Industry views

Parties that responded to the Refinement Consultation consider the Modification Proposal better facilitates objective (a)². One Party responding also agreed with the Proposer's view that it better facilitates objective (c).

Views against the consumer areas

Improved safety and reliability

This modification will have a neutral impact on this area.

Lower bills than would otherwise be the case

This modification will have a negative impact on this area.

Reduced environmental damage

This modification will have a neutral impact on this area.

Improved quality of service

This modification will have a positive impact on this area. Identifying self-disconnecting or self-rationing consumers would enable Suppliers to take proactive actions that would support the consumer, leading to improved quality of service.

Benefits for society as a whole

This modification will have a neutral impact on this area.

Appendix 1: Progression timetable

Timetable	
Event/Action	Date
Draft Proposal raised	8 Aug 2023

¹ facilitate energy consumers' management of their use of electricity and gas through the provision of appropriate information via smart metering systems.

² efficient operation of smart metering systems at energy consumers premises.

Timetable	
Event/Action	Date
Presented to CSC for initial comment	15 Aug 2023
CSC converts Draft Proposal to Modification Proposal	17 Oct 2023
Business Requirements discussed with DCC & The Proposer	13 Nov 2023
Modification discussed with Working Group	6 Dec 2023
Modification discussed with TABASC	4 Jan 2024
DCC Preliminary Assessment Requested	2 Feb 2024
DCC Preliminary Assessment Received	27 Feb 2024
Modification discussed with Working Group	3 Apr 2024
Modification discussed with OPSG	22 Apr 2024
Modification discussed with TABASC	2 May 2024
Refinement Consultation	8 May – 30 May 2024
Modification discussed with Working Group	3 Jul 2024
Modification discussed with Working Group	7 Aug 2024
<i>Impact Assessment costs approved by Change Board</i>	<i>20 Nov 2024</i>
<i>Impact Assessment Requested</i>	<i>20 Nov 2024</i>
<i>Impact Assessment Received</i>	<i>22 Jan 2025</i>
<i>Modification discussed with Working Group</i>	<i>5 Feb 2025</i>
<i>Modification Report approved by CSC</i>	<i>26 Feb 2025</i>
<i>Modification Report Consultation</i>	<i>26 Feb – 19 Ma 2025</i>
<i>Change Board Vote</i>	<i>26 Mar 2025</i>

Italics denote planned events that could be subject to change

Appendix 2: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	Full term
CSC	Change Sub-Committee
CU	Currency Units
DCC	Data Communications Company
DSP	Data Service Provider
DUIS	DCC User Interface Specification
ESME	Electricity Smart Metering Equipment
EUA	Energy and Utilities Alliance
GBCS	Great Britian Companion Specification
GSME	Gas Smart Metering Equipment
MMC	Message Mapping Catalogue
OPSG	Operations Group

Managed by

Glossary	
Acronym	Full term
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SMETS	Smart Metering Equipment Technical Specification
SMIP	Smart Metering Implementation Programme
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SR	Service Request
SRV	Service Reference Variant
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee
TSAT	Technical Specifications Applicability Tables

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MP244 ‘Device Alerts for Smart Meter Credit Replenishment’

Annex A

Business requirements – version 0.6

About this document

This document contains the business requirements that support the solution(s) for this Modification Proposal. It sets out the requirements along with any assumptions and considerations. The Data Communications Company (DCC) will use this information to provide an assessment of the requirements that help shape the complete solution.

1. Business requirements

This section contains the functional business requirements. Based on these requirements a full solution will be developed.

Business Requirements		
Ref.	Requirement	Responsible for delivery
1	A SMETS2 Device Alert notifying a Supplier of the re-enablement of a Supply following the receipt of various Device Alerts relating to scenarios where credit limits have been exceeded or exhausted.	DCC Meter Manufacturers

2. Considerations and assumptions

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

2.1 General

The Proposer has identified that no Device Alerts are in place to notify a Supplier (or other relevant DCC User) that a Supply has been re-enabled following a period of power loss caused by either the credit limits being breached, or the exhaustion of credit.

The Proposer would like to implement an Alert to fill the gap, under the name 'Supply Enabled', which would be triggered upon a Supply being re-enabled. The purpose of this Alert is to support the Proposer's organisation monitor any potential Energy Consumers who are 'rationing' their credit, triggering regular Alerts and re-enablement's. The Proposer would look to reach out to those Energy Consumers to then offer the subsequent support.

This solution will be applied to Smart Metering Equipment Technical Specification (SMETS2) Devices, both Electricity Smart Metering Equipment (ESME) and Gas Smart Metering Equipment (GSME).

2.2 Requirement 1: A SMETS2 Device Alert notifying a Supplier of the re-enablement of a Supply following the receipt of three different Device Alerts relating to scenarios where credit limits have been exceeded or exhausted.

The three Device Alerts provided below form the basis of the Proposer requesting the proposed new Device Alert:

1. Credit below Disablement Threshold (prepayment mode) (Alert Code 0x8F0F)
2. Emergency Credit Exhausted (Alert Code 0x81AA)
3. Combined Credit Below Low Credit Threshold (prepayment mode) (Alert Code 0x810D)

A new Device Alert will need to be implemented as part of this change, which will require a change to the Great Britain Companion Specification (GBCS).

The Alert would need to be made configurable, meaning that the DCC Users can choose whether they receive it or not. The DCC has advised that this will require a change to the DUIS Schema.

The Proposer does not require any information to be provided within the Device Alert detailing how the Supply was re-enabled.

As the proposed Device Alert will be Supply critical, the Alert would need to be returned to the Supplier as soon as possible. This may require an amendment to Northbound Prioritisation Alert priority levels.

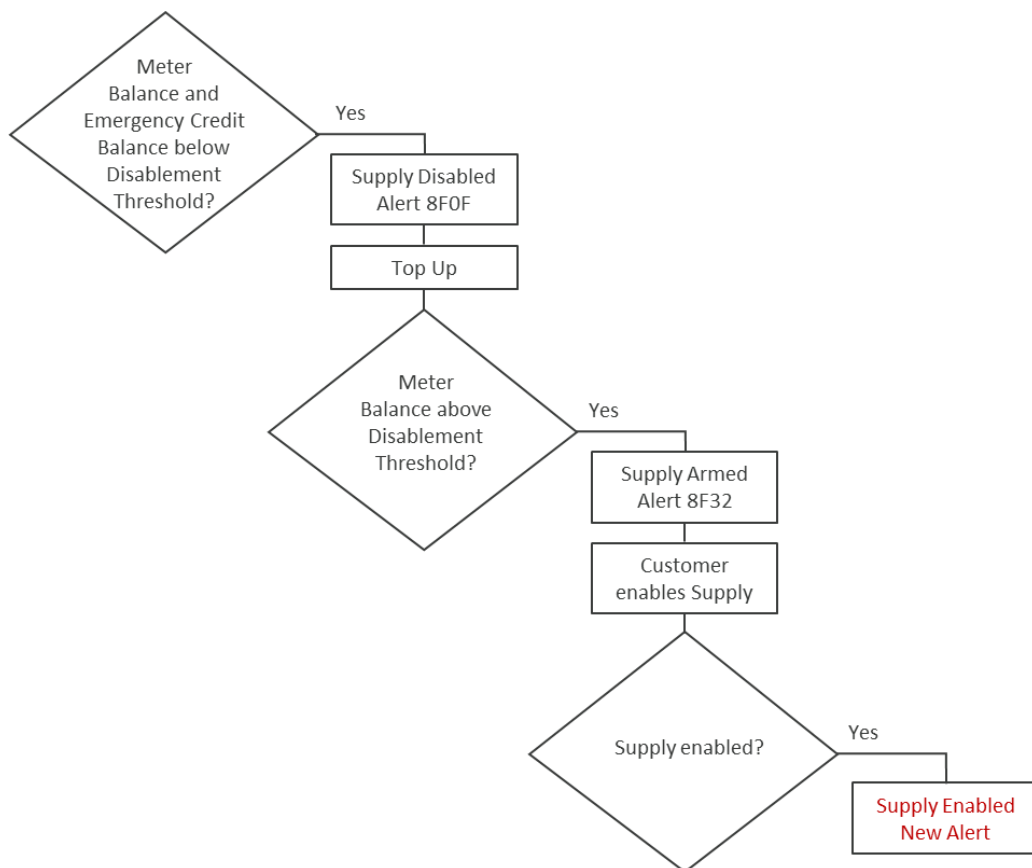


Diagram 1: Proposed Device Alert Illustration

3. Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary	
Acronym	Full term
DCC	Data Communications Company
DUIS	DCC User Interface Specification
ESME	Electricity Smart Metering Equipment
GBCS	Great Britain Companion Specification
GSME	Gas Smart Metering Equipment
SR	Service Request
SMETS	Smart Metering Equipment Technical Specification

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MP244 ‘Device Alerts for Smart Meter credit replenishment’

Annex B

Legal text – version 0.2

About this document

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

This document contains the changes required to deliver the Proposed Solution.

Schedule 8 ‘Great Britain Companion Specification

These changes have been redlined against Schedule 8 version 4.1.

These changes will be applied to versions 4.x as a new sub-version.

Amend Table 16.2 as follows:

Add the new Alert with the Alert Code 0x81D5 ‘Supply Armed Then Enabled - Credit Added’ to Table 16.2.

The resulting table is embedded below:



MP244_Table16-2_G
BCS-v4-3___2024_05.

Schedule 9 ‘Smart Metering Equipment Technical Specifications’

These changes have been redlined against Schedule 9 version 5.0.

These changes will be applied to versions new sub-version to 5.x.

Amend Section 4.4.7.2 as follows:

Prepayment Mode

GSME shall be capable of operating in Prepayment Mode, including during periods of loss of its Communications Link via its HAN Interface, and maintaining a balance of credit and reflecting any reduction in credit based on Consumption, standing charge and Time-based Debt Recovery.

GSME shall be capable of adding credit to the *Meter Balance*(4.6.5.11) (as set out in Sections 4.5.2.2 and 4.5.3.3) and reducing the amount of credit in the *Meter Balance*(4.6.5.11).

GSME shall be capable of making Emergency Credit available to the Consumer (by means of the *Emergency Credit Balance*(4.6.5.8)) if the *Meter Balance*(4.6.5.11) is below the *Emergency Credit Threshold*(4.6.4.14). GSME shall be capable of displaying the availability of Emergency Credit on its User Interface and of generating and sending an Alert indicating the availability of Emergency Credit via its HAN Interface. The amount of Emergency Credit made available to the Consumer shall be equal to the *Emergency Credit Limit*(4.6.4.13). GSME shall be capable of reducing the amount of credit in the *Emergency Credit Balance*(4.6.5.8) where Emergency Credit is activated (as set out in Sections 4.5.2.1 and 4.5.3.1) and the *Meter Balance*(4.6.5.11) is at or below the *Disablement Threshold*(4.6.4.12). Any Emergency Credit used shall be repaid when credit is added to GSME (as set out in Sections 4.5.2.2 and 4.5.3.3).

GSME shall be capable of reducing the *Meter Balance*(4.6.5.11) until it reaches the *Disablement Threshold*(4.6.4.12) followed by reducing the *Emergency Credit Balance*(4.6.5.8), where activated, until it reaches zero, on the basis of:

- i. the Consumption in the *Tariff TOU Register Matrix*(4.6.5.20) converted by *Calorific Value*(4.6.4.3) and *Conversion Factor*(4.6.4.5) and the Prices in the *Tariff TOU Price Matrix*(4.6.4.32) and, if operating Time-of-use with Block Pricing, the Consumption in the *Tariff Block Counter Matrix*(4.6.5.19) converted by *Calorific Value*(4.6.4.3) and *Conversion Factor*(4.6.4.5) and the Prices in the *Tariff Block Price Matrix*(4.6.4.29);
- ii. the *Standing Charge*(4.6.4.23); and
- iii. the recovery of debt hourly or daily through each of the *Time Debt Registers* [1 ... 2](4.6.5.21) at rates defined by the *Debt Recovery Rates* [1 ... 2](4.6.4.9).

Where configured by *Suspend Debt Emergency*(4.6.4.28) to do so and when Emergency Credit is in use, GSME shall be capable of suspending the application of (ii) and (iii) to the *Emergency Credit Balance*(4.6.5.8), and accumulating (ii) and (iii) in the *Accumulated Debt Register*(4.6.5.1).

GSME shall be capable of recording debt recovered, or accumulated in the *Accumulated Debt Register*(4.6.5.1), in the *Billing Data Log*(4.6.5.3).

GSME shall be capable of monitoring the *Meter Balance*(4.6.5.11) and where activated the *Emergency Credit Balance*(4.6.5.8) and:

- iv. if the combined credit of the *Meter Balance*(4.6.5.11) and *Emergency Credit Balance*(4.6.5.8) falls below the *Low Credit Threshold*(4.6.4.16), displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- v. if the *Meter Balance*(4.6.5.11) is below, or falls below the *Disablement Threshold*(4.6.4.12) and, if *Emergency Credit* is activated, the *Emergency Credit Balance*(4.6.5.8) is, or falls to zero:
 - receiving and executing *Add Credit*(4.5.3.3) and *Activate Emergency Credit*(4.5.3.1) Commands from a PPMID and a Gas Proxy Function; and
 - once any such Commands have been executed if the *Meter Balance*(4.6.5.11) remains below the *Disablement Threshold*(4.6.4.12) and, if *Emergency Credit* is activated, the *Emergency Credit Balance*(4.6.5.8) is zero, Disabling the Supply, displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- vi. where the Supply is Disabled (as set out in (b) above):
 - where configured by *Suspend Debt Disabled*(4.6.4.27) not to suspend Time-based Debt Recovery, continuing to apply (ii) and (iii) above to reduce the *Meter Balance*(4.6.5.11);
 - where configured by *Suspend Debt Disabled*(4.6.4.27) to suspend Time-based Debt Recovery, suspending the application of (iii) above to the *Meter Balance*(4.6.5.11) and continuing to apply (ii) above to reduce the *Meter Balance*(4.6.5.11); and
- vii. if the Supply is Enabled, suspending the Disablement of Supply (as set out in (b) above) during periods defined in the *Non-Disablement Calendar*(4.6.4.20), continuing to reduce the *Meter Balance*(4.6.5.11) on the basis of (i), (ii) and (iii) above, displaying on its User Interface an indication that the *Meter Balance*(4.6.5.11) is below the *Disablement Threshold*(4.6.4.12) and, if *Emergency Credit* is activated, the *Emergency Credit Balance*(4.6.5.8) is zero and that Disablement of Supply due to insufficient credit has been suspended, and generating and sending an Alert that Disablement of Supply due to insufficient credit has been suspended via its HAN Interface.

If the *Meter Balance*(4.6.5.11) is equal to or below the *Disablement Threshold*(4.6.4.12) GSME shall be capable of maintaining a calculation of the Debt to Clear based on:

- viii. the difference between the *Meter Balance*(4.6.5.11) and the *Disablement Threshold*(4.6.4.12);
- ix. amount of debt accumulated in the *Accumulated Debt Register*(4.6.5.1);
- x. amount of *Emergency Credit* activated and used by the Consumer; and
- xi. the payment-based debt to be collected based on (viii), (ix) and (x) (as defined by *Debt Recovery per Payment*(4.6.4.8) taking account of the amount remaining in the *Payment Debt Register*(4.6.5.13), the payment-based debt payments in the *Billing Data Log*(4.6.5.3) and the *Debt Recovery Rate Cap*(4.6.4.10)).

For Time-based Debt Recovery, the GSME shall be capable of recovering the lesser of:

- the amount in the relevant *Time Debt Registers [1 ... 2]*(4.6.5.21); and
- xii. the corresponding amount determined by the *Debt Recovery Rates [1 ... 2]* (4.6.4.9).

For Payment-based Debt Recovery, the GSME shall be capable of recovering the lesser of:

- xiii. the amount defined by *Debt Recovery per Payment*(4.6.4.8) subject to the *Debt Recovery Rate Cap*(4.6.4.10); and
- xiv. the amount in the *Payment Debt Register*(4.6.5.13).

Where an *Adjust Debt*(4.5.3.5) Command is to reduce the amount in a Debt Register and the amount in the Command is greater than the amount in the Debt Register, GSME shall be capable of setting the amount in the Debt Register to zero then applying the difference in the amounts in the following order:

- xv. recovering debt accumulated in the *Accumulated Debt Register*(4.6.5.1);
- xvi. where the *Meter Balance*(4.6.5.11) is less than the *Disablement Threshold*(4.6.4.12), increasing the *Meter Balance*(4.6.5.11) until it is equal to the *Disablement Threshold*(4.6.4.12);
- xvii. repaying Emergency Credit activated and used by the Consumer and so increasing the *Emergency Credit Balance*(4.6.5.8) accordingly; and
- xviii. increasing the *Meter Balance*(4.6.5.11).

In executing the *Adjust Debt*(4.5.3.5) Command, GSME shall if Emergency Credit activated and used by the Consumer is fully repaid, deactivate Emergency Credit so that it is capable of activation when GSME is operating in Prepayment Mode where Emergency Credit is available (as set out in *Section 4.4.7.2*)

GSME shall be capable of monitoring the *Meter Balance*(4.6.5.11) and, where the Supply is Disabled, GSME shall be capable of Arming the Supply if the *Meter Balance*(4.6.5.11) rises above the *Disablement Threshold*(4.6.4.12), displaying any such change in the *Supply State*(4.6.5.18) on its User Interface and generating and sending an Alert that the Supply has been Armed via its HAN Interface.

Where the Supply is Armed following the rise of the *Meter Balance*(4.6.5.11) above the *Disablement Threshold*(4.6.4.12), the GSME shall be capable of monitoring the *Supply State*(4.6.5.18), and, upon Enabling the Supply, generating and sending an Alert that the Supply has been Enabled via its HAN Interface.

GSME shall be capable of monitoring the *Emergency Credit Balance*(4.6.5.8) and, where it falls to zero, of generating an entry to that effect in the *Event Log*(4.6.5.9) and generating and sending an Alert to that effect via its HAN Interface.

Amend Section 5.5.7.2 as follows:

Prepayment Mode

ESME shall be capable of operating in Prepayment Mode, including during periods of loss of its Communications Link via its HAN Interface, and maintaining a balance of credit and reflecting any reduction in credit based on Consumption, standing charge and Time-based Debt Recovery.

ESME shall be capable of adding credit to the *Meter Balance [INFO]*(5.7.5.22) (as set out in *Sections 5.6.2.2* and *5.6.3.3*) and reducing the amount of credit in the *Meter Balance [INFO]*(5.7.5.22).

ESME shall be capable of making Emergency Credit available to the Consumer (by means of the *Emergency Credit Balance [INFO]*(5.7.5.15) if the *Meter Balance [INFO]*(5.7.5.22) is below the *Emergency Credit Threshold [INFO]*(5.7.4.17)). ESME shall be capable of displaying the availability of Emergency Credit on its User Interface and of generating and sending an Alert indicating the availability of Emergency Credit via its HAN Interface. The amount of Emergency Credit made available to the Consumer shall be equal to the

Emergency Credit Limit [INFO](5.7.4.16). ESME shall be capable of reducing the amount of credit in the *Emergency Credit Balance [INFO](5.7.5.15)* where Emergency Credit is activated (as set out in Sections 5.6.2.1 and 5.6.3.1) and the *Meter Balance [INFO](5.7.5.22)* is at or below the *Disablement Threshold [INFO](5.7.4.15)*. Any Emergency Credit used shall be repaid when credit is added to ESME (as set out in Sections 5.6.2.2 and 5.6.3.3).

ESME shall be capable of reducing the *Meter Balance [INFO](5.7.5.22)* until it reaches the *Disablement Threshold [INFO](5.7.4.15)* followed by reducing the *Emergency Credit Balance [INFO](5.7.5.15)*, where activated, until it reaches zero, on the basis of:

- xix. the Consumption in the *Tariff TOU Register Matrix [INFO](5.7.5.34)* and the Prices in the *Tariff TOU Price Matrix [INFO](5.7.4.50)*, and if operating Time-of-use with Block Pricing the Consumption in the *Tariff TOU Block Register Matrix(5.7.5.35)* and the Prices in the *Tariff Block Price Matrix [INFO](5.7.4.47)*;
- the *Standing Charge [INFO](5.7.4.42)*; and
- the recovery of debt hourly or daily through each of the *Time Debt Registers [1 ... 2] [INFO](5.7.5.36)* at rates defined by the *Debt Recovery Rates [1 ... 2] [INFO](5.7.4.12)*.

Where configured by *Suspend Debt Emergency(5.7.4.46)* to do so and when Emergency Credit is in use, ESME shall be capable of suspending the application of (ii) and (iii) to the *Emergency Credit Balance [INFO](5.7.5.15)*, and of accumulating (ii) and (iii) in the *Accumulated Debt Register [INFO](5.7.5.1)*.

ESME shall be capable of recording debt recovered, or accumulated in the *Accumulated Debt Register [INFO](5.7.5.1)*, in the *Billing Data Log(5.7.5.10)*.

ESME shall be capable of monitoring the *Meter Balance [INFO](5.7.5.22)* and where activated the *Emergency Credit Balance [INFO](5.7.5.15)* and:

- if the combined credit of the *Meter Balance [INFO](5.7.5.22)* and *Emergency Credit Balance [INFO](5.7.5.15)* falls below the *Low Credit Threshold [INFO](5.7.4.23)*, displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- if the *Meter Balance [INFO](5.7.5.22)* is below, or falls below, the *Disablement Threshold [INFO](5.7.4.15)* and, if Emergency Credit is activated, the *Emergency Credit Balance [INFO](5.7.5.15)* is, or falls to, zero, Disabling the Supply, displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- where the Supply is Disabled (as set out in (v) above):
 - a) where configured by *Suspend Debt Disabled(5.7.4.45)* not to suspend Time-based Debt Recovery, continuing to apply (ii) and (iii) above to reduce the *Meter Balance [INFO](5.7.5.22)*;
 - where configured by *Suspend Debt Disabled(5.7.4.45)* to suspend Time-based Debt Recovery, suspending the application of (iii) above to the *Meter Balance [INFO](5.7.5.22)*, and continuing to apply (ii) to reduce the *Meter Balance [INFO](5.7.5.22)*; and
- if the Supply is Enabled, suspending the Disablement of Supply (as set out in (v) above) during periods defined in the *Non-Disablement Calendar [INFO](5.7.4.30)*, continuing to reduce the *Meter Balance [INFO](5.7.5.22)* on the basis of (i), (ii) and (iii) above, displaying on its User Interface an indication that the *Meter Balance [INFO](5.7.5.22)* is below the *Disablement Threshold [INFO](5.7.4.15)* and, if Emergency Credit is activated, the *Emergency Credit Balance [INFO](5.7.5.15)* is zero and that Disablement of Supply due to insufficient credit has been suspended,

and generating and sending an Alert that Disablement of Supply due to insufficient credit has been suspended via its HAN Interface.

If the *Meter Balance* [INFO](5.7.5.22) is equal to or below the *Disablement Threshold* [INFO](5.7.4.15) ESME shall be capable of maintaining a calculation of the Debt to Clear based on:

the difference between the *Meter Balance* [INFO](5.7.5.22) and the *Disablement Threshold* [INFO](5.7.4.15);

amount of debt accumulated in the *Accumulated Debt Register* [INFO](5.7.5.1);

amount of Emergency Credit activated and used by the Consumer; and

the payment-based debt to be collected based on (viii), (ix) and (x) (as defined by *Debt Recovery per Payment* [INFO](5.7.4.11) taking account of the amount remaining in the *Payment Debt Register* [INFO](5.7.5.23), the payment-based debt payments in the *Billing Data Log* (5.7.5.10) and the *Debt Recovery Rate Cap* [INFO](5.7.4.13)).

For Time-based Debt Recovery, the ESME shall be capable of recovering the lesser of:

the amount in the relevant *Time Debt Registers* [1 ... 2] [INFO](5.7.5.36); and

the corresponding amount determined by the *Debt Recovery Rates* [1 ... 2] [INFO](5.7.4.12).

For Payment-based Debt Recovery, the ESME shall be capable of recovering the lesser of:

the amount defined by *Debt Recovery per Payment* [INFO](5.7.4.11) subject to the *Debt Recovery Rate Cap* [INFO](5.7.4.13); and

the amount in the *Payment Debt Register* [INFO](5.7.5.23).

Where an *Adjust Debt* (5.6.3.5) Command is to reduce the amount in a Debt Register and the amount in the Command is greater than the amount in the Debt Register, ESME shall be capable of setting the amount in the Debt Register to zero then applying the difference in the amounts in the following order:

recovering debt accumulated in the *Accumulated Debt Register* [INFO](5.7.5.1);

where the *Meter Balance* [INFO] (5.7.5.22) is less than the *Disablement Threshold* [INFO](5.7.4.15), increasing the *Meter Balance* [INFO](5.7.5.22) until it is equal to the *Disablement Threshold* [INFO](5.7.4.15);

repaying Emergency Credit activated and used by the Consumer and so increasing the *Emergency Credit Balance* [INFO](5.7.5.15) accordingly; and

increasing the *Meter Balance* [INFO](5.7.5.22).

In executing the *Adjust Debt* (5.6.3.5) Command, ESME shall if Emergency Credit activated and used by the Consumer is fully repaid, deactivate Emergency Credit so that it is capable of activation when ESME is operating in Prepayment Mode where Emergency Credit is available (as set out in Section 5.5.7.2).

ESME shall be capable of monitoring the *Meter Balance* [INFO](5.7.5.22) and, where the Supply is Disabled, ESME shall be capable of Arming the Supply if the *Meter Balance* [INFO](5.7.5.22) rises above the *Disablement Threshold* [INFO](5.7.4.15), displaying any such change in the *Supply State* [INFO](5.7.5.32) on its User Interface and generating and sending an Alert that the Supply has been Armed via its HAN Interface.

Where the Supply is Armed following the rise of the *Meter Balance* [INFO](5.7.5.22) above the *Disablement Threshold* [INFO](5.7.4.15), the ESME shall be capable of monitoring the *Supply State* [INFO](5.7.5.32), and, upon Enabling the Supply, generating and sending an Alert that the Supply has been Enabled via its HAN Interface.

ESME shall be capable of monitoring the *Emergency Credit Balance [INFO](5.7.5.15)* and, where it falls to zero, of generating an entry to that effect in the *Event Log(5.7.5.16)* and generating and sending an Alert to that effect via its HAN Interface.

Amend Section 5.11.2.2 as follows:

Prepayment Mode

ESME shall be capable of operating in Prepayment Mode, including during periods of loss of its Communications Link via its HAN Interface, and maintaining a balance of credit and reflecting any reduction in credit based on Consumption, standing charge and Time-based Debt Recovery.

ESME shall be capable of adding credit to the *Meter Balance [INFO](5.7.5.22)* (as set out in Sections 5.6.2.2 and 5.6.3.3) and reducing the amount of credit in the *Meter Balance [INFO](5.7.5.22)*.

ESME shall be capable of making Emergency Credit available to the Consumer (by means of the *Emergency Credit Balance [INFO](5.7.5.15)* if the *Meter Balance [INFO](5.7.5.22)* is below the *Emergency Credit Threshold [INFO](5.7.4.17)*). ESME shall be capable of displaying the availability of Emergency Credit on its User Interface and of generating and sending an Alert indicating the availability of Emergency Credit via its HAN Interface. The amount of Emergency Credit made available to the Consumer shall be equal to the *Emergency Credit Limit [INFO](5.7.4.16)*. ESME shall be capable of reducing the amount of credit in the *Emergency Credit Balance [INFO](5.7.5.15)* where Emergency Credit is activated (as set out in Sections 5.6.2.1 and 5.6.3.1) and the *Meter Balance [INFO](5.7.5.22)* is at or below the *Disablement Threshold [INFO](5.7.4.15)*. Any Emergency Credit used shall be repaid when credit is added to ESME (as set out in Sections 5.6.2.2 and 5.6.3.3).

ESME shall be capable of reducing the *Meter Balance [INFO](5.7.5.22)* until it reaches the *Disablement Threshold [INFO](5.7.4.15)* followed by reducing the *Emergency Credit Balance [INFO](5.7.5.15)*, where activated, until it reaches zero, on the basis of:

- i. the Consumption in the *Tariff TOU Register Matrix [INFO](5.7.5.34)* and the Prices in the *Tariff TOU Price Matrix [INFO](5.7.4.50)*, and if operating Time-of-use with Block Pricing the Consumption in the *Tariff TOU Block Register Matrix(5.7.5.35)* and the Prices in the *Tariff Block Price Matrix [INFO](5.7.4.47)*;
- ii. the Consumption in the *Secondary Tariff TOU Register Matrix [INFO](5.13.2.10)* and the Prices in the *Secondary Tariff TOU Price Matrix [INFO](5.13.1.1)*;
- iii. the *Standing Charge [INFO](5.7.4.42)*; and
- iv. the recovery of debt hourly and daily through each of the *Time Debt Registers [1 ... 2] [INFO](5.7.5.36)* at rates defined by the *Debt Recovery Rates [1 ... 2] [INFO](5.7.4.12)*.

Where configured by *Suspend Debt Emergency(5.7.4.46)* to do so and when Emergency Credit is in use, ESME shall be capable suspending the application of (iii) and (iv) to the *Emergency Credit Balance [INFO](5.7.5.15)*, and of accumulating (iii) and (iv) in the *Accumulated Debt Register [INFO](5.7.5.1)*.

ESME shall be capable of recording debt recovered, or accumulated in the *Accumulated Debt Register [INFO](5.7.5.1)*, in the *Billing Data Log(5.13.2.3)*.

ESME shall be capable of monitoring the *Meter Balance [INFO](5.7.5.22)* and where activated the *Emergency Credit Balance [INFO](5.7.5.15)* and:

- v. if the combined credit of the *Meter Balance [INFO](5.7.5.22)* and *Emergency Credit Balance [INFO](5.7.5.15)* falls below the *Low Credit Threshold [INFO](5.7.4.23)*, displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- vi. if the *Meter Balance [INFO](5.7.5.22)* is below, or falls below, the *Disablement Threshold [INFO](5.7.4.15)* and if Emergency Credit is activated, the *Emergency Credit Balance [INFO](5.7.5.15)* is, or falls to, zero, Disabling the Supply, displaying an Alert to that effect on its User Interface and generating and sending an Alert to that effect via its HAN Interface;
- vii. where the Supply is Disabled (as set out in (vi) above):
 - 1.a. where configured by *Suspend Debt Disabled(5.7.4.45)* not to suspend Time-based Debt Recovery, continuing to apply (iii) and (iv) above to reduce the *Meter Balance [INFO](5.7.5.22)*;
 - b. where configured by *Suspend Debt Disabled(5.7.4.45)* to suspend Time-based Debt Recovery, suspending the application of (iv) above to the *Meter Balance [INFO](5.7.5.22)*, and continuing to apply (iii) above to reduce the *Meter Balance [INFO](5.7.5.22)*; and
- viii. if the Supply is Enabled, suspending the Disablement of Supply (as set out in (vi) above) during periods defined in the *Non-Disablement Calendar [INFO](5.7.4.30)*, continuing to reduce the *Meter Balance [INFO](5.7.5.22)* on the basis of (i) to (iv) above, displaying on its User Interface an indication that the *Meter Balance [INFO](5.7.5.22)* is below the *Disablement Threshold [INFO](5.7.4.15)* and, if Emergency Credit is activated the *Emergency Credit Balance [INFO](5.7.5.15)* is zero and that Disablement of Supply due to insufficient credit has been suspended, and generating and sending an Alert that Disablement of Supply due to insufficient credit has been suspended via its HAN Interface.

If the *Meter Balance [INFO](5.7.5.22)* is equal to or below the *Disablement Threshold [INFO](5.7.4.15)* ESME shall be capable of maintaining a calculation of the Debt to Clear based on:

- ix. the difference between the *Meter Balance [INFO](5.7.5.22)* and the *Disablement Threshold [INFO](5.7.4.15)*;
- x. the amount of debt accumulated in the *Accumulated Debt Register [INFO](5.7.5.1)*
- xi. the amount of Emergency Credit activated and used by the Consumer; and
- xii. the payment-based debt to be collected based on (ix), (x) and (xi) (as defined by *Debt Recovery per Payment [INFO](5.7.4.11)* taking account of the amount remaining in the *Payment Debt Register [INFO](5.7.5.23)*, the payment-based debt payments in the *Billing Data Log(5.13.2.3)* and the *Debt Recovery Rate Cap [INFO](5.7.4.13)*).

For Time-based Debt Recovery, the ESME shall be capable of recovering the lesser of:

- xiii. the amount in the relevant *Time Debt Registers* [1 ... 2] [INFO](5.7.5.36); and
- xiv. the corresponding amount determined by the *Debt Recovery Rates* [1 ... 2] [INFO](5.7.4.12).

For Payment-based Debt Recovery, the ESME shall be capable of recovering the lesser of:

- xv. the amount defined by *Debt Recovery per Payment* [INFO](5.7.4.11) subject to the *Debt Recovery Rate Cap* [INFO](5.7.4.13); and
- xvi. the amount in the *Payment Debt Register* [INFO](5.7.5.23).

Where an *Adjust Debt*(5.6.3.5) Command is to reduce the amount in a Debt Register and the amount in the Command is greater than the amount in the Debt Register, ESME shall be capable of setting the amount in the Debt Register to zero then applying the difference in the amounts in the following order:

- xvii. recovering debt accumulated in the *Accumulated Debt Register* [INFO](5.7.5.1);
- xviii. where the *Meter Balance* [INFO] (5.7.5.22) is less than the *Disablement Threshold* [INFO](5.7.4.15), increasing the *Meter Balance* [INFO] (5.7.5.22) until it is equal to the *Disablement Threshold* [INFO](5.7.4.15);
- xix. repaying Emergency Credit activated and used by the Consumer and so increasing the *Emergency Credit Balance* [INFO](5.7.5.15) accordingly; and
- xx. increasing the *Meter Balance* [INFO](5.7.5.22).

In executing the *Adjust Debt*(5.6.3.5) Command, ESME shall if Emergency Credit activated and used by the Consumer is fully repaid, deactivate Emergency Credit so that it is capable of activation when ESME is operating in Prepayment Mode where Emergency Credit is available (as set out in Section 5.11.2.2).

- xxi. ESME shall be capable of monitoring the *Meter Balance* [INFO](5.7.5.22) and, where the Supply is Disabled, ESME shall be capable of Arming the Supply if the *Meter Balance* [INFO](5.7.5.22) rises above the *Disablement Threshold* [INFO](5.7.4.15), displaying any such change in the *Supply State* [INFO](5.7.5.32) on its User Interface and generating and sending an Alert that the Supply has been Armed via its HAN Interface; ~~and-~~

- xxii. where the Supply is Armed following the rise of the *Meter Balance* [INFO](5.7.5.22) above the *Disablement Threshold* [INFO](5.7.4.15), the ESME shall be capable of monitoring the *Supply State* [INFO](5.7.5.32), and, upon Enabling the Supply, generating and sending an Alert that the Supply has been Enabled via its HAN Interface.

ESME shall be capable of monitoring the *Emergency Credit Balance* [INFO](5.7.5.15) and, where it falls to zero, of generating an entry to that effect in the *Event Log*(5.7.5.16) and generating and sending an Alert to that effect via its HAN Interface.

Appendix AD ‘DCC User Interface Specification’

There are no changes to the body of Appendix AD, only changes required to the XML Schema. The XML Schema changes will be drafted during the design phase, post-decision of this modification against Appendix AD version 5.0.

These changes will be applied to a new sub-version, 5.x

Appendix AF ‘Message Mapping Catalogue’

There are no changes to the body of Appendix AF, only changes required to the XML Schema. The XML Schema changes will be drafted during the design phase, post-decision of this modification against Appendix AF version 5.0.

These changes will be applied to a new sub-version, 5.x.

SEC Modification Proposal, SECMP0244, DCC CR5312

Device Alerts for Smart Meter Credit Replenishment

Preliminary Impact Assessment (PIA)

Version:	0.3
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1 Executive Summary

The Change Board are asked to approve the following:

- Total cost to complete the Full Impact Assessment of **£20,694**.
- The timescales to complete the Full Impact Assessment of 40 working days.
- ROM costs for SECMP0244, up to the end of Pre-Integration Testing (PIT) of £60,000 to 200,000
- Significant Integration testing from the Communication Service Providers

Problem Statement and Solution

Scenarios exist where the supply to a prepayment meter could be cut off through reaching certain credit limits. If this were to happen frequently, it may identify a trend where a prepayment energy consumer may be self-disconnecting or rationing their credit. If the Supplier needs an update on the status of the Device following the receipt of a credit exhaustion alert, they will need to send Service Reference Variant (SRV) 7.4 'Read Supply Status'. This SRV may be sent multiple times in a scenario where power loss is caused by credit exhaustion, adding potentially unnecessary traffic to the Data Communications Company (DCC) System. If the power remains lost, there may be a need to visit the site to investigate the issue, as well as take behind the scenes remedial actions.

Although an Alert is sent to the Supplier to inform them of an issue', the Device will not automatically inform the Supplier if the Supply has been enabled through some form of remedial action. A Supplier will not receive an update or Alert on the Disablement Threshold issue in relation to Supply re-enablement until they take some form of action such as sending SRV 7.4 to the Device.

This Modification seeks to introduce a new device alert through changes in the DSP and on the Devices.

Modification Benefits

A direct consequence of submitting an increased volume of Service Requests (SR) is an increase of traffic within the DCC System, possibly leading to increased response times, as well as adversely affecting DCC messaging limits. DCC have identified the total number of SRV 7.4 sent in January 2024 was of the order of 4.7million, out of a monthly total of just over 2,000million. By defining a new Supply Enabled Alert, the device would automatically send an Alert at the time of re-enablement removing the need for the Supplier to send SRV7.4 and the receiving a response, potentially reducing traffic on the network.

The new Alert would allow Suppliers to take a proactive approach to protecting vulnerable customers, and in cases where the initial Off-Supply Alert is not generated this Alert would notify Suppliers of disconnects that would otherwise be hidden, potentially masking Self-Disconnecting Customers. There would be reputational advantages for the Smart Metering Implementation Programme (SMIP) in being able to proactively manage and support any vulnerable customer's Self-Disconnect behaviours.

2 Document History

2.1 Revision History

Revision Date	Revision	Summary of Changes
23/02/2024	0.1	Initial version, for DCC internal review
27/02/2024	0.3	Review complete and published

2.2 Associated Documents

This document is associated with the following documents:

Ref	Title and Originator's Reference	Source	Issue Date
1	MP244-Modification-Report-v0.4	SECAS	2/02/2024
2.	MP244 - Business Requirements Document v0.5	SECAS	9/02/2024

References are shown in this format, [1].

2.3 Document Information

The Proposer for this Modification is Kevin Clark of Utilita Energy Ltd. The Modification was raised on August 8th, 2023.

The Preliminary Impact Assessment (PIA) was requested of DCC on 9th February 2024.

3 Context and Requirements

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

The requirements have been provided by SECAS, the Proposer and the Working Group.

3.1 Context

When a Smart Meter has been installed successfully, a Supplier can configure the Device to perform in prepayment mode, as well as triggering specific Alerts and notifications depending on scenarios. When a Supplier receives a particular Alert or notification, they can take remedial actions to rectify issues if required.

The Proposer has identified scenarios where a Supply could be cut off through reaching certain credit limits. If this scenario were to happen frequently, it may identify a trend where a prepayment energy consumer may be self-disconnecting or rationing their credit.

If a Supplier wishes to retrieve an update on the status of the Device following the receipt of a credit exhaustion alert, they will need to send SRV 7.4 'Read Supply Status'. This SRV may be sent multiple times in a scenario where power loss is caused by credit exhaustion, adding potentially unnecessary traffic to the Data Communications Company (DCC) System. If the power remains lost, there may be a need to visit the site to investigate the issue, as well as take behind the scenes remedial actions.

3.2 What is the Issue?

The Proposer has identified that although an Alert is sent to the Supplier to inform them of an issue, e.g., for example Alert 0x8F0F 'Credit Below Disablement Threshold (prepayment mode)', the Device will not automatically inform the Supplier if the Supply has been enabled through some form of remedial action. A Supplier will not receive an update or Alert on the Disablement Threshold issue in relation to Supply re-enablement until they take some form of action such as sending SRV 7.4 to the Device.

3.3 Impact of the Issue

The Proposer has advised that SRV 7.4 may need to be triggered multiple times over the course of an event. This means the Supplier is spending time and resource retrieving the status of the Supply, in conjunction to taking remedial action to resolve any outstanding issues. A Supplier will be unable to provide accurate information to the consumer about the state of their supply unless they manually initiate SRV 7.4 when questioned about the Supply. This may have an impact on services offered by Suppliers to consumers experiencing difficulties with their Supply, such as offering welfare checks, providing discretionary or emergency credit, or accurately responding to Supply faults and/or concerns.

A direct consequence of submitting an increased volume of Service Requests (SR) is an increase of traffic within the DCC System, possibly leading to increased response times, as well as adversely affecting DCC messaging limits. DCC have identified the total number of SRV 7.4 sent in January 2024 was of the order of 4.7million, out of a monthly total of just over 2,000million.

3.4 Business Requirements

The business requirements are as follows.

Ref.	Requirement	MoSCoW Rating
1	A SMETS2 Device Alert notifying a Supplier of the re-enablement of a Supply following the receipt of three different Device Alerts relating to scenarios where credit limits have been exceeded or exhausted.	M

The Proposer requires a new Alert with the name 'Supply Enabled', which would be triggered upon a Supply being re-enabled. The Alert would support any organisation monitoring any potential Energy Consumers who are 'rationing' their credit, triggering regular Alerts and re-enablements.

This solution relates to Smart Metering Equipment Technical Specification (SMETS2) Devices, and will apply to both Electricity Smart Metering Equipment (ESME) and Gas Smart Metering Equipment (GSME).

The three Device Alerts provided below form the basis of the Proposer requesting the proposed new Device Alert:

1. Credit below Disablement Threshold (prepayment mode) (Alert Code 0x8F0F)
2. Emergency Credit Exhausted (Alert Code 0x81AA)
3. Combined Credit Below Low Credit Threshold (prepayment mode) (Alert Code 0x810D)

The new Alert would need to be made configurable, meaning that the DCC Users can choose whether they receive it or not. No further information is required within the Device Alert detailing how the Supply was re-enabled.

The following diagram shows a potential flow for existing and the new Alert.

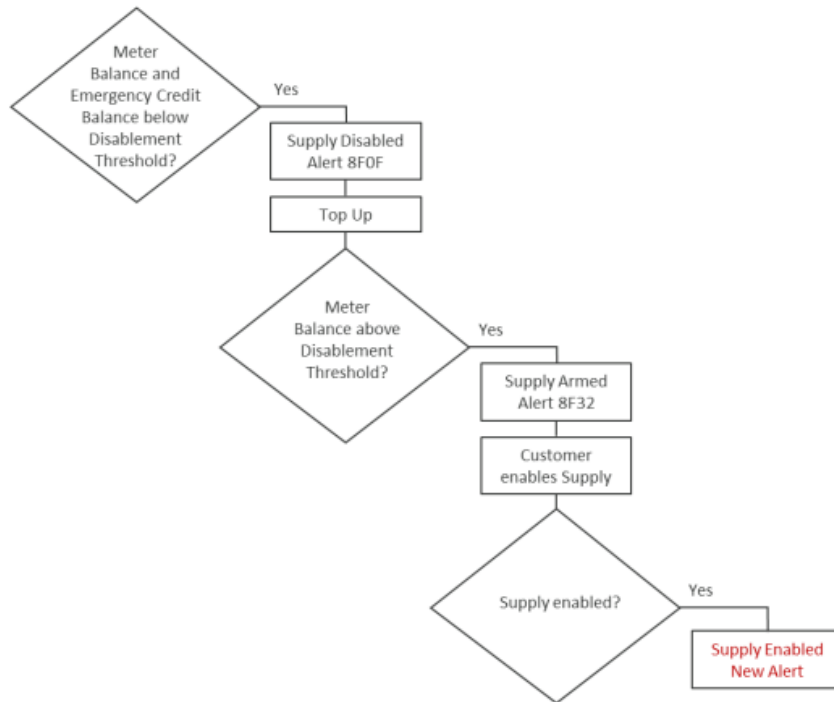


Figure 1: Process Flow for Supply Enabled New Alert

DCC notes that the Supply Armed Alert could be seen as an adequate indicator that the customer has taken some action to top up the meter balance; is the new Enabled Alert seen as an indicator of prepayment customers who Self-Disconnect or Self-Ration?

3.5 Business Case

Business benefits and the basis of the business case are given in detail in document [2]. The key points associated with the new Alert can be summarised as:

- An increased understanding of, and support for, prepayment customers who Self-Disconnect or Self-Ration.
- The new Alert would allow Suppliers to take a proactive approach to protecting vulnerable customers.
- In cases where the initial Off-Supply Alert is not generated this Alert would notify Suppliers of disconnects that would otherwise be hidden, potentially masking Self-Disconnecting Customers. DCC notes that whatever is stopping the Off-Supply Alert from being sent might also prevent the new Enabled Alert from being sent in turn.
- Reputational advantages for the Smart Metering Implementation Programme (SMIP) in being able to proactively manage and support vulnerable customer's self-disconnect behaviours.
- An automated Alert would have a positive impact on the traffic across DCC network, as the Alert would be an Alert from the end device to the Supplier as opposed to a Supplier SR 7.4 and response. However, it is possible that the Alert would be generated on multiple occasions if the customer repeatedly self-disconnects and reconnects.

3.6 Solution Approach

This Modification seeks to introduce a new device alert through changes in the DSP. It will also be necessary to implement changes in the Great Britain Companion Specification (GBCS) at a device level. The latter aspect is not covered in this PIA, and would require a separate SECAS-led consultation with meter manufacturers to assess the cost and effort required.

In terms of the properties of the new GBCS Device Alert:

- If the Alert is Non-Mandated, all Manufacturers would be required to adopt this Alert, and there is a likelihood of high implementation costs as a result.
- If the Alert is Mandatory, all relevant Users would receive the Alert in relation to 'Supply Re-Enablement'. There would be no option to switch the Alert off. This option would be a 'text-only' change to the DCC User Interface Specification (DUIS) requiring minor amendments.
- If the Alert is designated as configurable, a DCC User could choose whether they receive the Alert, and in which scenarios it applies to. However, a configurable alert has a more significant impact to DUIS, including a DUIS Schema amendment.

The Proposer decided to progress with a configurable Device Alert.

As the proposed Device Alert will be Supply critical, the Alert would need to be returned to the Supplier as soon as possible. This may require an amendment to Northbound Prioritisation Alert priority levels.

DCC notes that the term "Supply critical" is not an official term, and should not be confused with "Critical Alerts" as the latter alerts cannot be configurable. Is the Supply Armed 8F32 Alert considered Supply critical?

4 Description of Solution

Changes in the DSP to DUIS, the Message Mapping Catalogue (MMC), and GBCS will be required to meet the requirements.

4.1 DSP Changes

The extent of the changes for this Modification include:

1. Amend the DUIS SRV6.22 request to allow a new Supply Enabled Alert to be configurable for both ESME and GSME devices
2. Amend the MMC SRV6.2.10 response to include the configuration setting of the Supply Enabled Alert
3. Create new DUIS and MMC XML schemas (assumed to be version 5.4) for the revised SRV definitions
4. Add support for a new GBCS version (assumed to be v4.4) that includes the new Supply Enabled Alert

To allow a new GBCS Alert to be configurable requires a change to the DUIS XML schema definition for SRV6.22 to add the new Supply Enabled Alert code to the list of possible XML tags that may be present in a SRV6.22 request. Similarly, for that configuration to be read from the device requires a change to the MMC XML schema definition to add the new Supply Enabled Alert code to the list of possible XML tags that may be present in a SRV6.2.10 response.

For GBCS compatibility, the processing of SRV6.22 will only allow the new Supply Enabled Alert code to be configured if the target device is at a GBCS version which supports the new Supply Enabled Alert (potentially v4.4 or later). The existing error code E062203 will be returned if the GBCS version is not compatible with a request to configure the new Supply Enabled Alert.

There is no requirement for any GBCS compatibility validation on SRV6.2.10 since a device will only return the configuration of GBCS Alerts which it supports.

The DSP solution will be updated to support new DUIS and MMC XML schemas (assumed to be v5.4) for the revised SRV definitions, and will also be updated to support a new GBCS version (assumed to be v4.4) that includes the new Supply Enabled Alert.

4.1.1 Security Impact

There will be no significant change to the security design as a result of this change. There are no interface or major changes to functionality meaning there is no requirement for a penetration test or any changes to the existing protective monitoring approach.

The implementation will be security assured throughout. This assurance includes reviewing designs, test artefacts and providing consultancy to the implementation and test teams.

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

4.1.2 Technical Specifications

Changes to DUIS, MMC, and GBCS will be required to meet the requirements.

4.1.3 Service Impact

As part of the implementation, a provision is anticipated for service support in the following areas:

- as part of the setup activities, the Application Management Support (AMS) team will extend the monitoring solution to include the new device alert. The solution allows DSP to proactively monitor the health of the Production system and take action to address potential service disruption, although none is anticipated.
- a Data Power schema change will be required in all the environments due to the required DUIS change.
- activities required for transition to operations (TTO) at time of implementation will be minimal following completion of testing. However, there will be a small effort required to ensure that all applications continue to function correctly during and post cutover. A small amount of effort will be included in the FIA to cover knowledge transfer sessions.

A more detailed assessment of service impact will be completed as part of any Full Impact Assessment for this Modification.

4.1.4 Infrastructure Impact

No infrastructure impact is expected from this Modification.

4.2 Critical Software

Critical Software as the Parse and Correlate provider will make the required changes to support the revised MMC schema definition for SRV6.2.10.

4.3 Communications Service Providers

This Preliminary Impact Assessment contains no impacts on the SMETS 2 Communications Service Providers (CSP) or the Network Evolution Service Providers (4G Comms Hub). As there are no requirements for the Communications Hub to implement any functionality beyond the passthrough of the new Supply Enabled Alert, no firmware changes are required. In addition, specific exemptions apply to all the CSPs:

- No modification to any test approaches.
- No changes to network traffic.
- No changes to performance measures.
- No changes to alert prioritization within the CSP solutions
- No changes to GBCS which will impact the CSPs

4.4 Data Science and Analytics Reporting

While there is no specific requirement relating to reporting, a new Alert is likely to impact the current DCC Data Science and Analytics (DS&A) reporting of SRVs and Alerts which are included in the existing SECMP0122B reporting. Provision for this is included in the cost in section 6.1 to produce a FIA.

5 Implementation Timescales and Approach

This Modification is expected to be implemented in a future SEC Release. Design, Build, and Pre-Integration Testing (PIT) is expected to take approximately four (4) months to complete after the CAN is signed. The Modification would be added to a suitable SEC release after the FIA is completed, and although this change would be expected to be part of a SEC Release, due to the DUIS schema changes would most likely be implemented in a Release with other DUIS changes.

5.1 Implementation Approach

Implementation of this change is assumed to follow a hybrid of agile and waterfall methodology. The release lifecycle duration and implementation details will be confirmed as part of the FIA.

5.2 System Integration Testing

System Integration Testing (SIT) will include DUIS and GBCS Compatibility testing, System Regression testing, and SIT management as well as governance activities. More specifically the SIT scope for this Change will consist of:

- testing across both CSPs on all three sets of Comms Hubs
- testing using the Network Evolution WAN and a 4G Comms Hub
- the use of real ESME and GSME devices on new firmware versions which support the uplifted GBCS version and device alert
- Install and Commission of the device sets using the new GBCS firmware version, with service users supported by the uplifted DUIS version
- validating changes to the updated SRV 6.22 and SRV 6.2.10 support the configuration of behaviour for the new alert
- executing key business scenarios which result in disabled supply, including Emergency Credit Exhausted and Credit Below Disablement Threshold
- testing the Device Top-up business scenario to verify supply is re-enabled and the new alert is sent
- testing to verify that submitting SRV6.22 using a previous GBCS version results in DSP error E062203.

It is understood that, as part of this CR5312, new DUIS and GBCS versions will be required to implement the changes to SRVs to allow for alert configuration. Therefore, it is expected that new test scripts and scenarios will need to be created. This will be carried out as part of the SIT preparation activities, including the creation of test artefacts such as the Heatmap. It is expected that minor updates to the Motorway Automation Framework will be required to accommodate these changes.

It is estimated that for this Modification, approximately four hundred and eighty tests will be executed within the proposed SIT-B scope in order to verify the new behaviour. While the cost and duration are not included as part of the PIA, it is clear that this testing and any

required regression testing with all the CSPs will require significant effort and associated cost.

5.3 User Integration Testing

The UIT team will conduct testing specific for this change by enabling consumption on an ESME and GSME, running-down the credit available on the device and then running a top-up SR as follows:

1. set the ESME or GSME in Prepayment mode
2. set tariff and meter balance to be a specific value and ensure the Test Lab Operator (TLO) has enabled consumption on the device
3. wait for the credit on the ESME or GSME to be exhausted
4. run a SR2.2 to apply a top-up to the device and then check via the Service User Simulator (SUS) or Self Service Management Interface (SSMI) that the new 'Supply Enabled' alert has been generated

It is anticipated that significant support will be required from the CSPs to complete UIT.

6 Costs and Charges

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

The Rough Order of Magnitude cost (ROM) shown below describes indicative costs to implement the functional requirements as shown in section 3.4. The price is not an offer open to acceptance. It should be noted that the change has not been subject to the same level of analysis that would be performed as part of a Full Impact Assessment and as such there may be elements missing from the solution or the solution may be subject to a material change. As a result, the final offer price may result in a variation.

6.1 Design, Build and Testing Cost Impact

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

£ ROM	Design, Build and PIT
Create a new Supply Enabled Alert	£60,000 to 200,000

The range of charges includes provision for a DUIS uplift. However, if the targeted SEC Release date includes another Modification or Change Request with a DUIS uplift, that cost will be shared equally between the two (or more) changes, and the cost of Design, Build, PIT, and subsequent Integration Testing will come down.

Although not included in this PIA, it is expected that there will be high integration testing costs associated with this Modification. As with the DUIS uplift, if the targeted SEC Release date includes another Modification or Change Request with regression testing, that cost will be shared equally between the two (or more) changes, and the cost of Integration Testing will come down.

Based on the existing requirements, the total fixed price cost for a Full Impact Assessment is **£20,684** and would be expected to be completed in 40 working days.

6.2 Contract and Schedule Impacts

No changes to Schedule 2.2 (Performance Measures and Reporting) are expected as a result of this Change.

Updates to the DSP Design Baseline (Schedule 4.1) and Payment milestones (Schedules 6.1 and 7.1) are anticipated.

Appendix A: Glossary

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

Acronym	Definition
AMS	Application Management Support
CAN	Contract Amendment Note
CH, Comms Hub	Communications Hub
CR	DCC Change Request
DCC	Data Communications Company
DSP	Data Service Provider
DS&A	Data Science and Analytics
DUIS	DCC User Interface Specification
ESME	Electricity Smart Metering Equipment
FIA	Full Impact Assessment
GBCS	Great Britain Companion Specification
GSME	Gas Smart Metering Equipment
MMC	Message Mapping Catalogue
MRT	Meter Read Transaction
PIA	Preliminary Impact Assessment
PIT	Pre-Integration Testing
ROM	Rough Order of Magnitude (cost)
SAT	Service Audit Trail
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMIP	Smart Metering Implementation Programme
SR	Service Request
SRV	Service Reference Variants
SSI	Self-Service Interface
TTO	Transition to Operations
UIT	User Integration Testing

Appendix B: RAID and Clarifications

No Risks or Issues have been identified at this time.

Assumptions

Ref	Description	Status/Mitigation
SECMP244-A1	SIT testing will involve the use of real devices where available, otherwise emulators will be used.	Accepted
SECMP244-A2	Systems Integrator Programme and Release Management activities are not included in this PIA.	Accepted

Dependencies

Ref	Description	Status/Mitigation
SECMP244-D1	In the case that emulators will need to be used during SIT testing, firmware versions must be readily available, and compatible with the uplifted GBCS version to test this change.	Accepted

Clarifications

In order to help complete the Full Impact Assessment, the DSP will require clarification on the following points:

1. Confirmation of the GBCS Alert Code to be used for the new Supply Enabled Alert.
2. A likely indication of the new GBCS version number.
3. A likely indication of the new DUIS version number.

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MP244 ‘Device Alerts for Smart Meter credit replenishment’

Annex D

Refinement Consultation responses

About this document

This document contains the full collated responses received to the MP244 Refinement Consultation.

Question 1: Do you agree that the solution put forward will effectively resolve the identified issue?

Question 1			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	No	Technically this would have been a good idea if implemented from the start, but it is too costly and difficult to implement retrospectively. The expected £2m cost for manufacturers is too high. We also think implementing the solution will take more time in practice than the 'targeted November 2025 Release' (on page 3 of the Modification report) suggests, once time for manufacturers to deliver the requirements, time for suppliers to test, and time for all meters to be updated OTA, is taken into account. We notice that later in the modification report, June 2026 and June 2027 Release dates are mentioned instead. We presume the proposer needs a solution quicker than this. In our opinion, it would seem most sensible to go for a non-mandated Alert solution. Or alternatively, to keep going with the current work-around(s).
E.ON	Large Supplier	Yes	-
Octopus	Large Supplier	Not entirely	The proposed solution does effectively resolve the identified issue, although as noted, there is already a solution available via SR7.4 and the modification and associated costs only cover the DCC and SEC changes. There is further work, significant cost and time following this modification for this to be effectively implemented due to changes required to GBSCS and by meter manufacturers. The modification takes steps towards resolving the issue but by the isolated approval of this modification the solution itself is unlikely to be available for some time and it's unclear whether this would have a positive or negative impact on DCC traffic profiles.

Question 2: Do you agree that the legal text will deliver MP244?

Question 2				
Respondent	Category	Response	Rationale	SECAS Response
British Gas	Large Supplier	No	As with our answer to qn 1, we don't think the solution will effectively resolve the identified issue. However, separately there is something wrong with the legal text document you have shared – there are lots of “Error” messages in the text, where the references appear to be broken.	The legal text has now been corrected to show the information without the error messages.
E.ON	Large Supplier	No comment	No comment, as it was difficult to read the amended text as the document when opened had numerous ‘Error - reference source not found’ messages.	
Octopus	Large Supplier	Yes	The legal text appropriately covers the implementation but as before, the proposal does not resolve the issue in full which MP244 sets out to resolve.	-

Question 3: Do you agree with the proposed implementation approach?

Question 3			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	Yes	-
Octopus	Large Supplier	Yes	We have no comments on the proposed implementation approach of targeting June 2026 or 2027. However, as noted previously, this is the partial implementation with no forecasted timelines from Manufacturers on implementation.

Question 4: Will there be any impact on your organisation to implement MP244?

Question 4			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	No	-
Octopus	Large Supplier	Minimal impact	As we already have an appropriate way of determining supply status and supporting vulnerable customers, this change would not necessarily have an impact on processes and systems as we understand the alert will be configurable. The implementation of MP244 would bring another option that would have an impact if we wanted to support the new alert.

Question 5: Will your organisation incur any costs in implementing MP244?

Question 5			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	No	-
Octopus	Large Supplier	Unknown cost to implement	We would likely utilise the proposed alert which would require adjusting the alerts used in our vulnerable prepayment customer support. The cost would come if we changed to use the new alert once it is implemented. There would likely also be a cost seen in manufacturers FW which would be required to introduce the alert therefore the linked costs are unknown.

Question 6: How long from the point of approval would your organisation need to implement MP244?

Question 6			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	Immediately	-
Octopus	Large Supplier	Minimal time	MP244 requires no changes to our system however it offers a different way of monitoring something we already monitor. With this in mind we would need little time to implement the alert proposed in MP244.

Question 7: Do you believe that MP244 would better facilitate the General SEC Objectives?

Question 7			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	-	Better facilitates General SEC Objective (a) and (c)
Octopus	Large Supplier	Yes	SEC objective A is better facilitated by MP244 by “efficient operation of smart metering systems at energy consumers premises”. Efficient due to having a single alert for supply being reestablished where there is currently a work around requiring multiple SR's being sent.

Question 8: Do you believe there will be any impacts on or benefits to consumers if MP244 is implemented?

Question 8			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	Yes	-
Octopus	Large Supplier	Yes	The modification does not bring direct benefits to the consumer and the benefits it offers are to a limited set of customers. The benefits only come from suppliers taking action off the back of the successful implementation of this alert and implementing better support than currently exists. Consumers will however feel the cost of this Modification via costs being levied upon suppliers which ultimately impacts consumers bills.

Question 9: Noting the costs and benefits of this modification, do you believe MP244 should be approved?

Question 9			
Respondent	Category	Response	Rationale
British Gas	Large Supplier	-	-
E.ON	Large Supplier	Yes	-
Octopus	Large Supplier	No	Whilst we appreciate that there is the potential to support vulnerable customers if this modification were approved and appropriately utilised by energy suppliers, we feel the unknown final costs and time to deliver are likely to outweigh the benefit.

Question 10: How does your organisation identify self-rationing or self-disconnecting consumers at present?

Question 10		
Respondent	Category	Response and rationale
British Gas	Large Supplier	-
E.ON	Large Supplier	Daily work task to review any reported 8F83 alerts. These alerts are shared with the team who support vulnerable customers so that contact can be made with the customer about their energy supply. Implementation of the Modification would reduce time and effort spent in reviewing and responding to the alerts reported.
Octopus	Large Supplier	We have a specific team which supports this area. We have a dashboard which tracks SPAYG disconnections, and we send an email to customers if they have not re-enabled supply after 2 hours offering support and options.

Question 11: Please provide any further comments you may have.

Question 11		
Respondent	Category	Comments
British Gas	Large Supplier	-
E.ON	Large Supplier	-
Octopus	Large Supplier	We think it is positive to create mechanisms to better support and serve vulnerable customers however we do not feel that MP244 is the most efficient and cost-effective way of doing so. The issue of supporting vulnerable and off supply customers has existed for some time and we believe that suppliers will have appropriate mechanisms in place. We also do not believe the volume of SR7.4 is concerning. MP244 states the volume is 4.7 million messages out of total of over 2,000 million- making it 0.235% of all traffic. 7.4's are not solely used to determine how long someone has been off supply so any reduction caused by MP244 would be insignificant. When considering the time and cost it will take for these alerts to appear in the ecosystem in a beneficial manner, we do not believe they carry an appropriate benefit for the cost to consumers. We would also note that the discussion around the 7.4's is related to DSP traffic, and we do not believe it is appropriate to introduce costly modifications with the intention of lowering traffic or smoothing traffic. The traffic management should be dealt with more centrally and feels unconvincing to use that argument in this MP. There is also discussion of "off supply alerts" not being generated, how can we be confident in the same mechanism to provide an "on supply alert" reliably? If the alert cannot be relied upon then it negates any benefit.