

This document is classified as **Clear** in accordance with the Panel Information Policy. Recipients can distribute this information to the world, there is no limit on disclosure. Information may be shared without restriction subject to copyright.

MP244 ‘Device Alerts for Smart Meter credit replenishment’

Annex C

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):
 - 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.