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MP085B

‘Synchronisation of Smart Meter voltage measurement periods (meters currently installed)’

Modification Report

Version 0.9

4 December 2024

Corporate member of
Plain English Campaign
Committed to clearer
communication

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About this document

This document is a draft Modification Report. It sets out the background, issue, solution, impacts, costs, implementation approach and progression timetable for this modification, along with any relevant discussions, views and conclusions.

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This document also has two annexes:

- **Annex A** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex B** contains the responses to the Refinement Consultation.

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1. Summary

This proposal has been raised by Alan Creighton of Northern Powergrid.

Electricity Distribution Network Operators (DNOs) use Root Mean Square (RMS) voltage readings to monitor the efficiency of their network. During the development of the Smart Meter technical specifications, DNOs assumed that average RMS voltage readings would be measured across a consistent period, which is essential for monitoring. An example of this would be the measurements taking place in 30-minute periods, starting on the hour (XX:00) and the half hour (XX:30) so that they would match half-hourly Consumption Profile Data. However, this was not codified in the Smart Metering Equipment Technical Specifications (SMETS) or the Great Britain Companion Specification (GBCS) and this has led to some voltage reading periods starting at different times.

Some Manufacturers have produced Electricity Smart Metering Equipment (ESME) which record RMS readings on the hour or half hour, however this is not standard across all Manufacturers. As a result, Electricity Network Parties are:

- (i) making conservative, less efficient analysis assumptions to account for the lack of data alignment; or
- (ii) recreating synchronised data by downloading high granularity (for example minute resolution) data and calculating the required data.

Investigations during the Refinement Process have found the issue affecting existing installed meters is more complex than initially envisaged. This could result in a lengthy lead time for implementation where meter Manufacturers could potentially still produce Devices that do not commence average RMS voltage readings on the hour. Therefore, it was agreed that there should be two separate solutions to address the issue:

- MP085A (implemented as part of the November 2022 SEC Release) – a Technical Specifications document change for meter Manufacturers to ensure a predictable approach for when newly manufactured Devices commence average RMS Voltage Measurement Period readings; and
- MP085B (this modification) – a solution for meters that are already installed if SEC Parties request that already installed Devices adopt the desired functionality by a set date.

This modification impacts Electricity Network Operators, Suppliers, Meter Asset Providers and Device Manufacturers. Costs to implement are limited to SECAS time and effort. This is a Self-Governance Modification which SECAS is targeting for inclusion in the June 2025 SEC Release.

2. Issue

What are the current arrangements?

What is average RMS voltage and what is it used for?

The RMS voltage value of an Alternating Current (AC) circuit represents an equivalent voltage of a Direct Current (DC) circuit. Electricity Network Parties use smart meter average RMS voltage and average consumption data to monitor the performance of distribution networks and identify any problems by the recorded voltage variations.

Once there is data available from enough smart meters on a DNO network, Network Parties will use this data to identify problems and appropriate solutions. The uptake in Low Carbon Technologies, particularly Electric Vehicles and Distributed Generation is expected to cause an increase in the number of power flow and voltage issues in distribution networks. Voltage and consumption data from smart meters will help manage these issues efficiently in the future.

What is the issue?

Electricity Network Parties have a statutory obligation to ensure that the voltage supplied to consumers' premises from Low Voltage electricity networks is always between defined limits.

To monitor the efficiency of their networks and meet the legal obligation of the voltage at the premises being within the prescribed limits, DNOs use RMS voltage readings from all meters across their network. When the SEC was first drafted, the Technical Specifications were silent on the average RMS voltage readings from smart meters measuring across a consistent period synchronised in time for all meters, which is essential for monitoring. An example of this would be for an average to be measured across a 30-minute period starting on the hour and on the half hour, which would match half hour consumption profile data. This has led to different Electricity Smart Metering Equipment (ESME) Device Models applying varying start times for the RMS voltage measurement. It is not possible for the DNO to configure the start time of the RMS voltage measurement period.

There are examples where some electricity meter Manufacturers' meters begin the measurement period on the hour or half hour, however this is not uniform across the industry. This has resulted in Electricity Network Parties:

- (i) making conservative, less efficient analysis assumptions to account for the lack of data alignment; or
- (ii) recreating synchronised data by downloading high granularity (for example minute resolution) data and calculating the required data.

The issue was addressed under [MP085A 'Synchronisation of smart meter voltage measurement periods'](#) for new ESME Device Models compliant with ESMETS v5.2, however the issue remains for Devices compliant with previous iterations of ESMETS (provided they do not already have the required functionality).

What is the impact this is having?

There are two headline implications if this issue is not addressed for meters currently installed:

- DNOs will either need to make conservative assumptions about network voltages which may lead to inefficient, potentially more costly solutions being implemented until all Devices are updated to SMETS v5.2; or
- DNOs will need to reconfigure the Average RMS Voltage Measurement Period for Devices currently installed from the default period of 30 minutes to one minute and download the high granularity data so that they can recreate synchronised data in their own systems. This will require DNOs to develop systems to manage a greater volume of data than originally envisaged as well as increasing traffic on the DCC System. This is not considered to be an efficient solution.

Impact on consumers

There is no direct impact on consumers resulting from the issue identified in this modification.

3. Proposed Solution

The Proposed Solution is to populate the Maintenance Validity Period (MVP) end dates for pre-ESMETS v5.2 versions within the TS Applicability Tables (TSAT). This will mean that pre-ESMETS v5.2 Devices can still be installed as the Installation Validity Period (IVP) will remain undetermined. This will reduce scrappage costs as Suppliers and or their contracted meter installers are likely to have existing stock that is yet to be installed. Once the MVP end date expires, the ESME will have to be updated to ESMETS v5.2 or later.

The Proposed Solution will result in ESME Devices gaining additional functionality compared to their current ESMETS version.

The proposed end date is 2 November 2028 to allow Manufacturers enough time to design and produce ESMETS v5.2 firmware updates and for Suppliers to roll them out across their Devices.

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

This modification will impact Electricity Network Operators as once Devices are updated to an ESMETS version that supports the MP085A solution, they will benefit from RMS Voltage Measurement Periods commencing at consistent time periods.

Device Manufacturers will be impacted as they will need to design and produce firmware updates that contain ESMETS v5.2 functionality.

Suppliers will be impacted as they will need to update their Devices with the firmware updates provided by the Device Manufacturers once pre-ESMETS v5.2 versions are no longer supported.

DCC System

This modification has no impact on the DCC System.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Schedule 11 'TS Applicability Tables'

The changes to the SEC required to deliver the Proposed Solution are available in Annex A.

Technical specification versions

This modification will result in existing versions of SMETS (pre-v5.2) being end dated. Once these versions are no longer supported, SEC Parties will be responsible for upgrading their Devices to a valid specification to ensure compliance.

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 ESME as those that are on pre-ESMETS v5.2 versions will have to be updated once their version's MVP has expired.

Consumers

This modification will ensure DNOs are provided with accurate data across all installed ESME in the granularity they require to enable Networks to operate more reliably and to become more efficient as the data is collated. Furthermore, aligning the Average RMS Voltage Measurement Periods across ESMEs will allow DNOs to identify issues on Low Voltage feeders and forecast future voltage issues. This will result in DNOs providing a higher level of service to consumers. The aligned data across all installed ESME is likely to become even more important with the increased uptake of Low Carbon Technologies being installed at consumers' premises, and the consequential increased load on the network.

Other industry Codes

This modification will have no impact on other industry Codes.

Greenhouse gas emissions

This modification will have no impact on greenhouse gas emissions.

5. Costs

DCC costs

There are no DCC System costs to implement this modification.

SECAS costs

The estimated SECAS implementation cost to implement this as a stand-alone modification is one days 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

One Manufacturer noted that costs for a specific ESMETS v 5.2 release would cost around £300,000. Another two Manufacturers stated their costs would be between £50,000 and £200,000 each. Suppliers noted that they would incur costs in purchasing this firmware to ensure they can bring their Devices into compliance.

MAPs and Suppliers have highlighted that if Devices are unupgradable and therefore non-compliant they would need to be removed. In turn, the premature removal of assets would result in scrappage costs of more than £1 million per Party.

Network Parties noted that they would incur no costs from implementation of this modification as they already have the systems in place to collect and process RMS voltage readings.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **26 June 2025** (June 2025 SEC Release) if a decision to approve is received on or before 12 June 2025; or
- **6 November 2025** (November 2025 SEC Release) if a decision to approve is received after 12 June 2025 but on or before 23 October 2025.

As this is a text-only change, the modification can be implemented ten Working Days following decision. Given the current modification timetable, the next possible release this modification can be included in is the June 2025 SEC Release.

7. Assessment of the proposal

Observations on the issue

The original proposal (DP085) was taken to the Change Sub-Committee (CSC) for initial discussion. A CSC member pointed out that there are numerous synchronisation issues so it would be beneficial to discuss these issues together and explore potential efficiencies in any solution. Another member pointed out that these would have been discussed at Technical Specification Issue Resolution Sub-Committee (TSIRS). This was discussed with the Proposer and it was agreed that although a valid concern, it was felt that there was a separate issue to the one defined in this proposal.

Solution development

This section describes the solution alternatives which were explored before the current Proposed Solution was selected. It notes the Preliminary Assessment, the following three solutions which were explored and the feedback of the British Electrotechnical and Allied Manufacturers' Association (BEAMA), TABASC and the Working Group.

Preliminary Assessment

SECAS requested a DCC Preliminary Assessment in July 2020 to address this issue, which returned costs to implement of £100,000 - £200,000. SECAS presented this to the Working Group in October 2020 and February 2021 who commented that DNO's would benefit from this change rather than Suppliers and supported a solution with a lower cost.

As a result of these comments from the Working Group, SECAS and the Proposer developed three solutions which are detailed below.

Solution 1 - End dating existing versions of ESMETS

- End dating ESMETS pre v5.2 versions will force Suppliers to update Devices onto ESMETS v5.2 or later, once the Installation and Maintenance End Dates have passed.
- This will deliver MP085A functionality as well as additional functionality included in ESMETS v5.2 or later.
- Pros:
 - All Devices will benefit from updated functionality (not just MP085A).
 - A reduced number of ESMETS versions, reducing complexity.
- Cons:
 - Devices that cannot be updated would be non-compliant, will no longer have 'smart' capabilities (once their MVP has expired) and should be replaced to bring them back into compliance, incurring financial and environmental costs.

Solution 2 - Retrospective uplift to ESMETS version 4.X

- This will allow Suppliers to update Devices to the next available sub-version (v4.3), as opposed to forcing an uplift to v5.2 or later.
- Pros:
 - All Devices will benefit from updated MP085A functionality only.
- Cons:
 - End Dates still need to be populated to existing versions to incentivise updates. Some Devices that cannot be updated may no longer support 'smart' capabilities (once their MVP has expired) and would require replacing at one point in time.

Solution 3 - Voluntary MP085A functionality implementation (would not have required a SEC modification)

- Manufacturers including MP085A functionality (aligning the RMS voltage period with the half hour (implemented in ESMETS v5.2) in firmware upgrades.
- Suppliers will then need to purchase these upgrades.
- DNOs would want some level of transparency on when/where the upgrades are made – the Central Products List (CPL) would potentially help if Manufacturers made information available for SECAS to identify firmware versions with the desired functionality.
- This would not be codified in the SEC and would therefore not require a modification.

Perspectives on Solutions 1, 2 and 3

Testing and development

SECAS presented the three solution options at the June 2023 SEC Working Group.

SECAS advised that as Solution 2 would result in a new sub-version, there will likely be increased testing costs incurred by the DCC. The Energy and Utilities Alliance (EUA) representative added that the DCC is reviewing a potential new testing strategy that will result in reduced testing costs compared with the current process.

SECAS noted that during a discussion with EUA members in early June 2023, members advised that there would be high costs associated with upgrading Devices. Manufacturers incur costs developing the firmware upgrades and Devices to a new specification and Suppliers then need to purchase and implement the upgrades. In the Working Group, the EUA representative confirmed there would be less development and cost to move to a new sub-version of ESMETS than a principal version. They added that they cannot see the benefit of the modification when considering the high costs for Solutions 1 and 2.

Impacted Devices

A Working Group member queried if the number of impacted ESME was known. SECAS advised that when the modification (MP085) was initially raised, DNOs held data showing which Manufacturers' models were affected and this could be used to calculate the volume of data. However, when these solutions were discussed, the number of impacted Devices was unknown.

Initial Technical Specification drafting

Another Working Group member noted that they could not see the solution's benefits and queried why the functionality was not codified in the original Technical Specifications. SECAS added that this was likely due to an oversight. The Working Group member added that the modification appears to be a 'nice to have' solution for Networks at the expense of Suppliers. They added that it would be beneficial for a cost benefit analysis to be carried out to understand how much this solution will cost Suppliers and what benefit the DNOs will receive.

Associated costs

A Working Group member highlighted that the cost sits with Supplier Parties but the benefit will be with Network Parties. The Working Group member who is a Network Party added that DNOs have a workaround solution that is labour-intensive. They also commented that due to the high financial impact on Parties, there is no net benefit, and instead the solution of MP085A should be realised over time.

Triaged Devices

The EUA representative added that either Proposed Solution would have a negative impact on triaged Devices that are in the field. They advised that it would be detrimental if the modification results in Devices having to be physically removed and potentially scrapped.

The Working Group's final view

The Working Group agreed that none of the three solutions was appropriate and provided no support to implement any option.

Views of BEAMA

During the MP085B Refinement Process, SECAS engaged with BEAMA to understand if there was any preference on the solution options. BEAMA advised that all of the SEC-based solutions will result in Manufacturers and Suppliers incurring substantial costs to make firmware updates available and to purchase them. As a result, BEAMA members were unsupportive of the proposed changes.

Views of TABASC

Ahead of the August 2023 TABASC meeting, the TABASC Chair proposed an alternative solution. This solution proposed to populate Maintenance Validity Period end dates within the ESMETS table in SEC Schedule 11. This allows for ESME built to older ESMETS versions to continue to be installed, which will then require updating to a later version (once the MVP end date of the older ESMETS version has expired). This is the current Proposed Solution of this modification.

Solution 4

End dating pre-ESMETS v5.2 versions' Maintenance Validity Periods

- End dating pre-ESMETS v5.2 versions' MVPs will allow Suppliers to continue to install pre-ESMETS v5.2 ESME Devices, which will then require updating to v5.2 or later, once their respective ESMETS version's MVP has expired.
- This will deliver MP085A functionality as well as additional functionality included in ESMETS v5.2 or later.
- Pro:
 - All Devices will benefit from updated functionality (not just MP085A).
 - Scrappage will be reduced as pre-ESMETS v5.2 ESME will still be able to be installed.
 - A reduced number of ESMETS versions, reducing complexity.
- Con:
 - Devices that cannot be updated will no longer support 'smart' capabilities (once their Maintenance Validity Period (MVP) has expired) and would require replacing at one point in time.

SECAS presented an overview to the TABASC in August 2023 of the four aforementioned solutions, noting that Solution 3 did not require any change to the SEC. The TABASC highlighted that for this option, the commercial process and incentive for Device Manufacturers would need to be discussed further. SECAS also noted that DNOs have also expressed that they would want transparency of the Parties' firmware updates to understand which Devices have the functionality. SECAS confirmed to the TABASC that this does not require a SEC modification. This solution was not supported by the TABASC.

The TABASC supported Solution 4 as it will allow for pre-ESMETS v5.2 Devices still in supply chains to be installed and upgraded, reducing return and scrappage costs, as well as environmental impacts. As a result, Solutions 1 and 2 were unsupported. Further rationale was provided for Solution 2 as it will add further complexity to the Technical Specifications as another ESMETS version is required.

A TABASC member highlighted a scenario where a Supplier could exit the market and queried whether in this case a Supplier would have to remove all their ESMETS v4.x Devices as there may not be an available update to ESMETS v5.2 or later. The Chair noted that in this case, an exception would be required for the non-compliance. Another TABASC member advised that due to the age of some Devices, and the number of updates they have previously executed, they may not have sufficient memory to facilitate the update.

The TABASC Chair further noted that from a TABASC viewpoint, it is desirable to have a lower number of ESMETS versions in circulation to reduce architectural and technical specification complexity. The TABASC Chair also queried if there were any proposed end dates. SECAS stated that the initial proposal is November 2028.

SECAS requested that TABASC suggests its preferred solution which can be taken forward and through to the Refinement Consultation. SECAS noted that the DCC has already commented on the number of versions and sub-versions of each Technical Specification and noted that their desire is for a lower number of specifications to exist. SECAS further noted that the modification has been unsupported at other forums due to concern from SEC Parties surrounding the costs associated with executing firmware upgrades. The Chair summarised by noting that Solution 4 is most favourable as it is the most flexible option and that strategically, it reduces the overall number of technical specifications.

Discussion Points

Following the suggestion by the TABASC Chair that Solution 4 should be pursued, SECAS issued the Refinement Consultation. Below is a summary of the debates raised during the Refinement Consultation, Working Group in April and June 2024, as well as the June 2024 meeting of the TABASC.

Proposer's View

“Solution 4 is an evolutionary development of our proposed Solution 1, which allows suppliers to continue to install meters that do not meet the requirements of MP085A on the basis that they can be upgraded via firmware updates to have that functionality by 2 November 2028. We note that this will provide approximately four years for Manufacturers to develop and test firmware updates and for suppliers to deploy that firmware. It should also allow for meters carried in stock to be deployed on site thus minimising scrappage.

Northern Powergrid also recognise that there may be a small population of ESMEs that it would be impractical and/or uneconomic to upgrade to comply with ESMETS v5.2. Provided the volume of such ESMEs is low and their location on the network known, Northern Powergrid would support compliance exemptions being provided. It is not our intention to require significant volumes of ESMEs to be replaced prematurely”.

How many Devices are impacted by this issue?

Many Parties have questioned the scale of the issue, noting that the business benefits can only be considered once the number of ESME's which do not record on the hour and half hour has been calculated.

During the Refinement Process SECAS were informed by a Network Party that testing had taken place to gauge the scale of the issue. The models of four meter Manufacturers were tested and two of the Manufacturers' ESME commenced their measurement period on the hour whereas the other Manufacturers' ESME did not.

One of the two Manufacturers whose Devices do not record on the hour and half hour has approximately six million ESME installed. One DNO has informed SECAS that at least 45% of the Smart Meters on their network are from this Manufacturer and therefore do not have voltage synchronisation.

The Proposer's organisation undertook an assessment as part of this modification to calculate the number of impacted Devices. Of 18,000 Devices in the sample, 57% did not record RMS voltage readings on the hour or half hour.

A third DNO undertook analysis of the Devices in their network which showed that 38% of all Devices in their portfolio did not record on the hour of half hour.

Of the analysis which has taken place from three DNO's, an average of 47% of all ESME's are impacted by the issue identified in this modification.

Does the Proposed Solution resolve the identified issue?

Parties have argued that the current Proposed Solution will not resolve the issue. Several respondents noted that end-dating the MVP for pre-ESMETS v5.2 would not guarantee complete implementation of a solution as there are Devices which are uncommunicative, meaning firmware upgrades could not take place.

Other respondents noted that as of November 2024 there is only one Device on the CPL using ESMETS V5.2 compliant firmware. They also commented that there are few entries on the CPL with ESMETS v5.0 which has been present for several years, adding that although firmware may be available there may not be adequate time to test and deploy the firmware before the current November 2028 deadline.

Concern over un-upgradable Devices

Given there are meters which are unupgradable for a variety of reasons, Parties have expressed concern throughout the Refinement Process about what would happen when the Maintenance Validity Period expires. MAPs highlighted that premature removal of their assets would be problematic as investments are made on the basis that Devices will be installed for a set period of time.

Parties also noted that some Devices already record RMS readings on XX:00 and XX:30. They noted that these Devices would be compliant with the goal of the modification, but because they have not received an update they would technically be non-compliant.

Supplier Parties commented that they may not have contracts with all Manufacturers so are unable to update firmware on that Device, especially where the Device has been gained in a Change of Supply.

Areas of no SMWAN were also highlighted, with Parties noting that even if the Device is replaced it will not deliver the functionality desired by the Proposer. In addition, the removed meter will have not have received firmware updates to enable them to be triaged which will increase waste.

Proposed exemption for unupgradable Devices

The Proposer does not want to force unnecessary removal of Devices. After the Refinement Consultation, the Proposer suggested introducing an exemption for Devices that cannot be upgraded. Networks also commented that they would be supportive of an exemption, provided the volume of Devices is low and their physical location on their Network is known.

SECAS discussed this suggestion with the TABASC in September 2024 who rejected the proposed exemption. They noted that an exemption would take away the purpose of the TSAT, which is to drive progress in technical specifications so consumers receive the best experience through new and updates features.

Projected benefits to DNO's from implementation of MP085B

During the Refinement Consultation, Networks noted two projects which had taken place which show the benefits of using Smart Meter data to reduce voltage.

- **Boston Spa Energy Efficiency Trial:** This innovation project was to optimise the voltage at our 33/11kV substations and hence at customers' supply terminals in the Boston Spa area of Yorkshire in order to deliver energy reduction benefits to those customers. This works by generally lowering the voltages on the distribution system and hence at the customers' supply

terminals whilst ensuring that voltages remain within statutory limits at all times. Customer's voltage is controlled by tap changers on the 33/11kV transformers that are set using close-to-real-time voltage data from the smart meters in the premises of customers supplied via that transformer. The availability of reliable, accurate and synchronised voltage data is key to maximising the customer benefits. For a modest 1% reduction in voltage, the benefits to customers in the trial area are estimated to be £136k/annum increasing to £406k/annum if the voltage could be reduced by 3%. If the project was rolled out across GB, the benefits to GB consumers is estimated to be between £256m/annum and £770m/annum.

- **PA Consulting Report:** In 2019 Distribution Network Operators (DNOs) commissioned PA Consulting to assess the benefits to DNOs from smart meters. This report concluded that smart metering in general could be expected to deliver benefits in the region of £11m across all DNOs between 2019 and 2030 associated with better informed load related investment decisions. This benefit arises from having more robust network models populated by better synchronised voltage and consumption data. If 10% of this benefit is associated with better voltage data, that would equate to a saving of £1.1m over the ten-year period. The same analysis also identified benefits of £43m associated with load shifting LCT demand. This benefit is also dependent upon having good network models populated with robust data. Assuming 10% of this benefit was attributed to better quality voltage data, this equates to a £4.3m saving over the ten-year period. These benefits would be shared with customers in accordance with the formula in our regulatory settlement with Ofgem.

8. Case for change

Views against the General SEC Objectives

Proposer's views

The Proposer believes that MP085B's implementation will better facilitate SEC Objectives (a)¹ and (e)² as the Proposed Solution will provide a consistent approach for all installed ESME in relation to Average RMS Voltage Measurement Periods. The modification will bring improvements to the operation and interoperability of smart meters while also providing Network Parties with more accurate data for them to better manage their networks. Furthermore, the Proposer commented that the implementation of MP085B will improve the operation of Smart Metering Systems to record voltage information in such a way that it can more usefully be used in the development of novel techniques for the management of voltage on high voltage and low voltage distribution networks.

Views against the consumer areas

Improved safety and reliability

This modification will ensure DNOs are provided with accurate data across all installed ESME in the granularity they require to enable Networks to operate more reliably and to become more efficient as the data is collated.

¹ Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain.

² Facilitate innovation in the design and operation of energy networks to contribute to the delivery of a secure and sustainable supply of energy.

Lower bills than would otherwise be the case

This modification will have a neutral impact on the price of a consumer's bills.

Reduced environmental damage

This modification will have a neutral impact on environmental damage as existing ESME Devices will still be able to be installed.

Improved quality of service

This modification will have a positive impact on service quality as DNOs will be able to respond quicker to faults on the electricity network and work to mitigate against the same fault reoccurring.

Benefits for society as a whole

This modification will have a neutral impact on benefits to society.

Appendix 1: Progression timetable

Timetable	
Action	Date
CSC recommendation that Panel convert into a Modification Proposal	29 Oct 2019
Panel convert Draft Proposal to Modification Proposal	15 Nov 2019
Potential solution options agreed with the Proposer	Dec 2019 – Jan 2020
Business Requirements discussed with the Proposer	Feb 2020
Potential Solution options discussed with Working Group	4 Mar 2020
Solution refined with the Proposer	Mar 2020
Modification discussed with TABASC	16 Apr 2020
Legal text developed with the Proposer	Apr 2020
Preliminary Assessment requested	July 2020
Preliminary Assessment returned	10 Sep 2020
Modification discussed at Working Group	7 Oct 2020
Request for Information issued to BEAMA	Nov 2020
Modification discussed at Working Group	3 Feb 2021
MP085 split into two separate modifications	22 Mar 2021
MP085B Request for information	26 Apr – 18 May 2022
Modification discussed at Working Group	1 Jun 2022
MP085B second Request for Information	Oct 2022 – Feb 2023
Modification discussed at Working Group	7 Jun 2023

Managed by

Timetable	
Action	Date
Modification discussed at TABASC	3 Aug 2023
Legal text developed for Proposed Solution	Aug 2023
Refinement Consultation	17 Jan 2024 – 29 Feb 2024
Refinement Consultation responses discussed with Working Group	3 Apr 2024
Modification discussed at Working Group	5 Jun 2024
Modification discussed at TABASC	6 Jun 2024
Modification discussed at TABASC	5 Sep 2024
Second Request for Information	4 Dec 2024 – 20 Dec 2024
<i>Modification discussed with TABASC</i>	<i>16 Jan 2025</i>
<i>Modification Report approved by CSC</i>	<i>18 Feb 2025</i>
<i>Modification Report Consultation</i>	<i>19 Feb 2025 – 12 Mar 2025</i>
<i>Change Board Vote</i>	<i>26 Mar 2025</i>

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
AC	Alternating Current
BEAMA	British Electrotechnical and Allied Manufacturers' Association
CPL	Central Products List
CSC	Change Sub-Committee
DC	Direct Current
DCC	Data Communications Company
DNO	Distribution Network Operator
DSP	Data Service Provider
DUIS	DCC User Interface Specification
ESME	Electricity Smart Metering Equipment
EUA	Energy and Utilities Alliance
GBCS	Great Britain Companion Specification
IVP	Installation Validity Period
MVP	Maintenance Validity Period
OPSG	Operations Group
RFI	Request For Information

Glossary	
Acronym	Full term
AC	Alternating Current
RMS	Root Mean Square
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SMETS	Smart Metering Equipment Technical Specifications
SR	Service Request
SSC	Security Sub-Committee
TABASC	Technical Architecture and Business Architecture Sub-Committee
TSAT	TS Applicability Tables
TSIRS	Technical Specification Issue Resolution Sub-Committee