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MP085B ‘Synchronisation of Smart Meter voltage measurement periods (meters currently installed)’

Annex C

Second Request for information responses

About this document

This document contains the full collated responses received to the second Request for Information (RFI) for [MP085B ‘Synchronisation of Smart Meter voltage measurement periods \(meters currently installed\)’](#).

Summary of responses

SECAS received 15 responses to the RFI. Parties were invited to give their thoughts on the Proposed Solution (end-dating the Maintenance Validity Period versions of ESMETS prior to v5.2 as 2 November 2028) and the Alternative Solution (end-dating the Installation Validity Period of versions of ESMETS prior to v5.2). Six Parties (Four Networks and two Large Suppliers) supported the Proposed Solution. Three Parties (two Large Suppliers and one Network Party) supported the Alternative Solution. Five Parties (four Other SEC Parties and a Large Supplier) did not support either solution. One Party (an Other SEC Party) supported both solutions.

Those Parties in support of the Proposed Solution (MVP end-dating) preferred the solution as it would not force restrictions on installation. The Large Suppliers in support of the Alternative Solution noted they could adhere to the deadline for installation, however noted there could be costs for others.

Parties noted that the Alternative Solution could impact the commerciality of the supply chain which could lead to increased costs. They also noted there would be scrappage costs due to delays in the triage process. They highlighted the issues faced by Parties when the IVP for ESMETS v2.0 was end-dated in April 2024. MAPs also noted that they did not believe all purchased assets would be installed by the start of November 2028. These Parties also noted that the Alternative Solution would not deliver the requirement of the Proposer to deliver MP085A functionality to already-installed ESME.

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Parties were broadly in support of extending the Installation End Date in the Alternative Solution to 2030, rather than 2028. Other SEC Party respondents suggested the date could be set as 2028, however should be reviewed closer to the time to ensure there is not widespread risk of Devices being removed. Large Supplier Parties noted that without knowing when Manufacturers would produce ESMETS v5.2 firmware they could not support end-dating Installation Validity Periods due to the potential scrappage of Devices.

Parties also noted there are a high number of meters which have the desired MP085A functionality. They questioned whether it was possible to devise a solution whereby only Devices which don't record RMS voltage readings on the hour and half hour could be updated. Parties also noted that Manufacturers may have firmware which are already compliant with MP085A but not with the other requirements of ESMETS v5.2. They noted that both solutions do not cater for these examples. Parties also sought clarity on what would occur to non-communicating meters if they cannot be upgraded via a OTA firmware upgrade, noting removals would be pointless if they already have MP085A functionality.

Question 1: Would your organisation experience any issues if the Alternative Solution was adopted?

Question 1			
Respondent	Category	Response	Rationale
BUUK	Network Party	No	There are no foreseen issues should the Alternative Solution be adopted. We would not need to change any of our existing processes or incur any costs.
Calisen	Other SEC Party	Yes	Whilst it is acknowledged that the proposed date is in the future, introducing any date that results in assets not being able to be installed impacts Meter Asset Providers (MAPs) as well as energy suppliers. Whilst all action would be taken to install meters by a set date, it is predicted not all purchased assets would be installed and therefore suppliers and MAPs would be financially impacted. This would drive unnecessary cost to the SMIP programme and to consumers. We do acknowledge however, there needs to be a solution to ensure the DNOs receive the benefits expected from smart meters.
Centrica	Large Supplier	Yes - we would still experience issues	The Alternative Solution is preferable to the Proposed Solution. It prevents the potential wide-scale replacement of non-compliant meters across our customer base, that would have been necessary with an MVP solution, which would be costly and disruptive to consumers as well as logistically challenging for suppliers. However, any meters on the old specifications at the point of the IVP end date (eg in a warehouse, or in engineer vans) would be un-installable and potentially need to be scrapped, unless there were off network triage solutions from affected manufacturers. As British Gas, we carry a significant number of meters at any one time, so the cutover would need to be carefully managed to mitigate further escalating costs of the rollout.

Question 1			
Respondent	Category	Response	Rationale
			We are also mindful that only a minority of manufacturers are keeping up with the latest specifications (and others are exiting the market). Mandating an IVP end date for pre-5.2 devices would be highly likely to impact the commerciality of the supply chain again risking increasing costs and works against a multi-manufacturer approach. Industry needs to have a significant number of volume-capable manufacturers with: • V5.2 tested functionality on the CPL and in volume supply • Volume capable use case 4 firmware update services before a switchover plan can be established based on this approach.
EDF	Large Supplier	Yes	Changing the proposal to limit the installation validity date doesn't seem to make sense for addressing updating of meter firmware on meters that are already installed. While it shouldn't be an issue for meter manufacturers to update the firmware they load at the factory for a version that supports the requirement, it's not in the interests of energy suppliers to accept a limit on existing stock they have that does not have the new firmware and can only acquire it after installation via OTA update. The MVP date limit also constrains meter operation after the MVP date but it does not preclude old meters being installed and immediately updated. The IVP does. The date is quite far out at Nov 2028, so it shouldn't affect us too much either way (IVP or MVP), but it depends on when the meter manufacturers agree to implement the required firmware in new meter production. If this happened only close to the IVP date, then suppliers would be stuck with excess stock that would not be legally installable and so be scrapped.
EON	Large Supplier	Yes	We could potentially experience issues with meters that cannot be installed prior to their IVP end date due to the protracted time delays in the triage process with resultant scrappage costs. This has already been experienced with the ESMETS v2.0 IVP end-date in April 2024.
ENWL	Network Party	No	No impact to our existing systems or processes
Kaifa	Other SEC Party	No	Kaifa are starting to develop FW with ESMETS 5.x in 2025, we should be ready to go live well before the IVP date.

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Question 1			
Respondent	Category	Response	Rationale
NGED	Network Party	No	We would not experience any issues (or incur any implementation costs) if either the proposed solution or the alternative solution is adopted, as our existing systems and processes would continue to operate as normal.
Northern Powergrid	Network Party	No	Our existing systems and processes will not need to be changed to utilise the higher quality data sets arising from either the Proposed Solution or the Alternative Solution, and no implementation costs will be incurred.
Northern Powergrid Metering	Other SEC Party	Yes	This could lead to stranded assets.
Octopus Energy	Large Supplier	No	We have engaged with our Electricity SMETS2 manufacturers for installations and although the dates provided are forecasts only, and as long as there is not sufficient movement in those dates then we believe there should be sufficient time to transition to deliveries of devices operating ESMETS v5.2 and deplete previous version stock levels by 2 November 2028.
Scottish Power Energy Retail	Large Supplier	Yes	As an energy supplier we have worked with six ESME manufacturers, representing a large proportion of the installed GB smart electricity meter estate. Four of these manufacturers already have the solution in place for the stated issue within their SMET2 v4.2 firmware and hence are compliant with MOD 85a. In our view, preventing these SMET2 v4.2 meters from being installed, by end-dating the IVP, does not make sense. The other two manufacturers have MOD 85a fix in their SMETS2 v5 releases: one is already in the supply chain, while the other is coming in 2025.
Smart Meter Assets	Other SEC Party	Yes	We are not convinced that the issue is properly understood (i.e. whether this is an issue across all meters or only certain manufacturers) and what the cost benefit analysis looks like. Anything which risks

Question 1			
Respondent	Category	Response	Rationale
			meters being rendered non-compliant needs to be very carefully considered with stranding costs factored into any business case.
UKPN	Network Party	Yes	Implementing the Alternative Solution would ensure that all ESME installed after the Installation Validity Period end date are updated to the most current firmware version. However, the Alternative Solution does not satisfy the requirement to deliver MP085A functionality to already installed ESME with pre-v5.2 firmware version. Practically all ESME devices currently installed in GB that do not deliver the requirements of MP085A will remain, with no obligations to update to the most current firmware version. This will therefore increase the number of ESMETS versions and increase complexity. We therefore may be unable to accurately carry out network voltage analysis as not all meters will be recording the voltage at the times set out in MP085A. This will require us to implement mitigating actions for assessing the voltage levels on the network to deliver benefits to consumers.

Question 2: If the Installation Validity Period for ESMETS versions prior to v5.2 was end dated as 2 May 2030, would this be more suitable for your organisation?

Question 2			
Respondent	Category	Response	Rationale
BUUK	Network Party	No	Our preference is for end dating the MVP rather than the IVP, however, should this Alternative Solution be overwhelming preference of parties, we would support its implementation. We do believe however that postponing this to 2030, rather than 2028 is not required.
Calisen	Other SEC Party	Yes	The implementation of any end dates impacts MAPs and suppliers and potentially drives cost into the SMIP. However, if this proposal was introduced, extending the end date would be preferred.
Centrica	Large Supplier	Unknown	We cannot support a proposal for a fixed date (see above) without some understanding of manufacturers plans and commitment to develop compliant firmware and introduce the product into the supply chain – without this the financial risk and operational burden to suppliers is unacceptable. Attempting to set a date is premature at this stage. There needs to be further work on an industry timeline which considers this and other changes before a date can be set – without this any date would be unacceptable from our point of view.
EDF	Large Supplier	Yes	If an IVP date is to be set without knowing the feature introduction planning timeline from meter manufacturers, the date should be as far out as possible to prevent stranded stock being held by the manufacturers, MAPs and suppliers.
EON	Large Supplier	Yes	Due to the fact that ESMETS v5.2 firmware is not currently available in production for virtually all meter models, the extended end-date would reduce the risk of obsolete stock for Suppliers and costs to consumers.
ENWL	Network Party	No	Unrealistic timeframe, leaving Devices without this functionality for longer than we would be comfortable with.

Question 2			
Respondent	Category	Response	Rationale
Kaifa	Other SEC Party	Yes	Taking into account the answer to the previous question, we hope to be ready before the 2028 cut off but if there were any delays in CPA or Customer testing the later date may be advantageous, perhaps it could be set at 2028 with a chance to review?
NGED	Network Party	No	If the alternative solution is adopted, thus end dating the IVP of ESMETS versions prior to v5.2, we believe that there is sufficient time for this to be completed by 2 nd November 2028 given that the only affected ESMES would be new ones (and not those already installed). We do not feel that adding 18 months to the deadline by extending it to 2 nd May 2030 would be necessary.
Northern Powergrid	Network Party		End dating the IVP rather than the MVP is a less attractive option for Network Parties because it would allow ESMES that don't have MP085A functionality to remain in-service until the MVP's are eventually end dated. However, we recognise that end dating the IVP, rather than the MVP, is likely to be a more acceptable solution for other smart metering stakeholders and feel that, if approved, would be a reasonable compromise. Give that end dating the IVP would only affect new ESMES, and not ESMES already installed, we would need to be convinced why end dating IVP by November 2028 (or earlier) was unrealistic. With a November 2028 end date, this would provide over three years for manufactures to develop and test firmware updates and make them available for new ESMES. We think that it would be unreasonable to defer this a further 18 months to May 2030.
Northern Powergrid Metering	Other SEC Party	No	Any defined date provides a cliff edge for a risk of meter removal.
Octopus Energy	Large Supplier	No	As per response to Q1, we believe that the 2 November 2028 would be achievable given the dates provided by our installing Electricity Manufacturers, even with minor delays. However, if there was additional time to achieve this then that would provide contingency for any significant delays that could occur. Although, I expect this could also be managed by engaging with the relevant SEC Forums

Question 2			
Respondent	Category	Response	Rationale
			(namely TABASC and OPSG) in a reasonable time (6 months-1 year) prior to the 2 November 2028 IVP date to assess whether this date was still achievable for Suppliers.
Scottish Power	Large Supplier	Yes	We have mentioned in Question 1 that end-dating IVP for meters that have the solution required of the MOD 85a makes little sense. However, were the end date to be set much further in the future, it might allow a sufficient window in which any impacted stock could be deployed such that only later SMETS2 versions would remain in the supply chain. Our preference is still that the MOD 85 be decoupled from the tidy-up of the TSAT table. End-dating of SMETS2 lines of the TSAT should be done in a standalone MOD at the appropriate time when it is known that perfectly working stock will not be impacted. We believe that all Suppliers want to upgrade firmware and it is generally network or connectivity issues that impede this.
Smart Meter Assets	Other SEC Party	No	Our concerns are more fundamental as to understanding the issue and assessing other potential solutions rather than the date. Extending the date would move the risk “to the right” but we would prefer more detailed and clear exploration and explanation of the issue per our comments in Question 1.
UKPN	Network Party	No	This extends the period for installing ESME with a pre-5.2 firmware from 2 November 2028 to 2 May 2030, increasing the volume of such ESME with a pre5.2 firmware version but not addressing the delivery of v5.2 firmware functionality to all installed ESME.

Question 3: Do you have a preference between the Proposed Solution and Alternative Solution?

Question 3			
Respondent	Category	Response	Rationale
BUUK	Network Party	Yes	Although we support in principle both Solutions, our preference is with the Proposed Solution. We would support the end dating of MVP to prevent ESMes without MP085A functionality remaining in service.
Calisen	Other SEC Party	No	We don't have a preference as we do not agree with the introduction of either proposal. However, the proposed solution (i.e. maintenance end date) would not introduce restrictions over installation of meters, but allow for focus to be on upgrading those installed. However, a decision needs to be made around non-communicating meters and the treatment of these as part of this Modification.
Centrica	Large Supplier	Yes – with caveats	We prefer the Alternative Solution over the Proposed Solution. However, both solutions still lead to significant costs for suppliers (and their MAPs), and the risk of damage to the competitive supply chain.
EDF	Large Supplier	Yes	A MVP limit seems less risky as it does not preclude installation and update, even if it does prevent smart operation (without update) beyond that time. Also, use of the IVP has no effect on already installed meters.
EON	Large Supplier	Yes	Although there are pros and cons of each approach, ending the MVP is our preference as this will allow more leeway in triage of older meters. The critical factor is the actual date being proposed rather than whether it is the IVPs or MVPs which are ended.
ENWL	Network Party	Yes	Alternative solution suggested date of November 2028 is an acceptable compromise
Kaifa	Other SEC Party	No	Either will work for us.

Question 3			
Respondent	Category	Response	Rationale
NGED	Network Party	Yes	Our preference would be for the MVP to be end dated, rather than the IVP. Therefore we would prefer for the proposed solution to be adopted, rather than the alternative solution.
Northern Powergrid	Network Party	Yes	As set out in our response to question 2, we have a preference for the Proposed Solution (End dating the MVP) but we recognise that the Alternative Solution (End dating the IVP) would be beneficial and is a reasonable compromise.
Northern Powergrid Metering	Other SEC Party	No	Any solution provides a cliff edge for a risk of meter removal.
Octopus Energy	Large Supplier	Alternative Solution	We prefer the Alternative Solution as it enables us to plan transition of orders/deliveries to be on ESMETS v5.2 without impacting existing installed assets that could have an impact on consumer experience that we believe MVP would have.
Scottish Power	Large Supplier	Yes	As most manufacturers already have the solution in place to the stated problem within their SMETS2 v4.2 release, end-dating the MVP is not the solution to the issue that this MOD aims to address i.e. obligating an upgrade to firmware when the existing firmware already has the solution is a redundant activity for the purposes of this MOD. Indeed, two of the UK electricity meter manufacturers with significant volumes of meters in the estate are no longer in the market. Their meters are on SMETS2 v4.2 and already have the required functionality contained in MOD 85a. End-dating MVP not only does not achieve anything, but also makes these meters non-compliant and therefore at risk of costly replacement for no reason.
Smart Meter Assets	Other SEC Party	No	Further analysis is required before either option is implemented with need for a sound business case.
UKPN	Network Party	Yes	UK Power Networks prefers the Proposed Solution to be implemented because setting a date of 2 November 2028 provides Manufacturers enough time to design and produce ESMETS v5.2 firmware updates and for

Question 3			
Respondent	Category	Response	Rationale
			Suppliers to deploy them across their Devices. The Alternative Solution does not address the issue of delivering MP085A functionality to ESME with pre-v5.2 firmware version. In addition, Section 39.15 of the Electricity Supply Standard Consolidated Licence Conditions and Section 17.21 of the Smart Meter Communication Licence states that the licensee must take all reasonable steps to ensure that the Smart Metering System is maintained so that at all times it satisfies the requirements of a Version of the relevant Technical Specification is within its Maintenance Validity Period. This means that it is part of the Licence Condition to maintain installed Devices in line with the TSAT.

Question 4: Please provide any further comments you may have.

Question 4		
Respondent	Category	Response
BUUK	Network Party	We also believe that the Proposed Solution further benefits the consumer and Net Zero targets. As the market moves closer to Net Zero and embraces LCT, good quality data is paramount in enabling these decisions in the LCT market.
Calisen	Other SEC Party	We would like to understand in more detail the sample testing completed by the DNOs as part of this MOD. There is one manufacturer we know of that has firmware due in the short term which will remedy this for their installed meters, but otherwise a number of manufacturers have confirmed meters are expected to take the voltage reading at these times already – therefore if they are not working as expected, we need to understand this and investigate further with the manufacturers (given the 47% impact quoted). As stated above ‘They requested further information about the number of Devices which are non-compliant with technical specifications before potentially being able to provide a final opinion’ – we would expect to see this identified as part of the proposal before any final decision is made. In relation to the Boston Spa trial quoted, is it possible to find out more details about the meters used in the trial, given the points above? Additional concerns we have: It is unclear what would happen if an end date is introduced and a meter installed after the date or not maintained to the required level by the date – is it expected the meter would be removed? The MOD report and recently issued TSAT Guidance does not seem to cover this, though the response to Refinement Consultation implies this would be the case. Will this requirement be included within the SEC? If the proposed solution is progressed (MVP introduced), the current requirements are ‘all reasonable steps’ in Supply Licences, therefore would there be any enforcement option or would the Licences be changed? Non-communicating meters – whilst this is referenced through the MOD report, it does not seem to have a definitive outcome. If there are approx. 10% of smart meters which are not communicating and cannot be upgraded by

Question 4		
Respondent	Category	Response
		firmware, what would happen to these if a maintenance end date is added? We suggest this needs further consideration as part of the Modification. Monitoring and reporting – if introduced what monitoring and reporting would be introduced to ensure adherence to requirements? Who would govern this, how would adherence be enforced? The introduction of these aspects would increase cost and resources – we suggest this should be factored into the implementation costs of the Modification. Will these requirements be included within the SEC to provide clarity around the requirements?
Centrica	Large Supplier	Broader challenge to SMETS2 ‘drift’ and the approach of MP085 When the SMETS2 specification was first finalised in 2014 it was never expected for there to be so many subsequent changes within the specification. We think it would be useful to have a wider discussion on the consequences of the existing iterative process, and what would be the best route forwards for the industry and consumers. Perhaps reasonably (?), only a minority of manufacturers have kept up to date with the latest specifications. We don’t agree with the fundamental approach behind MP085 – namely using an MVP or IVP expiry date to indirectly force manufacturers to make updates. This puts cost and obligations on suppliers and MAPs, as well as the development costs faced by manufacturers which ultimately adds significant cost burden to the overall rollout and end consumer. This change needs to be coordinated centrally recognising the overall challenge to multiple organisations. We believe there to be a very real risk over anything that reduces competition in the SMETS2 supply chain. We believe the financial implications of this could far outweigh any financial benefit to the DNOs. We are unclear on the latest benefits case for DNOs, but note that the development cost is not being born, or even contributed to by DNOs. The approach of mandating v5.2 also means that a lot of other development costs will be incurred (for other aspects of v5.2) which may not be necessary. Off-network firmware upgradeability

Question 4		
Respondent	Category	Response
		If the Alternative Solution were taken forward, some of the impact could be mitigated by ensuring a route to off-network firmware upgradeability from the manufacturers to mitigate scrappage costs. However, this would only work for manufacturers who chose to continue to exist in the market and developed this capability.
EDF	Large Supplier	-
EON	Large Supplier	The main question is whether either of the above 2 options is the most economical way to achieve the SEC Mod's aims (and hence cheapest for end-customers). There are many meters with pre-ESMETS v5.2 firmware which already log voltage on the half hour. Instead of end-dating the IVP or MVP, is there an alternative way to incentivise the upgrade of only the meters that don't log voltage strictly on the half-hour interval? Having said that, ending the IVP or MVP will force the upgrade of the industry estate to provide other benefits available in ESMETS v5.2. Neither the Proposed Solution nor the Alternative Solution consider that we will still have SMETS1 ESMES all the way up to 2033 which may not take their voltage readings on the absolute half-hour. Whilst these will eventually be replaced, DNOs may not achieve the aims of MP085B until 2033. As beneficiaries, the DNO's should be fully justifying the tangible benefits realised on behalf of energy consumers, and what compliance factor is required of the overall SMART metering estate for these benefits to materialise. The proposed solution assumes that all Suppliers have access to all Manufacturer firmware versions. This may, or may not, be the case.
ENWL	Network Party	-
Horizon	Other SEC Party	The functionality requested in MP085B has been bought into a bigger conversation with TSAT tables and I understand why as this is the only way under governance to enforce a change. However, I think there should be more engagement with meter manufacturers directly to find out who has this functionality now, what are their plans for the future implementation. The evidence presented is not from those impacted directly. I believe some manufacturers do

Question 4

Respondent	Category	Response
		this now and others have it in short term plans. The TSAT tables should be a bigger review into their relevance and how they should be managed going forward particularly for manufacturer required upgrades.
Kaifa	Other SEC Party	-
NGED	Network Party	Our common objective to continue cutting carbon emissions with a view to ultimately reaching Net Zero, relies heavily upon having a good quality, reliable electricity network which can cope with the increasing number of low carbon technologies. In order to ensure the right network investments in the right area at the right time, it is important for DNO's to have the best possible visibility of network voltages at all times and to receive accurate related data. It is also important to remember that a high quality and reliable electricity network can only benefit the consumer.
Northern Powergrid	Network Party	The primary benefit of this modification for Northern Powergrid is the availability of a consistent set of smart metering average rms voltage data that can be used alongside smart meter consumption data in our low voltage network models and also to validate data in those models. With increasing numbers of LCT technologies e.g. electric vehicles, heat pumps, PV and battery storage systems, being connected to our low voltage system, it is becoming increasingly important to have good visibility of network voltages to enable us to make the right investment decisions at the right time. Ultimately, it is consumers who will benefit arising from better quality data as GB transitions to a low carbon economy.
Northern Powergrid Metering	Other SEC Party	-
Octopus Energy	Large Supplier	More than one of the Manufacturers we have engaged with either currently support the 'Synchronisation of Smart Meter voltage measurement periods' functionality or have firmware planned to be introduced shortly that will support this, however, these firmware's are not compliant to the other requirements within ESMETS v5.2 (completely separate to the 'Synchronisation of Smart Meter voltage measurement periods'). However, the TSAT table proposal and solution does not cater for these examples as these would technically not be ESMETS v5.2 compliant. We do not

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Question 4		
Respondent	Category	Response
		think this is a problem for this particular modification given the timeframes but wanted to raise that there are devices that can support this functionality already or soon to be available yet would still fall into the category of non-compliant to ESMETS v5.2.
Scottish Power	Large Supplier	With upcoming firmware releases and consequent upgrades of the estate by energy suppliers, the bulk of the estate should be compliant with MOD 85a in due course without the need for end-dating either IVP or MVP. We do not see MOD 85b as necessary to achieve this. Tidy up of the TSAT table should be done as a separate exercise when it is known that there is no significant impact to either stock or meter removals. This would allow an orderly discussion of other MODs which also seek to obligate changes to functionality by end-dating SMETS2 v4.2.
Smart Meter Assets	Other SEC Party	-
UKPN	Network Party	The consultation documents presented at the different stages of MP085B have stated that this change, if implemented, will benefit Network Parties and fails to recognise that the benefits are delivered to consumers. The implementation of MP085B is simply an enabler for Network Parties to ensure the supply quality delivered to consumers is maintained to a national standard as required in the Electricity Safety Quality and Continuity Regulations 2002 (ESQCR).