Smart Energy Code

SEC
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Stage 02: Working Group Consultation Responses

What stage is this document in the process?

- 01 Initial Modification Report
- 02 Refinement Process
- 03 Report Phase
- 04 Final Modification Report

SECMP0009 'Centralised Firmware Library'

About this document

This document contains the collated responses to the SECMP0009 Working Group Consultation (WGC). The Working Group (WG) will review these responses and consider them as part of the solution development for this modification.

If you would like any further information, or to discuss any questions you may have, please do not hesitate to contact Nikki Olomo on 020 7081 3095 or email SEC.Change@gemserv.com.

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Question 1

Q1: Do you agree that the proposed solution better facilitates the SEC Objectives and should therefore be approved?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	Yes	Landis+Gyr believes that this modification better facilitate SEC objective (a) and (c).
Smart Meter Assets 1 Limited	Other SEC Parties	Neutral	It could be claimed that the proposed solution better facilitates the SEC objective to "Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain". However the proposal ignores the fact that meter manufacturers are not necessarily SEC parties and so it would be difficult to enforce especially given that there are commercial considerations. Our main point, though, is that there is an alternative solution; energy suppliers could secure access to such information via contracts with the MAP who has contracted with the meter manufacturer. Furthermore suppliers already have a licence condition to use all reasonable steps to agree contracts with MAPs and have a need to create a contractual link to manufacturers in order to comply with security obligations (reporting material security vulnerabilities).
Bristol Energy Ltd	Small Supplier	Neutral	Bristol Energy supports the working group's decision to approve the development of a Firmware Information Repository. Bristol Energy's views are neutral based on the remaining working groups views that the proposed solution better facilitates the SEC Objectives. The rationale for our neutral view on the proposed solution meeting the SEC Objectives (a), (c), (d) and (f) is as follows: Objective (a): Bristol Energy completely agrees that all Suppliers will have access to the firmware versions resulting in increased equality between

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			participants and addressing bug fixes and security vulnerabilities with potentially improved response times. Objective (c): Bristol Energy's view is neutral. There may be improved efficient processes however there will be challenges (such as timely availability of the firmware) to obtain these improved efficiencies to obtain interoperability of SMS at Energy Consumers premises Objective (d): Bristol Energy completely agrees that having readily available firmware information will Support the Responsible Suppliers to fulfil their customer needs eloquently. Objective (f): Bristol Energy's view is neutral. Bristol Energy agrees that access to the readily available firmware information will help in Data Security however Bristol Energy's view is that it will depend on how manufacturers will design the firmware to protect data which Bristol energy does not have control of.
E.ON	Large Supplier	Yes	We agree that the proposed solution better facilitates objective d by allowing new entrants visibility of details pertinent to all relevant manufacturers (the value of this however will depend upon the details provided, the manufacturer is already communicated within Industry flows during the CoS process). We further agree that the solution proffered retains the security of Firmware data (images and release notes) and thus poses no negative impact to objective f. The current solution does not provide Firmware to Parties as was envisaged in the intent of this Modification, thus we believe that the current solution does not directly facilitate any other objective.
Itron Metering Solutions UK Limited	Other	Yes	Yes for proposed Firmware Information Repository solution. The proposed solution facilitates General SEC Objective (a) for the operation of Smart Metering systems, (d) for effective competition, and (f) for the security of Data and Systems.

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Scottish Power	Large Supplier	Yes	The solution supports principles 1, 3 and 6
SSE	Large Supplier	No	We agree that the proposed solution could be viewed to better facilitate SEC Objective (a) regarding the operational aspects for managing Smart Metering Systems firmware and would be more efficient for all Suppliers in being able to identify the relevant Manufacturers and their contact details. We believe the proposed solution is neutral against SEC Objectives (c), (d) and (f).
Western Power Distribution	Network Party	Yes	We believe that this modification better facilitates SEC Objective (a) is it will facilitate efficient operation of Smart Metering Systems at Energy Consumers' premises.
EDF	Large Supplier	Yes	We agree that the proposed solution better facilitates SEC Objectives (a), (d) and (f), for the following reasons: (a) Suppliers will need to be able to access up to date firmware for devices to ensure that that continue to function in line with the relevant Technical Specifications and remain interoperable. While the proposed Firmware Information Repository does not provide direct access to the firmware images that Suppliers may require, it should make it easier for Suppliers (especially new or smaller Suppliers) to identify how those firmware images can be obtained. (d) Where a consumer changes Supplier the gain In order for compaction in supply to work effectively, Suppliers that gain devices that they did not install need to be able to operate and maintain those devices. The proposed solution would help gaining Suppliers to maintain devices, giving consumers the confidence that they will switch Supplier without the functionality of their devices being negatively impacted.

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			(f) Firmware is critical to the protection of data and the security of data and devices – enabling Suppliers to more easily identify and obtain up to date firmware will ensure that the risk that devices continue to run on insecure versions of firmware is reduced.
Utility Warehouse Ltd.	Small Supplier	Yes	No further comments

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Question 2

Q2: Will your organisation be impacted due the implementation of this modification?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	No	
Smart Meter Assets 1 Limited	Other SEC Parties	No	
Bristol Energy Ltd	Small Supplier	Yes	Bristol Energy's SMETS2 processes will be impacted.
E.ON	Large Supplier	No	Other than financial impact, we see no beneficial nor detrimental impact to us based on the current solution. To clarify, if this yields no benefit the detrimental impact would be the maintenance fees of a tool which is not fit-for-purpose; if the solution provides information which is useful the benefit will likely be an efficient tool for firmware notes and manufacturer contact details.
Itron Metering Solutions UK Limited	Other	Yes	Ongoing maintenance of the information to be provided to the Firmware Information Repository.
Scottish Power	Large Supplier	Yes	There will be a requirement to manually check the new firmware version list to set our internal parameters for ScottishPower firmware management processing
SSE	Large Supplier	No	There is no significant impact associated with the implementation of this proposal, as outlined in our response to Q3.

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Western Power Distribution	Network Party	No	We will not be directly impacted as a result of this modification being implemented however, it may benefit us going forward as if we have any problems communicating with ESMEs that a Supplier has gained, they will have additional information and details available to help address any issues.
EDF	Large Supplier	Yes	We will need to provide the additional information required where we submit any new firmware to the CPL/Firmware Information Repository. We will also need to review the additional information that is provided for each new firmware image that is registered in the Firmware Information Repository. We expect these impacts to be relatively minor.
Utility Warehouse Ltd.	Small Supplier	Yes	Operational processes, although in their draft stages will need to be changed to reflect the introduction of the CFL. However, we believe this will be help simplify processes by a small increment. Whether the mod was accepted or not we would have to create churn agreements with MAPs and may need to create separate agreements with manufacturers. The mod's original purpose of providing a central repository for firmware and supporting information would have had a huge positive impact on needing less resource to create agreements and maintain communications channels with third parties. The version presented as it stands is hugely watered down and will have much less of a positive impact.

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Question 3

Q3: Will your organisation incur any costs due to the implementation of this modification?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	No	
Smart Meter Assets 1 Limited	Other SEC Parties	No	
Bristol Energy Ltd	Small Supplier	Yes	Bristol Energy believes the cost of implementation will be related to the amendments to the SMEST2 Firmware
E.ON	Large Supplier	Yes	Although this is no more than our portion of the implementation and maintenance costs. The latter of which have not been provided as part of this modification report, thus we are unable to assess the potential impact.
Itron Metering Solutions UK Limited	Other	Yes	As above; expected to be nominal.
Scottish Power	Large Supplier	No	
SSE	Large Supplier	No	Given that the proposed Firmware Information Repository will not hold firmware images, this would follow the existing process for firmware acquisition and upgrade where we do not have any relationship with the Manufacturer. The information from the Repository would provide the details for who to contact to acquire the firmware.

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Western Power Distribution	Network Party	No	
EDF	Large Supplier	Yes	As per our response to Q2 we expect that there will be a resource impact but we expect this to be minor and the costs to not be material, especially relative to the benefits.
Utility Warehouse Ltd.	Small Supplier	No	Operational processes will continue to be refined over the coming year, so these changes will be considered as a natural part of refinement. We were hoping that to implementation of this mod in its original form would serve to decrease costs around firmware maintenance and churn, however the current modification provides only a small incremental reduction in costs as compared to the original proposal.

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Question 4

Q4: Having considered the potential impacts and costs to your organisation, as well as the cost to deliver the modification, do you agree that SECMP0009 should be approved?

Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	Yes	
Smart Meter Assets 1 Limited	Other SEC Parties	No	As per our answer to Q1 – this modification is not necessary and would be difficult and costly to enforce (if it is even feasible)
Bristol Energy Ltd	Small Supplier	Yes	Bristol Energy's view is that the SECMP009 should be approved as there will be no other method of obtaining the firmware versions from the MAP or Manufacturer, where Bristol Energy inherits devices that are supported by MAP/manufacturers that Bristol Energy does not maintain a relationship/contract with.
E.ON	Large Supplier	Yes	Whilst it is disappointing to see that the value of this Modification has after two and half years, and a lot of time and effort from Working Group participants, been minimised to the current solution, we believe that this may be the first step toward the general dissemination of Firmware to Supplier Parties. We note that Firmware versions are attainable from both within the DCC Systems and from the CPL (with the latter also potentially containing the Hash of the manufacturer Image), and that manufacturer details are provided within Industry data flows that are exchanged during the CoS process, as well as within the CPL. Thus, the only potential value for this Modification to yield is in the provision of additional details concerning manufacturers (e.g. e-mail addresses or telephone numbers), and the provision of useful information within the free-text field.

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			The current solution for this Modification does not impose any explicit obligation on manufacturers for the provision of such information for not all manufacturers may be SEC Parties and thus it cannot. There has however, been no confirmation from manufacturers within the consultation documentation that this information will be provided, or that the information provided will be useful to Suppliers. The risk therefore is that this modification is implementing a fruitless solution to our financial detriment. To that end, we note that should this modification be implemented, we would expect to see a review of this solution at some point post-implementation with a view to disregarding the spreadsheet if it is proving to provide no value, such that Parties are not paying for the maintenance of a spreadsheet that is not delivering Industry benefit.
Itron Metering Solutions UK Limited	Other	Yes	The proposed solution facilitates General SEC Objective (a) for the operation of Smart Metering systems, (d) for effective competition, and (f) for the security of Data and Systems.
Scottish Power	Large Supplier	Yes	
SSE	Large Supplier	Yes	This proposal does not meet the original expectation however we are still supportive of the proposal of an Information Firmware Repository, and understand the limitations of the new proposal.
Western Power Distribution	Network Party	Yes	We believe that this modification will provide a valuable resource going forward as the market develops. As new firmware is released and Customers change Supplier's it will aid the efficient operation of Smart Metering Systems and ensure that Suppliers can get the firmware required.
EDF	Large Supplier	Yes	While we still believe that a Central Firmware Library that provides direct access to firmware images is still the ideal outcome, we recognise that the current challenges to that solution appears to be insurmountable in the short term. The proposed solution is a lost cost and practical solution that should enhance the firmware management process; we hope that this will

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			provide the foundation for the potential development of a Central Firmware Library in the future.
Utility Warehouse Ltd.	Small Supplier	Yes	Having considered the changes to the original proposal, the current model has removed any risk or potentially negative impacts from most if not all parties. While we would have preferred a solution closer to the original model, the current proposal provides a compromise at a minimal cost.

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Question 5

Q5: Do you believe that the draft legal text changes deliver the intention of the modification?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	Yes	
Smart Meter Assets 1 Limited	Other SEC Parties	Neutral	Not reviewed the legal text
Bristol Energy Ltd	Small Supplier	Yes	Yes, Bristol Energy agrees the draft legal text deliver the intention of the modification
E.ON	Large Supplier	No	The modification report makes no mention of the Panel being involved in this process and yet the legal text refers to the spreadsheet being established and maintained by them. We believe it would be more accurate for the text to convey that this spreadsheet will be set up and maintained by the Code Administrator (akin to the text in SEC Sections C and D etcetera). We are concerned with the iteration of 'mandatory' within F2.15; this is entirely voluntary for manufacturers, and so we would question how the Panel or Administrator may 'ensure' the content of 'mandatory' fields. We feel that the legal text needs to convey the voluntary nature of the completion of this spreadsheet such as to minimise any risk to the fulfilment of these obligations. Our largest concern with the proposed legal text is that F2.17 places an obligation on the Party or any other person submitting details for CPL entry to provide the details required for the Firmware Information Repository (FIR). Neither Section F2, nor Appendix Z details any responsibility for any Party to provide details for CPL entry. With the exception of the Hash and

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			additional models under the same CPA Certificate, the obligations currently extend solely to the Panel and the establishment and maintenance of CPL, with Party involvement only being pertinent to the removal of entries from the CPL (Appendix Z 6.2). This obligation is further at odds with F2.15(c) wherein it is noted that the provision of data is at the discretion of the manufacturer, who may or may not be a SEC Party and therein bound or not by these obligations. Where the obligations concerning the Hash of the manufacturer image or to additional models under the same CPA Certificate being uploaded onto the CPL are relevant, F2.17 would obligate either the DCC or the Supplier Party to provide the details required for the FIR. The DCC and/or Supplier Party does not own the data required by the FIR and may not therefore be able to fulfil these obligations, especially where the intent of the modification and the corresponding legal text (F2.15(c)) permit these to be at the discretion of the manufacturer. To clarify, we do not believe it appropriate for a SEC obligation to be placed on Suppliers to provide mandatory data for the FIR that is at the discretion of manufacturers (free-text field), when uploading a CPL entry that adds a Device Model to an existing CPA Certificate, or when adding the Hash. We also note that the legal text refers to Information Repository in places, and the defined term is Firmware Information Repository; we believe such instances should be replaced with the defined term.
Itron Metering Solutions UK Limited	Other	Neutral	No Comment
Scottish Power	Large Supplier	Yes	
SSE	Large Supplier	Yes	Whilst this latest proposed solution does not meet the original intent of the Modification, the draft legal text seems to reflect the solution set out in the Draft Modification Report.

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Western Power Distribution	Network Party	Yes	
EDF	Large Supplier	No	While the legal text changes create the obligation to provide information to the stored in the Firmware Information Repository, it does not require this information to be of any specific quality and states that 'the content is at the discretion of the Manufacturers'. While we recognise the difficulty in making the obligation in this section more specific, we would welcome further information from Manufacturers on the sort of information that will be provided, and how this might be made as standardised as possible. Creating a new Firmware Information Repository which contains low quality information is not going to be much (if any) of an improvement over the current SEC baseline. We would also note that while the legal text states that 'the content is at the discretion of the Manufacturers' it is our understanding that other parties are able to submit updates to the COL (and therefore to the Firmware Information Repository) and if so the legal text should reflect that.
Utility Warehouse Ltd.	Small Supplier	Neutral	No additional comments

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Question 6

Q6: Do you agree with the recommended implementation date?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	Yes	
Smart Meter Assets 1 Limited	Other SEC Parties	No	Per statements above; we don't believe this modification is necessary
Bristol Energy Ltd	Small Supplier	Yes	Bristol Energy agrees with the recommended Implementation date of 1st November 2018 however implementation in February 2019 will be too late as Bristol Energy may inherit devices supported by MAP/manufacturers that they do not have a relationship.
E.ON	Large Supplier	Neutral	It is not appropriate for Parties to be asked whether they agree with flouting the Release Management Policy; it is for the Panel to determine changes to a Release. For clarity, we would not object to the proposed implementation date if Panel were to approve it.
Itron Metering Solutions UK Limited	Other	Yes	
Scottish Power	Large Supplier	Yes	
SSE	Large Supplier	Yes	The recommended implementation date for this Modification would be achievable, if it were to be approved in the timescales set out.

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Western Power Distribution	Network Party	Yes	
EDF	Large Supplier	Yes	
Utility Warehouse Ltd.	Small Supplier	Yes	We hope that the approval decision is made in a timely manner to implement by 1st November 2018.

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Question 7

Q7: Should the Information Repository be public?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	No	
Smart Meter Assets 1 Limited	Other SEC Parties	No	If the proposal is to be implemented there is no need to make it public
Bristol Energy Ltd	Small Supplier	Yes	Bristol Energy's view is that the Firmware Information Repository can be Public however the access to the Release Notes and Firmware Images should be via secured login on Manufacturers website.
E.ON	Large Supplier	No	As given above, the only value to be attained from this solution is additional contact details for manufacturers, and useful information within the free-text field. Manufacturers have made clear their concerns with regard to the provision of firmware data in terms of its availability, and without any obligation on manufacturers we believe that the access requirements for the FIR will determine the information contained within the free-text field and thus the value of this Modification. Consequently we believe that access to the FIR should be appropriately restricted.
Itron Metering Solutions UK Limited	Other	No	Providing technical contact information to the public can cause unintended consequences. Meter manufacturers already receive large numbers of queries from the public which should really be directed to their energy suppliers instead.

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Scottish Power	Large Supplier	No	The repository should be available to all parties with responsibility for the firmware and / or device maintenance i.e. meter manufacturers, MAPs, suppliers, registered supplier agents.
SSE	Large Supplier	No	We believe access to the Information Repository should be restricted to SEC Parties.
Western Power Distribution	Network Party	No	This repository should only be made available to those that have a valid need to view the information.
EDF	Large Supplier	Yes	We can't see any reason why the Firmware Information Repository should not be subject to the same access control rules as the CPL to which it is linked – however this is dependent on the information that is provided to the Repository and the risk that may pose. As noted in our response to Q5 we would welcome further clarity on the type and format of information that is proposed to be provided via the Repository – even if this is not proposed to be detailed or mandated within the SEC itself.
Utility Warehouse Ltd.	Small Supplier	No	We believe that only SEC parties will have any requirement to have visibility of the repository. We don't believe that SEC objectives would be better satisfied if it were made available to all. We would prefer for the CFL to be hosted and maintained by SECAS in a secure section of the site.

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Question 8

Q8: Do you have any further comments?			
Party Name	Party Category	Yes/No	Comments
Landis + Gyr	Other SEC Parties	No	
Smart Meter Assets 1 Limited	Other SEC Parties	No	
E.ON	Large Supplier	Yes	The current modification report does not detail the process by which information can be acquired and provided such that the Administrator may complete the spreadsheet. We believe that this process needs to be clear for Parties. We also believe that the modification report should clarify whether or not an initial draft of the FIR will contain information relevant to existing CPL entries, and if so, what process will be utilised for the completion of this initial draft.
Itron Metering Solutions UK Limited	Other	Yes	We support only the described 'Firmware Information Repository' solution as a way to provide contact information for suppliers who gain meters via customer churn. We do not support the Centralised Firmware Library that is described in the initial SECMOD009 documentation.
Scottish Power	Large Supplier	No	

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SSE	Large Supplier	Yes	One request for consideration is that the repository should have a list of all released and manufacturer-issued firmware releases (non-commercial) and not just the latest. The text does not make it clear that this will be the case. This is because of the following reasons: ▪ If we are taking on a new device, we should have a way of knowing if this is running test-related firmware version. ▪ If we need to update devices in stages because of some unlikely combination resulting in compatibility issues, we need to know all versions so we can define a preferred 'path' through the upgrade. ▪ Non-repudiation for vendors that may have issued and then retracted a firmware version because of issues. This should be transparent and listed as a version possibly with notes explaining it is not recommended or discouraged. We acknowledge that this would be dependent on what the Manufacturer provides in way of the free text field for release notes. Related to these points we understand the rationale provided by Manufacturers, even though disappointing, that the full release notes will not be published. Without the history of these though, there will be challenges in making an informed decision about firmware upgrade based on intelligence about vulnerabilities. We will endeavour to update a meter to the latest version, however updating from a prior version that is vulnerable might mean a different urgency. For example, in a COS gain scenario where a property might have been unoccupied because of renovation etc. the firmware could be found to be quite old.
Western Power Distribution	Network Party	No	
EDF	Large Supplier	No	

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Utility Warehouse Ltd.	Small Supplier	Yes	We are pleased that the working group reached a pragmatic compromise between parties with very different views. We believe that starting with a simple version of a CFL will give suppliers and the rest of industry a chance to see if it can provide real cost saving benefits. Naturally, if it is used regularly it is likely to warrant very legitimate cases for expansion later down the line. On the contrary if it makes processes more complicated or another solution provides an easier method of maintaining firmware it will likely lay dormant or scrapped. Either way the current proposal is a low risk method of testing the waters. With regards to the free text field being provided in the CFL for manufacturers to add additional information we would expect that SECAS provide some strongly suggested examples of information that would serve useful in this field. For example Manufacturer's 'Baseline' versions, recommended upgrades (from & to), notifications of urgent upgrades etc.

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