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MP184 ‘SMETS2 Twin Element ESME to support solar and storage use cases’

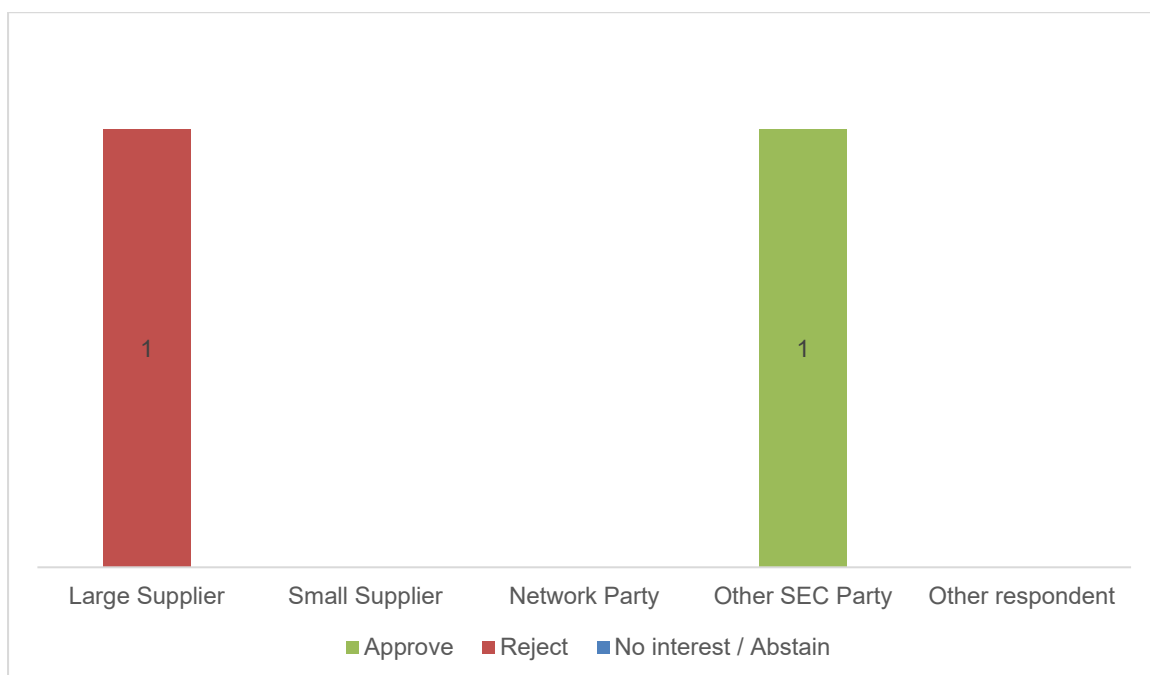
Annex D

Refinement Consultation responses

About this document

This document contains the full non-confidential collated responses received to the MP184 Refinement Consultation.

Summary of responses



Refinement Consultation

SECAS received two responses to the Modification Report Consultation. One respondent believed that the modification should be approved. They considered the modification better facilitated SEC Objectives (a)¹, (c)² and (e)³ as it would introduce Consumer efficiencies avoiding the need for multiple meters to be installed.

The other respondent believe that the modification should not be approved in its current form. It wanted more details around how the Solution for Consumers might work, however there is a continued lack of engagement from the Proposer which has meant this cannot be completed. The respondent suggested that the Proposer should engage with the DCC through the Elective Services route to allow development of a potential solution solely for the use of the Proposer but at the Proposers expense. Under the ECS the Proposer would benefit from the functionality for a period of time before it is made available to other Parties at which point costs are shared.

¹ facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain.

² facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems

³ facilitate such innovation in the design and operation of Energy Networks (as defined in the DCC Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy.

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

Question 1				
Respondent	Category	Response	Rationale	SECAS Response
Secure Meters (UK) Ltd	Other SEC Party	Yes	Yes, without these additional SRVs and registers, it will not be possible to develop a SMETS2 solution to provide a Supplier/Consumer this functionality. It is however not clear if the solution has considered the impact to other Data items, eg 'Meter Balance', 'Billing data', 'Daily read data', etc). It is assumed initially only Credit Mode should be considered and Prepay Mode considered at a later phase. [Options could be to include export within existing 'Billing Data Log' or add a new 'Export Billing Data log for export for E1 + E2' or a combination to allow each supplier to receive the Log as appropriate. Similar options to the above could be considered for the 'Daily read data'. For 'Meter Balance' SMETS2 currently only specifies its calculation on Consumption with no export component. Options could be to include export or even have a MPAN specific balance to allow more than one Supplier Meter Balance.]	These items were explored as part of MP184: Meter Balance: This relates to Imported Energy only. MP184 would not change this. Billing data: MP184 calls for the possibility of setting Time of Use (TOU) for the secondary measurement element (requirement 2). This will include setting and reading the price information, cumulative exported energy and the billing information. This is currently not defined for the Export on the primary element and will need further refinement when developing the solutions for MP184 (e.g. inclusion of primary element, application to single- and polyphase meters) Daily read data: For MP184 additional items related to the export via the secondary element must be added; this includes new Great Britain Companion

Question 1				
Respondent	Category	Response	Rationale	SECAS Response
				Specification (GBCS) Use Cases and extension to DCC User Interface Specification (DUIS). This had been outlined in the review of MP184. Prepayment: Prepayment only applies to imported energy and MP184 would not affect any of the data items relating to prepayment. The disabling of the supply when operating in prepayment mode after exhausting the credit would also affect the ability to export energy; this needs to be clarified further as part of MP184.
E.ON Next	Large Supplier	Yes	While we believe this would resolve the issue highlighted by the proposal, the issue seems to relate specifically to the Proposer's business model. Our future strategy may change, but currently we see little benefit if this change is implemented or mandated.	

Question 2: Do you agree with the proposed implementation approach?

Question 2				
Respondent	Category	Response	Rationale	SECAS Response
Secure Meters (UK) Ltd	Other SEC Party		Not reviewed so not able to comment	
E.ON Next	Large Supplier	No	We are not opposed to the approach and could change our view at a future date. However more clarity on cost, impact and funding would be required before further industry work is progressed (e.g., by DCC). There appears to be a significant cost impact. We would welcome more information and subsequent discussions to understand how the change would work in practice and what responsibilities would be expected from suppliers to facilitate this change. E.g. who is installing the twin element meter to facilitate the solar panels, who is responsible for scheming and tariff set up on the twin element device, and who will be arranging the secondary MPAN alignment with the DCC?	There are three major categories for the costs relating to MP184. Device related: The functionality of MP184 is expected to be achieved by a new firmware version. This needs to be confirmed by the manufacturers. The new functionality must be developed and tested. Data Communications Company (DCC) related: MP184 will necessitate new GBCS Use Cases and Service Requests. This needs to be implemented and tested. Supplier related: All Suppliers will need to support the new DUIS version resulting from the changes introduced by MP184. All Supplier systems must be upgraded to handle the addition of changed data items origination from MP184.

Question 3: Additional consideration: Introduction of TOU for the Export on the primary element (so that the handling of TOU is aligned on the primary and the secondary element)

Question 3				
Respondent	Category	Response	Rationale	SECAS Response
Secure Meters (UK) Ltd	Other SEC Party	Needed	Without this, it will not be possible to provide a Consumer/Supplier with any primary export data. If available, it would enable more innovative tariffs from Suppliers to promote export to the grid (SEG) If added, the impact on other SMETS2 functionality will need to be considered eg - Data items (ie 'Meter Balance', 'Billing data', 'Daily read data', etc) ; - Display items (ie 'Primary Active Export Tariff Price', etc)	See the response to Q1; several Data items require agreement on the detailed specifications.
E.ON Next	Large Supplier	Not needed	We struggle to see the use case or benefit of this capability in relation to TOU, due to half hourly data this could be calculated without this capability.	

Question 4: Additional consideration: Handling of Imported reactive energy (e.g. splitting this for each element)

Question 4			
Respondent	Category	Response	Rationale
Secure Meters (UK) Ltd	Other SEC Party	Needed	Yes needed for future proofing but not currently aware of any use case within SMETS2 domestic market.
E.ON Next	Large Supplier		We do not deal with reactive energy in our smart portfolio so do not see this as relevant to us.

Question 5: Additional consideration: Handling of Exported reactive energy on the second element (currently not defined)

Question 5			
Respondent	Category	Response	Rationale
Secure Meters (UK) Ltd	Other SEC Party	Needed	Yes needed for future proofing but not currently aware of any use case within SMETS2 domestic market.
E.ON Next	Large Supplier		We do not deal with reactive energy in our smart portfolio so do not see this as relevant to us.

Question 6: Will there be any impact on your organisation to implement MP184?

Question 6				
Respondent	Category	Response	Rationale	SECAS Response
Secure Meters (UK) Ltd	Other SEC Party	Yes	As a meter manufacturer, need to agree with customers to develop, test and certify firmware updates to support the additional functionality.	
E.ON Next	Large Supplier	Yes	Additional complexity including Supplier system changes and adaptor changes, along with potential commercial complexities with early removal of assets already in life. This could mean MAP PRCs have to be incurred by E.ON Next. We need clarity on how the scope of this change would be implemented, would suppliers be required to set up the additional MPAN and appropriate twin element tariffs? There would also be impacts to our manufacturers with product change that would require internal testing and assurance beforehand. This change would need to be delivered when energy suppliers are delivering work to meet obligations relating to 2G Sunsetting and GSOP introduction.	See response to Q2.

Question 7: Will your organisation incur any costs in implementing MP184?

Question 7				
Respondent	Category	Implementation Costs	Savings Costs	Rationale
Secure Meters (UK) Ltd	Other SEC Party	£250,000-£499,999	£0	Meter firmware development, test and certification. Consumer may make savings as may only need a single meter installed rather than multiple.
E.ON Next	Large Supplier	£250,000-£499,999	£0	The lack of clarity on the proposal and solution makes cost estimation very difficult at this stage. We do not currently offer a twin element solution so do not see any additional costs. However, this assumes we are not responsible for setting up or installing the twin element meter on behalf of another party for an E.ON-supplied customer. However, we predict significant costs if we are required to have the capability to provide these assets. In addition, if Service Request responses are changed as part of this modification, (e.g. increasing to the number of data items the response contains) then our system would require changes to accommodate this.

Question 8: Will there be any benefit to your organisation in implementing MP184?

Question 8				
Respondent	Category	Implementation Costs	Savings Costs	Rationale
Secure Meters (UK) Ltd	Other SEC Party			
E.ON Next	Large Supplier	£50,000-£249,000	£0	With the limited detail, it is difficult to identify or size the benefits.

Question 9: How long from the point of approval would your organisation need to implement MP184?

Question 9			
Respondent	Category	Response	Rationale
Secure Meters (UK) Ltd	Other SEC Party	12-24 months	As a meter manufacturer, need to agree with customers to develop, test and certify firmware updates to support the additional functionality
E.ON Next	Large Supplier		Twin element metering is currently not one of our offerings, with ongoing system development and adaptor changes it will be difficult to prioritise any changes at this moment in time.

Question 10: Do you believe that MP184 would better facilitate the General SEC Objectives?

Question 10				
Respondent	Category	Response	SEC Objective(s)	Rationale
Secure Meters (UK) Ltd	Other SEC Party	Yes	(a), (c), (e)	Consumer efficiencies (single meter rather than multiple), along access to export Data to better usage of energy and provide EN with more granular export information to make decisions on grid infrastructure
E.ON Next	Large Supplier	Yes	(c), (e)	

Question 11: Do you believe there will be any impacts on or benefits to consumers if MP184 is implemented?

Question 11			
Respondent	Category	Response	Rationale
Secure Meters (UK) Ltd	Other SEC Party	Yes	Single meter can be used, instead of multiple meters Consumer will get access to export Data together with boundary meter
E.ON Next	Large Supplier	Yes	Limited benefit to Consumers, the main benefit appears to be offering protection to the Proposer, however this protection could encourage the Proposer and other companies to offer new solutions in alternative ways providing cost effective solutions to benefit customers.

Question 12: Noting the costs and benefits of this modification, do you believe MP184 should be approved?

Question 12		
Respondent	Category	Response and rationale
Secure Meters (UK) Ltd	Other SEC Party	Yes
E.ON Next	Large Supplier	No - We would like to reserve the right to change our decision on this. We would welcome more information and subsequent discussions to understand how the change would work in practice and what responsibilities would be expected from Suppliers to facilitate this change, giving clarity on the end-to-end journey proposed by the initiator of this change. Such as who is installing the twin element meter to facilitate the solar panels, who is responsible for scheming and tariff set up on the twin element device, how will the commercial complexities relating to PRC's and MAP rental costs be handled with the removed device, who will be arranging the secondary MAP alignment with the DCC and how will that shared property be effectively managed?

Question 13: Please provide any further comments you may have.

Question 13			
Respondent	Category	Comments	SECAS Response
Secure Meters (UK) Ltd	Other SEC Party	DP302 is looking to allow certain Alerts to be sent to ENO. Battery storage and Solar solutions could generate numerous 81BB Reverse current for example which should be considered. While the requirements are only for providing secondary element Data items, the solution could also consider in a subsequent stage to allow for a more complete solution by - Adding any relevant display items - Determining the impact on any Alerts. For example, • Do any Alerts need to be sent to the Secondary Supplier ? • Does a new element specific reverse run need to be specified, in addition to the already defined '0x81BB Reverse current'? • etc - Extended the scope to include Prepayment applications	The 81BB Alert is non-mandatory and can be configured by the Supplier. It has no reference to Smart Metering Equipment Technical Specifications (SMETS) meaning that its generation is not codified and subject to the specific implementation (e.g. duration of the reverse flow, threshold for establishing a reverse flow). All SMETS2 electricity meters must handle Exported Energy and a reverse flow caused by storage batteries and photovoltaic solutions would fall into the Export domain. The connection of energy sources at premises is subject to Distribution Network Operator (DNO) approval and may be limited. It could be useful to implement an Alert to the DNO when the (configurable?) exported energy has been exceeded for the premises. This is not the subject of MP184 but could be included or introduced via a future change.

Question 13			
Respondent	Category	Comments	SECAS Response
			See also the response to Q1.
E.ON Next	Large Supplier	Should this be considered for the ECS (Elective Communications Service) route as that would be more equitable to allocate the change costs to the proposer who would be gaining the financial benefits.	