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Paper Reference:	**TABASC_51_0503_15**
Action:	**For Decision**

TABASC Principles for Assessing Modification Proposals

1. Purpose

The purpose of this paper is to provide the Technical Architecture and Business Architecture Sub-Committee (TABASC) with an updated copy of the 'TABASC Principles for Assessing Modification Proposals' document following its proposed amendments to enhance the existing principles. This can be found in Appendix A.

Additionally, SECAS has assessed MP077 'DCC Service Flagging' against these principles to act as a Worked Example for what we would expect in terms of TABASC analysis against future SEC Modification Proposals.

The TABASC is requested to note the amendments made to the 'TABASC Principles for Assessing Modification Proposals', to consider the Worked Example and to agree that the TABASC Principles are ready to be updated in line with the changes to the SEC Modification process.

2. TABASC suggested amendments

Following the December 2019 TABASC meeting, the TABASC members were generally satisfied with the proposal to amend and update the TABASC principles document which had last been issued in 2017. However, the TABASC members requested some minor amendments before they proceeded to accept the new principles.

They asked SECAS to:

- include an element for measuring the cost effectiveness of SEC modifications and their proposed solutions, and
- to include a requirement that when considering the impacts that a solution may have, to measure them separately against SMETS1 and SMETS2.

The TABASC members asked SECAS to return to a future TABASC meeting to present a version with these inclusions.

In Appendix A, please find attached a version of the new TABASC principles with the TABASC's requested amendments. In TABASC Principle 2 'Efficiency of Implementation', SECAS has included a redlined addition that specifies a necessity to consider the cost effectiveness of a proposed change, specifically relating to technical and business architecture. In TABASC Principle 4 'Change

Relevance', SECAS has included a reference in its rationale to acknowledge the separate impacts against SMETS1 and SMETS2 before condiering any implications a SEC Modification proposal or its solution has.

3. Principles in practice

SECAS suggested assessing some current Modification Proposals against these principles to confirm or refine them and to explicitly assess future proposals against the principles.

In Appendix B, we have provided a Worked Example to demonstrate how the principles would be measured against a Modification Proposal that the TABASC has taken an interest in, such as MP077 'DCC Service Flagging'. In this Appendix, it details the merits of the Modification Proposal's solution against each individual principle, and where areas of the solution have previously contradicted or currently conflict with the principles. This analysis will be recorded the Modification Reports as part of its time in the Refinement Process where the Panel Sub-Committees have provided detailed input.

4. Recommendations

The TABASC is requested to:

- **NOTE** the principles in practice;
- **ACKNOWLEDGE** the Worked Example of the principles against a SEC Modification Proposal in Appendix B; and
- **AGREE** the amendments to Appendix A TABASC Principles for Assessing Modification Proposals.

Harry Jones

SECAS Team

27 February 2020

Attachments

- **Appendix A:** TABASC Principles for Assessing Modification Proposals v1.3
- **Appendix B:** Worked Example of TABASC Principles against SEC Modification Proposals

Appendix A: TABASC Principles for Assessing Modification Proposals v1.3

TABASC Principles for Assessing Modification Proposals

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v.1.32

~~May~~ March 201~~7~~20

Revision History

Version	Date of Issue	Status	Change Summary
1.0	19/08/2016	Final	The TABASC agreed 4 Principles for publication
1.1	18/05/2017	Final	The TABASC agreed an additional Principle 5 'Use of the latest Protocol Standards' for publication
1.2	14/11/2019	Draft	Amendments made to align with the current SEC version 6.20 and minor clarification changes.
1.3	27/02/2020	Draft	Amendments made to: - Principle 2 'Efficiency of Implementation' to include an implication to consider the cost effectiveness of a proposed change - Principle 4 'Change Relevance' to include a reference in its rationale to acknowledge the separate impacts against SMETS1 and SMETS2 before proceeding to any implications a SEC Modification proposal or its solution has.

1. Purpose

The Technical Architecture and Business Architecture Sub-Committee (TABASC) has a duty to provide support and advice in respect of Draft Proposals and Modification Proposals that affect or are likely to require change to the Technical Code Specifications, End-to-end Technical Architecture and/or Business Architecture.

The TABASC has approved a set of principles to facilitate the assessment of Modification Proposals going through the Refinement Process and provide input to the Panel, the Change Sub-Committee, the Change Board and the Working Group. This document lists and describes those principles.

2. Scope

The principles described in the following section are intended to aid the TABASC in the assessment of Modification Proposals on a case-by-case basis. The principles are not limiting and are envisaged to evolve over time.

The principles will also be made available to the groups above to advise on the nature of the TABASC's assessment. These principles do not take precedence over the SEC, which requires that Modification Proposals be assessed against SEC Objectives as part of the Modifications Process.

3. TABASC Principles to assess Modification Proposals

Each principle consists of five sections: Name, Statements, Rationale, and Implications as follows:

Principle 1	
Name	User Simplicity
Statements	Any solution should minimise operational complexity for Service Users with consideration of viability.
Rationale	The intent behind this principle is to prevent, as much as possible, each individual User being burdened with the design, development and management of additional systems and process complexity where it can be carried out by DCC. Both economic and technical viability shall be taken into consideration, depending on the Modification Proposal.
Implications	- Users will not be burdened with having to build in complexity to every system where DCC can do it once.

Principle 2	
Name	Efficiency of Implementation
Statements	Efficiencies in implementation should be ensured where possible.
Rationale	The intent behind this principle is to ensure that the change is implemented in the most efficient way such that it delivers greatest value, and reduces to the largest extent possible any cost of implementation, for Service Users.~~,~~

	Where possible, multiple changes made to the same area are implemented as a single change in a coordinated manner.
Implications	- There will be a consideration of the cost effectiveness of change, specifically in regard to ongoing operation of business and technical architecture. - There will be a consideration of the objective cost of the change and an analysis into whether the change best suits the technical and business architecture. - There will be efficiency of costs when implementing two or more relevant changes in a coordinated manner. - There will be efficiency of processes when implementing two or more relevant changes in a coordinated manner.

Principle 3	
Name	Design Integrity
Statements	Impact to the Technical/Business Architecture should be limited, unless significant benefit is identified.
Rationale	The intent behind this principle is to ensure stability of operating design and expected performance.
Implications	- Technical/ Business Architecture will remain stable. - Stability of Technical/ Business Architecture will provide Smart stakeholders with certainty and confidence in business continuity. - No significant performance degradation will be introduced by the design change.

Principle 4	
Name	Change Relevance
Statements	Change should not replicate existing business systems, processes and other industry code provisions or requirements, unless significant benefit is identified.
Rationale	The intent behind this principle is to assess the appropriateness and relevance of a specific change, so as to ensure that the Smart Metering System does not take on industry functions outside its remit without specific consideration of the benefits. Consideration will be given on the separate impacts on SMETS1 and SMETS2 Devices for assessing solutions.
Implications	- Smart resources will be allocated to Smart solutions only. - Work developed by Working Groups will not duplicate work developed elsewhere.

Principle 5	
Name	Use of the latest Protocol Standards
Statements	The Technical Architecture should consider keeping alignment with developments in the relevant open protocol standards used, as and when opportunities allow.
Rationale	The intent is to ensure developments in relevant open protocol standards used within the Technical Specifications remain fit for purpose. Opportunities include when a

	SEC modification requires functionality from a later version of the protocol specification, or when the review of the effectiveness of the End-to-End Technical Architecture identifies constraints or reduced benefit realisation due to the use of older versions of the protocol specifications.
Implications	- GB Smart Metering infrastructure will keep pace of developments in relevant open protocol standards and, as a result, allow improvements in service quality and capability to be exercised. - Certification of Devices can remain fit for purpose with developments in the relevant open protocol standards. - An upgrade to the latest version of the relevant open protocol standard may impact the cost of a modification and therefore require additional justification. - If the efficiency and effectiveness review identifies benefit in moving to the latest version of the specification, then a modification will need to be raised by industry and justified on its own merits.

Appendix B – Worked Example of TABASC Principles against SEC Modification Proposals

The below provides a Worked Example of a Smart Energy Code (SEC) Modification Proposal being measured against the Proposal to indicate where analysis by the TABASC is required as part of the Proposal's Refinement Process. The Worked Example provides MP077 'DCC Service Flagging' and SECMP0015 'GPF timestamp for reading instantaneous Gas values' and will demonstrate the process we expect the TABASC to provide its advice and input through.

Principle 1 'User Simplicity'

Principle 1		
Name	MP077	SECMP0015
Statements	MP077 offers minimal operational complexity and offers a simple solution for Users and industry.	SECMP0015 offers a useful solution, but has an element of complexity and needs Users to uplift to make use of the solution.
Rationale	MP077 (at time of writing) doesn't impact any of the technical specification documents, only documents referring to registration data to amend the Service Flags. One of the new Service Flag states is an internal DCC flow which means re-using existing processes to deliver the solution.	SECMP0015 has a solution which will make a copy of its GSME date-time stamp available to Devices which could prevent Suppliers misinforming consumers on their energy bills. However, in order to make this time stamp available to the other devices, multiple technical specifications need amending which adds complexity and effort to the solution. Users will need to uplift their technical specification version so they can access the Use Cases that allow the time stamp to be copied to other Devices.
Outcomes	Users will see an improvement in the usefulness of DCC Service Flags and will not require them to uplift any technical specifications.	Users will need to uplift multiple technical specification documents to use the SECMP0015, which means the solution doesn't score well against this principle.

Principle 2 'Efficiency of Implementation'

Principle 2		
Name	MP077	SECMP0015
Statements	MP077 offers reasonable efficiency of implementation and comparatively has a low implementation cost (up to PIT).	SECMP0015 has to be implemented in a technical specification impacting Release, and so this should be efficient. It has a questionable cost effectiveness however.

Rationale	MP077 is the only Modification Proposal so far that affects the DCC Service Flags and currently the only one scheduled for affecting registration data. It therefore shouldn't conflict with any other Modification Proposals in the Release it is implemented in. With an up to PIT cost of £75,000 for creating a new Service Flag state and addressing the issue, this initial quote is cost effective.	SECMP0015 will be one of multiple Modification Proposals which have to be planned for implementation in the November 2021 SEC Release due to having technical specification impacts. With GBCS, SMETS, CHTS and the TSAT all being affected by the solution, efforts will have to be made to ensure these changes don't conflict with other solutions. The full cost of £4.6 million is difficult to justify as a cost effective solution, even if it resolves an clear issue.
Outcomes	The solution appears to be of good value and that the solution's changes don't conflict with any other Modification Proposals.	The solution isn't cost effective, even if it is useful and that steps will have to be taken to ensure any proposed changes don't conflict with other technical specification impacting Modification Proposals.

Principle 3 'Design Integrity'

Principle 3		
Name	MP077	SECMP0015
Statements	MP077 provides a limited impact to the technical architecture, but where the Service Flags are changed, these changes are justified.	SECMP0015 despite having significant technical specification impacts has only a limited architectural impact. Where there is an impact, this is justified.
Rationale	MP077 is not expected to impact the business architecture. The technical architecture is expected to be impacted by changing the DCC Service Flag states. Because the 'W' and 'S' flags are no longer in use, it warrants removing them so that the Service Flags are able to relay accurate and useful information to Users.	SECMP0015 is not expected to impact the business architecture. The technical architecture will be impacted by introducing the new GBCS Use Cases and due to the other noted changes on the technical specifications. This is because the reasoned benefit is that Suppliers will be able to time-stamp a GSME, which will help eliminate incorrect information when billing pre-payment customers.
Outcomes	The solution should provide needed reassurance for Users that the DCC Service Flags will display the correct information going forward.	The solution will provide confidence for Suppliers for Pre-Payment charging whilst incurring a limited effect on the technical architecture to achieve this.

Principle 4 'Change Relevance'

Principle 4		
Name	MP077	SECMP0015

Statements	MP077 does replicate one existing process. However, because this is an internal function that DCC uses and suppresses, this is something that will be new to wider industry.	SECMP0015 doesn't re-use any existing business processes or systems and is offering something entirely new to industry.
Rationale	MP077 is by and large offering a new systems process where the previous DCC Service State 'W' and 'S' flags are being replaced with new flag states. As part of this, one of the new flag states will include a data flow which is used by the DCC to provide the same information to Users. But otherwise, everything else included in the solution is entirely new to industry. This should affect both SMETS1 and SMETS2 Devices.	SECMP0015 is not duplicating any existing processes. This is due to creating a time-stamp as a new piece of functionality available to Devices. Because this hasn't been available from previous versions of the technical specifications, this won't be an inefficient use of resources due to creating something new. Due to the solution being measured against technical specifications which affect both SMETS1 and SMET2, it should impact both Device types.
Outcomes	MP077 won't be duplicating any existing work, instead utilising a data flow that already exists and creating new DCC flag states from scratch.	SECMP0015 won't duplicate any existing work, instead making a time-stamp accessible to Devices. This will affect all SMETS1 and SMETS2 Devices

Principle 5 'Use of the latest Protocol Standards'

Principle 5		
Name	MP077	SECMP0015
Statements	MP077 doesn't require a technical specification uplift for Users to benefit from its solution due to only affecting a single SEC Appendix, even if this requires lead time for Users.	SECMP0015 requires the User to uplift multiple technical specifications in order to benefit from the Proposed Solution. This is because it won't be backdated against older versions of these specifications.
Rationale	MP077 is only affecting an area in the SEC where registration data is written, and whilst having a technical impact on the data provided doesn't affect the technical specifications that would force Users to uplift these versions to derive any benefits. This means all Users can use the solution with relative ease and little effort.	SECMP0015 requires multiple technical specifications changes, including but not limited to SMETS, CHTS, GBCS and DUIS. Because all of these will require Users to uplift these to gain the Proposed Solution's benefits, this may affect the individual cost borne by a User outside of industry costs. Whilst the solution could justify the uplift, it still may require additional costs and time for Users.
Outcomes	Because MP077 will not require an uplift of the technical specifications, it doesn't provide additional burden on Users and doesn't negatively impact any of the technical specifications.	SECMP0015 affects the technical specifications and has a substantial cost to industry, but this could be justified by the issue that the Propose Solution will fix, even if it acknowledges the additional costs and efforts required by Users.