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Action:	**For Information**

TABASC Risk Register

1. Purpose

This paper provides detail of the risks and associated risk management plans that the Technical Architecture and Business Architecture Sub-Committee (TABASC) have agreed to retain and monitor. It provides an opportunity for the TABASC to undertake a monthly review of its current risks and identify any further risks associated with the TABASC's operations, along with the associated ratings.

The associated risk management plans can also be reviewed for progress made along with consideration of any additional actions that should be included to help mitigate against the identified risk. Following the TABASC's review, any risks that the TABASC agree should be escalated to the Panel and will be fed in through the monthly Panel Risk Register review.

2. SEC Panel Risk and Issues Register

The TABASC have agreed previously to escalate risks to the Panel for incorporation into its overall risk register. The initial risks identified relate to the TABASC operations in its duties as laid out in the TABASC Terms of Reference (ToR). The TABASC Members are invited to periodically review the Panel Risk Register and agree to identify and add new risks as they arise. For reference, the SEC Panel Risk and Issue Registers are provided as Appendix A and B respectively. The Panel Risk and Issue impact matrix is also provided as Appendix C for reference. A more thorough review will be undertaken to be presented to the TABASC at the January 2019 meeting.

3. Recommendations

The TABASC is requested to:

- **NOTE** the contents of this paper; and
- **NOTE** that no amendments have been made to the risk management plans set out in Appendix D during the month.

Rebecca Jones

SECAS Team

6 December 2018

Appendix A: SEC Panel Risk Register

The following table lists the SEC Panel risks, reflecting any updates made as part of the monthly review. The risks have been ordered from highest to lowest Severity. Any mitigations or actions activities in *italics* are those that are ongoing or require completion. Any mitigations or actions activities in red are those that are new.

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation (*Planned and/or ongoing actions in italics)*	RAG Status
1	The DCC are unable to deliver all the changes that make up the content of a Release, leading to potential descoping of content or delays to Release timescales.	3	4	**12**	• SEC Panel and the DCC have developed a Release Management Document to cover the overarching approach to managing releases, which was issued for consultation on 15 November 2017. • *DCC to regularly update the Panel on progression of the release implementation.*	**AMBER**
3	Confidential information is leaked due to inadequate security controls leading to reputational damage and potential legal challenge.	3	3	**9**	• The Panel Information Policy is in place to control access to confidential information in accordance with the SEC. • Terms of Reference (ToR) for each Sub-Committee require all members to sign a confidentiality and non-disclosure agreement. • Internal SECAS processes for handling of confidential data, including the use of Egress to store and distribute data.	**GREEN**
4	Testing may be insufficient for a stable environment leading to defects.	3	3	**9**	• The Testing Advisory Group (TAG) analyse and review outcomes and reports through the weekly testing updates and calls. • DCC Live Service Criteria Report to BEIS in place. • Defect Resolution Process and Issue Resolution Processing in place in relation to Modifications. • Obligations in place under User E2E testing.	**GREEN**

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation (*Planned and/or ongoing actions in italics)*	RAG Status
5	Release Management is inefficient due to the dual input by BEIS and the SEC Panel in relation to Release content and implementation.	3	3	**9**	• Initiated early handover of Technical Specifications to align Modifications in Releases. • *Development of the enduring Release Management documentations (ongoing).* • *SECAS continue to attend the Implementation Managers Forum (IMF) and Technical and Business Design Group (TBDG) for BEIS updates on Release Management planning.*	**AMBER**
13	Wider industry initiatives that have impacts on the smart metering arrangements do not take into account the current requirements (e.g. the switch to half-hourly settlement and the faster switching programme and changes to Feed in Tariffs).	3	3	**9**	• *Establish regular reporting and information exchange between the Faster Switching teams to ensure impacts are captured and considered.* • *Sub-Committees (such as the TABASC and the Ops Group) to highlight any industry wide projects that may require SEC input.* • *Updates to be provided to the Panel or (relevant Sub-Committee) on new industry initiatives to be requested from leading body.* • *Assumptions made by the leading body are checked and challenged (if required) by the Panel or relevant Sub-Committee.*	**AMBER**
15	The Security Sub-Committee (SSC) has identified a risk that whilst the Security Architecture for the Initial Operating Capability (IOC) is baselined, there are changes under consideration that will need to be assessed for security considerations under Change Control by the SSC. Further, the DCC has not yet completed a sufficiently detailed or stable SMETS1 E&A design for Middle (MOC) and Final Operating	3	3	**9**	• *Regular SMETS1 agenda item at each SSC meeting to ensure that the security controls are being considered at each step and are both sufficient and feasible.* • *The SSC advice being provided on emerging DCC design.*	**AMBER**

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation (*Planned and/or ongoing actions in italics)*	RAG Status
	Capability (FOC), which may lead to: • Potential delay and cost increases to enrolment and adoption caused by the need to implement additional security controls or rework; • Impact on time and cost to change the security solution design, later in the design, build and test cycle; • Reputational risk to smart metering (including SMETS2) from negative publicity as a result of security vulnerability or incident; • A security compromise that could lead to an adverse operational impact on SMETS1 operations; • The SSC advising security controls that have not been included in the current DCC design of SMETS1 E&A for IOC, MOC and FOC; • DCC having to amend both its designs and contractual arrangements with its service providers at increased financial cost to DCC and its Users; and • The SMETS1 E&A solution lacking sufficient security controls to avoid a security compromise.					
14	Insufficient Communications Hub firmware regression testing is undertaken during	4	2	**8**	• *DCC undertakes appropriate levels of Communication Hub regression testing to provide assurance that devices continue to*	**AMBER**

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation (*Planned and/or ongoing actions in italics)*	RAG Status
	Release testing, resulting in deployed devices and/or Communications Hubs in storage not working once a release goes live.				*work once a release goes live.* • *Evidence of the regression testing is provided and reviewed by the TAG and Panel.*	
6	Incorrect implementation of process or tooling defects lead to errors being introduced into the draft Technical Specifications and Great Britain Companion Specification (GBCS).	4	2	**8**	• A Quality Assurance process is in place. • SECAS has a defined process including resourcing. • SECAS has a community of technical experts for content reviews.	**GREEN**
7	The expert support structure established by the Technical Architecture and Business Architecture Sub-Committee (TABASC) is not adequate for supporting them in its duties, due to knowledge gaps or there not being availability within industry.	3	2	**6**	• The Technical and Business Expert Community (TBEC) is established. • Agreed approach for expert resource to be managed on a work package level. • Directly seek out technical experts if required by future work packages.	**GREEN**
8	The Panel guidance and timescales cannot support DCC Users in meeting their licence obligations in relation to User Mandates.	2	3	**6**	• Completed updates to the User Entry Process guidance on SEC Website. • Provide Party Support by communicating with all Small Suppliers. • Joint DCC engagement with DCC Users, to ensure alignment. • The SEC Panel have delegated the responsibility of setting the assurance statuses to the SSC, which therefore supports quicker timescales for the assessment process.	**GREEN**
9	A Modification Proposal is progressed that has a negative impact on the End-to-End Technical Architecture.	2	3	**6**	• The *TABASC to feed into Modifications Process with any feedback and impact assessment required (ongoing).* • The TABASC are provided with a monthly Modification	**GREEN**

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation (*Planned and/or ongoing actions in italics)*	RAG Status
					development update. • TBEC established for the TABASC to call on if required to provide expert input into the Modifications Process.	
10	SEC Panel Budget is insufficient due to unexpected resource needs (e.g. high volume of Modification Proposals or additional unexpected Panel responsibilities taking effect).	3	2	**6**	• Updated Jointed Implementation Plan (JIP) reviewed to identify any impacts to SEC Panel. • SEC Panel Budget reflects DCC re-plan outcomes. • SEC Panel Budget for Regulatory Year 2018-2019 approved and finalised. • A Draft SEC Panel Budget for Regulatory Years 2019-2022 is awaiting approval. This includes an increased Project Budget, and contingency provisions to accommodate any potential overspend.	**GREEN**
16	Insufficient SECAS and/or User CIO resource capacity results in the delay to User entry activities, resulting in delay to User Go Live and/or DCC Mandates.	3	2	**6**	• SECAS undertake thorough resource planning in conjunction with the User CIO. This includes fortnightly catch ups to discuss recent assessment bookings. The SEC website also contains an online booking form which provides adequate slots for people to book in advance of the mandates. • The User CIO has the ability to upscale their team resources if needed. • SECAS undertaking review of workload and responsibilities to enable thorough resource planning and to expand its resource capacity.	**AMBER**
17	The User CIO is unable to deliver User CIO assessments due to conflicts of interest and/or the alternative User CIO is not appropriately geared up (e.g. subject matter knowledge) to provide a thorough and	3	2	**6**	• Mechanism in place with User CIO to promptly identify any conflicts of interest to enable the deployment of the alternative/reserve User CIO. • On these occasions, the SEC Panel has the ability to procure an	**AMBER**

#	There is a risk that…	Impact (1-5)	Likelihood (1-5)	Severity	Mitigation *(Planned and/or ongoing actions in italics)*	RAG Status
	consistent evaluation given the potential numbers of assessments involved.				alternative User CIO. Processes such as shadowing the current User CIO are in place to ensure that they are appropriately geared up for assessments.	
11	Inability to fulfil SEC activities across all SEC Panel Sub-Committees due to unclear requirements or timings.	2	2	**4**	• Duties set out and monitored monthly by each Sub-Committees' Activity Planners. • Utilise available resources such as the TBEC and SECAS technical experts. • The SSC utilise security experts. • The TABASC utilise work packages to determine a development approach and estimated resource required for each new piece of work. • The SMKI PMA utilise specialists available. • Seek Panel's advice if duties are unclear in the Terms of Reference.	**GREEN**
12	There is insufficient interaction between the SEC Panel and Alt HAN Forum to enable alignment of SEC Objectives.	1	2	**2**	• Establish regular reporting and information exchange between the SEC Panel and Alt HAN Forum Chairs. • Alt HAN Forum provided input to the SEC End of Regulatory Year Report.	**GREEN**

Table 1: SEC Panel Risks

Appendix B - SEC Panel Issue Register

The following table lists the SEC Panel issues, reflecting any new or updated issues made as part of the monthly review. Any mitigations or actions activities in *italics* are those that are ongoing, or require completion. Any mitigations or actions activities in **red** are those that are new.

Issue No.	Date Raised	Issue Category	Associated Risk No.	There is an Issue that…	The Impacts of the Issues are...	Impact (1-5)	Mitigation and Actions Required (*Planned actions in italics*)	RAG Status
1	14 July 2017	Modification Process	2[1]	The progression of Modification Proposals is not meeting required timescales due to the delayed completion of activities (e.g. submission of Impact Assessments and any requested information within reasonable timescales from the DCC) leading to reputational damage and challenge.	That industry driven Modification Proposals are not being progressed in a timely manner resulting in: • diminished case for the change, as the benefits against the SEC Objectives are potentially reduced; • frustration with the SEC Modification Process; and/or • frustration that Industry driven change is not a priority compared with other changes.	3	• Panel is monitoring progression against agreed timescales through monthly Modification updates and is reviewing changes when necessary. • Panel has requested commitment and confirmation from the DCC that timescales (including revised timescales) for the completion of Preliminary Assessments and Impact Assessments will be achieved and will not slip (further). • SECMP0034 'Changes to the SEC Section D for DCC analysis provisions', was implemented on 1 November 2018. This change ~~which is currently with the Authority for final decision, seeks to~~ recognises within the SEC the DCC's Preliminary Assessment (PA) and Impact Assessment (IA) processes to ensure there are clear delivery timescales and methods for setting such timescales. • Plan resourcing of activities required to	RED

[1] The progression of Modifications Proposals does not meet required timescales due to the delayed completion of activities (e.g. submission of Impact Assessments and any requested information within reasonable timescales) leading to reputational damage and challenge by SEC Parties and/or Ofgem.

Issue No.	Date Raised	Issue Category	Associated Risk No.	There is an Issue that…	The Impacts of the Issues are...	Impact (1-5)	Mitigation and Actions Required (*Planned actions in italics)*	RAG Status
							assess a Modification Proposal and manage expectations accordingly. The extent of involvement by SECAS to deliver obligations are reviewed and reflected in the SEC Panel Budget. • DCC to confirm the timescales they indicate for the provision of DCC Assessments. • SECAS ~~is carrying~~ has carried out a review of the SEC Section D provisions and the end-to-end modifications process to implement a more efficient and robust assessment process. • SECAS is proactively seeking industry engagement in the various modification Working Groups to ensure meetings are quorate and do not need to be rescheduled.	
2	15 June 2018	Modification Process - DCC Systems	TABASC 10	DCC System is circumvented as making changes to it is too costly and timely	• This issue concerns the circumstance where Modification Proposals will provide a benefit from the perspective of process improvement and/or efficiency, however the (DCC System) costs or implementation timescales are	3	• SECAS ~~is carrying~~ has carried out a review of the SEC Section D provisions and the end-to-end Modifications Process to implement a more efficient and robust assessment process. An Authority decision on introducing a pre-modification process is anticipated early January 2019. SECAS will continue to review if further improvements and enhancements to the process can be made. • Clear requirements needed to enable an accurate assessment of (DCC	RED

Issue No.	Date Raised	Issue Category	Associated Risk No.	There is an Issue that…	The Impacts of the Issues are...	Impact (1-5)	Mitigation and Actions Required (*Planned actions in italics*)	RAG Status
					high, resulting in the change not going ahead for cost and/or timescale reasons alone.		solution) cost impacts to be calculated. • Monitor the costs associated with implementing (DCC System impacting) Modification Proposal solutions. • DCC to request the Working Group to clarify requirements (in a timely manner and prior to the submission of PA/IA requests) to enable an accurate assessment to be undertaken. • The Panel have requested (and the DCC accepted) ~~to request SECAS initiate a plan of work with the DCC~~ to investigate and review what is driving the unacceptably high cost of change. This will include a review of the testing, cost of testing and scope of testing.	
3	5 October 2018	Planned Maintenance Concerns		The number and length of full maintenance outages is not commensurate with the availability of a live service as outlined within the SEC.	The interruptions to the DCC service are now having a material impact on the business operations of Users, particularly given the increased scale of installation and commissioning activity.	3	• DCC to provide a Consolidated Forward View and to ensure that notice periods adhere to SEC H8.4. • DCC to avoid short notice changes and cancellations as these are disruptive to users. • Ops Group to monitor maintenance outages and report to the Panel.	RED

Table 1: SEC Panel Issue Register

Appendix C - SEC Panel Risk and Issue Impact Classification

Category	Negligible (1)	Minor (2)	Moderate (3)	Serious (4)	Major (5)
Safety	Minor or no medical treatment required, no lost time.	Medical treatment, less than 3 days' impact.	Reportable injury with impact greater than 3 days.	Major long term but reversible injury.	Single fatality or serious irreversible disability with major quality of life impact.
Environment	Contained environmental release with no adverse effects.	Short term, minor environmental impact confined to site.	Moderate short term impact on biological or physical environment.	Environmental impact causing serious but reversible environmental impact on biological or physical environment.	Major environmental impact causing long-term or irreversible change in localised biological or physical environment with loss of habitat/species.
Reputation	Isolated complaint or comment with no anticipated coverage.	Limited local public and media concern with 'short lived' local coverage.	Extensive regional public and media concern with potential to escalate to national coverage.	Sustained regional public and media concern with limited national coverage impacting business in UK.	Sustained public and media criticism impacting smart metering or business in UK.
Client & Customer	Limited short-term impact on client base and satisfaction.	Short-term impact on client base and satisfaction.	Significant short-term impact on client base and satisfaction.	Significant impact on client base and satisfaction requiring some change to company strategy.	Significant long-term impact on client base and satisfaction requiring significant change to company strategy.
Asset	Minimal asset damage, affecting operations for less than 48 hours.	Minor asset damage which impacts operations for < 30 days.	Moderate asset damage which impacts operations for between 30 days and six months.	Serious asset damage which impacts operations for more than 6 months.	Total loss of single asset (or group of interdependent assets).

Category	Negligible (1)	Minor (2)	Moderate (3)	Serious (4)	Major (5)
Legal & Regulatory	Breach of internal controls, limited impact.	Low level legal issue, quickly resolved. Breach of internal control.	Moderate legal issue, non-compliance or breach of regulation, increased scrutiny by authorities. Multiple breach of internal controls.	Significant breach, or latest in a series of breaches, involving investigation or report to authorities with prosecution or moderate fine possible.	Major legal/regulatory breach resulting in litigation, regulatory sanction and/or significant fine.
Financial Impact	One off revenue impact < £50k. Recurring, annual revenue impact < £10k.	One off revenue impact: £50k to £250k. Recurring, annual revenue impact < £50k.	One off revenue impact: £250k to £500k. Recurring, annual revenue impact < £100k.	One off revenue impact: £500k - £1m. Recurring, annual revenue impact < £250k.	One off revenue impact > £1m. Recurring, annual revenue impact > £250k.
People	Minimal staff loss or shortfalls in recruitment. Key Staff / Team not available for a week.	<10% loss or recruitment of a team. Key Staff / Team not available for up to one month.	Between 10% - 50% loss or recruitment of a team. Key Staff /Team not available for between one to three months.	>50% loss or recruitment of a team. Key Staff / Team not available for between three to six months.	100% loss of or unable to recruit a team. Key Staff / Team not available for more than six months.
Security	Temporary closure (less than a day) or reduced operation of a Site or Asset.	Temporary closure (more than a day) of a Site or Asset.	Temporary closure (more than a week) of a Site or Asset.	Long term (more than a month) closure of a Site or Asset.	
Strategic	Impacts short-term tactical objectives.	Strategic objectives are delayed or require additional resource to deliver.	A strategic objective is not delivered or a key strategic assumption is overturned.	Multiple strategic objectives are not delivered or multiple key strategic assumptions are overturned.	Incident response prevents strategic roles being delivered, or demands complete change of strategy.