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Meeting TABASC_17_2004, 20th April 2017

10:00 – 16:00, Gemserv, 8 Fenchurch Place, London, EC3M 4AJ

Technical Architecture and Business Architecture Sub-Committee (TABASC) Final Minutes

Attendees:

Category	TABASC Members
TABASC Chair	Julian Hughes
Large Suppliers	Emslie Law
	Stephen Lovell
	Rochelle Harrison
	Grahame Weir
	Ashley Pocock
Other SEC Parties	Tim Boyle
	Elias Hanna
Electricity Networks	Alan Creighton
Gas Networks	Leigh Page

Representing	Other Participants
BEIS (Secretary of State)	Seamus Gallagher
DCC	Sylvia Ovie
	Amanda Rooney (part)
SECAS	Alys Garrett
	Kayla Reinhart

Apologies	
Large Suppliers	Tim Newton

Absent	
Small Suppliers	Kirk Hawksworth
Small Suppliers	Andy Knowles

1. Minutes and Actions Outstanding

The draft minutes from the March 2017 TABASC meeting were agreed as final. All actions were marked as completed or on target for completion. The following updates were provided:

Action Reference	Update
TABASC09/06 SECAS to produce a proposal for an enduring TAG function for TABASC to review.	The Panel are continuing work on the approach for enduring Release Management. The Panel are to consider an approach to Testing Principles for modifications, which will include consideration of the governance group that will have oversight. A joint workshop with TAG and TABASC was held on 21 st March 2017. Outputs from the workshop are provided under agenda item 11. Action CLOSED .
TABASC13/01 The DCC to provide updated DCC internal changes slides to include relative timeframes to TABASC.	The DCC provided information on the list of internal changes and any candidate release under agenda item 3. Action CLOSED .
TABASC15/02 SECAS to investigate communication channels for accessing information to enable a watching brief on the ZigBee and Device Language Message Specification (DLMS) standards and to report back to the TABASC.	SECAS has reached out to the relevant contacts at each association and is investigating membership options to establish communication channels. SECAS will provide an update at the May 2017 TABASC meeting. Action ONGOING .
TABASC15/03 The DCC to provide the TABASC with a description of the planned up-and-coming maintenance release outage periods.	The DCC provided an update on the planned up-and-coming maintenance release outage periods under agenda item 3. Action CLOSED .
TABASC15/05 SECAS to assess the configuration management of the SEC and tools that could be used to support that function.	SECAS is investigating different configuration management of the SEC and tools to support that function. Action ONGOING .
TABASC15/09 BEIS to provide feedback on Authority Decision timescales for urgent defects.	BEIS provided feedback on Authority Decision timescales for urgent defects under agenda item 2. Action CLOSED .

<p>TABASC16/04</p> <p>The TABASC to develop a communication approach to the wider industry once the BAD has been published.</p>	<p>The TABASC to discuss a communication approach to the wider industry, once the BAD has been published, at the May 2017 TABASC meeting.</p> <p>Action ONGOING.</p>
<p>TABASC16/07</p> <p>SECAS to further investigate the effort required to conduct the questionnaire and provide an update at the April 2017 meeting.</p>	<p>SECAS will provide an update at the May 2017 TABASC meeting when the updated questionnaire will be discussed.</p> <p>Action ONGOING.</p>
<p>TABASC16/08</p> <p>SECAS to further develop the questionnaire to be provided to the TABASC for final approval.</p>	<p>SECAS will provide the updated questionnaire at the May 2017 TABASC meeting.</p> <p>Action ONGOING.</p>
<p>TABASC16/10</p> <p>SECAS to provide an updated activity planner at the April 2017 TABASC meeting.</p>	<p>SECAS will provide an updated Activity Planner at the May 2017 TABASC meeting.</p> <p>Action ONGOING.</p>
<p>TABASC16/11</p> <p>SECAS agreed to liaise with BEIS regarding the handing over of the Design Notes and to bring further information to a future meeting.</p>	<p>BEIS noted that they had continued discussions with SECAS on the handover of the Design Notes from transitional to enduring governance. Further details were discussed under agenda item 2.</p> <p>Action CLOSED.</p>

2. BEIS Update

BEIS informed the TABASC of BEIS highlights, consultations and conclusions that have been published or are to be published in the coming months:

- BEIS noted that they had continued discussions with SECAS on the handover of the Design Notes from transitional to enduring governance. BEIS confirmed that BEIS will no longer be maintaining the Design Notes through the Technical and Business Design Group (TBDG) and the intent is to hand them over to the TABASC to own. SECAS noted that in order for the TABASC to formally take ownership this should be agreed by the Panel and would require an update to the TABASC Terms of Reference. SECAS informed the TABASC that a disclaimer has been applied to each Design Note stating that the document may be out of date and content should be non-binding and where there is any discrepancy, the SEC takes precedence. The TABASC noted the need for these Design Notes to be assessed, specifically against the BAD, to determine if the documents are fit for purpose and to discuss an approach to maintain these documents.

Post Meeting Note: At the April 2017 Panel meeting, the Panel determined that the TABASC should take ownership of the Design Notes. Updates to the Terms of Reference will be presented at the May 2017 TABASC meeting.

- BEIS provided an update on TABASC Action 15/09 in relation to the Authority Decision timescales for specification defects. BEIS noted that there are discussions underway to test the use of the proposed Path 5 to determine whether this path is needed, or if an existing or amended existing path can be used instead. BEIS underwent discussions with Ofgem on the expected timescales for these decisions. It was noted that BEIS has a Service Level Agreement (SLA) to provide a decision within 25 Working Days. BEIS noted that if all information is available in order to make an informed decision, they will try to make decisions quicker than their SLA requirements. BEIS also noted that the timescales for decision making also depends on the complexity of the change and the cost. Overall, BEIS and Ofgem are supportive of progressing Authority Decisions in a timely manner to a reasonable degree.
- In relation to Release 2 activities, BEIS noted that the DCC had returned their impact assessment on RFC-55 noting that they would be unable to deliver to the full scope in the Release 2 delivery timescales. The DCC proposed an alternative scope to maintain DCC Release 2 delivery timescales, which includes a revised list of 14 RPs. BEIS noted that the new versions of the Technical Specifications will be issued for a two-week consultation and the revised document scope should be sent out by the end of the month. BEIS noted that the proposed changes are to enable the timely delivery of Dual Band Communications Hub (DBCH) functionality.
- In relation to the DBCH and Zigbee activity, BEIS noted that the documentation for version 0.9 had been released to BEIS and is awaiting final approval. It was noted that approval of version 0.9 was not on the critical path for DBCH delivery. It was also noted that the target date for version 1.0 remains as 24th May 2017, however this may be challenging.
- BEIS noted that the UK will have a general election on 8th June 2017. Consequently, it was noted that departments are restricted to what they can deliver for a certain period. In light of the election, BEIS does not see this as impacting the DBCH programme delivery.
- BEIS provided an update on Release 3 and Release 4. BEIS noted that Enrolment and Adoption (E&A) has a current planning assumption of initial implementation in June 2018. It was noted that BEIS is considering which of the 17 RPs that were not included in Release 2 can be incorporated into the June 2018 Release. The TABASC were informed that the remaining RPs should be included in Release 4. BEIS noted they will continue in their oversight role after Release 2 to ensure the remaining RPs are implemented.

The TABASC **NOTED** the verbal update.

3. DCC Update

The DCC informed the TABASC that they were revisiting the approach to managing environments to support release management and testing services. It was noted that the DCC would be circulating an RFP to request consultancy services to aid them in defining a revised cloud-based strategy. The TABASC Members requested to see the RFP that would be circulated. The DCC noted that a revised approach should reduce the time required to stand up new environments and be more cost efficient.

The DCC also advised that they were standing up an internal DCC Design Authority (DA). This would allow for alignment across the three programmes that are currently running within the DCC – SMETS2, SMETS1 and Faster Switching. It was noted that decision making would be at the macro level affecting overall architecture, consistency and performance. The TABASC discussed that they should be kept up to date with the outputs from the DA and the DCC noted that they would invite external parties as required e.g. the TABASC Chair.

Based on the TABASC15/03 action reference, the DCC provided the TABASC with information on planned up-and-coming maintenance release outage periods. The DCC indicated a maintenance window of 60 hours for Release 1.3. The DCC recognises that this is a long period of time and is working on reducing the outage periods required with the revised approach to managing environments supporting this activity. The TABASC expressed that the industry is not happy with the lengthy timeframes and indicated that the DCC Systems should be designed to be maintainable.

In relation to Action Reference TABASC13/01 – The DCC to provide updated DCC internal changes slides to include relative timeframes to TABASC the DCC presented on the list of change requests currently being assessed by the DCC including timescales. These change requests are those for new functionality, not defect change requests. The TABASC noted that it would be useful to see a list of the defects currently being progressed as well. In total, the DCC noted that there are 153 change requests that require change management, including Impact Assessments.

The TABASC **NOTED** the content of the verbal update.

ACTION TABASC17/01: The DCC to feedback their intended approach to make upgrades more acceptable.

ACTION TABASC17/02: The DCC to provide the TABASC with a list of defects change requests currently being progressed.

4. Sub-Committee Update

The TABASC Chair provided the TABASC with an update on the other SEC Sub-Committees most recent activities:

- Security Sub-Committee (SSC) – New organisations are continuing to proceed through the User Competent Independent Organisation (CIO) audits. It was noted that all Large Suppliers are on track for conclusion of the User CIO audits by the date of the Large Supplier mandate. Several Small Suppliers are undergoing Security Assessments in order to meet their user mandate of 25th November 2017.
- SMKI Policy Management Authority (SMKI PMA) – the TABASC were informed that discussions were held on the testing requirements for the SMKI Recovery functionality. The SMKI PMA raised concern that the Recovery functionality would not be available for Users to test in the User Interface Testing Environment until Release 1.4, however the functionality would be available in the production environment from Release 1.3. The TABASC noted this for consideration in future releases.

The TABASC Chair noted an issue that had been discussed at both the SSC and SMKI PMA in relation to User IDs and Parties using shared services. In some cases, one company has two legal entities where each hold either a Gas or Electricity Licence; however, wish to operate as one DCC User, sharing a single User ID to combine their gas and electricity supplier roles. It was noted that there are several Shared Service Providers that have structured their technical solution to only support a single User ID per SEC Party. Therefore, in examples where the licences are split between two different legal entities, the client would be required to use separate User ID's related to each entity. It was noted that there has been push back from some organisations that have this issue, mainly due to costs of operating multiple shared services; however, this appears a limitation in the implementation of the service by Shared Service Providers. SECAS noted that discussions with Ofgem and BEIS are underway and that Ofgem currently do not intend to change policy. It is understood that the BEIS Stewardship contacts for Small Suppliers should be involved in these discussions with individual SEC Parties. SECAS is developing SEC Guidance to assist industry to

understand the obligations. SECAS is also looking into the structure around user CIO Audits to address this item.

It was also noted that the first electricity smart meter has received its Commercial Product Assurance (CPA) certificate. SECAS informed the TABASC that the electricity smart meter has been added to the Certified Products List on the SEC Website.

The TABASC **NOTED** the content of the verbal update.

5. Transitional and Enduring Industry Forum List

SECAS provided the TABASC with a paper outlining the industry forums currently held by the Data Communications Company (DCC) and the Department for Business, Energy and Industrial Strategy (BEIS). The TABASC discussed the current industry forums from an enduring governance point of view to identify any gaps.

The TABASC noted that a forum to discuss service management and operational issues are not covered in the enduring governance arrangements. SECAS noted that the SEC Panel may take responsibility of service management in enduring governance. It was noted that this will be confirmed with the SEC Panel at the 21st April 2017 meeting. SECAS will provide an update on the outcomes from the service management in enduring governance discussion at the April 2017 SEC Panel meeting.

It was noted that the Transitional Security Expert Group (TSEG) is no longer a monthly forum, just meeting as required by BEIS. However, the Security Sub Committee (SSC) is the enduring governance for the security matters. It was also noted that Test Design and Execution Group (TDEG) will be covered under the enduring governance of the Testing Advisory Group (TAG).

The TABASC noted that the Alt HAN was not represented in the list provided. It was noted that the Alt HAN already forms part of the enduring SEC governance.

The TABASC and industry have interactions and dependencies on the forums listed and noted the need to identify where presence is required on enduring forums. SECAS will discuss with Panel their roles and responsibilities in relation to enduring forums.

The TABASC **DISCUSSED** the content of the paper and agreed to further develop a view of the interactions and dependencies that the TABASC should have with other industry groups.

ACTION TABASC17/03: SECAS agreed to further develop a view of the interactions and dependencies that the TABASC should have with other industry groups.

ACTION TABASC17/04: SECAS to provide an update on the outcomes from the service management in enduring governance discussion at the April 2017 SEC Panel meeting.

6. TABASC International Standards Approach Update

At the March 2017 TABASC meeting, the TABASC discussed the proposed Principle 5 approach to maintaining alignment with the open standards used within the GB Smart Metering Specifications.

The intent of Principle 5 is to maintain alignment with the open protocol standards used within the Technical Specifications. An opportunity to ensure alignment may arise 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. It was noted that market demand is the main driving force behind the uplift of standards.

At the March 2017 TABASC meeting, the TABASC Chair requested the TABASC to provide further feedback on the proposed Principle 5 - Use of the latest protocol standards and whether it should be added to the TABASC Principles when assessing Modification Proposals. Based on the TABASC Members' feedback and in line with previous discussions, the TABASC agreed the validity of the Principle. However, the TABASC raised concerns with the practicality of implementation of the Principle. The TABASC discussed whether they would be responsible for determining if an upgrade to the latest version of an open protocol standard should be undertaken, considering the potential costs in doing so and the potential implication on certification of Devices. It was noted that certification is based on functions rather than versions of the standard, and uplifts to the standard are additive and therefore, should be backwards compatible.

It was noted, as part of the TABASC Member's feedback, that the intent of the Principle should be changed from the Technical Specifications 'are kept current' to 'remain fit for purpose' instead. BEIS agreed and informed the TABASC that keeping the open standards up to date is out of the TABASC's remit.

It was noted that the use of the open standards should be considered as part of each Modification Proposal including whether a proposal would be requiring additional functionality from a later version of the standards. To help with this process, the TABASC discussed the need to monitor the developments in the open standards, as well as assessing their effectiveness as part of the Effectiveness Review of the End-to-End Technical Architecture.

It was also noted, as part of the TABASC Member's feedback, the intent of the Principle should be amended to include 'relevant open standards' and not 'open protocol standards'. It was also recommended that the TABASC should 'consider keeping alignment' rather than 'should keep alignment'.

The TABASC Chair noted the outcomes of the TABASC Member's feedback and recommendations to further developing Principle 5. Proactive assessment of changes to Open Standards will be done as part of the assessment of the effectiveness review of the technical architecture. TABASC will also assess SEC Modifications to consider whether it is appropriate for the version of Open Standard to be changed and make recommendations to the Working Groups as necessary.

The TABASC discussed their options for an approach to obtaining knowledge of changes to Open Standards. SECAS is investigating the membership of certain standards bodies to establish communication channels. It was also noted that the TABASC Members should be able to provide updates of developments in Open Standards as they occur, after which the TABASC can consider whether further assessment of the opportunities is worthy of investigation.

The TABASC **AGREED** for the proposed Principle 5 to be published to the TABASC Principles to assess Modification Proposals list, subject to amendments.

7. Business Architecture Document Project Update – March 2017

SECAS provided the TABASC with the monthly update on the Business Architecture Document (BAD) Project, focussing on the activities undertaken in March 2017. A high-level dashboard set out the project status and high level risks. The BAD project and Business Process Model (BPM) to date have delivered to time and budget, with future planned activities set at Green status for the overall project out-turn.

SECAS noted that the third drop of content of the main document was provided last month. As a result, the BPM has been updated with this content on the evolve portal for review. SECAS will hold

workshops with the Technical and Business Expert Community (TBEC) around the end of May 2017 for the BAD model review and to provide any feedback.

Due to the significant amount of data to review, the TABASC requested SECAS to allocate relevant specific areas of the BAD model to relevant members for their review. SECAS noted relevant areas of the BAD model had been allocated to the SSC and SMKI PMA for their review and would do this for the TABASC Members.

SECAS also noted that a communication approach of how to circulate the BAD to industry will be brought to the May 2017 TABASC meeting.

The TABASC **NOTED** the contents of the Business Architecture Document Project Update – March 2017.

ACTION TABASC17/05: SECAS agreed to allocate relevant areas of the BAD model for review by the specific parties (i.e. the TABASC, SCC and SMKI PMA).

8. TABASC Risk Register

The TABASC were provided with a paper documenting the TABASC risks, as well as the risks and issues included in the SEC Panel Risk Register. The TABASC were provided with an initial set of operational risks, relating to the End-to-End Technical and Business Architecture.

The TABASC reviewed each operational risk and provided scenarios to assess each risk when necessary. Based on these discussions, the TABASC developed the risks' severity levels, potential mitigations and RAG (Red, Amber, Green) Status'. The amended risk register can be found in Appendix A of this document and will be assessed on a monthly basis.

The TABASC noted in general that several risks are drawn out at a high level. As part of the TABASC's obligation of reviewing the effectiveness of the Technical and Business Architectures and the Home Area Network (HAN) Requirements, a questionnaire will be sent to all Users in order to identify areas for the risks to be developed in more detail.

The TABASC **AGREED** the content of the paper, subject to the discussed amendments to several risks.

9. TABASC Activity Planner

SECAS provided the TABASC with an updated Activity Planner outlining the activities anticipated until December 2017. SECAS noted that a restructured SEC Activity Planner will be provided at the May 2017 TABASC meeting.

The TABASC **NOTED** the contents of this paper.

10. Specification Defect Process Development Example

The TABASC Chair noted that discussions are underway between SECAS and Ofgem to further investigate Specification Defect scenarios that may require a new Modification Pathway. It was noted that further information would be brought back to a future TABASC meeting.

The TABASC **NOTED** the verbal update.

11. Development of User Testing Principles for Modification Proposals Workshop - Update

SECAS presented on the outcomes of the development of User Testing Principles for Modification Proposals Workshop. The purpose of the workshop was to develop testing principles to aid Modification Proposers and Working Groups (WGs) to meet SEC Modification Process and reporting requirements as set out in SEC Section D. Due to the limited notice for the meeting, very few TABASC Members were able to attend however there is an opportunity for all members to feedback.

SECAS informed the TABASC of a key outcome from the workshop, to aid the discharging of SEC Section D1.7 requirements on Modification submissions. A matrix was initially proposed by the workshop attendees to be added to the Modification Proposal Form, that would require the Proposer to indicate which elements of DCC and User Testing would likely be required as part of the implementation activities for the modification; however, SECAS has recommended the matrix forms part of the Initial Modification Reports (IMRs) to reduce the burden on industry when raising a modification. As part of the Critical Friend role performed by SECAS, SECAS will support the Proposer in populating the matrix, which will be included within the IMR.

The TABASC raised concern around why User Entry Process Tests (UEPT) was not included in the matrix under 'Testing phases'. SECAS informed the TABASC that as noted in the matrix, for existing Users, it is assumed that for the implementation of Modification Proposals that User Entry Process Testing will not be required. Any testing undertaken will be to ensure the new functionality or altered functionality works and is useable.

SEC Variation Testing Approach Document (SVTAD) was also noted as not having been considered and should be.

The TABASC raised concern around which organisations are required to test once the testing requirements are determined and whether this is determined on a voluntary basis or whether it is only required by the proposer.

In addition, the workshop covered the Modification Development and TAG involvement. It was noted that there is a need for the Working Groups to have some testing knowledge within their membership. The TABASC were informed that the enduring TAG should see the proposed testing approach information set out in the IMRs prior to the DCC Preliminary Assessments and DCC Impact Assessments. In addition, the enduring TAG should see the DCC Preliminary Assessments and DCC Impact Assessments output on testing within the Impact Assessment responses. Similarly, Sub-Committees (including the TABASC) feedback will be included and taken on board by the WGs.

The workshop discussed the future of TAG. It was noted that the SEC Panel have agreed that TAG should continue in enduring governance. Consequently, the Sub-Committee's Terms of Reference will be revised and agreed by the SEC Panel. It was recommended that the enduring TAG may be held on an ad hoc basis for matters relating to Release and release matters as well as to provide input on Modification Proposals as they are progressed.

The TABASC **NOTED** the workshop update and agreed to feed back any comments on the proposed approach prior to it being raised to the SEC Panel in May 2017.

ACTION TABASC17/06: The TABASC Members to provide SECAS with feedback on the proposed approach for development of User Testing Principles for Modification Proposals prior to it being raised at the SEC Panel in May 2017.

Any Other Business

There were no further items and the TABASC Chair closed the meeting.

Items for Information

12. Modification Status Report – April 2017

The monthly Modification Status Report was provided to the TABASC for information to update them of the status and progress of Modification Proposals going through the SEC Modification Process.

13. DCC Monthly Performance Measurement Report

The DCC Monthly Performance Measurement Report was, and will continue to be, circulated at each TABASC meeting. The DCC and the TABASC discussed the accuracy of the DCC Monthly Performance Measurement Report in order to understand the issues and identify risks. The TABASC questioned whether there is a need to monitor these to determine if there is anything in the architecture that is driving these failures. However, although the report is concerning, the TABASC should only undertake a Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern and not to actively monitor the operational system. The TABASC questioned who is responsible for ensuring incidents are resolved on time. The TABASC discussed the potential for a service management forum where service management issues could be raised and discussed rather than only bilaterally with the DCC. It was noted that the DCC Monthly Performance Report in relation to the delivery of Communications Hubs are not accurately reflecting what Users are experiencing. The TABASC noted this issue has been flagged in several industry forums but has not been resolved. BEIS noted that if the DCC are not reporting accurately, they are in breach of the SEC or their licence. It was noted that any party can raise this as an incident with the DCC in the usual way. The TABASC determined that they will keep a watching brief through the effectiveness review; however, will not solely use the DCC Monthly Performance Measurement Report other than as a high-level awareness tool. SECAS agreed to raise this item to the SEC Panel to question where they saw service management ownership as per Action Reference TABASC17/04.

Appendix A: TABASC Operational Risks

The following table lists the initial set of TABASC Operational Risks for approval and discussion. 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 or have been amended.

#	There is a risk that ...	Likelihood (1-5)	Impact (1-5)	Severity	Mitigation <i>(Planned actions in italics)</i>	RAG Status
4	The architecture is so complex that it does not support prompt and agile improvements to functionality.	4	4	16	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor Modification Proposals going through the process and assess against the TABASC Principles.</i> 	AMBER
7	The performance of Smart Metering Systems (including Devices, HAN and integration with in-home consumer equipment) result in high volumes of reported incidents that require resolution and affect installation and operations.	4	4	16	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor DCC Performance Measurement Report for Incident Resolution.</i> • <i>The Smart Metering Operational Group (SMOG) is in place to address the performance of Smart Metering Systems.</i> 	AMBER
8	Device performance problems arising from different interpretations of or ambiguities in Smart Metering System specifications affect installation and operations.	5	3	15	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor DCC Performance Measurement Report.</i> • <i>Monitor issues raised through the DCC and the SEC Issues Process.</i> • <i>The Smart Metering Device Assurance (SMDA) is in place to address Device</i> 	AMBER

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#	There is a risk that ...	Likelihood (1-5)	Impact (1-5)	Severity	Mitigation <i>(Planned actions in italics)</i>	RAG Status
					<i>performance problems.</i>	
11	Business process problems arising from the technical architecture (excluding processes to connect to the WAN) take longer and / or require more resources than planned and affect installation rates and affect enduring business operations.	3	4	12	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor issues raised through the DCC and the SEC Issues Process.</i> 	AMBER
15	HAN performance affects business operations and / or impacts consumers (e.g. via IHD performance or by 2.4GHz HAN not delivering the expected 70% of coverage).	4	3	12	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> 	AMBER
2	Incidents & problems reported to the DCC, relating to the architecture, cannot be fixed quickly enough to prevent business operational problems.	3	3	9	<ul style="list-style-type: none"> • <i>Monitor DCC Performance Measurement Report.</i> 	AMBER
9	Difficulties experienced with implementing remote firmware upgrades to meters or communications hubs affect business operations.	3	3	9	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor DCC Performance Measurement Report.</i> • <i>Monitor issues raised through the DCC and the SEC Issues Process.</i> 	AMBER
5	Current protocols are a constraint on the architecture that prevents the adoption of more modern, efficient, and less costly technology.	4	2	8	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor Modification Proposals going through the process and assess against the</i> 	AMBER

#	There is a risk that ...	Likelihood (1-5)	Impact (1-5)	Severity	Mitigation <i>(Planned actions in italics)</i>	RAG Status
					TABASC Principles.	
10	868 MHz performance affects business operations and / or impacts consumers.	2	4	8	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> 	AMBER
13	Processes affect the consumer experience (e.g. higher than expected volumes of consumer contact is needed to complete readings, billing, and changes of circumstances).	2	4	8	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> 	AMBER
6	Technical scalability limitations affect enduring and enhanced business operations.	2	3	6	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor quantity from the DCC Demand Management Report.</i> 	AMBER
12	Inadequate controls in processes and infrastructure prevent Devices from performing as planned e.g. preventing a smooth change of supplier process for consumers.	2	3	6	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> 	AMBER
1	The performance of the DCC technical solution adversely impacts business operations.	2	2	4	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> • <i>Monitor the aggregation report within the DCC Monthly Performance Measurement Report.</i> 	GREEN

#	There is a risk that ...	Likelihood (1-5)	Impact (1-5)	Severity	Mitigation <i>(Planned actions in italics)</i>	RAG Status
3	BCDR design, infrastructure and management doesn't adequately support business operations.	1	4	4	<ul style="list-style-type: none"> • <i>Technical Business and HAN Architecture Effectiveness review to identify areas of concern.</i> • <i>Monitor reports from failover and recovery proofing exercise.</i> 	GREEN
14	The architecture does not support processes for the delivery of elective or smart home services.	1	1	1	<ul style="list-style-type: none"> • <i>Technical, Business and HAN Architecture Effectiveness Review to identify areas of concern.</i> 	GREEN

SEC Panel Risk and Issue Impact Classification (including proposed amendments)

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).

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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.	