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Testing Advisory Group (TAG) Meeting

TAG_51_3001

30 January 2019, 10:30 – 16:30

Final Minutes

Name	Organisation
David Barber	Chair (SECAS)
Rebecca Jones	SECAS
Phillip Twiddy	SECAS
Louise Evans	SECAS
Martin Bell	EDF Energy
Martin Hanley	SSE
Andrew Cameron	Scottish Power
Will Leacock	British Gas
Elias Hanna	L&G (Part Meeting)
Antony Thomas	Npower
Terry Jefferson	EUA
Terry Underwood	Utilitgroup (<i>teleconference</i>)
Adrian Wood	E.ON (<i>teleconference</i>)
Chris Rowell	DCC
Rupal Patel	DCC
Tom Burke	DCC (Part Meeting)
Edward Mace	DCC (Part Meeting)
Nils Lofmark	SIT Auditor (Part meeting)
Anish Shukul	DCC (Part meeting)
James Henton	DCC (Part meeting)
Raj Chandrasekaran	DCC (Part meeting)
Peter Doyle	DCC (Part meeting)
Jackie Wright	BEIS (Part meeting)
Dan Chambers	(BEIS (Part meeting)
Graeme Milligan	BEIS

Robin Cooper	BEIS (Part meeting)
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1. Minutes and Actions Outstanding

All actions were marked as completed or on target for completion with a verbal update provided. A number of open actions were discussed under planned agenda items. The following updates were provided:

The minutes for meeting 49 would be marked final, once action TAG 44/05 was updated.

Action Reference	Update
<p>TAG43/07</p> <p>(SMETS1 Service) DCC to explain how limitations of performance testing can be managed and controls applied to address issues that are identified</p>	<p>An update was provided at meeting 49 although how the limitations would be managed was not addressed.</p> <p>Simulation and monitoring of bandwidth generated by both load injection and processing of messages did not seem an appropriate method to mitigate the lack of testing involving 'interfaces' on an integrated environment. This is being monitored during DSP testing, results for R2.0 showed only 2KB bandwidth for all messaging during I&C tests (heaviest hitting scenario). DCC OAT believe that these results may not have been shared with TAG for R2. SMETS1 will continue to monitor this area, potential solutions are available should this be a cause for concern during execution, i.e. fixed bandwidth injection etc</p> <p>The TAG requested that the DCC advise how well they are monitoring constraints, which dual risks remain and how they are best mitigated going forward.</p> <p>It was noted that this would be picked up as part of the System Capacity Testing Approach Document (SCTAD), but the timings of the SCTAD could not be confirmed in the meeting.</p> <p>Action OPEN</p>
<p>TAG47/03</p> <p>(SMETS2+) DCC to consider whether formal acceptance of defects by manufacturers should be introduced (currently this is inferred if the manufacturer does not reject defects). Discuss outcome with TAG prior to completion of DIT phase 3.</p>	<p>TAG49 – discussed at meeting. DCC will produce categorisation of manufacturer accepted defects and disputed defects.</p> <p>DCC added that it was its intention to adopt the practice, noting that engagement was still needed, or need to be confirmed as currently underway with manufacturers.</p> <p>Additional action required to cover SMETS1 devices (see new action TAG51/01).</p> <p>Action OPEN</p>

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Action Reference	Update
<p>TAG48/01</p> <p>(SMEST1) DCC to set up a meeting outside of the TAG to get TAG view on what is needed for SIT completion.</p>	<p>Discussed at TAG 50. Separate meeting being arranged for early January to identify all timing/governance challenges and set out proposals to TAG and Panel to mitigate these.</p> <p>Meeting held on 3 January. Governance plan prepared and shared with the Panel and TAG Members. Plan will be updated depending on LC13 plan decision and if the expected IOC SIT completion date changes.</p> <p>Action CLOSED</p>
<p>TAG49/01</p> <p>DCC to confirm what sub-GHz testing with PMMID takes place in DIT / SIT</p>	<p>Updates were given on this action under agenda item 7.</p> <p>Action OPEN</p>
<p>TAG49/03</p> <p>DCC to produce SCTAD, TAG to review & identify risks, DCC to set out how these are mitigated</p>	<p>SCTAD is a work in progress.</p> <p>Action OPEN</p>
<p>TAG49/04</p> <p>DCC to document what capacity testing takes place in UIT, when, and how this does not impact users.</p>	<p>Capacity testing will not have any effect on users for IOC, SPs are either standing up their own (non-integrated) test environments or use of UIT-A prior to this environment being integrated with the rest of DCC. Environment planning for any MOC, FOC work needs to be carried out and the position will be confirmed.</p> <p>Action OPEN</p>
<p>TAG49/05</p> <p>DCC not planning to test DUIS1 alongside DUIS2 and DUIS3 - DCC to make clear in SCTAD and how omissions are mitigated.</p>	<p>Update provided at meeting 49.</p> <p>Action ON HOLD (Feb 2019)</p>
<p>TAG49/06</p> <p>BIMI not being capacity tested. DCC to justify – potentially in SCTAD</p>	<p>Still a WIP, DCC seeking BIMI to provide an overview of system performance, currently, there is not an environment available to provide conclusive evidence.</p> <p>SCTAD is a Work in Progress.</p> <p>Action OPEN</p>
<p>TAG49/07</p> <p>DCC - explain continued use of UIT-B.</p>	<p>Update on progress to be provided at the next Meeting.</p> <p>Action OPEN</p>

Action Reference	Update
<p>TAG50/01</p> <p>(DCC) One week of Functional Regression Testing required for testing issues #70795 and #70796.</p>	<p>Updates were given on this action under agenda item 7.</p> <p>Action OPEN</p>
<p>TAG50/02</p> <p>(DCC) to set out further detail of R2.0 DBCH DIT SMETS2v3 testing</p>	<p>Updates were given on this action under agenda item 7.</p> <p>Action OPEN</p>
<p>TAG50/03</p> <p>DCC to contact manufacturers, if necessary, for 868MHz PPMIDs.</p>	<p>Updates were given on this action under agenda item 7.</p> <p>Action OPEN</p>
<p>TAG50/04</p> <p>TAG members to provide further feedback for lessons learnt or confirm support for BG views.</p>	<p>Opportunity given for feedback to be provided. Subject to TAG Member agreement, this action will be closed.</p> <p>Action CLOSED</p>
<p>TAG50/05</p> <p>SECAS to seek clarification of the risk from the TAG member and provide this to DCC to clarify how this is mitigated.</p>	<p>Risk clarified with TAG Member, and is set out below:</p> <p><i>Both SIT and ET are not planned to use migrated data but will have data artificially created. So there is a risk that testing is not performed on 'live' like data.</i></p> <p>SECAS and DCC to discuss how the risk is mitigated and update the TAG.</p> <p>Action OPEN</p>
<p>TAG50/06</p> <p>DCC to confirm plan for using DMCT to supplement SIT to cover the update of firmware</p>	<p>DCC clarified that Device Model Compatibility Testing (DMCT) will be picked up in May. It was explained that the test pack scope had been discussed in principle with many but not all elements of it being automated.</p> <p>DMCT will use the UI-B environment and the design is underway. It was noted that it does not involve testing business scenarios but does cover End-to-End which means a vast majority of scenarios will be covered. The proposed scope will be shared with TAG members at a future meeting, and the regularity elements of DMCT is in the SMETS1 SEC Variation Testing Approach Document (SVTAD).</p> <p>Action OPEN</p>
<p>TAG50/07</p> <p>SECAS to arrange meeting with DCC, BEIS and TAG member(s) to address the timing / governance challenge of progressing from SIT to UTS and identify other similar challenges in the plan.</p>	<p>Meeting held on 3 January. Governance plan prepared and shared with the Panel and TAG Members. Plan will be updated depending on LC13 plan decision and if the expected IOC SIT completion date changes.</p> <p>Action CLOSED</p>

Action Reference	Update
TAG50/08 TAG members to provide comments to DCC on Code Control principles by 11 January 2019.	Opportunity given for feedback to be provided. Subject to TAG Member agreement, this action will be closed. Action CLOSED

ACTION TAG58/01: (SMETS1) DCC to consider whether formal acceptance of defects by manufacturers should be introduced for SMETS1 devices.

Action TAG 58/02: (SMETS1) DCC to action necessary changes to CTSD to recognise which elements are (and are not applicable) to SMETS1 device as part of CTSD updates activities underway.

2. SMETS1 Testing Update

The DCC provided an update on the SMETS1 test documentation which are in development. The next proposed change will be to include the User Testing Service Approach Document (UTSAD) and would soon be sent to BEIS for designation consultation. BEIS noted that due to the required designation timescale activities the UTSAD and other amended test approach documents, (the Common Testing Scenarios Document (CTSD) and Enduring Testing Approach Document (ETAD) may not be designated until close to the commencement of Initial Operating Capability (IOC) User Testing Services in March. The TAG raised concerns around this, particularly in relation to the UTSAD, which sets out the required testing parties need to undertake, and that until designated there was nothing formally requiring parties to undertake or prepare to do testing for the SMETS1 Service Release.

A TAG Member queried whether the Issues Management Resolution Document was going to be updated for SMETS1, as the triage process for issues and defects was unclear, especially HAN defects and the roles with the introduction of new Service Providers. The DCC confirmed that this was the case. In addition, the TAG Member queried progress with updates to the User Guidance on testing to capture the narrative content that had been included in previous release testing approach documents, that did not form part of the SMETS1 suite of approach documents. The TAG member also queried the progress with providing clear mapping and traceability of this content.

An action was captured on the DCC to aid the tracking of progress on these observations, that the Issue Management Resolution document and User Guidance should be added to the SMETS1 test documentation slide for future references.

ACTION TAG51/03: (SMETS1) DCC to identify the difference between DCC run tests and expected user testing to ensure that the any differences are captured, and any associated risk can be mitigated.

ACTION TAG 58/04: (SMETS1) DCC to update Test Documentation tracking table with progress with the Issue Management Resolution Document Use Guidance progress.

The DCC advised that the remaining Dual Control Organisation (DCO) code had been deployed into SIT. However, a TAG Member questioned why the decision to do so had not followed defined processes, such as Test Assurance Board (TAB) agreement, before doing so.

The DCC explained it was a timing issue and that there was not enough time to produce a TAB report prior to deploying the code. In addition, the code needed to be deployed early to resolve and enable a

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number of blocked tests to be completed. The TAG noted the rationale but raised concerns that due to the correct governance route not being followed there was a risk of problems being missed. The DCC noted there were no issues and checks were undertaken to ensure the approach would not give rise to issues. The TAG Chair questioned whether the decision to take this approach had been communicated to TAB Members and observers. The DCC noted that a communication had not occurred and accepted this may have resolved the issue.

It was observed that processes would be updated to ensure clear communication, while noting the TAG assumption that normal due governance would be followed going forward and that this instance should be a one-off occurrence.

3. IOC SIT Auditor Preliminary Opinion

The IOC SIT Auditor provided a preliminary opinion on IOC SIT activities to date, advising that they have spent some time with the DCC and the Data Service Provider (DSP). It was noted that the overall opinion is of such that the process' which the DCC have in place for test traceability are to a good standard. The IOC SIT Auditor noted that they have been able to see the process the whole way through and have seen that all these things are mapped, each of the documents are reviewed and approved by DCC test assurance, and that test defects and resolutions is captured in the DCC testing issues system (ALM) but some cross checking is required to make sure the ALM records reflect the supporting documents while noting that they had been advised that this would happen. The table of testing requirements from the Smart Energy Code (SEC) all have corresponding traceability matrices.

A TAG member asked the auditor whether they had experienced any difficulties in auditing arising from the absence of a SIT Approach Document, to which the auditor responded that the SIT Approach Release Document had been used for the basis of the audit. This led to discussion regarding aspects such as closing issues in HP ALM when passed to the DIRF and whether all categories of issue are adequately addressed by documented processes.

ACTION TAG51/05: (SMETS1) DCC to provide document explaining lifecycle of every category of issue arising from testing, including capturing and closing in HP ALM, handing over to DIRF and resolution of issue.

4. SMETS1 IOC SIT > UTS Governance Approach

This item provided an update on the SIT to User Testing Services (UTS) steps including the dates for scheduled test phase completion and associated governance activities.

The TAG Chair noted that the plan circulated was unchanged from the one presented to the Panel on 11 January and subsequently shared with TAG Members following the Panel meeting. The plan was a 'sunny day' plan and assumed no delays in SIT completion.

The TAG Chair noted that BEIS had raised a question around whether in light of the plan, which had SIT completion governance activities overlapping with UTS activities that the TAG needed to consider a recommendation to the Panel on whether to allow the overlapping of test phases.

If required, the recommendation to overlap would have to be taken to the SEC Panel for approval. The TAG then considered whether they would make such a recommendation.

The TAG highlighted that they had only been sent the request to consider any such overlap only 24 hours before the meeting, due to this they had not had the time to look into the document properly to understand the full implications.

The TAG reiterated observations made throughout current and previous release testing planning activities that overlapping was not acceptable and occurred due to time constraints. The concern over overlapping had been captured in several post release lessons learnt exercises.

With this in mind, and having been requested to give its view, the TAG agreed that they do not support the overlapping of test phases and would not agree to this. The DCC and BEIS advised that they had understood this message loud and clear. BEIS then advised that the DCC would need to take away the feedback received from the TAG and let it inform what they would present at the BEIS run Issue management Forum meeting on 31 January 2019, where the SMETS1 Service release plan would be discussed further, as sign-off of the plan is subject to BEIS governance activities.

5. IOC Device Selection – Consultation Response & Decision

The DCC provided TAG with a verbal update on its consultation response to IOC Device Selection. The DCC noted that the responses to the consultation need to be carefully reviewed and that the subsequent information on firmware that will be provided in May needs to answer questions raised.

A test was run against Device Model Combinations (DMCs) that were no longer in use by the Suppliers, following firmware updates in live, and as a consequence there was low percentage coverage, therefore a response is required regarding this. The DCC highlighted that although IOC has not been as smooth or quick as it should have been, the lessons learnt will mean that this will not be the case for Middle Operating Capability (MOC) and Final Operating capability (FOC).

6. IOC SIT Completion Walkthrough

The DCC provided the TAG with an in-depth overview of the draft IOC SIT phase completion report, advising that this has been sent out so the proposed format and content can be reviewed, and feedback provided to ensure the report meets the needs of the TAG to enable it to form its recommendation to the Panel following the completion of IOC SIT.

The TAG was asked to note that the draft report covered SIT testing up to the end of System Testing (ST) stage 5. The report would then be updated to include the ST6 results once complete.

It was noted that the testing for SMETS1 was following an Agile methodology, and that for SMETS1 testing a number of new terms and language is being used and is reflected in the language seen in the reporting,

The TAG questioned references to descoping of tests. The DCC clarified that at this point no tests have been descoped. If descoping was to be considered, it is subject to a defined process that requires Secretary of State approval before a test can be descoped. The mechanism for the consideration of descoping tests was noted as being set out in the SMETS1 SVTAD.

A page turning of the draft SIT Completion report was undertaken to then enable comments to be raised in relation to specific session.

Executive Summary

The DCC noted that the Executive Summary provides an overview of the completion report. The TAG noted the section and made no comments.

High-Level scope

The DCC explained how the High-Level Scope section summarises the high-level technical scope of the programme and the schedule of the various drops of solution test cycles and code drops associated with those. It was reiterated that the dates for ST stage 6 have 'TBC' in the report and the end of cycle dates are planned for 11-22 February 2019. As a consequence, these elements would be updated on completion of these activities.

The TAG questioned the functionality content of each ST drop and requested for clarity that it is listed within the report, to which the DCC agreed that this would be added.

The TAG observed that a clear reference to undertaking a lessons learnt exercise following each test phase is required. The DCC noted that a lessons learnt paper would be prepared for the next release, with it being a separate document but a link/reference to this will be incorporated into the completion report.

Feedback was given on the SIT exit criteria table (Table 1) and that they should be expanded to disaggregate out tests by specific areas, which would aid the indication of if and where problems occurred.

Questions were raised by the TAG around the testing issues thresholds and whether it was per service provider or one set of thresholds for all service providers. It was clarified that the threshold was per service provider, meaning the numbers per defect severity level was multiplied by 4 in effect. However, it was observed by the DCC that it was expected that the defect levels across all the SPs would be much lower than the defect levels permissible.

Shared Environment

The TAG advised that the section on regression testing (section 3.1) needs to be expanded to provide further detail and clarity on the extent and coverage of regression testing including how the exit criteria for 100% regression tests passed, has been met, A minor typographical error was noted as well, in relation to the incorrect testing environment being referenced.

Test Overview

In addition, the TAG observed that additional content is required to clearly explain what 'Concessions' are and if and how they may lead to descoped tests and if and how they map to defects. Clarity was also requested on the purpose and process involved in the Design Issues Recommendation Forum (DIRF) as concerns were raised that this forum and associated processes had been set up and only defined in the completion report, rather than within test approach documentation. The DCC noted the request but observed the reason why the DIRF was only being captured in the completion report, was due to it being established after the approach documentation was drafted, baselined and in some cases designated.

In addition, it was requested that Table 3, should be updated to show the lifecycle of testing and where concessions have occurred and if required where this has resulted in any descoping. The table of concessions also needs to be expanded to ensure clear traceability of them within the report. A question was raised around the capturing of End of Cycle (EoC) Regression Testing and it was noted that the information would be split out from the Solution Test results and captured with the ST6 TAB report.

The final observation was that table 6 in the report needs to be disaggregated to provide clarity on the tests undertaken to provide confidence that a sufficient range has been undertaken and successfully completed, with DCC Alerts being the example referenced.

Design & Test Authority Statement

TAG observed that in Section 8.3 makes reference to design elements that has not been finalised, and at this stage that this was not acceptable. The TAG stated that they cannot sign off the report and the test phase outcomes when it clearly states that it is still awaiting design.

Other comments

The TAG noted that end of cycle regressions should be reported on, to which the DCC advised that this will be included in the Solution Testing (ST) stage 6 reporting.

It was requested by the DCC that any further comments from the TAG Members could be submitted to the DCC directly by close of play Friday 1 February 2019. This would then enable the comments to be addressed in a revised version for circulation to TAG Member during week commencing 4 February 2019. A further review of the draft completion report would take place at the 27 February 2019 meeting.

ACTION TAG51/06: (SMETS1) DCC to confirm the format and how the narrative content of test approach documents has been captured within the SMETS1 testing User Guidance.

ACTION TAG51/07: (SMETS1) TAG Members to provide any further feedback on the draft IOC SIT completion report by 1 February 2019 to the DCC.

ACTION TAG51/08: (SMETS1) DCC to action initial feedback on the draft IOC SIT completion report for circulation to TAG Members for further review and feedback.

7. Release 2.0 Testing Update

The DCC provided details of a defect that had arisen early in the week, in relation to Meter transmitting within allowable spectrum set out within the Intimate Communications Hub Interface Specification (ICHIS) not being received by the Communications Hub. The DCC indicated that the CSP had accepted the issue but now working on the fix and planning its testing. The DCC sought feedback on the extent of testing, particularly regression testing should be undertaken. The DCC suggested approximately one week, picking up from the point that the defect was encountered. However, for certainty and to ensure the fix works, the TAG recommended that a full three weeks of regression testing should be undertaken. The DCC took this on board and advised that the subsequent timescales for DBCH SIT completion would be affected, including the timings for full DBCH availability. It was also noted that the timescales impact would also impact the timing of the availability of the Fylingdales Communications Hub.

The DCC provided an update on the remaining Release 2.0 testing activities including the Arqiva Dual Band Communications Hub (DBCH) SIT status. It was noted that the Severity 2 defect, #70771

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has been fixed and tested in SIT but a further 2 Severity 2 defects were found, #70795 and #70796, but these have both since been fixed.

The TAG also questioned if there is a defect on the Dual band Gas meter relating to the frequency problem, to which the DCC noted that the manufacturer is considering changes to the firmware, although it is not strictly a defect.

The DCC provided an overview of the test approach for Device Integration Testing (DIT) SMETS2 version 3 testing and DUIS versions combinations that would be undertaken along with the functional areas that would be tested within the combinations. The DCC also outlined the progress with DIT testing and noted that due to defects currently in triage that there is a risk with the WNC Communications Hubs not completing DIT by the current planned timescales.

8. Addressing the NAO Recommendations on Testing

BEIS provided details of the outputs of the National Audit Office (NAO) review of the SMIP, focusing on its views on the type and level of testing undertaking. BEIS noted that the NAO recommended the need to 'commission an expert independent review of testing, focused on determining whether energy suppliers are testing a sufficient cross-section of smart metering set-ups and scenarios to provide reasonable assurance that the SMETS2 system will work as intended for all customers.'

BEIS also set out details of the proposed approach for addressing the NAO findings and recommendations and a plan and timeline for doing this. BEIS outlined the plan to provide a set of questions that would be issued to different stakeholders for feedback to inform the output of the review, which was expected to take the form of a briefing note. The DCC questioned how much effort would be involved in the questions, and whether it could shift focus away from undertaking existing testing activities. BEIS noted that the point of the questions was to not to interrogate or audit what testing the different parties may have or have not done, but instead just to see if it will work as intended.

The TAG having observed the parties that were to be engaged as part of the review, questioned if BEIS had considered involving DNOs, BEIS advised the TAG that they had not planned to involve DNOs as they were of the view they had not done much meter testing, but they agreed to explore the option further.

BEIS also requested support in reviewing the proposed set of questions that would be used to inform the piece of work. TAG Members agreed to share the questions with relevant groups and bodies to assist. In addition, the TAG Chair offered the option to use SECAS to share any proposed questions to TAG members centrally if that would aid coordination of the review of questions.

ACTION TAG51/09: BEIS to share proposed questions to support the NAO testing review work for circulation to TAG Members for feedback.

9. Any Other Business

The TAG Chair informed the TAG Members that this would be the penultimate meeting that he will chair, before moving leaving SECAS at the beginning on March.

An item of AOB raised by the DCC at the beginning of the meeting, regarding undertaking forward planning of future TAG Agenda items and meetings was raised but not covered in detail, The TAG Chair noted that SECAS would engage with the DCC in between TAG meetings to discuss the items that need to be scheduled and planned for discussion over the coming months.

No other items of AOB were raised and the Chair closed the meeting.