

MINUTES

MEETING NAME TECHNICAL ASSURANCE OF METERING EXPERT GROUP

Meeting number	33
Date of meeting	17 January 2018
Venue	ELEXON Ltd
Classification	Public

ATTENDEES AND APOLOGIES

Attendees

Mike Smith	MS	TAMEG Chair
Mohamed Ali Khan	MK	Technical Secretary
Chris Day	CD	ELEXON
George Player	GP	ELEXON
Katharine Higby	KH	ELEXON
Antony Hobbs	AH	Siemens plc
Colin Gentleman	CG	SSE
John Noble	JN	EdF
Nicholas Sawyer	NS	Npower (telephone)
Richard Thompson	RT	EdF
Kevin Walker	KW	E.On
Ron Cook	RC	Industry Expert
Stuart Jackson	SJ	C&C Group (TAA)
Warren Lacey	WL	Norther Powergrid (telephone)

Apologies

Alistair Barnsley	AB	E.On
Bob Dryden	BD	Npower
Calvin MacFarlane	CM	Npower
Dan Rynne	DR	IMServ
Holly Mills	HM	EdF Energy
Paul Gregory	PG	C&C Group (TAA)
Rebecca Gaskill	RG	SSE
Simon Hagan	SH	IMServ

INTRODUCTIONS

1. Apologies

- 1.1 Simon Voyse (Northern Powergrid), Holly Mills (EdF Energy), Bob Dryden (Npower), Rebecca Gaskill (SSE) and Richard Turner (EdF) had given their apologies for not being able to attend the meeting.

MINUTES

ADMINISTRATION

2. Minutes and Actions

- 2.1 The minutes for the [Technical Assurance of Metering Expert Group \(TAMEG\) 32 meeting](#) were approved without amendment within a month of the meeting.

ACTION 30.02

- 2.2 BP agreed to inform the Performance Assurance Board (PAB) of TAMEG's concerns regarding Independent Connection Providers (ICPs) and Independent Distribution Network Operators (IDNOs) obligations and the issues with the adoption process.
- 2.3 BP noted that the issues and concerns around ICP connections were investigated internally. It was deemed to be a large piece of work, beyond the scope of the work that she has been doing with Commissioning.
- 2.4 BP noted that it is a piece of work that needs an in-depth investigation and discussion within the industry. ELEXON noted that it now has this earmarked as a piece of work that will be worked on in due course. It added that if Parties wish for this to be looked into sooner an Issue should be raised.
- 2.5 A TAMEG member noted that the action should remain open as it is pending future investigation.
- 2.6 Action open.

ACTION 30.11

- 2.7 The TAMEG chair agreed to enquire whether ELEXON can voice concerns to PAB on EE Circuit Switch Data (CSD) as the numbers not working anymore.
- 2.8 The TAMEG chair proposed that the action remains open until the conclusion of the Association of Meter Operators (AMO) meeting regarding transfer of metering and change of Agent and communications.
- 2.9 A TAMEG member noted that following the AMO meeting, potential communications issues will need to be reported to the Imbalance Settlement Group (ISG) for Central Volume Allocation (CVA) issues and Supplier Volume Allocation Group (SVG) for Supplier Volume Allocation (SVA) issues.
- 2.10 **Post meeting note:** Original action was actually to do with EE proposing to migrate their voice and CSD numbers into one number and whether ELEXON should voice concerns to the ISG and the SVG. EE are no longer doing this so this action is closed. If TAMEG wish to raise another action regarding wider communications issues, that the AMO are discussing, then a TAMEG member can raise this at a future TAMEG meeting.
- 2.11 Action closed.

ACTION 30.12

- 2.12 ELEXON agreed to report concerns of BNOs to PAB as energisation not being appropriate for Settlement due to the lack of general knowledge.
- 2.13 BP noted that the issues and concerns around BNO connections were investigated internally. It was deemed to be a large piece of work beyond the scope of the work that she has been doing with Commissioning.
- 2.14 BP noted that it is a piece of work that needs an in-depth investigation and discussion within the industry. ELEXON noted that it now has this earmarked as a piece of work that will be worked on in due course. It added that if Parties wish for this to be looked into sooner an Issue should be raised.

MINUTES

2.15

2.16 The TAMEG chair asked if the action should be closed. TAMEG members noted that it should remain open as it is pending future investigation.

2.17 Action open.

ACTION 31.02

2.18 KH agreed to investigate outstanding non-compliances for CT/VTs in the DNO areas to compare it with RCs CT/VT data and the National Measurement Transformer Error Statement (NMTES) to see what is missing.

2.19 No data yet received from RC.

2.20 RC commented that sufficient knowledge to be able to investigate the Metering Equipment on site vs the generic statement will also be required to rectify non-compliances, rather than just the generic statement itself.

2.21 Action open.

ACTION 31.03

2.22 ELEXON agreed to take a paper to the SVG to add RC's data to the NMTES so the related CT/VT non-compliances can be cleared.

2.23 See Agenda item 14. Action open.

ACTION 32.01

2.24 MS agreed that ELEXON will speak to DNOs to ask them to check their de-energised HV sites and advise DNOs to amend the energisation statuses of sites if they are identified as being incorrect so they can be included in the Technical Assurance Agent (TAA) main sample for audit purposes.

2.25 See Agenda item 7. Following Agenda item 7 MS agreed to re-ask LDSOs/IDNOs to ensure the information they provided regarding their view of the energisation status of their MPANs has come from their own network operational system.

2.26 Action open.

ACTION 32.02

2.27 MS noted all the issues and concerns raised by a TAMEG member regarding compliance certificates and agreed to set up a working group to discuss the issues in more detail to add new requirements to BSCP601.

2.28 The TAMEG chair noted that the action will remain open until a working group is established.

2.29 Action open.

ACTION 32.03

2.30 SJ agreed to investigate the request of the Aggregation Rule from the Registrant and CDCA and noted that it may involve raising a change to the TAA Local Working Instructions (LWI).

MINUTES

- 2.31 The TAA noted that it will discuss this issue with ELEXON at the Service Improvement meeting on 31 January 2018.
- 2.32 Action open.

ACTION 32.04

- 2.33 SJ agreed to look into the miscellaneous category 2.13 non-compliances individually, to establish whether there are any commonalities and group them accordingly.
- 2.34 See Agenda item 9.
- 2.35 Action closed.

ACTION 32.05

- 2.36 KH agreed to update the LWI to keep the process of creating the "Outstanding Category 1 Non-Compliance" report as it is and omit the rectified non-compliances from discussion in the TAMEG meeting. KH added that the report will also reflect the new escalation process once it has been agreed and implemented.
- 2.37 KH confirmed that this has been completed.
- 2.38 Action closed.

ACTION 32.06

- 2.39 KH agreed to notify Beth Brown (BB) at ELEXON about non-compliances identified by more than one Performance Assurance Technique (PAT), e.g. Category 1 (Cat 1) Non Compliances (NCs) identified through the Technical Assurance of Metering (TAM) process and associated Trading Disputes raised.
- 2.40 KH noted that BB was informed about TAMEG's question on 19 December 2017. KH noted that BB informed her that TAMEG's views will be passed on as a suggestion for improvement in the Trading Disputes PAT.
- 2.41 Action closed.

ACTION 32.07

- 2.42 SJ agreed to take the points from the discussion on "Re-classifying Category 1 Non-Compliances" away, add the extra steps to the diagram and circulate the updated diagram to TAMEG members.
- 2.43 See Agenda item 8.
- 2.44 Under agenda item 8 SJ noted that further amendments will be made to the diagram and it will be circulated to TAMEG via email.
- 2.45 Action open.

ACTION 32.08

- 2.46 MS agreed to ask ELEXON to instruct the TAA to accept MOCOPA labels.

MINUTES

- 2.47 The TAMEG chair noted that the TAA informed it that MOCOPA labels are not always accurate. TAMEG members noted that only the Serial Number (MSN) might be incorrect and would have no impact on Settlement accuracy.
- 2.48 TAMEG members noted that it would like ELEXON and the TAA to find examples of incorrect MOCOPA labels and report findings to TAMEG for discussion. KH agreed to discuss a trial period of checking MOCOPA labels with the TAA and draft potential wording in the TAA LWI ahead of the next meeting.
- 2.49 The TAMEG chair noted that following the discussion on MOCOPA labels at TAMEG's next meeting a paper will need to go to PAB to approve the use of MOCOPA labels.
- 2.50 Action open.

ACTION 32.09

- 2.51 ELEXON agreed to investigate the proposal to change the Meter class accuracy requirement for CoP5 to class 1.0 and discuss the solution in the certificates working group (which has been proposed to assist with not having to present certificates to the TAA when it calculates and ensures overall accuracy is maintained).
- 2.52 TAMEG members noted that non-compliances for historic sites need to be addressed. ELEXON noted that the working group will discuss how historic non-compliances should be addressed and how to prevent new non-compliances from occurring.
- 2.53 Action closed.

ACTION 32.10

- 2.54 MS agreed to investigate what LDSOs and transmission companies currently specify for the rated burdens for CT/VTs for metering, so ELEXON can provide guidance to parties going forward.
- 2.55 The TAMEG chair noted that the investigation is on-going.
- 2.56 Action open.

ACTION 32.11

- 2.57 KH agreed to take note of the discussion and modify the Category 1 Escalation process with the suggestions made and speak to the Error and Failure Resolution (EFR) analyst to investigate whether the parties with outstanding Cat 1 NCs need to be put into EFR.
- 2.58 TAMEG members noted that the Balancing and Settlement Code (BSC) already allows EFR to be turned on for parties with outstanding Cat 1 NCs and can be utilised in the TAM technique. ELEXON noted that a paper will need to be taken to the PAB for approval to use the EFR technique.
- 2.59 Action open.

ACTION 32.12

- 2.60 MS agreed to circulate the slides related to TAM from the SVA forum, once they have been approved.
- 2.61 MS circulated the slides to TAMEG Members on 20 November 2017.
- 2.62 Action closed.

MINUTES

3. Non-compliance stats report

- 3.1 KH presented the non-compliance stats report to the TAMEG.
- 3.2 A TAMEG member asked when ELEXON started checking Parties for incorrect Aggregation Rules. ELEXON noted that it starting check Parties in 2013. It added that this was following an audit of CVA Aggregation Rules which took place in 2011/2012 and found about 60 NCs where some were material and some were not.
- 3.3 A TAMEG member asked why three incorrect Aggregation Rules have not been identified. ELEXON acknowledged the comment and informed the TAMEG member that they are aware of cases where the Central Data Collection Agent (CDCA) has not provided all the Aggregation Rules associated with a Metering System Identifier (MSID) and would have to look at other BM Units that utilise the same Metering System (e.g. where there are separate Import and Export BM Units for a circuit where the Import and Export Metering Systems share the same MSID). ELEXON added that where the TAA has been sent an Aggregation Rule for an Export (only) BM Unit but with no Import Measurement Quantity, the TAA has gone back to CDCA for further information in those instances. ELEXON added that there are also scenarios where you can have different MSID's with different Parties responsible for the Import and Export BM Units. A TAMEG Member responded by agreeing that they believe it's a positive action that checks are being completed because it eliminates the potential for other things to go wrong. A TAMEG Member asked ELEXON if there is allowance for having MPANs and MSIDs, ELEXON responded that the TAA selects a Metering System to investigate and will only look at that MSID (or MPAN). ELEXON added that the ELEXON BM Unit registration team makes a habit of asking for any MPANs associated with supplies to a newly registered CVA site. A TAMEG Member asked ELEXON if they can request the team to carry this out on a regular basis. ELEXON assured the TAMEG Member that it is already carried out in order to maximise efficiency. The TAMEG Member acknowledged this notion and stated that they believe this helps in many ways and that this process is coming along progressively. A TAMEG Member mentioned that they believe the numbers in the report are fine.
- 3.4 A TAMEG Member asked if ELEXON know the identities of the parties that contribute to the no access figures. ELEXON noted that it is not the same party.
- 3.5 A TAMEG Member referred back to the Aggregation Rules and questioned that three were raised this year and that Aggregation Rules have no Import and staff are not able to explain why. The TAMEG Member added that the system failed to load auxiliary loads and that the last Aggregation Rule does not account for embedded customers. A TAMEG Member added that these visits should have ended in Disputes. ELEXON responded that the assumption (as to why these have not ended up as Disputes) is that the customer is buying electricity from the network owner/landlord and their individual supplies are not traded therefore their supplies don't need to be differenced off the network owner's/landlord's Boundary Point Metering System.
- 3.6 A TAMEG Member asked for clarification regarding unmetered supplies from ELEXON. ELEXON responded that this is was an issue particularly at wind farms . A TAMEG Member responded that this was not the requirement for wind farms and stated that later on in the agenda this will come up again. The TAMEG Member added that there are early offshore wind farms which don't have low voltage meters. ELEXON responded by stating that this might be an onshore issue. A TAMEG Member responded that this discussion needs to be revisited later on this agenda.

4. Outstanding category 1 non-compliance report

- 4.1 KH presented the outstanding Cat 1 NC report.

MINUTES

- 4.2 ELEXON asked SJ if any inspections have occurred at the site with the de-energised supply which is still outstanding. A TAMEG Member responded that they had spoken to a colleague regarding this, about a particular Supplier who had a situation similar to this, who was becoming irritated that this issue had not been fixed. SJ added that the customer has called off a site visit inspection due to weather restrictions. SJ reassured the TAMEG that the site visit had taken place afterwards and was speaking to the TAA auditor to finalise a resolution but at this current moment in time the TAA is awaiting confirmation and the report will be updated to reflect this.
- 4.3 ELEXON noted that TAMEG should move its focus from the long outstanding non-compliances with no material impact to newer non-compliances that do have a material impact. A TAMEG Member noted that TAMEG should not move its focus as the long outstanding non-compliances are yet to be resolved.
- 4.4 A TAMEG Member asked for an update on the CT issue that has been outstanding for 49 days. ELEXON noted that the Trading Disputes team are chasing the Supplier to get the complex site status changed and then will backdate the complex site aggregation rule for Settlement Data.
- 4.5 A TAMEG Member asked ELEXON if Suppliers are chased regularly for updates on the long outstanding non-compliant sites. SJ noted that Suppliers are chased once a week for updates.
- 4.6 A TAMEG member noted that the NCs should be resolved if Suppliers are being chased once a week and suggested reviewing the escalation process as non-compliances may be fixed quicker if PAB focused some attention on the issue.
- 4.7 ELEXON noted that the TAMEG could request that PAB writes a letter to the Suppliers in question asking them for regular updates on the outstanding non-compliances. A TAMEG Member noted that after a set number of days, the Trading Dispute team should try to get engagement from the Supplier/Registrant and if they do not, the Supplier/Registrant should be informed that the PAB could be notified of the issue. It added that it will be effective as Suppliers/Registrants do not want to be in EFR. ELEXON noted that it will take a paper to PAB notifying it of the current process and asking if PAB believes EFR would be beneficial for these Suppliers/Registrants.

Action KH: 33:01

- 4.8 A TAMEG Member referenced two queries about the slides and asked for clarification and distinction between the two as they both had the same NC description. ELEXON responded that the Meters are different and that they were changed after the site visit was completed. A TAMEG Member asked if there is any difference in the NCs stated. ELEXON responded that one query is in relation to an Outstation clock drift and the other is in reference to a Meter programmed incorrectly. A TAMEG Member added to this and assured the TAMEG that they believe that the Meter was due to be exchanged but had not been exchanged but that has not caused the NC. A TAMEG Member responded that this query has been resolved but the comments need to be updated to reflect this.

5. Trading Disputes Report

- 5.1 KH presented the Trading Disputes report. ELEXON asked TAMEG if it had any comments or concerns in regards to the Trading Disputes report.
- 5.2 A TAMEG Member noted that there are three Disputes relating to unregistered Metering Systems and asked ELEXON for information on a Dispute which was estimated at £500,000. ELEXON noted that the materiality of the CVA Disputes are yet to be determined.

MINUTES

- 5.3 A TAMEG Member asked for clarification on four Disputes which were associated with National Grid. ELEXON noted that the four Disputes were raised separately and presented as one paper to the Trading Disputes Committee (TDC).
- 5.4 A TAMEG Member asked if there was a discussion on lessons learnt from faulty Meters. ELEXON responded that there was confidential information which had to go back to the TDC but asked the TAMEG Member if they want ELEXON to identify this as they can have discussions with the manufacturer and receive more clarity around this. ELEXON stated that any information regarding specific parties or Meter Manufacturers could not be shared as it is confidential. A TAMEG Member responded that some of these issues can be used as learning points and stated that there may be other Party's which are experiencing similar problems. The TAMEG Member asked if there is a forum where this kind of information can be shared. ELEXON responded that the CVA Meter Operator forum have a specific item on their agenda (Equipment Experience). The TAMEG Member responded that this can be discussed as a specific item on the agenda.
- 5.5 ELEXON noted that there used to be a Supplier Agent forum a few years ago where issues like faulty Meters could be discussed. The TAMEG Member responded that they had tried to facilitate this through the PAB. A TAMEG Member stated that they believe there is the lack of monitoring of the actual Metering Equipment. The TAMEG Member added that there is an assumption once the Metering Equipment is installed that everything will work correctly but this is not the case. The TAMEG Member added that there should be a discussion on when it becomes a problem and not necessarily how to fix it. ELEXON mentioned that [BSCP601](#) has a process whereby Metering Equipment compliance can be raised as an issue which could ultimately lead to the compliance certificate being removed by the BSC Panel and the Metering Equipment type removed from the [CoP Compliance and Protocol Approval list](#).
- 5.6 ELEXON asked the TAMEG if there should be ongoing monitoring of the installed Metering Equipment. A TAMEG Member responded that they have no choice as the industry must take action otherwise Meter types prone to certain faults will continuously be used. ELEXON informed the TAMEG that when it looked at the CoP Compliance and Protocol Approval list, there were at least seven different Meter types that could be used instead. A TAMEG Member responded that the industry needs Meters that are reliable apart from the commercial side of things. A TAMEG Member added that the range of Meters is a CVA issue rather than an SVA issue and added that there is a meeting commencing first week of February which is where this discussion should be continued. In reference to how to make more Meter types available ELEXON responded that the BSCP601 compliance testing application process requires manufacturers to pay for testing and for ELEXON review the report. If all the tests pass a certificate is issued to the applicant (manufacturer usually) and the [CoP Compliance and Protocol Approval list](#) is updated to inform the industry. ELEXON further added that the only way to reduce costs in this regards is to get the industry to pay for the testing. A TAMEG Member responded in agreement and stated that something like this needs to happen as opportunities are limited.
- 5.7 A TAMEG Member added that for the issue of lack of availability, there should be a meeting to discuss costs and present solutions to monitor them to ensure they do not start failing. ELEXON asked the TAMEG if they should, for example, issue a certificate of compliance for 10 years and ask the applicant if they are only going to produce/sell products for another few years towards the end of that 10 year period. A TAMEG Member responded that the software is also changing constantly. ELEXON responded that BSCP601 requires applicant to notify ELEXON of the changes to software/hardware and explain their impact on continued compliance and protocol approval. A TAMEG Member asked ELEXON for clarification if they are suggesting any change means going through compliance testing again. ELEXON noted that manufacturers can self-declare that changes to software/hardware do not impact continued compliance or protocol approval. A TAMEG Member stated that there needs to be a robust outlook on technology. The TAMEG Member added that having a CVA forum once a year is insufficient to provide much valuable help. A TAMEG Member responded that there is no evidence to

MINUTES

suggest this is a problem which is not being dealt with by the industry. ELEXON responded that if the concern is regarding the Metering Equipment quality then this needs to go to the Panel or Panel committees.

6. HHMOA to carry laptops to site (verbal)

- 6.1 KH gave an update on Half Hourly Meter Operator Agents (HHMOAs) carrying laptops to site.
- 6.2 ELEXON informed the TAMEG that where it is possible, the HHMOA's should take their laptops to site visits and this is reflected in the redlined guidance notes for awareness. ELEXON added that this is assist with the identification of phase failures and to find out if a D0001 flow was originally sent. A TAMEG Member asked the basis of this requirement. ELEXON responded that this is not an obligation within BSCP27 but it is something that has been highlighted that can assist the TAA with site visits. The TAMEG Member asked for clarification on whether not attending a site visit with a laptop would lead to a non-compliance if it is not a requirement. ELEXON responded that it is purely guidance and not an obligation within BSCP27. The TAMEG Member asked how carrying a laptop would assist with finding out if a D0001 was sent to indicate phase failure. ELEXON responded that this was something suggested at a TAA Operational meeting and advised the TAMEG Member it could assist in identifying when the phase failure first occurred. The TAMEG Member responded that this should be present on Half Hourly data due to the collection of historical data.
- 6.3 A TAMEG Member stated that they don't understand why this item was added to the guidance. ELEXON responded that the TAA contact is not present to explain their point of view regarding this but reassured the TAMEG Member that if they feel this item has no value then there is no need for the addition to the guidance. The TAMEG Member responded and informed ELEXON they find this odd that it has been raised as a problem and commented that no auditors asked them to take their laptops to site.
- 6.4 A TAMEG Member mentioned that the Data Collector (DC) is meant to be identifying phase failures and added that if the question is when this began then this needs to be relayed back to the DC. ELEXON asked the TAMEG if there is no value to this item. A TAMEG Member responded that they do not understand why this has suddenly become an issue and there is a need to speak to the TAA contact. ELEXON asked the TAMEG in regards to the issue they are trying to solve if it is phase failures and when it occurred or if there is a phase failure and why they were not aware of it. SJ responded that they need to ask that question to the MOA and not the person who is on site. ELEXON responded and advised the TAMEG Member that ELEXON and SJ need to go back to the TAA contact and clarify the issue.

Action KH/SJ: 33:02

7. De-energised HV premises

- 7.1 MS gave an update on de-energised high voltage (HV) premises.
- 7.2 ELEXON informed the TAMEG that they had received a list of contacts from the Settlement Operations team for LDSOs and IDNOs and asked them what the actual energisation status was for de-energised HV sites. ELEXON added that they didn't have many LDSO's who confirmed there were problems but one did suggest they had 158 as de-energised in ECOES but 148 were actually de-energised. ELEXON further added that there is a project to look at de-energisation records. There were a total of six MPANs where it received responses on an inconsistency, but it did not receive responses from a number of LDSOs. ELEXON asked the TAMEG what they would like to do about this. A TAMEG Member responded in reference to the slide presented and confirmed they had spoken to an LDSO and the issue was described differently. ELEXON acknowledged the comment made and informed the TAMEG Member that they do not always receive what they ask for. A TAMEG Member stated that the interpretation was in regards to looking at the Supplier's record and comparing it to what the Supplier had asked for and added that it will be better to look at network records and compare those to registration records which will be a more robust process.

MINUTES

- 7.3 A TAMEG Member asked what was found in the results and if there were any discrepancies. A TAMEG member added that they think there is a clear problem as the energisation status is updated by the Supplier and not the distributor. The TAMEG Member further added that the only way to know is by looking at network records instead of referring to ECOES. A TAMEG Member added that if there are any discrepancies then they need to physically go out and confirm that. ELEXON responded that on the basis of quality and reliable information received, they could raise this as a TAPAP check for the future to see if people have processes to match what their network system illustrates. A TAMEG Member stated that some LDSOs are getting actual data from sites which are supposed to be de-energised which illustrates that there is a problem.
- 7.4 ELEXON asked the TAMEG Member how the DNO notifies the Supplier when de-energising sites. The TAMEG Member responded that the data flow comes through and informs the recipient that it has been completed or failed along with a failure code which goes back to the Supplier. A TAMEG Member added to this statement and stated that this is a rare occurrence and they suspect the process is being followed correctly in the majority of cases. ELEXON responded that there is a concern with too many people reporting back through different streams. The TAMEG Member responded that referring to the network records is valid and added that they do not know if a TAPAP check would be helpful. ELEXON responded that if there are timescales associated with this then a TAPAP check is something that needs to be completed. A TAMEG Member responded that the numbers appear very low which shows that there is no justification for this.
- 7.5 A TAMEG Member asked ELEXON how many had responded. ELEXON referred to the list and responded that they chased everyone who did not respond at least twice. A TAMEG Member asked for clarification if a TAPAP check would help. ELEXON responded that they do not know what the current level of TAPAP checks which have already been planned are or are in the process of being planned. ELEXON added that they cannot confirm any benefits but it is an idea for the future. ELEXON asked the TAMEG if they would like ELEXON to keep the action open until they receive definitive numbers of those who have not responded. A TAMEG Member advised that it might be of benefit to speak to BSC Auditor regarding this. ELEXON responded that they will check the BSC Auditor.

Action KH: 33:03

8. Revised Category 1 Non-Compliance Classification (Action 32.07)

- 8.1 KH presented the revised Category 1 non-compliance classifications.
- 8.2 A TAMEG Member referenced the slide presented and mentioned that the previous action in the last TAMEG meeting was to amend the diagram. A TAMEG Member commented that the addition is the right hand box and that there was a discussion about putting in an extra step. The TAMEG Member added, by referencing the colour schemes which highlighted non-compliance and planned status, that there is a disconnection between the two.
- 8.3 A TAMEG Member asked for clarification around the boxes from the slides that appear to be identical but still asking different questions. A TAMEG Member responded that Stage 1 was a party putting a plan in the system to address the problem and if the TAA thinks the plan is acceptable then the next stage would be to finalise and complete the plan. The TAMEG Member also added that the party in question must provide evidence of the plan being completed. A TAMEG Member questioned whether this was illustrated in a clear manner. A TAMEG Member responded by stating that the box at the top illustrates that the party must submit a draft plan, the plan is then rectified and then the review of the plan takes place which is either deemed acceptable or not. A TAMEG Member recommended revising the plan that is already in place but questioned the accuracy of the lines which were populated. The TAMEG Member asked if the right hand line

MINUTES

should go towards the rectification plan. SJ acknowledged the comment and informed that they can amend the lines.

- 8.4 ELEXON asked for clarification on the reasoning for splitting out commissioning evidence. SJ responded that they receive evidence from the MOA that the problem has been fixed but mentioned that part of the rectification process is that the MOA must carry out re-commissioning. SJ also added that they are receiving evidence of the problem being fixed but not receiving evidence of re-commissioning. ELEXON responded to this comment and questioned if this is the case then evidence has not been provided. SJ informed ELEXON that this is why they have shown the boxes to be separated. SJ added that the commissioning evidence is the last part of this process and added that the number of outstanding NCs was due to the lack of evidence provided, which is why the extra step was incorporated. ELEXON responded to this comment and questioned the accuracy of the word 'Resolved' which is causing confusion. ELEXON stated that the query is not resolved until the appropriate evidence has been provided. A TAMEG Member added to this and stated that if the evidence has not been provided then it will still need to go through the review stage. A TAMEG Member stated that where re-commissioning of a Metering System post Meter change is required then this could be added as part of the rectification plan. If the plan did not include this step then it would have to be rejected. SJ noted that ninety percent of the time he is chasing for commissioning records.
- 8.5 A TAMEG Member asked for clarification referencing a green box from the slides as the status 'resolved pending Commissioning information' assumed that the problem had been fixed. ELEXON added that this may be due to the wording. SJ responded that it illustrates an action for review. ELEXON advised that they can add an extra step separating out instance of when the TAA needs to receive Commissioning information as part of the rectification plan and when it does not. ELEXON added to this by stating that saying the non-compliance has been fully rectified without the commissioning record is inaccurate as receipt of the commissioning records should be included in the rectification plan. A TAMEG Member asked if this relates to the other outstanding Cat 1 NCs where ELEXON are awaiting Commissioning records. ELEXON agreed and noted that this is the case. ELEXON added that using the word 'resolved' is causing confusion and informed the TAMEG what the diagram is trying to identify is that resolution is dependent on Commissioning records.
- 8.6 ELEXON noted that there is a danger of using the phrase 'resolved pending Commissioning records' as it assumes that the Meter is working fine and that the need for Commissioning records is vital to ensure the closure and resolution of a query. A TAMEG Member agreed with ELEXON's comment and advised to change the phrase to 'work completed'. A TAMEG Member added that the word 'resolved' should be left out completely but advised to change the wording on the other column to 'rectified'. ELEXON stated that this essentially has the same meaning. The TAMEG Member responded that they are looking to change the Cat 1 to Cat 2 and that it is imperative to get the wording right. ELEXON advised to change the phrase to 'all actions completed apart from' and noted that this could limit confusion. ELEXON asked the TAMEG, aside from these two amendments, if they are happy with the changes. A TAMEG Member responded that a decision box needs to be added above the box which states 'Commissioning evidence submitted by a Party'. A TAMEG Member added that the decision box should state 'Commissioning required' and that this is covered at an early stage. ELEXON asked the TAMEG if they are happy with these changes to send the diagram which they will review. SJ responded to agree on the action of changing the word 'resolved' and asked if they would like the word 'compliant' added. A TAMEG Member asked if it is compliant if there is a Cat 2 as well. ELEXON responded that this would require the wording to be changed to 'rectified' and want to be clear regarding this. ELEXON advised to continue this by email and for everyone to send their comments.

Action SJ/KH: 33:04

9. Category 2.13 Non-Compliances (Action 32.04)

MINUTES

- 9.1 KH gave an update on Category 2.13 non-compliances.
- 9.2 ELEXON noted that SJ had put the list together on the NCs. The TAMEG Member stated that the NCs are grouped in a specific way which illustrates there are many NCs which are similar to one another. A TAMEG Member questioned that there are a number of Aggregation Rule NCs and questioned if they should be categorised as Cat 1's. A TAMEG Member responded to this and noted that the Aggregation Rule shows no import which highlights a Cat 1. The TAMEG Member responded that it is difficult to tell from the detail available but noted that this seems incorrect.
- 9.3 ELEXON asked a TAMEG Member if they could expand on this point and noted that if the Line Loss Factors (LLF's) for Import and Export appear to be different, the TAA would not have knowledge on that. ELEXON further added that the BSC states LLFs should be applied before combining measured quantities. A TAMEG Member noted that looking at the information on the slides, it suggests that some of the classifications should change to Cat 1's but with the Aggregation Rule there are a lot of them. ELEXON added that there is not enough detail behind this and the question regarding the grouping is should they be put into their own NC category.
- 9.4 A TAMEG Member added that several other questions spring to mind such as is the battery life linked to the life of a Meter as battery alarms can be different on each Meter type. For example, a battery alarm on one Meter might indicate 'battery low' and on another Meter the battery alarm might indicate 'battery dying'. The TAMEG Member asked for the opinions of what they think in regards to the alarms. The TAMEG Member added that this is showing that these have not been reported or not being raised by the MOA or the MOA is not fixing these issues. The TAMEG Member further added that the TAA are raising these but asked what the TAA is expecting. ELEXON added that it is more likely the Meter will be replaced rather than the battery being replaced and added that most batteries have a 'shelf life' of ten years (assuming they are not used). ELEXON also asked whether a notification is sent if the battery dies. A TAMEG Member responded that they should know fairly quickly when this occurs. ELEXON responded that the CoP simply states to provide the alarm of the battery status and asked the TAMEG if they would like to see these logged in a different way. A TAMEG Member stated that it is misleading if this was a timing issue and noted that the reason for the battery flag was to illuminate the battery being low on power. ELEXON asked if they need to separate these issues into separate categories.
- 9.5 ELEXON noted that the underlying question is if the TAMEG want to see separate categories or will the phrase 'miscellaneous' suffice. A TAMEG Member responded that they believe there are some NCs which should have specific categories associated to them. A TAMEG Member responded that this raises questions on these scenarios whether or not they are separate risks which fall under Cat 2 and asked if the communication port not being sealed is a risk to Settlement data. ELEXON responded that this represents a small risk if it limits access to the Meter if someone disconnects the communications. The TAMEG Member responded that if the communications are disconnected and are not reconnected then it would not become a major issue to Settlement data. A TAMEG Member disagreed and stated that this would represent a risk and would require a site visit. The TAMEG Member added that if a MOA was given a NC for a communications port not being sealed then at the time of an audit they would most likely seal it before they leave site. ELEXON responded that an Observation NC is something that cannot impact Settlement which would not result in this being a Cat 1. A TAMEG Member agreed with this statement and noted that whether it's has a potential to affect Settlement or not, they would regard this as an Observation.
- 9.6 A TAMEG Member asked where the current list of all the NCs was held. ELEXON noted that it was held in the categories of non-compliance guidance note. ELEXON noted that the communications port seals needs to be security seal. A TAMEG Member asked whether a more generic term should be applied for sealing issues. ELEXON advised the TAMEG to focus on the question and asked if they would like these to be separated.

MINUTES

- 9.7 A TAMEG Member stated that there seemed to be a lot of reference towards compensation and asked if this was covered by the Code. A TAMEG Member responded that the overall accuracy of sites in regards to compensation is good. ELEXON noted that there should not be any materiality for a Cat 2 but asked if there is a potential due to no one working out the accuracy. A TAMEG Member noted that the Meter was installed a while ago and mentioned that people leave companies and the paperwork for jobs disappears but also mentioned that overall accuracy cannot always be proven with the paperwork. It does not mean that the site has not been Commissioned. A TAMEG Member added that if there is no evidence to back the compensation applied then the evidence will be the Meter, CT and VT certificates. A TAMEG Member noted that applying generic compensation figures is not accepted but at the time they were installed and fitted, this is what the Party used to rely on. A TAMEG Member stated that Meters have changed over time but the errors can be copied across to the new Meters which are being installed. The TAMEG Member added that if you have access to old paperwork then you can cross reference the two due to the information still being valid. The TAMEG Member further added that for practical reasons this is not the correct process but noted a lot of Suppliers carry out compensation. A TAMEG Member added that in theory there are less accurate Meters than there used to be. A TAMEG Member dismissed this point as low priority and added that this problem will disappear but the previous ones, highlighted on the list, represent a bigger problem and indicate the Metering Equipment is on the wrong side of the power transformer. A TAMEG Member responded that if there is no Metering Dispensation then this is incorrect.
- 9.8 A TAMEG Member referenced a row from the list on the slides presented and asked if these should be classified as Cat 1's. ELEXON responded that this is dependent on whether or not it is compensated for losses and accuracy maintained. The TAMEG Member responded that a Metering Dispensation is a required for this. ELEXON responded and noted that the Meters are on the LV side and asked where the Metering Dispensation is. The TAMEG Member responded that there are not enough details available in order to make a clear judgement.

10. Establishing need for Metering Dispensations (AMP not a DMP) without SLD

- 10.1 SJ and CD presented the need for Metering Dispensations without SLD agenda item.
- 10.2 A TAMEG Member questioned if there is any way of establishing the Defined Metering Point (DMP) without a single line diagram (SLD). A TAMEG Member responded that they believe an obligation can be added to define where the DMP is. A TAMEG Member advised that the focus is to be able to identify the Metering Equipment that is relevant to the MSID that is being audited. A TAMEG Member asked in an embedded network where the full Settlement option is being utilised, how to distinguish this has been applied from a MOP's perspective. ELEXON responded and advised that where a Metering System is installed on an embedded site (not full Settlement option) it should be registered with an MTC of 999 to make it identifiable. ELEXON asked what if there are other customer's Meters below the DMP. A TAMEG Member responded that if there are different Actual Metering Points (AMPs) embedded within a private network then it would need to be the same MOA on that specific site. ELEXON responded for CVA site audits that they get the SLD off the Registrant and confirmation if there are embedded customer sites. ELEXON added that they do not believe there is anything in the Codes of Practice which stipulates you must provide a

MINUTES

diagram (but there is a question in BSCP15/4.1 'Registration of BM Unit' form¹) but noted that as a result of the Aggregation Rule review the TAA now ask for an SLD as part of a CVA site audit. ELEXON added that this can be tied into other Metering Systems.

- 10.3 A TAMEG Member asked if there is a requirement in a TAA CVA audit to provide an Aggregation Rule and SLD and whether not providing this would be NC. ELEXON advised that they believe this to be in the guidance rather than in a BSC Procedure (BSCP). A TAMEG Member asked whether it would be appropriate to ask for an SLD for site audits undertaken at complex HV SVA sites. A TAMEG Member added to this and noted that they do not want to generate something that is not needed. A TAMEG Member asked that, using these examples, should metering be on low voltage (LV) side or HV side. A TAMEG Member responded that the DMP needs to be clear as this could cause confusion. ELEXON asked if LDSOs could receive guidance to remind them to provide this and asked if this should sit with the TAA. ELEXON asked if they should allow the LDSO to provide SLD for HV SVA sites in the guidance notes so that they can get some information to establish the point of connection to the Distribution System (i.e. the DMP for embedded generators and customers). A TAMEG Member responded and advised to request it but to not make this a NC otherwise this will result in multiple cases.

11. Changes to the Technical Assurance of Metering (TAM) Service

- 11.1 KH gave an update on the changes to the TAM service.
- 11.2 ELEXON noted that it took this paper to the PAB regarding the scope of the TAA audit. ELEXON noted that they had extended the contract with the TAA for two years and informed the PAB that there will be additional services commencing in August this year and that there will be fifteen audits for trials. A TAMEG Member responded in agreement and noted that this discussion took place in December last year.
- 11.3 The TAMEG Member asked if one of the audits will include a Grid Supply Point and also asked if they would incorporate all Metering Systems at a site rather than selecting specific MSIDs at a site visit. The TAMEG Member added that when the TAA looks at Metering Systems with four feeders does the TAA test the four feeders. ELEXON responded that the currently TAA selects the MSID and selects one of the circuits (if they are many under the same MSID) and that this was an additional step to capture all circuits under an MSID. A TAMEG Member asked whether geographical consideration would be taken into account when auditing CVA sites and whether it was possible for the TAA to audit multiple MSIDs on the same site. SJ responded that if this was obvious in the list of MSIDs provided by ELEXON then the other MSID's would be looked at and that is the plan going forward. The TAMEG Member added that they would not attend site and look at the other MSIDs located there as part of the same site audit but mentioned it is down to efficiency planning. ELEXON added that they are trying to make the address information for each MSID more accurate and reliable to ensure the information is up to date. A TAMEG Member responded that reviewing all the circuits is more appropriate.
- 11.4 A TAMEG Member questioned that on the basis this applies to offshore inspections would it be possible to get an understanding of how many sites have two or three platforms. ELEXON responded that they have estimated a rough figure in this regards of about four. A TAMEG member responded that there may be

¹ The form says: "For Embedded and Directly Connected BM Units, tick to confirm that a single line diagram(s) showing the location of the Metering Equipment, in particular the Settlement current and voltage transformers (CTs/VTs) and CT/VT Ratio, and all existing Boundary Points and any System Connection Points at or near the proposed Boundary Point(s) is attached to the application."

MINUTES

offshore accommodation on the odd ones but that they have a lot of experience of this and that this will be a costly process. ELEXON responded and informed the TAMEG that this is the reason why it is using a sample and that doing three audits as a trial would help to understand the findings of that trial. The TAMEG Member noted that the discussions they have had shown there is a lack of understanding of where these things currently sit. A TAMEG Member added to this and stated that the conclusion from this is somewhere between fifteen and twenty offshore Metering Systems and that there is a significant cost of training someone to visit these offshore Metering Systems. The TAMEG Member added that there is not a standardised single safety requirement for different companies depending on which site they visit, there will be different safety requirements. A TAMEG Member added that the cost is too significant and the cost of Registrant will be too high. A TAMEG Member responded that a lot of work has gone into training new people to allow these site visits to take place as safely as possible and asked what the plan is for someone who arrives at site and is stuck due to weather restrictions. A TAMEG Member advised that they would need to go from platform to platform so the challenges will always be there.

- 11.5 ELEXON asked the TAMEG if there is any alternative way of getting this completed. A TAMEG Member responded that there must be a desire to complete this along with a concise timetable. The TAMEG Member added the timetable is to ensure work is getting completed as much as possible due to there being only fifteen to twenty but noted that if it is possible to lower the sample size it would be more ideal. ELEXON added that the main goal is to ensure the accuracy of Settlement and have to weigh the cost/benefit of offshore audits.
- 11.6 ELEXON referenced the slide and asked for clarification from the TAMEG on 'zero load' flagging. A TAMEG Member responded that this should not be referenced as zero load flagging. ELEXON responded in agreement and noted that the term should be insufficient load as opposed to zero.
- 11.7 ELEXON added that they are bringing LDSOs into the Commissioning NCs process. ELEXON added that they have agreed the process and it will commence from 1 April 2018 and that training will be made available for the LDSO on using TAA Management Tool (TAAMT). ELEXON further added that the TAAMT education day will split into two parts where they will inform the LDSO about the technique and the basic understanding of using the system.
- 11.8 A TAMEG Member asked ELEXON if this has been made clear in its communications. A TAMEG Member responded in disagreement and stated that they do not believe this has been made clear to LDSOs. The TAMEG Member recommended that ELEXON might want to provide specific training in this area and whether this is required. The TAMEG Member added that ELEXON should make it clear on what the day entails. ELEXON acknowledged the request from the TAMEG Member and noted that they will send correspondence to LDSOs with revised wording. A TAMEG Member added that there should be a two stage process for the LDSO in terms of target audience. The TAMEG Member added that the LDSO has no Commissioning responsibility where they do not own the measurement transformers and so somebody else should be notified of a NC. ELEXON advised that NCs should be allocated to the appropriate party by November 2018 otherwise inconsistencies will occur with the CoP4 process.

12. Commissioning – update on progress with CPs

- 12.1 CD gave an update on the progress with CPs.
- 12.2 ELEXON noted that two Change Proposals related to the introduction of data flows which will be incorporated into the Communications process. One of the data flows was to replace the 'notification of defect of omission' form in the P283 guidance and the other was to be a notification of Commissioning information to be used both in the New Connections process (and where a material change takes place) and the Change of Agent process. The changes are aimed for implementation in November 2018. ELEXON

MINUTES

added that this would be considered for approval during the SVG on the 30 January 2018. A TAMEG Member asked ELEXON if they are putting guidance together on this. ELEXON responded and informed the TAMEG Member that they intend to hold an education day on the changes related to the Commissioning process and also produce a guidance note. The TAMEG Member asked when the guidance note would be produced and advised that this should be as soon as possible to allow parties to use the guidance to assist in their implementation. ELEXON noted that the guidance should be available as soon as Q2 2018.

13. Negating the need to provide Meter and CT/VT certificates (verbal)

- 13.1 CD/KH gave an update on negating the need to provide Meter and CT/VT certificates.
- 13.2 A TAMEG Member referenced the slides presented and stated that they do not believe the generic statement implies what it should. ELEXON responded it were currently assessing NMTES and were planning to widen the scope and range of errors present in the statement. ELEXON noted that it was currently analysing the backing data that they had already to assess how much data was already currently available. The TAMEG Member queried how ELEXON is planning to do this as they stated that they do not believe ELEXON has backing data regarding this and expressed their concern on this matter. ELEXON responded that it did have some backing data but it was not a complete set. A TAMEG Member noted that the broader issue is around testing. ELEXON clarified that this was in regards to risk of Settlement and the overall accuracy of a Metering System. The TAMEG Member agreed but noted that this is a secondary issue and has not, to date, highlighted any concerns with the accuracy of Metering Systems throughout the industry. The TAMEG Member noted that they did not wish to see the rest of the work streams delayed due to the progression of improving the scope of NMTES. ELEXON agreed with this statement.
- 13.3 A TAMEG Member noted that errors for measurement transformer should be in the category of a statistical curve and stated that by using this analysis and the NMTES then the use of an agreed average value in the overall accuracy calculation becomes more appropriate than the extreme errors of the class. ELEXON noted that it has been suggested that the same approach could be used for determining Meter errors in the absence of Meter calibration certificates. ELEXON added that Npower HHMOA presented a spreadsheet with thousands of errors for Elster A1700 Meters taken from calibration certificates. This analysis showed the average ratio errors to be around 0.05% and asked if other MOAs have a similar spreadsheet for Meters. The TAMEG Member asked in regards to the AMO meeting on the 1 February 2018 if this can be raised as a question. ELEXON responded in agreement and informed the group that the provision of more data for CT/VT calibration errors by LDSOs is something that will be suggested on the TAM education day.
- Action KH: 33:05**
- 13.4 A TAMEG Member noted that the last working group took place in the summer and asked if there is a timeline for the next working group. ELEXON responded that at there is no meeting currently booked but advised that they are planning on arranging a second workgroup around March 2018. ELEXON also asked if anyone is interested in joining the meeting so they can update the distribution list. A TAMEG Member added that the object of the exercise is to limit the need of certificates and that LDSOs would be keen for to this happen to avoid non-compliance allocation in the future.
- 13.5 ELEXON noted that they did not believe any Trading Disputes had been raised as a result of Metering Systems failing an "overall accuracy test". A TAMEG Member responded and noted that this comes back to the point that the TAA should be focusing on key issues such as Commissioning. A TAMEG Member noted that when Meters that are lightly loaded the accuracy goes down considerably. The TAMEG Member added that the ideal scenario is fifty percent load and that anything above ten percent is fine but as soon as it decreases then it becomes a problem. The TAMEG Member added that they had been referencing CoP1 and noted that it is not ambiguous but it fails to mention taking account of future upgrading. The TAMEG

MINUTES

Member further added that consideration of the load on site and actual burden on the measurement transformers should be taken into consideration before generic statements are applied. ELEXON responded in agreement and noted that they are currently commencing with a piece of work to extend the errors on NMTES to include different test points at both rated and low (25% usually) burden. A TAMEG Member advised that no one will change the CT's because the load has dropped and mentioned that this has never been done. A TAMEG Member responded that there should be allowance for future upgrading. A TAMEG Member agreed but noted that the problem is no one is going to change the CT ratio

14. AOB

- 14.1 Change of DC where the Meter uses a SIM card - ELEXON noted that the DC does not have a commercial relationship with the communications provider and stated that nothing can be added to the BSC that all MOA's report to the DC because of the lack of relationship. ELEXON did state that there are changes in the pipeline to put things in place (e.g. D0268 changes to assist with interoperability). A TAMEG Member responded that this is something that must take priority in resolving.
- 14.2 In relation to provision of CT/VT certs - A TAMEG Member noted that they ask the DNO to provide CT data and to include other means of reliable information instead of a certification. The TAMEG Member expanded and stated that the issues could be with the VTs but you cannot tell until the site visit. The TAMEG Member stated that you can get VTs and CTs in big batches and stumble across old certifications for sites that are non-existent and the key is to link the information together. The TAMEG Member stressed the importance of leaning towards CT and VT certificates as the only way to retrieve useful information. ELEXON responded that the BSC illustrates the need for this and that it is already known among the TAMEG.
- 14.3 A TAMEG Member raised two points for AOB. One was in regards to CT Meters fitted needing to be Advanced Meters. The TAMEG Member added that the BSC explains that the new CT Meters need to be registered as HH for energisation. The TAMEG Member moved to the second point which was in regards to the PAB looking at value for money on BSC Audits from the old PAF framework. The TAMEG Member questioned the value of extending the TAA contract for two years from a commercial aspect and emphasised the need for a discussion around this.

Next Meeting: 18 April 2018