

RESPONSE TO THE TECHNICAL ASSURANCE AGENT (TAA) ANNUAL REPORT RECOMMENDATIONS

MEETING NAME	TAMEG
Date of meeting	19 June 2017
Owner/author	Kat Higby
Purpose of paper	For Information
Classification	Public
Summary	ELEXON's Response to the TAA Annual Report Recommendations

1. Background

- 1.1 The Technical Assurance of Metering (TAM) technique monitors compliance with the Half Hourly (HH) Metering System requirements, as documented in the Balancing and Settlement Code (BSC) and its subsidiary documents which include Balancing and Settlement Code Procedures (BSCPs) and Metering Codes of Practice (CoPs). When HH Metering Equipment is first registered, it must comply with the requirements which are set out in the relevant CoP in place at that time. ELEXON contracts the TAA (currently C&C Group Plc) to facilitate the TAM technique.
- 1.2 At the May Performance Assurance Board (PAB) meeting (PAB196), the TAA presented its annual report for 2016/17 which provided its opinion on the health of the HH Metering System population in both the Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) markets. The audit findings highlighted four issues which are impacting the health of the markets. These issues are:
- Commissioning and Commissioning Records
 - Measurement Transformer Calibration Certificates
 - HH Metering Equipment Failures
 - Half Hourly Data Collector (HHDC) Documentation Errors
- 1.3 The TAA presented its annual report to the BSC Panel at its June meeting (Panel 267). The Panel noted the TAA Annual Report.
- 1.4 The four identified market issues are set out below alongside the recommendations from the TAA, ELEXON's comments on each recommendation followed by ELEXON's recommendations on each issue.

2. Issue 1 – Commissioning and Commissioning Records

TAA Recommendations on SVA Commissioning

- 2.1 In addition to a specific sample¹ on Commissioning and P283² which the TAA will undertake over the course of the 2017/18 audit year, the TAA provided five recommendations for review which, along with ELEXON's comments, are set out below:

¹ A specific sample consisting of 100 Inspection Visits will focus on where there is perceived risk to Settlement

² Reinforcing the Commissioning Process

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Ref	TAA Recommendation	ELEXON Comments
1.	ELEXON develop a report (similar to SR0028 ³) aimed specifically at Commissioning non-compliances, which is issued to Market Participants on a monthly basis showing performance of clearing outstanding Commissioning issues.	<p>ELEXON notes that the number of Commissioning non-compliances is increasing as very few have been rectified by Market Participants. To date, there are 3,543 outstanding SVA Commissioning non-compliances and 289 outstanding CVA Commissioning non-compliances.</p> <p>The reasons Market Participants provide for not rectifying are primarily linked to being unable to locate the original Commissioning records which have either been lost or destroyed or cannot be provided by the host Licenced Distribution System Operator (LDSO) or Half Hourly Meter Operator Agent (HHMOA) for the HH Metering System.</p> <p>It is ELEXON's view that ensuring Market Participants are complying with the P283 process is the priority for 2017/18. ELEXON will create a monthly report strawman containing Commissioning non-compliances raised for Metering Equipment which has been installed since the implementation of P283. ELEXON will present the report to the PAB for its consideration in August 2017.</p>
2.	Use a process similar to Error and Failure Resolution (EFR) for Category 1 non-compliances which could be invoked against Market Participants to expedite the rectification of these non-compliances.	<p>Technical Assurance of Performance Assurance Parties (TAPAP) checks were completed between September 2015 and May 2016 on the P283 process. The EFR technique was applied to 14 LDSOs, four Independent Distribution Network Operators (IDNOs), 12 HHMOAs and two Suppliers.</p> <p>Two Suppliers and three HHMOAs have now exited EFR through successful rectification of their identified audit issues. 14 LDSOs, four IDNOs and 9 HHMOAs will remain in EFR with further milestones to complete.</p> <p>Should the PAB deem the progress made by Parties against their milestones to be inadequate, the PAB may initiate EFR Escalation and invite those Parties to attend the PAB at its monthly meeting.</p>
3.	Market Participants mandated to provide evidence for all HH Metering Systems they are registered to and where records are not available, recommission a site to provide the relevant confirmation that accuracy is being maintained.	<p>ELEXON considers Commissioning following an identified category 1 non-compliance to be a priority, and will continue to enforce BSCP27⁴ Section 1.17:</p> <p><i>"Post Rectification Action</i></p> <p><i>Where a Registrant is required to perform testing as per CoP 4, 'Code of Practice for the Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes',</i></p>

³ The risk that HHMOAs make changes to the Metering System and do not inform the HHDCs resulting in Meter readings being misinterpreted or not collected

⁴ Technical Assurance of Half Hourly Metering Systems for Settlement Purposes

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		<p><i>following the rectification of a non-compliance, the PAA or BSCCo or TAA shall have the option to attend and/or request details of the tests performed.</i></p> <p><i>The costs associated with the rectification of a non-compliance and any subsequent testing shall be borne by the responsible Party."</i></p> <p>Requesting that Market Participants re-commission Metering Equipment where there is a lack of Commissioning records more generally would be difficult as it would require a large amount of resource across the industry.</p>
4.	Suppliers are asked for their views on the worsening situation and their recommendations as to how the issues could be resolved. Given that Suppliers are responsible for non-compliances raised against their registered Metering Systems, Suppliers should consider introducing financial incentives with their agents to prevent and improve non-conformance (if not already in place).	ELEXON will ask Suppliers for their views on Commissioning, P283 and where they feel the process is breaking down over the course of the 2017/18 audit year. ELEXON will report Supplier responses to the PAB in September 2017 once they have been received.
5.	If ELEXON considers historic non-compliances to be low priority, a cleansing activity could remove non-compliances with a specific age profile. If a cleansing exercise did occur, we recommend that any HH Metering System included should be considered in a specific sample for a future audit period to understand the ongoing compliance of the HH Metering Systems.	<p>ELEXON is in support of this recommendation; however ELEXON would like to focus its resource in 2017/18 on ensuring Market Participants are complying with P283.</p> <p>Once a lower percentage of Commissioning non-compliances are being recorded consistently by the TAA, ELEXON will consider performing a specific sample on the non-compliant HH Metering Systems which were installed prior to the implementation of P283.</p>

Conclusions: ELEXON Recommendations on Commissioning and Commissioning Records

SVA Commissioning

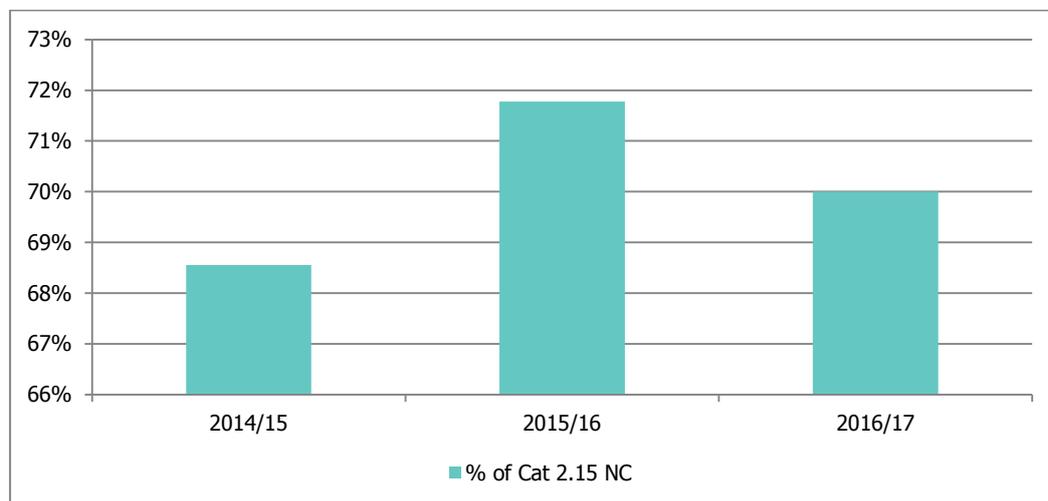
- 2.2 ELEXON notes the TAA's concerns with the Commissioning process, specifically regarding the lack of Commissioning evidence and that 70% of the SVA Metering Systems audited had no or incomplete Commissioning records. ELEXON notes that all but one of category 1 non-compliances⁵ identified in the SVA

⁵ Currently affecting the quality of data for Settlement purposes

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market also have a category 2.15⁶ non-compliance. This suggests that if thorough Commissioning procedures had been followed, the category 1 non-compliances could have been avoided.

- 2.3 ELEXON notes that the percentage of identified category 2.15 non-compliances has remained consistent over the last three audit years, with non-compliances being identified at ~70% of SVA sites visited in 2016/17:



- 2.4 ELEXON notes that there has been an improvement of ~10% in Commissioning of Metering Equipment which has been installed since the introduction of P283. A category 2.15 non-compliance was allocated to ~60% of sites affected by P283 in comparison to ~70% overall.
- 2.5 ELEXON is currently undertaking 10 work streams which aim to address the ongoing Commissioning issues:

	Work Stream	Description
1.	TAA specific sample for 2017/2018	The specific sample will focus on sites where Metering Equipment has been installed post P283 implementation
2.	TAA non-compliance allocation	In the new TAA contract arising from the pending procurement process in 2017, ELEXON intends to include a change to the Technical Assurance Agent Management Tool (TAAMT) to allow Commissioning non-compliances to be allocated to the LDSO where appropriate
3.	Alternatives to current transformer (CT) / voltage transformer (VT) certificates	A Working Group will be run with a view to finding alternatives that provide the same level of assurance in the absence Meter calibration certificates
4.	P283 education day	A P283 education day will be run in the 2017/18 audit year to discuss the timescales which were introduced in CP1458 ⁷

⁶ Commissioning records not provided, incorrect or incomplete

⁷ Introduction of timescales for the P283 Commissioning process for SVA CT operated Metering Systems

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5.	Commissioning records standardisation	A standard Commissioning record template has been created which is currently going through internal review and will be rolled out following the BSC change process.
6.	Newscast	A Newscast article will be issued to the industry to remind Market Participants of their obligations for Commissioning in CoP4 ⁸
7.	Qualification process	The issue is pending consultation with the Association of Meter Operators (AMO) and will be revisited during the 2017/18 audit year
8.	P283 EFR	All non-compliant parties are in EFR with reporting and milestones for the P283 Commissioning process agreed
9.	P283 guidance document review	A first draft has been created for internal review. The guidance note will be rolled out over the course of the 2017/18 audit year
10.	Commissioning dataflow	Feedback from the P283 TAPAP checks suggested that a set of Data flows for the communications obligations within the P283 Commissioning process was needed. A workgroup is currently working on the development of these flows.

2.6 Full details of the 10 ongoing work streams can be found in the Commissioning Update (PAB197/13)

2.7 In addition (as recommended by the TAA), ELEXON will ask Suppliers for their view on Commissioning, P283 and where they feel the process is breaking down. ELEXON will write to Suppliers over the course of the 2017/18 audit year and provide Supplier responses to the PAB in September 2017 once they have been received.

CVA Commissioning

2.8 The TAA reported that Parties are not using the process which was introduced to rectify Commissioning non-compliances for Metering Equipment installed before the implementation of CoP4 in 1993. ELEXON will issue another Newscast to remind Parties of the process.

3. Issue 2 – Measurement Transformer Calibration Certificates

The TAA's recommendation for Issue 2, along with ELEXON's comments, is set out below:

TAA Recommendation	ELEXON Notes
The TAA noted the root causes of why historical certificates cannot be sourced, i.e. if they are no longer physically available it is impossible to regenerate them. However, for newly commissioned Metering Systems that will have certificates, the TAA is not convinced that robust processes are being employed to ensure	ELEXON notes that each CoP requires that calibration certificates are made available to the TAA for review at a TAA inspection. This evidence is no longer readily available to the TAA auditor due to the age of many HH Metering System installations. ELEXON predicts further increases in non-compliances associated to measurement transformer calibration certificates. A change in the

⁸ Code of Practice for the Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes

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<p>adherence to the CoPs. This is applicable to all Market Participants audited in 2016/17.</p> <p>The TAA recommends that ELEXON undertakes activities to understand why all Market Participants are not adhering to the CoPs, and identifies practical solutions to ensure future compliance.</p>	<p>process for managing and maintaining measurement transformer calibration certificates is required to prevent further increases.</p>
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Conclusions: ELEXON Recommendation on Measurement Transformer Calibration Certificates

- 3.1 ELEXON presented a paper at the last Technical Assurance of Metering Expert Group (TAMEG) meeting (TAMEG 30, May 2017) on the merits of providing Meter and measurement transformer calibration certificates to the TAA at site inspections.
- 3.2 ELEXON recommended that a Working Group be created with a view to finding alternatives that provide the same level of assurance in the absence of manufacturer’s calibration certificates.
- The first Working Group meeting will be held on 18 July 2017. ELEXON will update the PAB on the progress of the Working Group at future meetings. This first update will be provided to the PAB in August 2017.

4. Issue 3 - Increase in HH Metering Equipment Failures

- 4.1 The TAA’s recommendation for Issue 3, along with ELEXON’s comments, is set out below:

TAA Recommendation	ELEXON Notes
<p>The TAA recommends that the PAB considers the scope of the BSC Audit to include additional checks to understand how Market Participants monitor volumes of energy, are alerted of material change, investigate changes and correct them.</p> <p>Suppliers could consider introducing financial incentives similar to those suggested for Commissioning performance for the monitoring and maintenance of Metering Equipment failures.</p>	<p>ELEXON notes an increase in the number of non-compliances raised due to Metering Equipment failures.</p> <p>All Metering Equipment failure non-compliances investigated to date have been present for more than 100 days prior to the inspection date; some a great deal longer. ELEXON notes that Market Participants may have been able to identify the errors if they had alerts for material changes in metered volumes (either increase or decrease) and if they conducted investigations to verify the changes.</p> <p>Failures such as blown and withdrawn metering fuses should be identified via the HHDC through the phase failure monitoring facility, as should Meters that have failed and cannot be communicated with (the D0001⁹ process). The BSC Audit already contains a check on the resolution of inconsistencies where a D0001 data flow is sent from the HHDC to the HHMOA.</p>

⁹ A data flow used to request a Metering System investigation

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Conclusions: ELEXON Recommendation on HH Metering Equipment Failures

- 4.2 ELEXON will conduct further investigations into the category 1 non-compliances raised by the TAA. Should further investigations highlight a weakness in the fault investigation process, ELEXON will consider performing a TAPAP check to monitor the compliance of Suppliers, HHMOAs and HHDCs.
- 4.3 ELEXON will update the PAB on its findings in August 2017.

5. Issue 4 - HHDC Documentation Errors

- 5.1 The TAA’s recommendation for Issue 4, along with ELEXON’s comments, is set out below:

TAA Recommendation	ELEXON Notes
<p>The TAA recommends that the PAB considers a TAPAP check to review the process of passing Meter Technical Details (MTDs) from the HHMOA to the HHDC, how this information is stored by the HHDC and subsequently passed to the TAA when requested in advance of the planned inspection. These audits would determine whether there is a Market Issue.</p>	<p>ELEXON notes that five category 1 non-compliances were recorded in 2016/17 due to incorrect Meter Serial Numbers held in Meter Technical Details (MTDs). The number of category 1.01 non-compliances is increasing yearly, indicating that HHDC back office processes for managing MTDs may be lacking.</p> <p>It is not possible to ascertain from the data recorded whether HHDCs were issued incorrect information from HHMOAs or the HHDCs provided incorrect details when providing information in advance of the HH Metering System inspections.</p>

Conclusions: ELEXON Recommendation on HHDC Documentation Errors

- 5.2 ELEXON will conduct further investigations into the five category 1 non-compliances raised by the TAA. Further investigation should highlight where the weakness is in the process. Following further investigation, ELEXON will consider performing a TAPAP check to monitor the compliance of MOAs and HHDCs.
- 5.3 ELEXON will update the PAB on its findings in August 2017.

6. Additional Actions

LDSO Attendance at Audits:

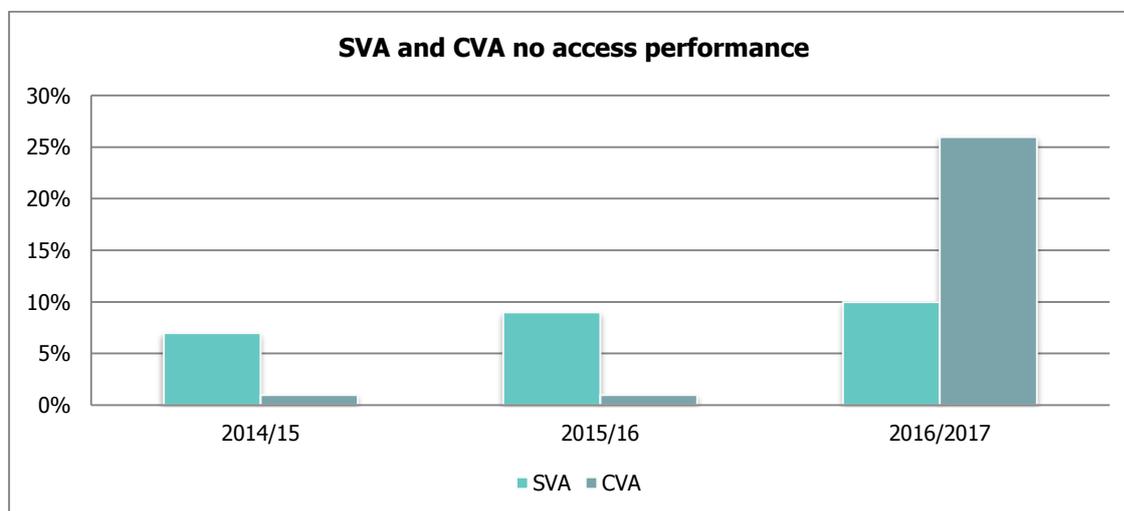
- 6.1 For those SVA Half Hourly Metering Systems inspected during the 2016/17 audit year, for 25% of the visits (344 HH Metering Systems), the TAA was unable to access the CT / VT rating plates due to a lack of LDSO attendance at Inspection Visits.
- 6.2 ELEXON took an action from PAB189 to undertake actions to ensure Suppliers are aware of and are prepared to meet their obligations with regards to arranging LDSO attendance at Inspection Visits.
- 6.3 ELEXON wrote to Suppliers to request their Local Working Instructions (LWIs) to ensure a process is in place to meet their obligations. ELEXON plans to arrange for the TAA to carry out a sample of High Voltage (HV) Site Inspections across the industry in the 2017/18 audit year and will report the findings of the Site Inspections back to the PAB. ELEXON will provide a progress update to the PAB in August 2017.

No Access

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6.4 Throughout the year the TAA carries out a number of Inspection Visits where due to varying circumstances they are unable to access the Metering Equipment to complete a TAA inspection.

6.5 The following graph illustrates the percentage Inspection Visits in 2016/17 which resulted in no access:



CVA

6.6 In the 2016/17 audit year, the percentage of CVA site visits which resulted in no access was higher than in previous years. The TAA achieved access to 45 of the 61 sites arranged for inspection which equates to 26% no access. In comparison, in the 2015/16 audit year there was a 3% no access rate for CVA Metering Systems. National Grid gave the following reasons for non-attendance:

- Priority emergency work,
- System maintenance and sickness.

6.7 ELEXON recommends that the PAB writes a letter to National Grid regarding the importance of completing scheduled site visits. ELEXON will report back to the PAB with any response received from National Grid. ELEXON will provide a progress update to the PAB in July 2017.

SVA

6.8 The SVA no access rate increased from 9% in the 2015/16 audit year to 10% in the 2016/17 audit year.

6.9 ELEXON continues to write to Registrants on a monthly basis to report on their individual performance against no access, and remind them of their obligations in BSCP27. ELEXON will notify the PAB of any trends of no access site visits upon identification over the 2017/18 audit year.

7. Recommendations

7.1 We invite you to:

- a) **NOTE** the four identified issues affecting the health of the market and ELEXON's recommendations against each issue

For more information, please contact:

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