

## Technical Assurance of Metering (TAM) Audit Scope 2022/2023

### Performance Assurance Board

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Summary **The Performance Assurance Board (PAB) is invited to approve the Technical Assurance of Metering (TAM) audit scope for Performance Assurance Operating Period (PAOP) 2022/2023.**

### 1. Background

- 1.1 The TAM technique aims to ensure the accuracy of Half Hourly (HH) Metered data through the use of onsite Inspection Visits and Desktop Audits carried out by the Technical Assurance Agent (TAA). TAM requirements are outlined in [BSCP27 – Technical Assurance of Half Hourly Metering Systems for Settlement Purposes](#) and include the requirement to provide an indication of the overall health of the HH Metering System population.
- 1.2 TAM is a detective Performance Assurance Technique (PAT) within the Performance Assurance Framework (PAF) and is the only technique that looks at physical Metering Systems. Non-compliances identified through the Technique provide information on four Supplier Volume Allocation (SVA) Risks and five Central Volume Allocation (CVA) Risks, as shown in Appendix A.

### 2. SVA Main Sample

- 2.1 The SVA Main Sample is the main method by which TAM aims to provide an indication of the overall health of the HH Metering System population. Until the 2020/2021 Audit Year this was typically achieved by completing Inspection Visits for approximately 1% of the Measurement Class C<sup>1</sup> Meter population.
- 2.2 Inspection Visits were suspended for the entirety of the 2020/2021 Audit Year and until August of the 2021/2022 Audit Year due to Covid-19 restrictions. During this time, Elexon offered optional Desktop Audits in place of Inspection Visits. From August 2021 onwards the SVA Main Sample then comprised both Inspection Visits and Desktop Audits.
- 2.3 Elexon proposes retaining this mix of Inspection Visits and Desktop Audits for the 2022/2023 Audit Year. However, whilst the ratio of Desktop Audits to Inspection Visits in 2021/2022 was around 4:1, Elexon recommend a ratio of 1:2 for 2022/2023.
- 2.4 This greater emphasis on Inspection Visits is recommended for two reasons:
  - Risk 003 (See description on page 3) has been highlighted as an area of concern in the Risk Operating Plan (ROP) for 2022/2023, in part because of difficulties obtaining physical access to Metering Systems over the past two PAOPs. It is therefore appropriate to weight the Main Sample toward Inspection Visits in order to obtain direct information about conditions “on the ground”.
  - Whilst Desktop Audits provided some valuable insight during 2020/2021 and 2021/2022, the process requires further improvement. In particular, refinements are needed to distinguish between instances where the process has not been completed correctly (for example, where files have been uploaded in the wrong format) and

<sup>1</sup> Half Hourly Metering Equipment at above 100kW Premises

instances where there is a genuine failure and/or Risk to Settlement (for example, where the file shows that a Participant’s system holds incorrect information).

- 2.5 Elexon will continue to work alongside the Technical Assurance Metering Expert Group (TAMEG) and Audit Participants to ensure maximum value from the Desktop Audit process.
- 2.6 The SVA Main Sample size has been calculated using the statistical sampling methodology outlined in the TAM Audit Scope for 2020/2021 ([PAB228/07](#)) and in line with the recommendations of the PAF review. As in 2021/2022, the confidence level has been reduced to account for the reduction in certainty associated with Desktop Audits when compared to Inspection Visits.

| SVA Main Sample           |         |
|---------------------------|---------|
| Confidence Level          | 95%     |
| Population <sup>2</sup>   | 168,525 |
| Failure Rate <sup>3</sup> | 1%      |
| Sample Size               | 1485    |
| Percentage of Population  | 0.88%   |

### 3. CVA Main Sample and Targeted Visits

- 3.1 The CVA Main Sample does not lend itself to the same statistical sampling methodology as the SVA main sample, due to the smaller CVA population (967 Meter System Identifiers (MSIDs)). The sampling method used in previous audit years has been to select between 5-10% of the population each audit year.
- 3.2 At its December 2017 ([PAB203](#)) meeting the PAB approved recommendations for the CVA Main Sample to include multi-circuit sites. Following completion of an Inspection Visit (from 2018 onwards), the inspected MSID is removed from future audit years’ selection population, to widen market coverage.
- 3.3 The significant risk to Settlement demonstrated by CVA sites has been highlighted by Metering issues identified over the last two PAOPs in Grid Supply Point (GSP) areas \_A, \_J and \_C. The TAA has supported ongoing investigations into possible CVA Metering issues through a number of Targeted Visits at GSP sites.
- 3.4 So far, three Category 1 non-compliances have been recorded from 70 Targeted Visits. Even allowing for the increased likelihood of finding a non-compliance during a Targeted Visit, this greatly exceeds the expected occurrence rate of 0.25% cited in the scope for previous Audit Years.
- 3.5 Consequently, and given the potential high materiality of CVA Metering Issues, Elexon recommends an increase in the number of CVA Main Sample visits by 50%, from 79 (~8% of the total) in 2021-22 to approximately 121 (~13%) in 2022-23 (with the actual number dependant on the number of circuits inspected).
- 3.6 Further to these, 25 Main Sample Inspection Visits from 2021-22 that could not be completed due to resourcing constraints at the registered Meter Operator Agent (MOA) will be “rolled over” into 2022-23, for a total CVA Main sample of 146 (~15%).
- 3.7 To ensure the widest possible coverage, MSIDs in GSP areas \_J, \_K and \_M that received a Targeted Visit in 2021-22 will be excluded from consideration for the Main Sample.
- 3.8 In addition, Elexon recommends a continuation of the approach taken during the 2021/2022 audit year, with CVA Targeted Visits taking the place of a CVA or SVA Specific Sample. This will allow for approximately 45 CVA Inspection Visits to be made available to support ongoing and future CVA investigations (with the actual number dependant on the number of circuits inspected). Elexon will continue to develop analysis to identify potential CVA Metering issues.

<sup>2</sup> Population is the number of Measurement Class C MPIDs in the most recent snapshot of Supplier Meter Registration Service (SMRS) data

<sup>3</sup> Failure rate is the expected percentage of Settlement-impacting (Category 1) non-compliances present in the population, based on modelling from historic data

#### 4. CVA Desktop Audits

- 4.1 Whilst Elexon still intends to explore widening the use of Desktop Audits to include CVA sites, work remains to be done to ensure that the process is fit for purpose for CVA.
- 4.2 Given the instance and severity of Category 1 CVA non-compliances discovered through Targeted Visits in 2021-2022, Elexon does not recommend progressing with a proof of concept sample during 2022-2023. Resources will instead be focussed on CVA Inspection Visits.

#### 5. Recommendations

- 5.1 The PAB is invited to:
- a) **APPROVE** the SVA Main Sample; and
  - b) **APPROVE** the CVA Main Sample and Targeted Visits approach

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#### For more information, please contact:

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#### Appendix A: TAM – Associated Settlement Risks

| Risk | Description  |
|------|--|
| 003  | SVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all                         |
| 004  | Changes to SVA Metering Equipment are not notified, such that all members of the Supplier Hub do not use the current Meter Technical Details                           |
| 012  | SVA Metering System technical details are created incorrectly  |
| 015  | SVA reference data is not created or transferred correctly, or at all  |
| 019  | A Volume Allocation Unit is registered incorrectly or not at all, such that the CDCA does not collect any or the relevant data   |
| 020  | CVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all                         |
| 022  | Changes to CVA Metering Equipment are not notified to CDCA   |
| 024  | CVA Metering System technical details are created incorrectly  |
| 026  | Aggregation Rules in CDCA are incorrect such that CVA Metered Data is not correctly aggregated and the energy volumes required for Settlement are incorrect or missing |