

# ELEXION

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**TAMEG 49/01 Technical Assurance of  
Metering (TAM) Stats Report**

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## Changes to the format of the Report

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TAMEG Actions 45.01 and 47.01 identified two improvements to be made to the TAMEG Stats report. Members suggested that it would be helpful for the report to:

- show trends in non-compliances over time
- take into account the greater number of audits undertaken by some participants when producing peer comparisons of non-compliances

Following feedback from Members on the revised report produced for TAMEG 48, the following analyses have been split into four sections:

- Engagement, covering cancellation and no access rates for site visits and cancellation and confirmation failure rates for desktop audits
- Supplier Volume Allocation (SVA) Desktop Audits Non-compliances
- SVA Main Sample Non-compliances
- Central Volume Allocation (CVA) Non-compliances

Each section begins with a short overview and some high-level conclusions from the information that follows.

Peer comparisons of participant performance have been **not** been included at this stage. There are several options for what information should be included in such comparisons and how they should be presented. Some possibilities, and the challenges associated with them, are included in each section and Elexon would welcome suggestions from Members on their preferred options based on what is included in this report.

Elexon also welcomes feedback from Members on these changes more generally, as well as suggestions for further improvements.

# ENGAGEMENT

## Engagement

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The following graphs show the proportion of each type of audit (SVA Main Sample, SVA Desktop Audit, and CVA Main Sample) that were cancelled or could not go ahead because of a failure to secure access (or for the Supplier to confirm the audit in the case of Desktop Audits). The actual number of audits making up these proportions is shown within the columns.

Data for Main Sample audits is presented year-on-year for the last five years in which site visits took place and month-by-month for the most recent audit year. Data for Desktop Audits is presented year-on-year for the 2020-21 and 2021-22 audit years, for the optional (Jul 20 – Jul 21) and mandatory (Aug 21 – Mar 22) periods, and month-by-month for the most recent audit year.

In general, the completion rates for SVA audits remains steady across the period for which data is included at ~80-85%, with a result in the no-access rate in 2021-22 offset by an increase in the cancellation rate.

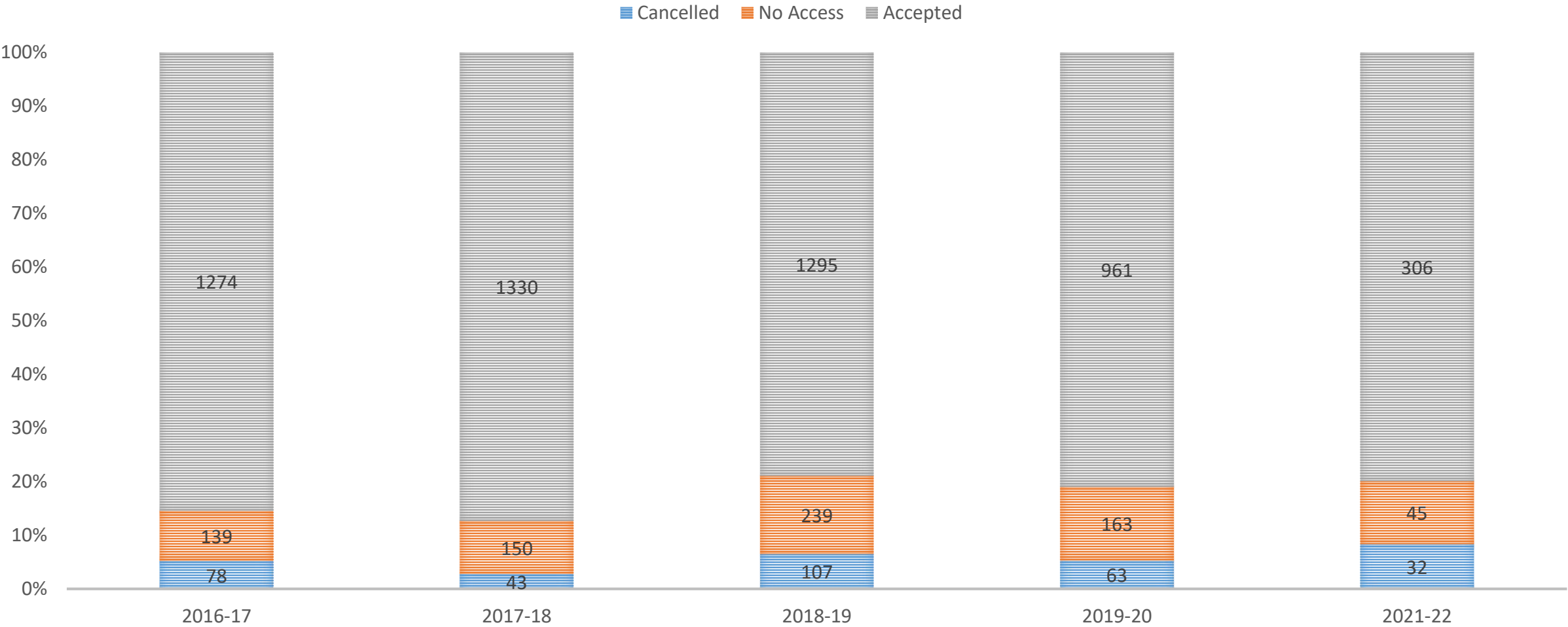
Notably, the completion rate for Desktop Audits is no higher than that for site visits, and for the mandatory period it has been lower – although the month-on-month data suggests this may be improving as participants become more familiar with the audit process.

The completion rate for CVA audits was significantly lower in 2021-22 than in preceding years. However, this can be attributed to the pressure on participants' resources of both a smaller operational window during which to arrange audits and the addition of a large number of targeted CVA inspections across GSP Groups \_J, \_K and \_M to investigate anomalies in the Annual Demand Ratio (ADR) for these areas.

As securing access (and confirming Desktop Audits) in the SVA market is the responsibility of the Supplier, peer comparison may be relatively straightforward. In the CVA market, however, access is often the dependent on the resources available to National Grid and the CVA MOA. There is also the question of how detailed any presentation should be, for example whether it should drill down into the various sub-categories of “cancelled” and “no access”, and what – if any caveats – should be included.

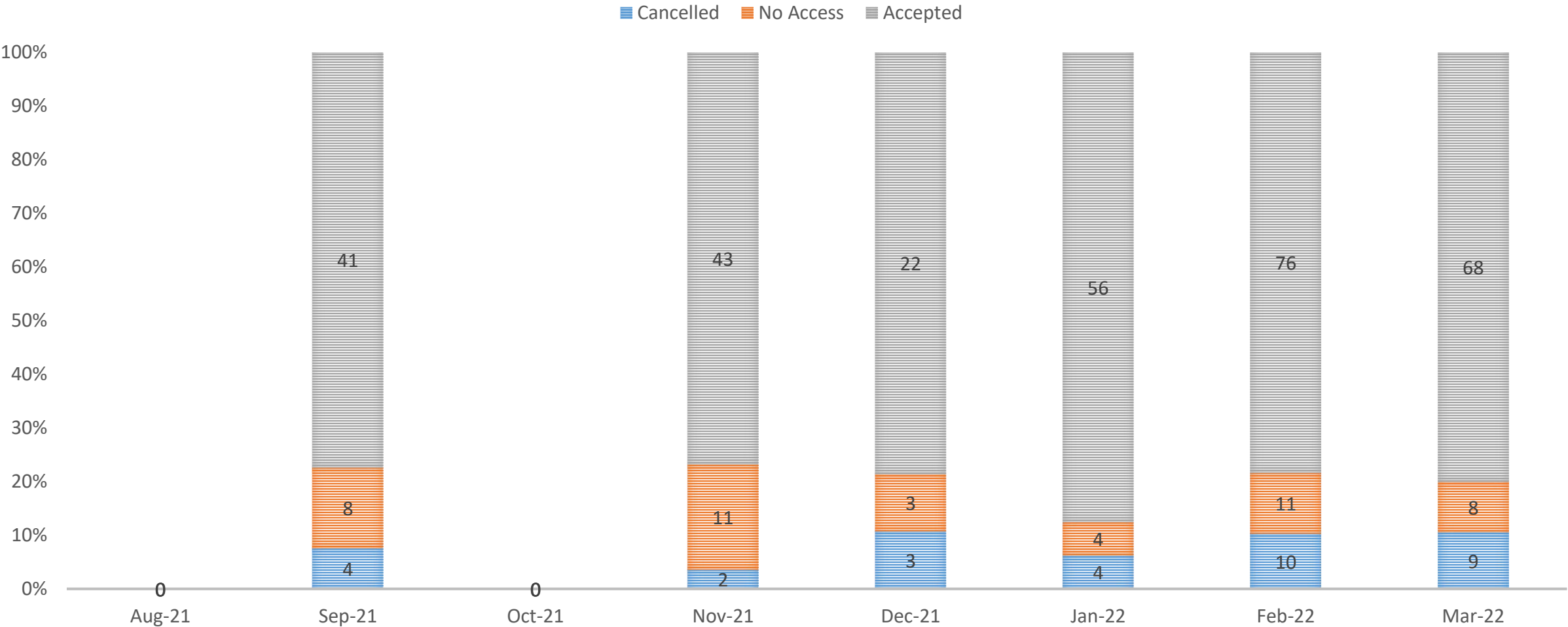
# Technical Assurance of Metering (TAM) – Engagement

SVA Main Sample – Cancellation and No Access Rates, Year-on-Year



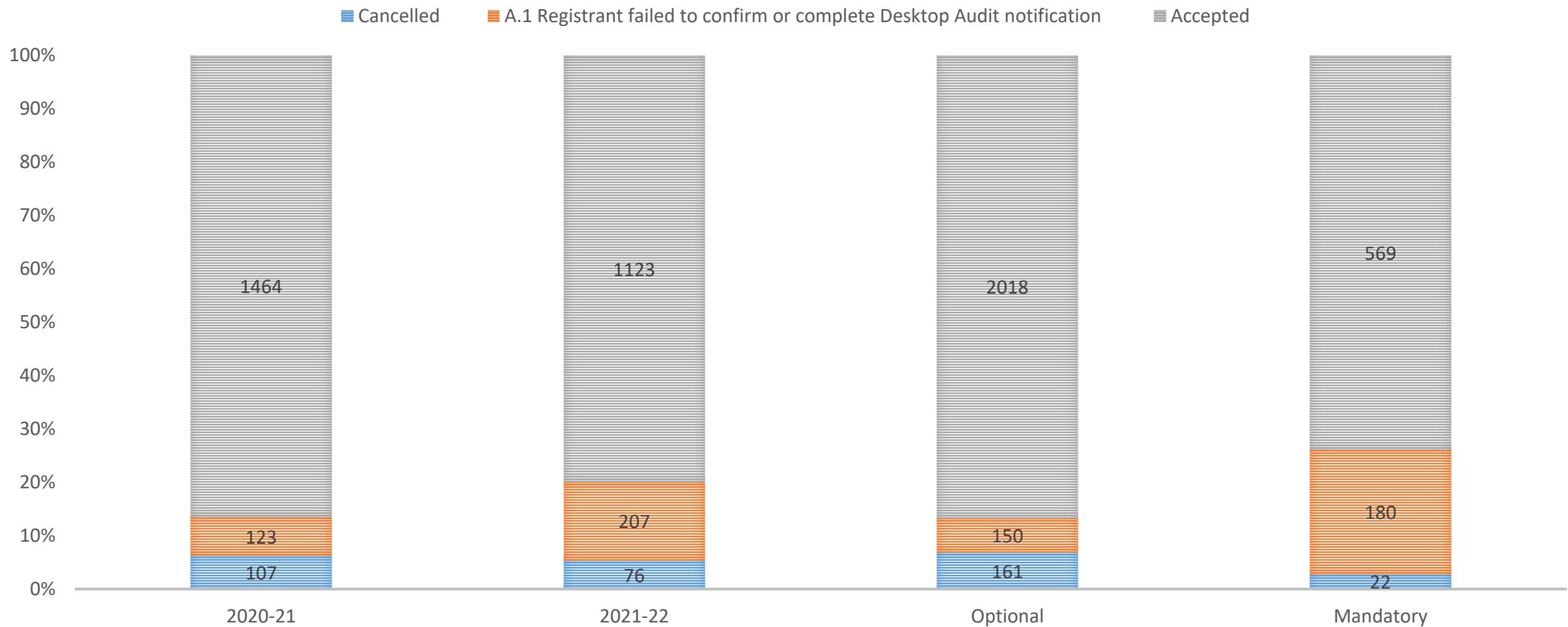
# Technical Assurance of Metering (TAM) – Engagement

SVA Main Sample – Cancellation and No Access Rates, Month-by-Month



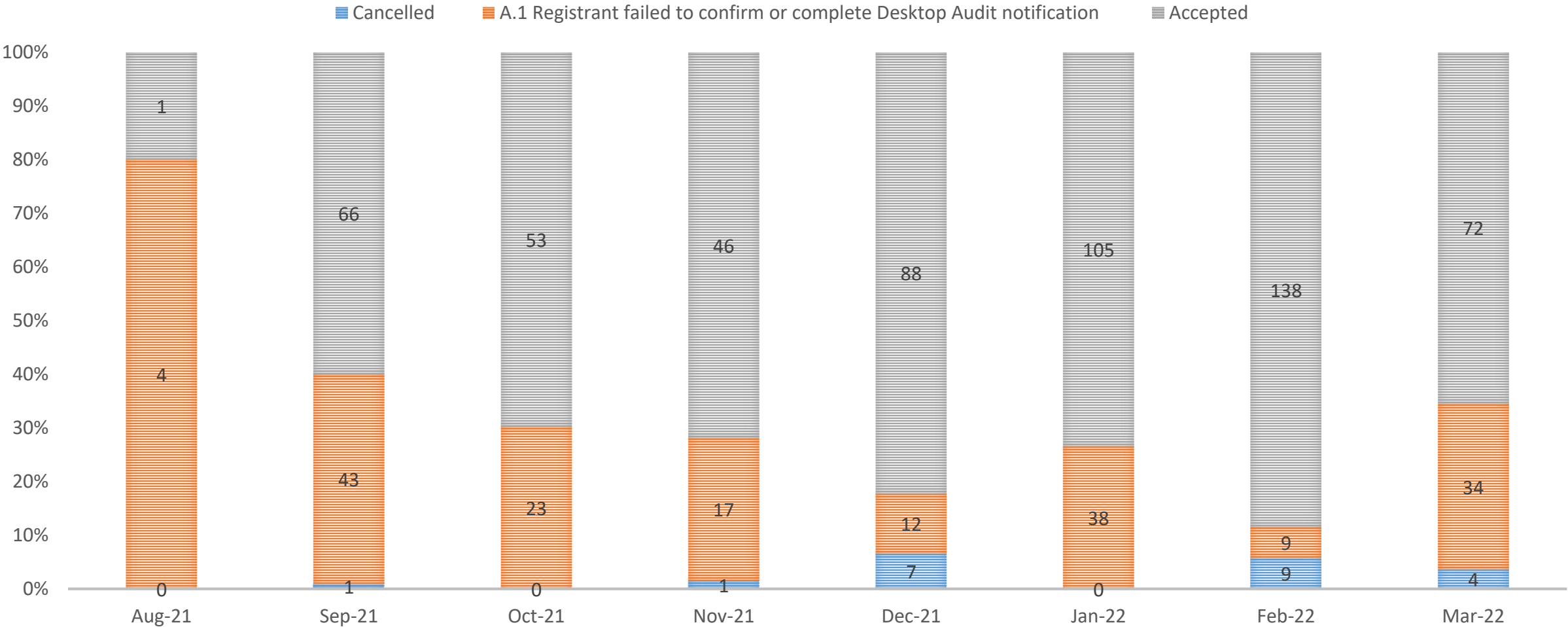
# Technical Assurance of Metering (TAM) – Engagement

SVA Desktop Audits – Cancellation and Confirmation Failure Rates, Year-on-Year



# Technical Assurance of Metering (TAM) – Engagement

SVA Desktop Audits – Cancellation and Confirmation Failure Rates, Month-by-Month

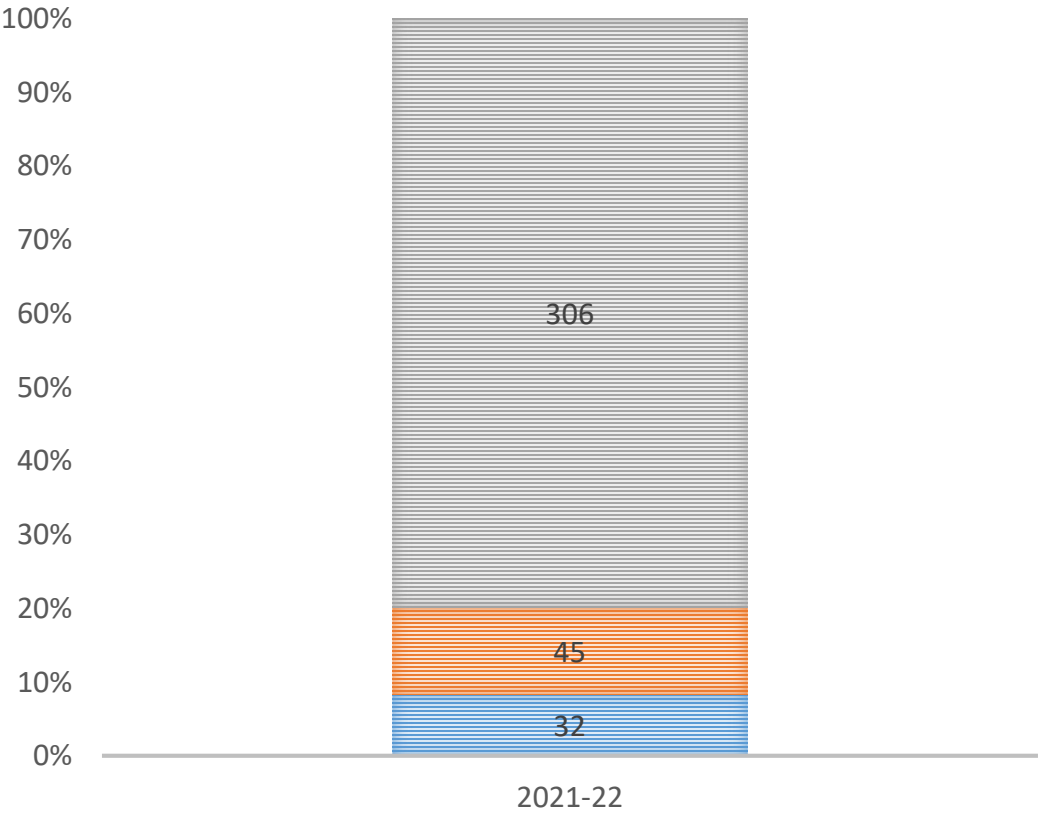




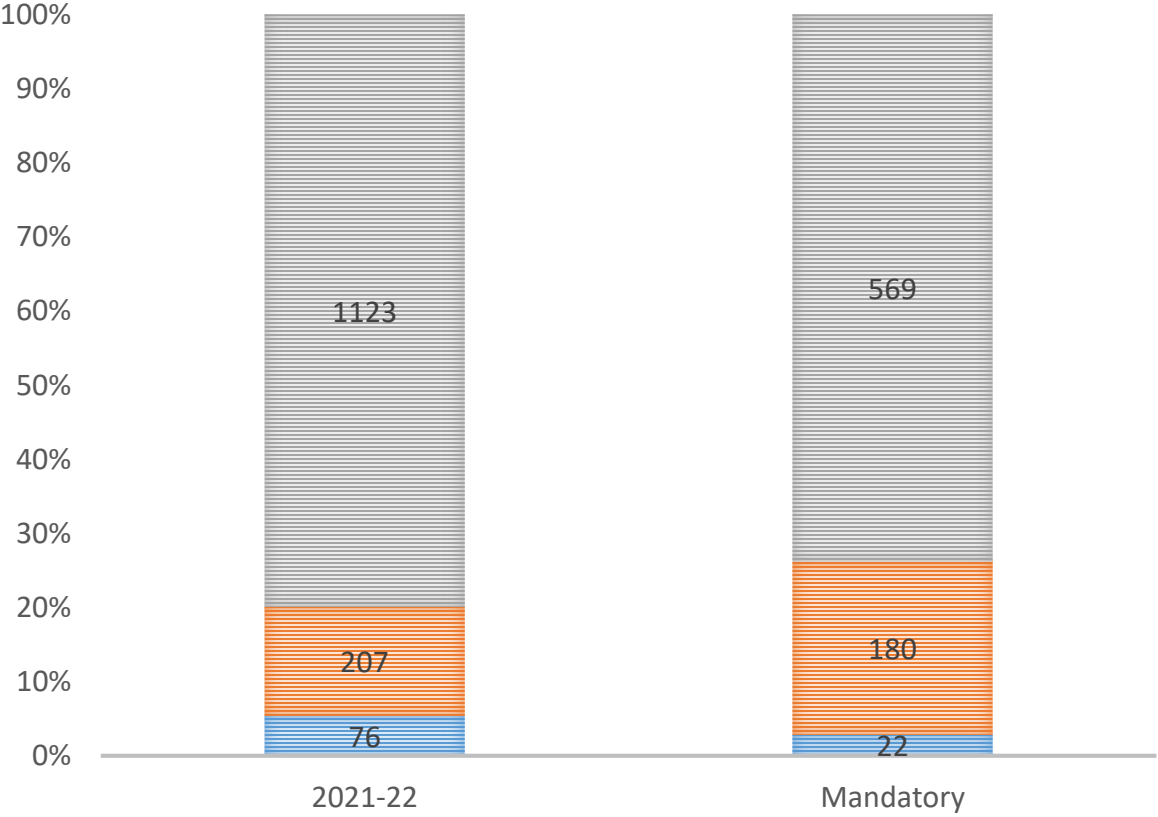
# Technical Assurance of Metering (TAM) – Engagement

## SVA Main Sample vs SVA Desktop Audits 2021-22

Cancelled No Access Accepted

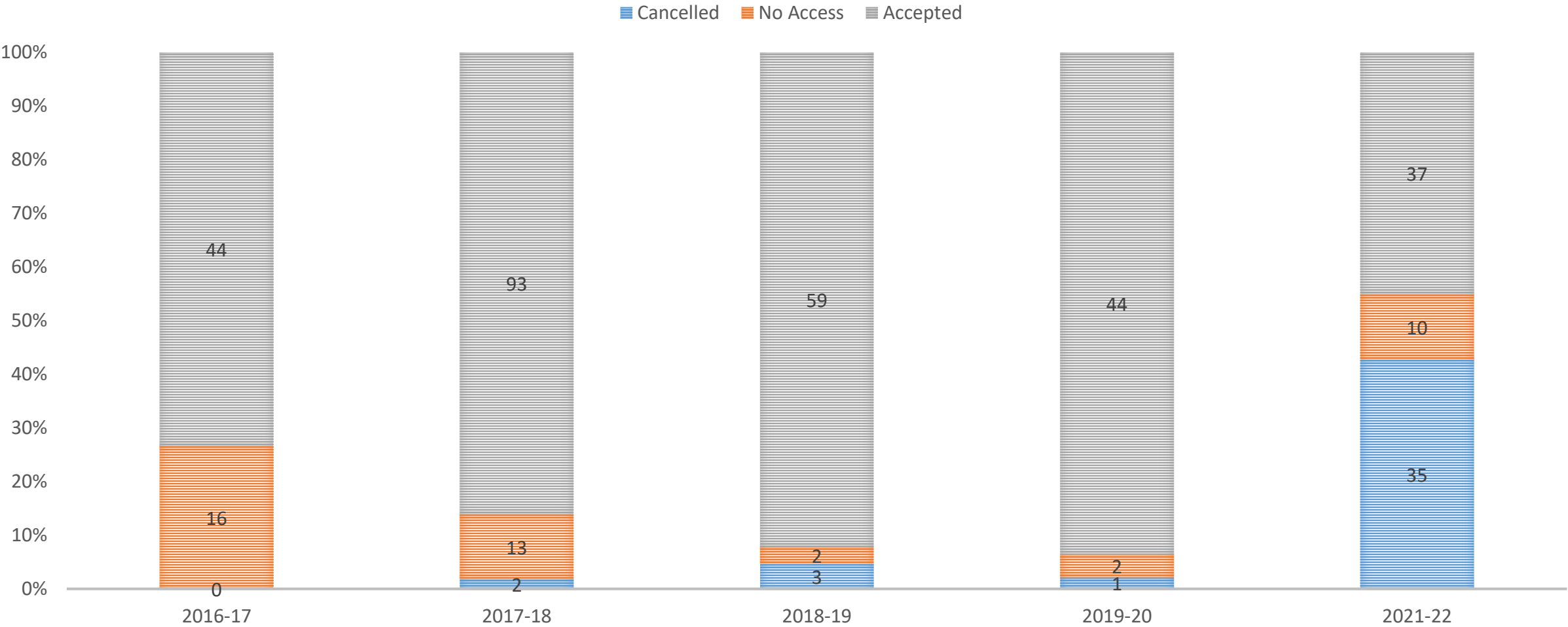


Accepted  
A.1 Registrant failed to confirm or complete Desktop Audit notification  
Cancelled



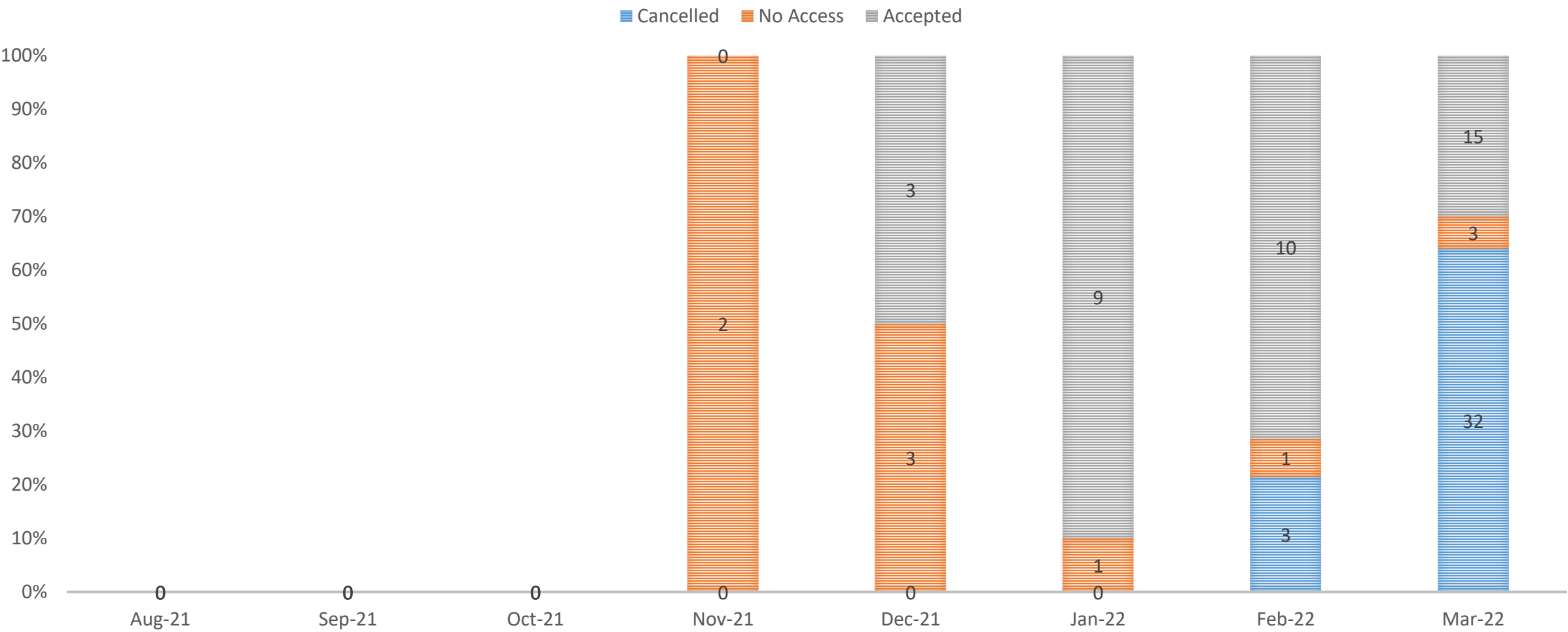
# Technical Assurance of Metering (TAM) – Engagement

CVA Main Sample – Cancellation and No Access Rates, Year-on-Year



# Technical Assurance of Metering (TAM) – Engagement

CVA Main Sample – Cancellation and No Access Rates, Month-by-Month



# SVA MAIN SAMPLE NON- COMPLIANCES

## SVA Main Sample

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The following graphs show the percentage of SVA Main Sample audits resulting in a Category 1 non-compliance (“deemed to be currently affecting the quality of data for Settlement purposes”) as well the average number of Category 2 non-compliances (“deemed to *potentially* affect the quality of data for Settlement purposes”) recorded per completed audit, year-on-year for the last five years in which site visits took place.

For each category, a breakdown is provided showing the proportion of the total made up by the various sub-categories. The actual number of findings making up these proportions is shown within the columns.

Overall, the frequency with which both categories of non-compliance are recorded has reduced in the 2021-22 audit year although, whilst welcoming the improvement, we should note that this may be a consequence of the proportionately fewer number of Main Sample audits undertaken.

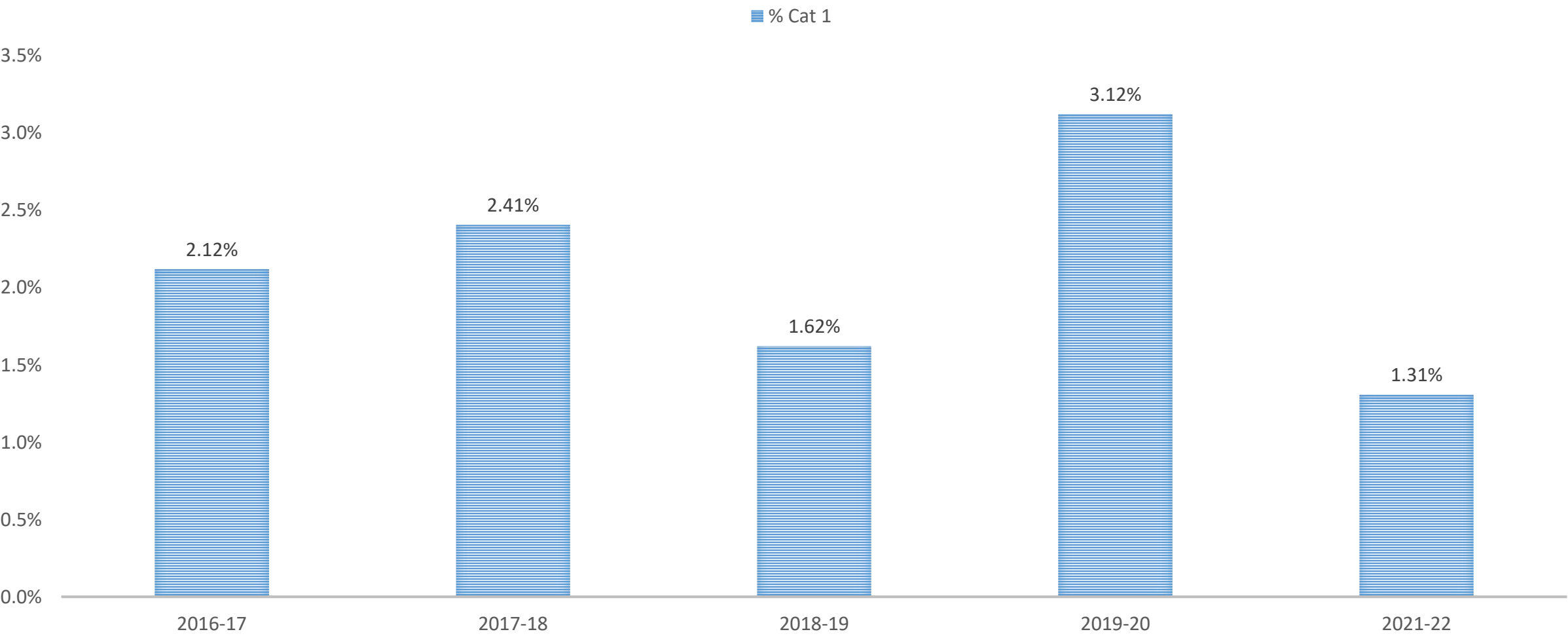
The proportions of each sub-category making up the total have also remained relatively steady, with the only marked change being a reduction in the rate of sub-category 2.16 (“Measurement Transformer certificates not provided or incorrect”).

The most notable change is shown in the final graph, which compares the distribution of non-compliances recorded across the total number of audits completed. These show a significant rise in the proportion of audits in which *no* non-compliance (of either category) was recorded. This suggests *either* that some participants are performing better than others *or* that participant performance is becoming more inconsistent.

There are several challenges in producing meaningful peer comparisons from this data. One option could be to *start* with a graph showing the distribution of non-compliances for each participant, which is probably the most readily intelligible way of presenting the data. However, questions remain about how and to whom responsibility for non-compliances is assigned and about what caveats to include – for example, some non-compliances may be more concerning than others, and some non-compliances may occur at rates that are not statistically significant.

# Technical Assurance of Metering (TAM) – SVA Main Sample

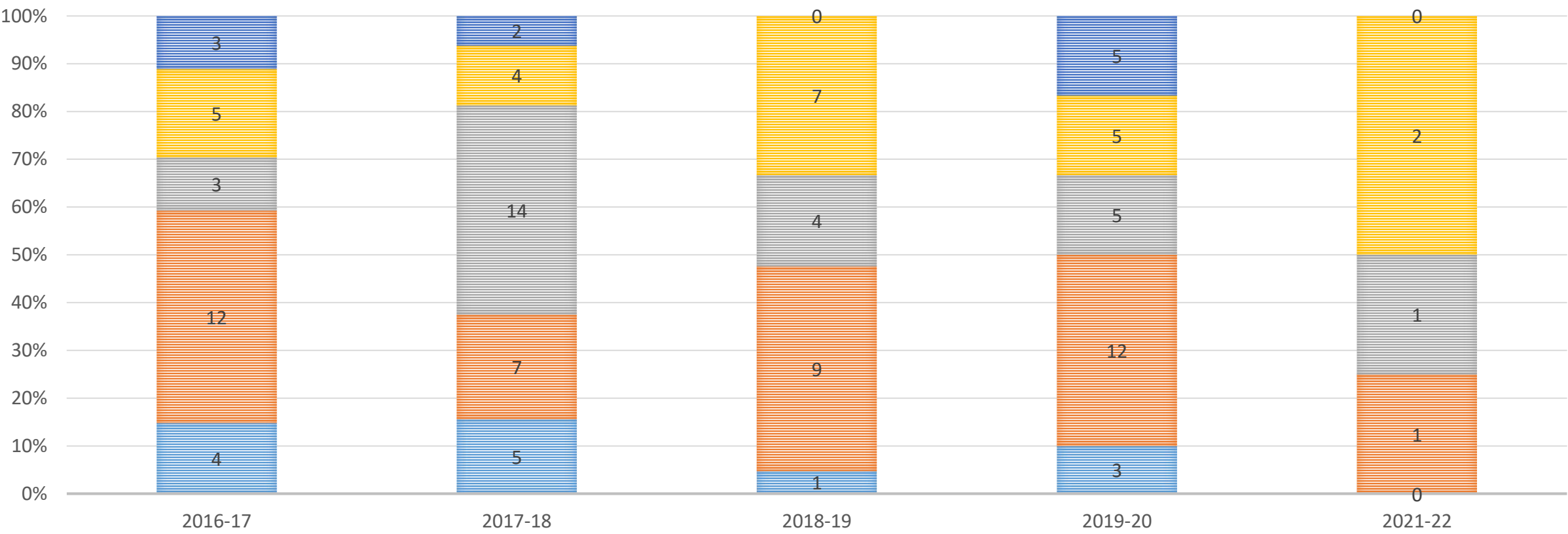
% of Completed Audits Recording a Category 1 Non-Compliance



# Technical Assurance of Metering (TAM) – SVA Main Sample

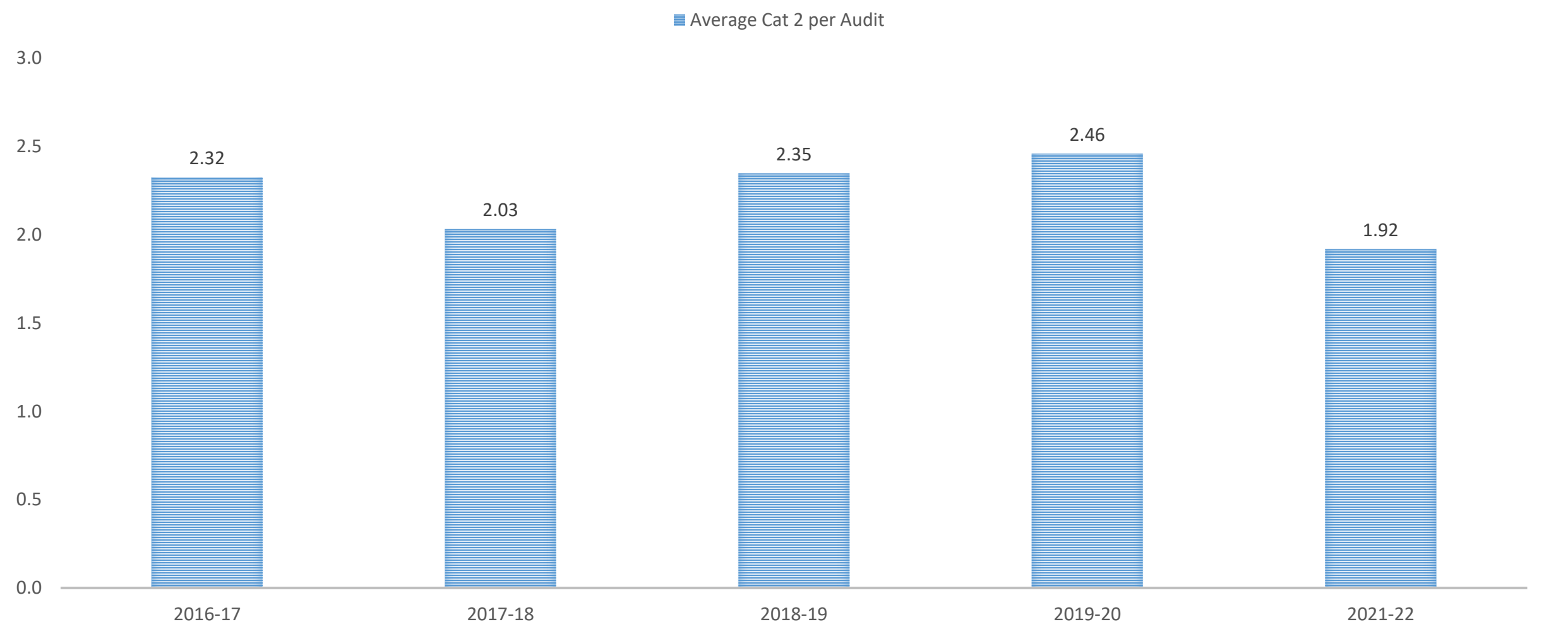
## Breakdown of Category 1 Non-Compliances by Type

- 1.01 Inaccuracy of Standing Data (Key MTD fields) held by Data Collector
- 1.02 Metering Equipment Incorrect or Unsatisfactory
- 1.03 Timing Error (Major)
- 1.04 Measurement Transformer Ratios Physically Incorrect
- 1.06 Miscellaneous



# Technical Assurance of Metering (TAM) – SVA Main Sample

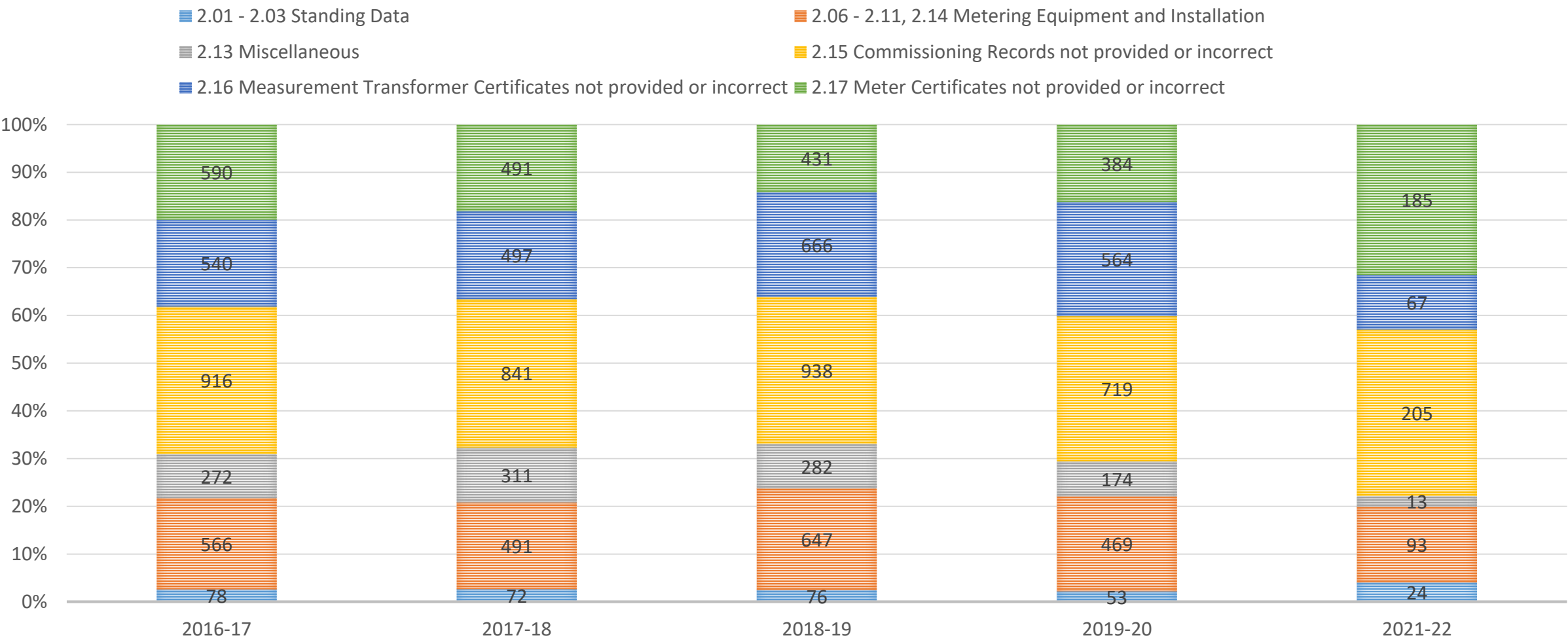
Average Category 2 Non-Compliances Recorded per Completed Audit





# Technical Assurance of Metering (TAM) – SVA Main Sample

## Breakdown of Category 2 Non-Compliances by Type



# Technical Assurance of Metering (TAM) – SVA Main Sample

Distribution of Non-compliances by Completed Audit



# SVA DESKTOP AUDIT NON- COMPLIANCES

# SVA Desktop Audits

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The following graphs show the percentage of SVA Desktop Audits resulting in a Category A non-compliance (“deemed to be currently affecting, or to have a high likelihood of affecting, the quality of data for Settlement purposes”) as well the average number of Category B non-compliances (“deemed to have a lower likelihood of affecting the quality of data for Settlement purposes, or for the non-provision of evidence”) recorded per completed audit, year-on-year for the 2020-21 and 2021-22 audit years and for the optional (Jul 20 – Jul 21) and mandatory (Aug 21 – Mar 22) periods.

For each category, a breakdown is provided showing the proportion of the total made up by the various sub-category. The actual number of findings making up these proportions is shown within the columns.

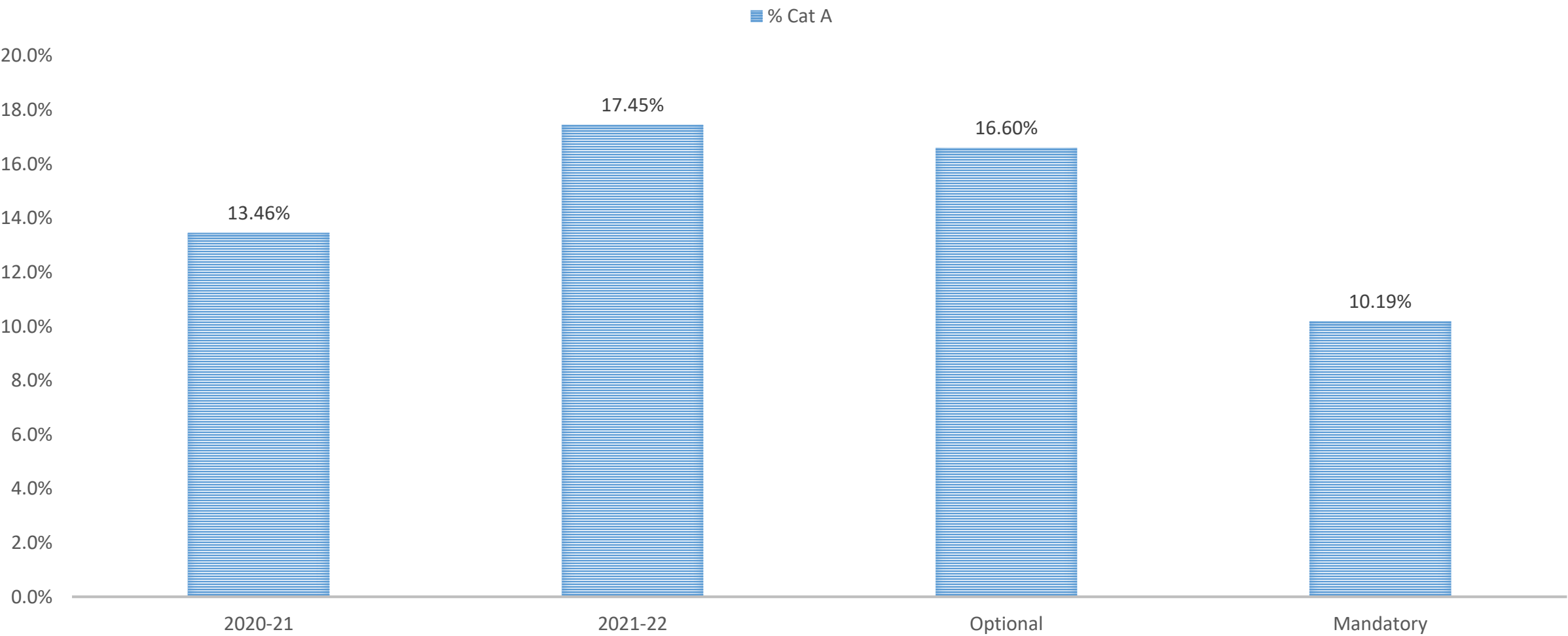
The frequency of Category A non-compliances increased in 2021-22 but has declined during the mandatory period, whilst the frequency of Category B non-compliances has declined in both. The proportions of each sub-category making up the total have remained relatively steady both year-on-year and between the optional and mandatory periods.

Again, the most notable change is in the distribution of non-compliances recorded. There was both a rise in the proportion of audits in which *no* non-compliance (of either category) was recorded and a fall in the proportion in which 6 or more non-compliances were recorded. This may reflect a reduction in the number of non-compliances being recorded as a result of participants completing audits incorrectly as the process beds in.

Again, a graph showing the distribution of non-compliances for each participant is probably the most readily intelligible way of presenting a peer comparison from the data, especially as Desktop Audit non-compliances are already assigned to particular participants. However, as with Main Sample audits, questions remain about what caveats to include.

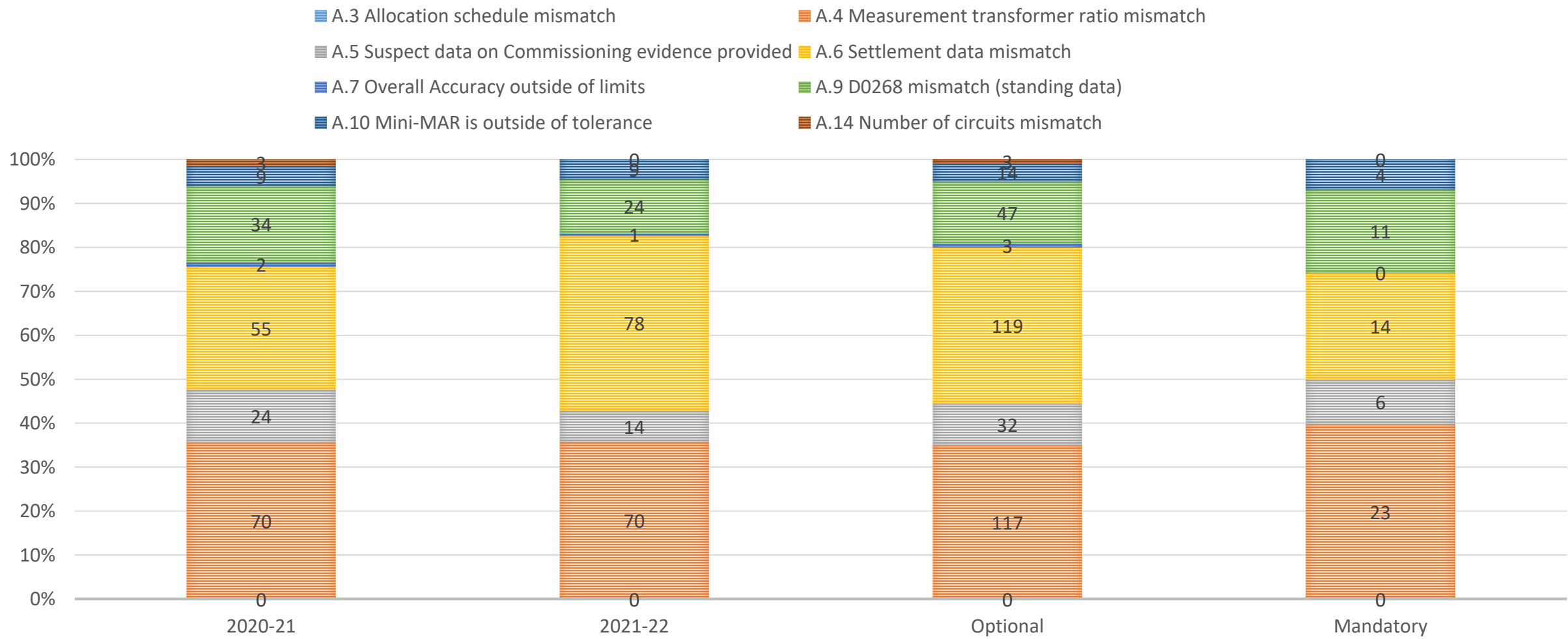
# Technical Assurance of Metering (TAM) – SVA Desktop Audits

% of Completed Audits Recording a Category A Non-Compliance



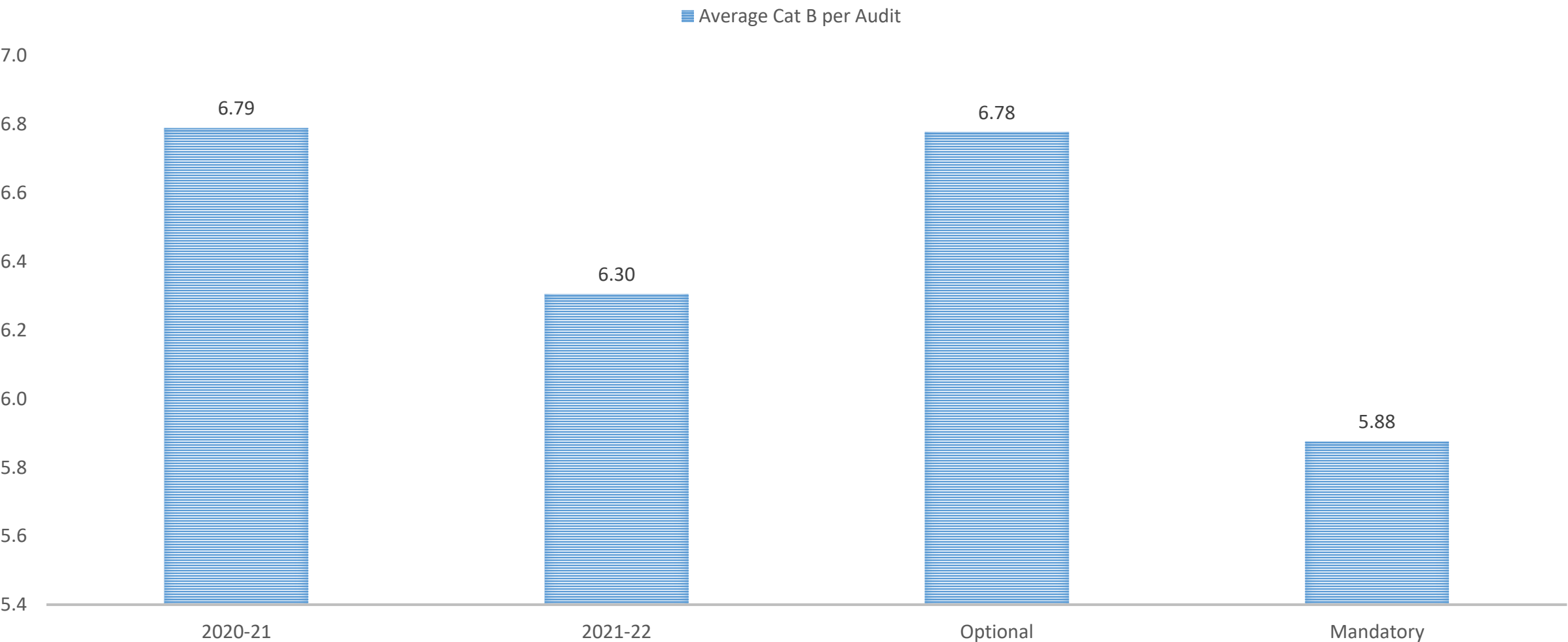
# Technical Assurance of Metering (TAM) – SVA Desktop Audits

## Breakdown of Category A Non-Compliances by Type



# Technical Assurance of Metering (TAM) – SVA Desktop Audits

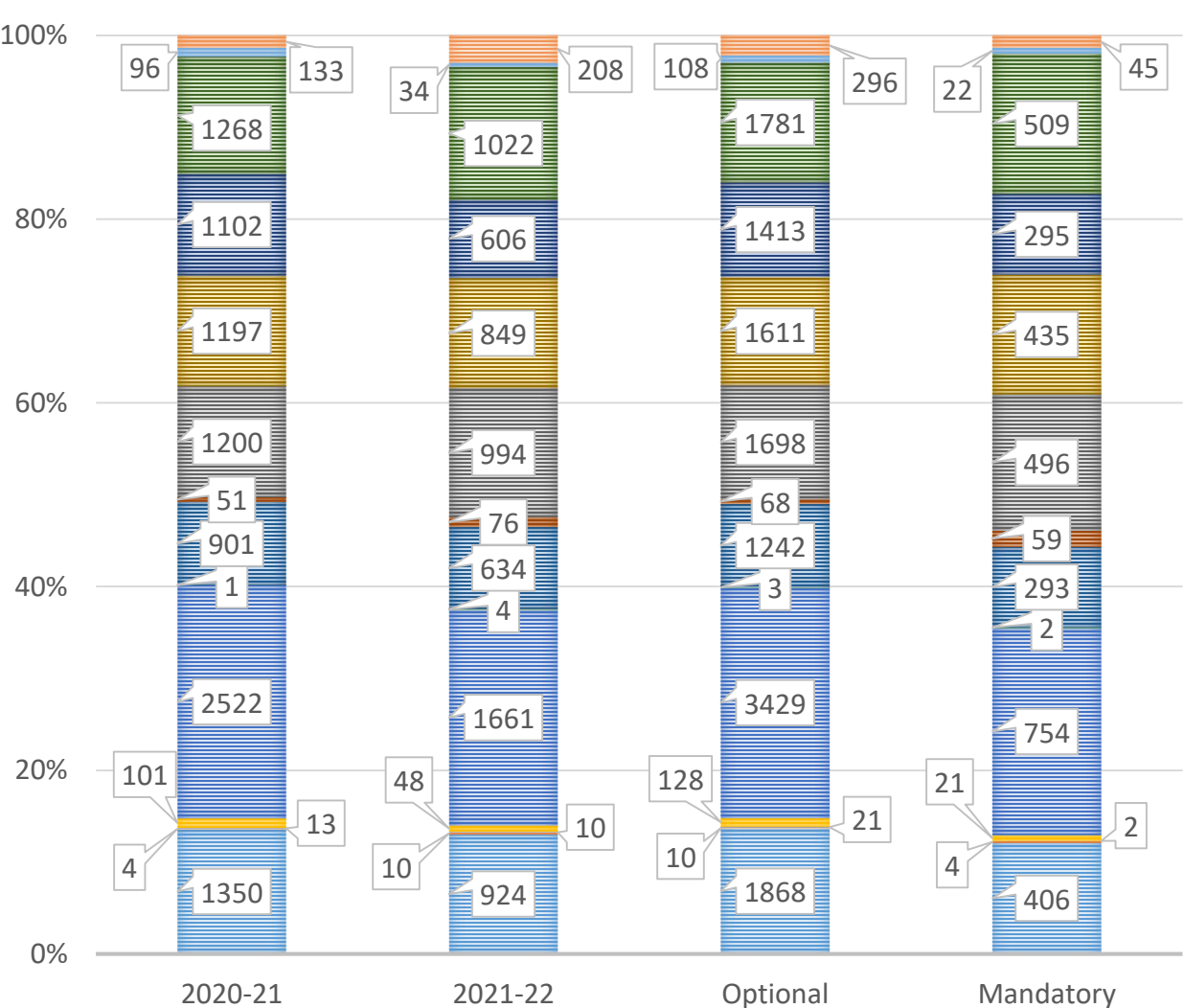
Average Category B Non-Compliances Recorded per Completed Audit



# Technical Assurance of Metering (TAM) – SVA Desktop Audits

Breakdown of Category B Non-Compliances by Type

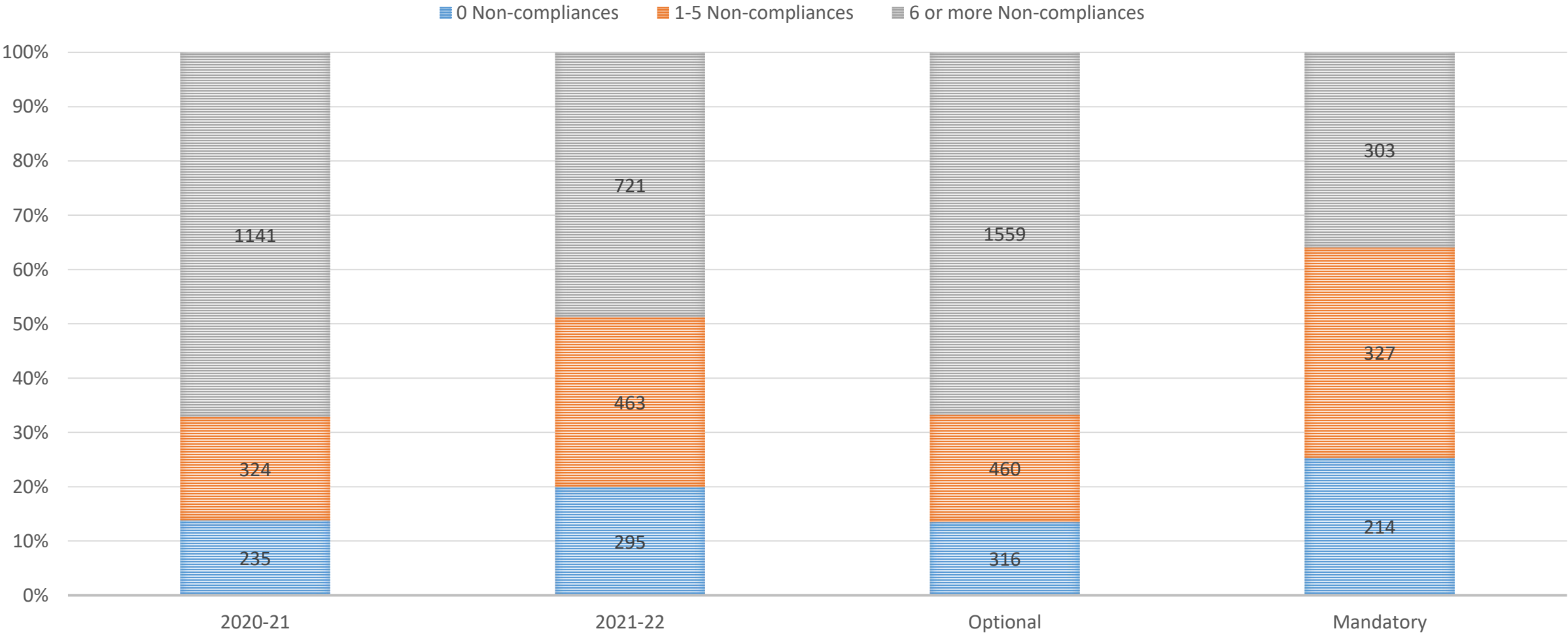
- B.18 Mini-Mar not provided
- B.17 Overall accuracy calculation not provided
- B.16 Missing CT/VT certificates (Post Nov 18) or supporting evidence for overall accuracy
- B.15 Missing Commissioning record Part 1 (Post Nov 18)
- B.14 Missing D0215
- B.13 Missing Meter certificates/supporting evidence
- B.12 CT/VT Certificates (Pre Nov 18) or supporting evidence for overall accuracy not provided
- B.11 Commissioning record (part 2) not provided
- B.10 Compensation figures not provided
- B.9 Settlement data (3 days) not provided
- B.8 Request for metering system investigation (D0001) and fault resolution report (D0002) not provided
- B.7 Allocation Schedule not provided
- B.4 Complex site form not provided
- B.1 D0268 not provided





# Technical Assurance of Metering (TAM) – SVA Desktop Audits

Distribution of Non-compliances by Completed Audit



# CVA NON-COMPLIANCES

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## CVA Main Sample and Targeted Visits

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The following graphs show the percentage of CVA Main Sample audits resulting in a Category 1 non-compliance (“deemed to be currently affecting the quality of data for Settlement purposes”) as well the average number of Category 2 non-compliances (“deemed to *potentially* affect the quality of data for Settlement purposes”) recorded per completed audit, year-on-year for the last five years in which site visits took place.

Results from the targeted inspections in 2021-22 across GSP Groups \_J, \_K, and \_M have also been included. These are shown separately from the 2021-22 Main Sample to reflect the proportionately higher likelihood of finding a non-compliance.

For each category, a breakdown is provided showing the proportion of the total made up by the various sub-categories. The actual number of findings making up these proportions is shown within the columns.

As expected, the targeted visits resulted in a significantly higher proportion of both Category 1 and Category 2 non-compliances than the Main Sample audits, although the distribution of non-compliances is broadly similar and has remained consistent since the 2017-18 audit year.

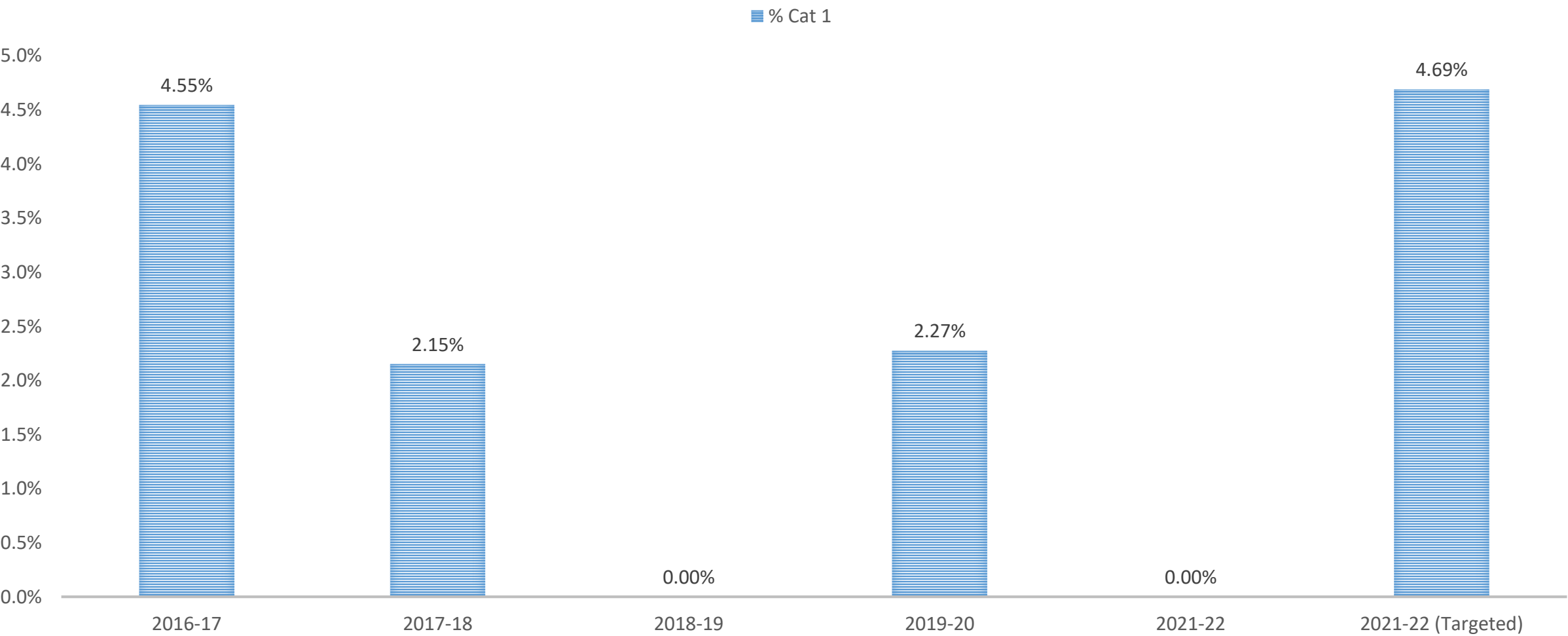
Given the proportionately higher materiality of Category 1 non-compliances in the CVA Market (which typically run to tens of millions of pounds), the results support Elexon’s further development of the methods used to target CVA audits at high-risk sites.

The results also show that the expected rate of Category 1 non-compliances in the CVA Market used for statistical modelling (0.25%) was too low. Even if the targeted visits in 2021-22 had uncovered every Category 1 non-compliance in the CVA Market this would represent a rate of 0.31%, and we have good reason – for example, anomalies in the ADR for GSP Groups \_P and \_G – to believe that there are more. Accordingly, Elexon has increased the number of CVA Main Sample visits planned for the 2022-23 audit year.

There are similar challenges to producing meaningful peer comparisons from this data as there are with the SVA Main Sample data. Moreover, there is also the question of whether it is fair to attribute responsibility to participants for non-compliances resulting from work carried out by stakeholders such as National Grid who are not subject to Elexon’s Performance Assurance Framework.

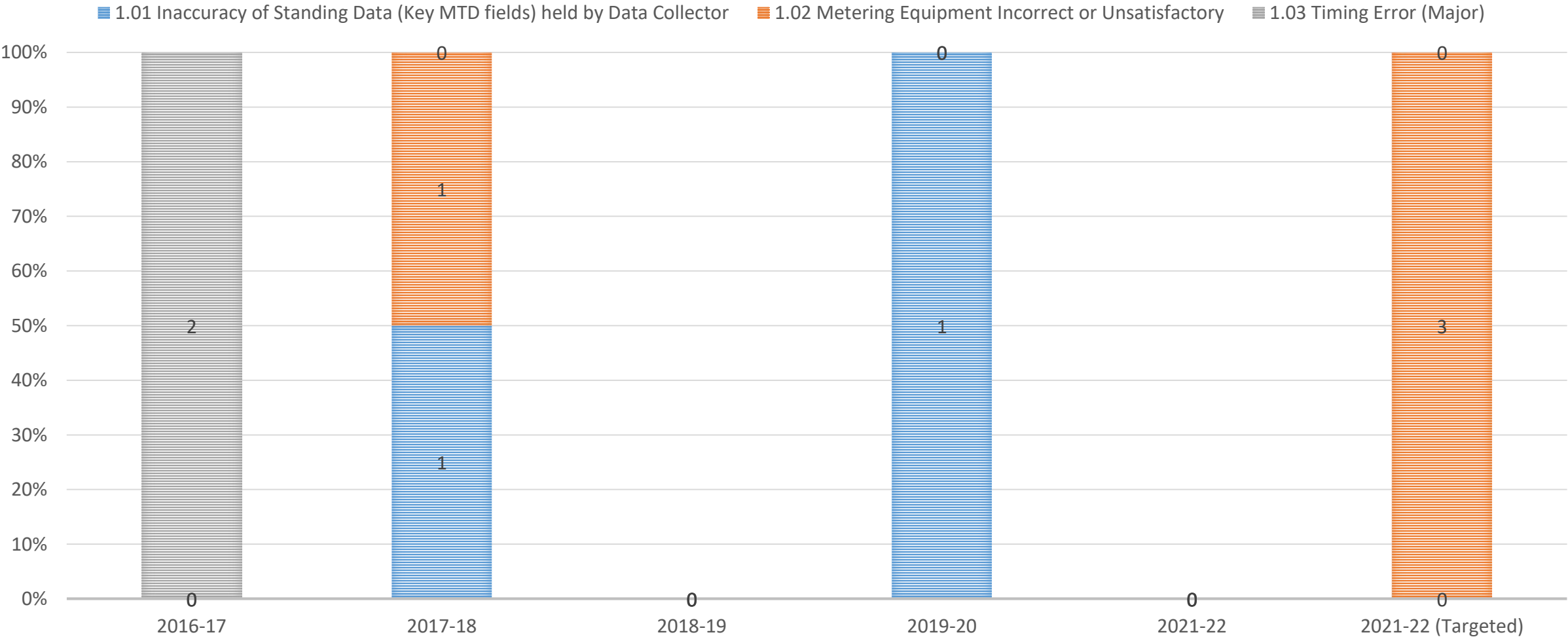
# Technical Assurance of Metering (TAM) – CVA

% of Completed Audits Recording a Category 1 Non-Compliance



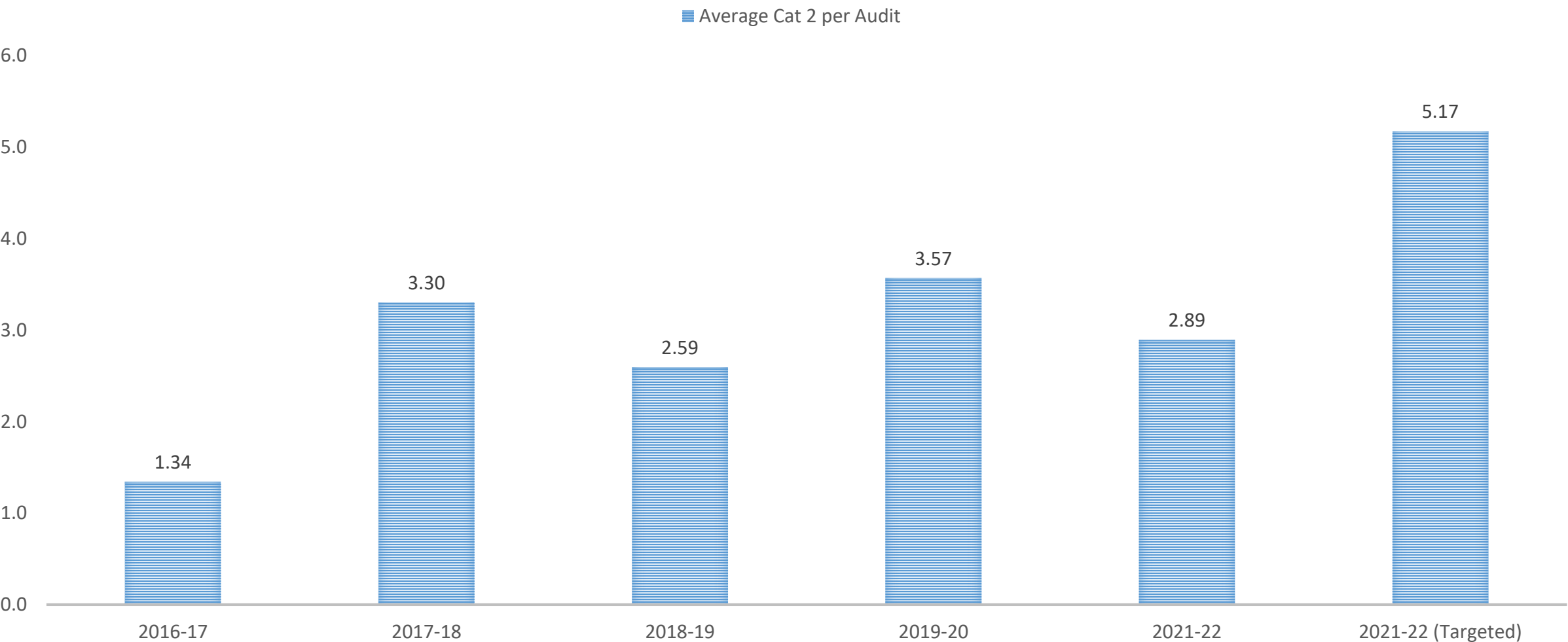
# Technical Assurance of Metering (TAM) – CVA

Breakdown of Category 1 Non-Compliances by Type



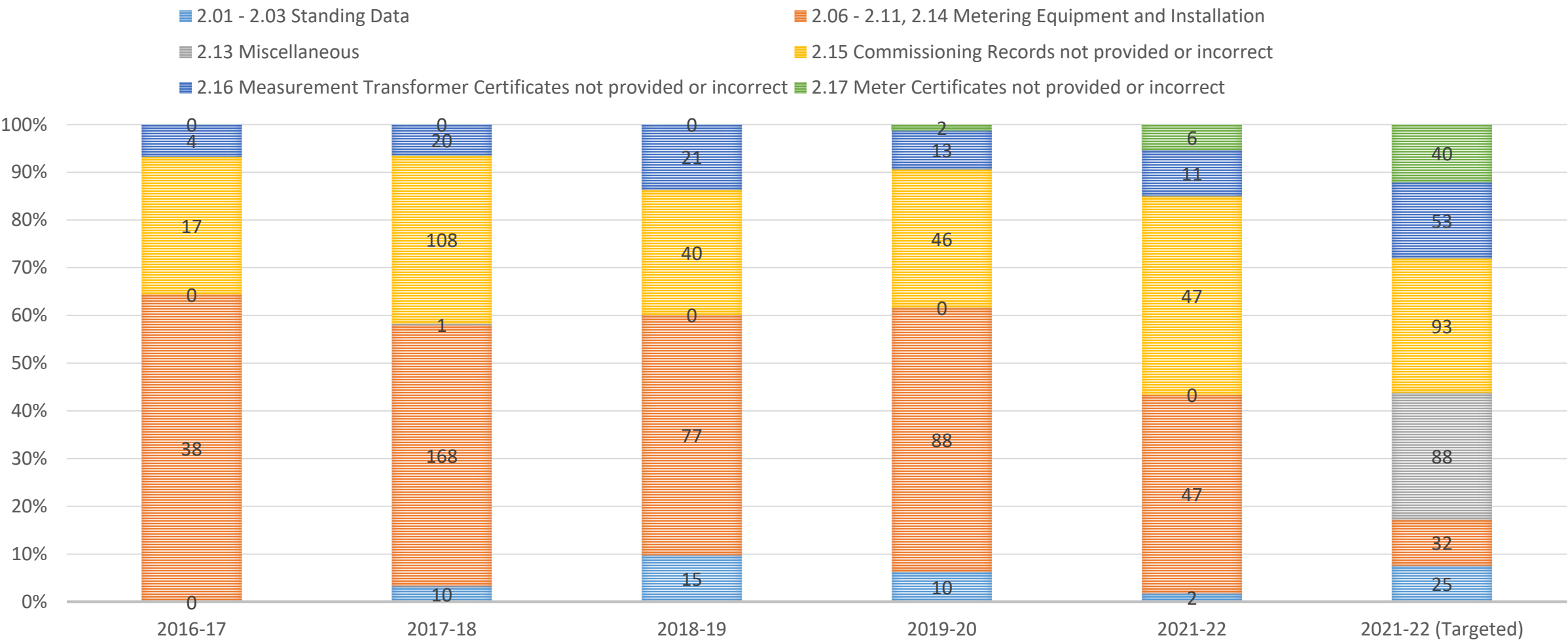
# Technical Assurance of Metering (TAM) – CVA

Average Category 2 Non-Compliances Recorded per Completed Audit



# Technical Assurance of Metering (TAM) – CVA

Breakdown of Category 2 Non-Compliances by Type



# Technical Assurance of Metering (TAM) – CVA

Distribution of Non-compliances by Completed Audit

