



The BSC Audit Approach
2023/2024

ISAE (UK) 3000 Opinion Audit

27 APRIL 2023



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The contacts at KPMG in connection with this document are:



Nathan Cain
Partner, KPMG LLP

Tel: +44 (0)7557 631470
nathan.cain@kpmg.co.uk



Gavin Gardner
Senior Manager, KPMG LLP

Tel: +44 (0)7468 768848
gavin.gardner@kpmg.co.uk

The BSC Audit Approach 2023/2024

We will continue to deliver this work in two distinct streams:

- This Approach document covers the Central Systems and Central Volume Allocation Meter Operator (CVA MOA), which will remain within the scope of an ISAE (UK) 3000 Opinion Audit (see Appendix 1 for details).
- A separate Approach document covers the Supplier and Supplier Volume Allocation (SVA) Agents and CVA Registrants which fall under the scope of the Process Assessment Audit

ISAE (UK) 3000 Opinion Audit (Assurance Conclusion):

We will continue to issue an Independent ISAE (UK) 3000 Assurance Conclusion over Central Systems and CVA MOA.

The ongoing and upcoming changes, as part of the Kinnect programme, will be a fundamental transformation of BSC Central Systems operations. We hold regular inquiry meetings with Elexon to understand the scope and timings of the changes and their potential impact on our work. We will continue to monitor progress and adapt our approach accordingly. The SAA system migration took place at the end of the 2022/2023 BSC Audit period, additional testing of the new system is due to take place early in the 2023/2024 audit period. We are aware of, and planning the same approach for the FAA system changes which are due to commence at the end of the 2023/2024 audit period.

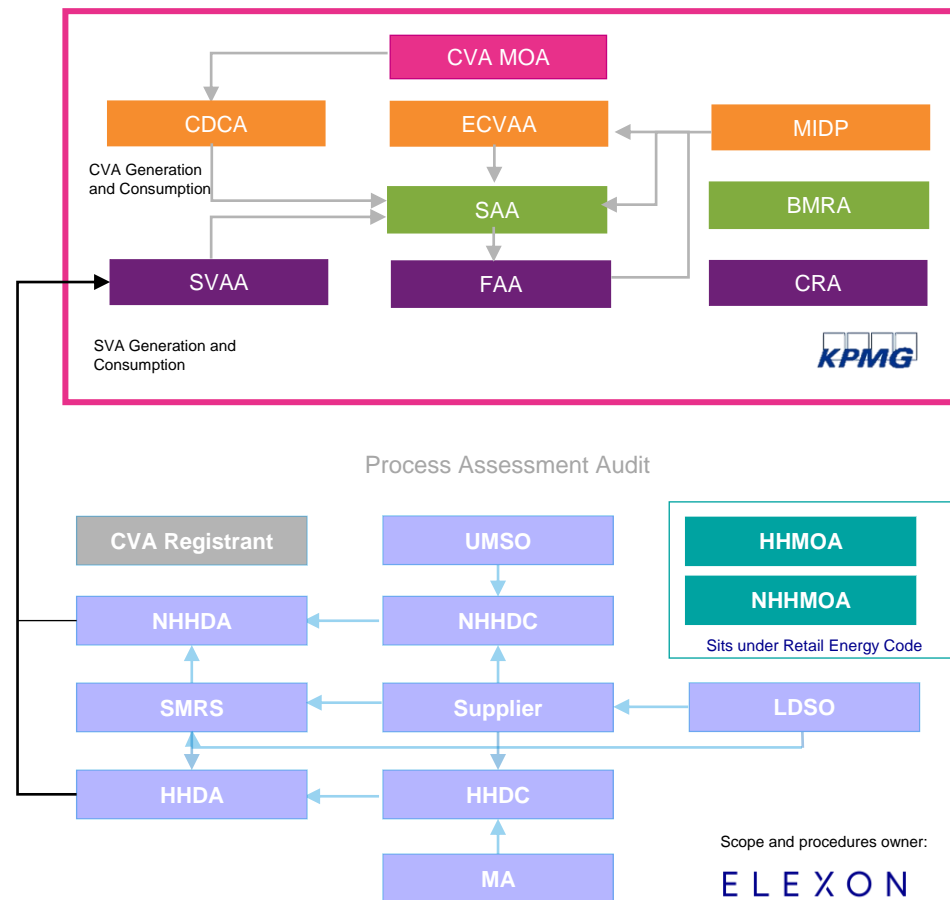
Data Modelling - The testing performed by the BSC Auditor will be supported and focused by the use of models and re-performance of calculations using data from a number of Parties within the industry. We utilise this data and models as part of the suite of tests we perform over the operation of the Central Settlements Systems.

Materiality - For the Assurance Conclusion work over Central Systems and CVA MOA, the materiality threshold for the year ending 31 March 2024 BSC Audit is 1.1 TWh. We will issue a Reasonable Assurance Report and present it to Performance Assurance Board (PAB) in May 2024 and the Panel in June 2024.

Process Assessment (covered in a separate Approach Document):

We will not be issuing a formal Assurance Conclusion over the SVA market. The diagram on the right outlines how the scope of the BSC Audit is split between Process Assessment Audit and the ISAE (UK) 3000 Assurance Conclusion (Central Systems and CVAMOs).

ISAE (UK) 3000 Opinion Audit



Operational Approach: BSC Audit phases

1. Planning

2. Entity Engagement

3. Fieldwork and data modelling

4. Clearance meetings and reporting

1. Planning

Risk assessment and entity selection

For Assurance Conclusion work over CVA MOA and Central Systems, the scoping of entities and work programmes will be done by KPMG with inputs from Elexon. Utilising information and available data, the risk associated with each market participant to the completeness, validity and accuracy of allocations and Settlement is determined. The sources of data include:

- Technical Assurance Agent (TAA) Audit and Technical Assurance of Metering (TAM) Findings;
- Number of (and changes in the number of) MPANs managed by the market participant and sum of Metered Volume (MWh);
- Open Audit Issues, including the length of time those issues have been open;
- Accumulated knowledge and experience of the industry and market participants;
- OSM knowledge with respect to changes in people, processes and systems at participants; and
- Output from the Qualification Service and re-Qualification requests.

In general, a rotational approach is followed to make sure that each market participant is subject to full scope assurance procedures at least once every four years in relation to CVA MOA agents. We will continue performing testing in three intensities: full, targeted and limited.

A separate Audit Selection Document which provides further details as to the rotational approach, selection criteria and market participants in scope for the BSC Audit Engagement is provided to Elexon for each assurance period.

The audited entity selection process and design of the assurance procedures are informed by the mapping of Industry Risks per the Risk Evaluation Register (see Appendix 3) to relevant sections of the BSC, The Code Subsidiary Documents ('CSDs') and the BSC Audit Scope as set by PAB.

2. Entity Engagement

Audit Planning Memorandum ('APM') and Data Requests

Prior to the scheduled audit for each participant, a planning meeting will be held with nominated representatives at in-scope entities. For new market entrants, an extended planning meeting will be scheduled to introduce the BSC Audit. Prior to the planning meeting, a draft Audit Planning Memorandum ('APM') will be made available to each in-scope entity outlining the timeframes, key contacts and data requested.

The APMs for the 2023/2024 BSC Audit period will provide further details on the work that will be performed, including a description of the processes that will be covered. This will allow entities to plan more effectively the meetings that will be held on the site visits and the resources they will have to allocate to BSC Audit.

Operational Approach: BSC Audit phases (cont.)

1. Planning

2. Entity Engagement

3. Fieldwork and data modelling

4. Clearance meetings and reporting

3. Fieldwork and data modelling

Site visits for fieldwork will generally take place between October 2023 and March 2024 and will be conducted remotely, unless otherwise agreed. The timing of this work will be agreed with entities during the entity engagement phase. We will aim to finish all site work by 31 March 2024. KPMG will also utilise intelligent scheduling of Party Audits to minimise the impact on Parties while retaining the level of assurance expected from the BSC Audit.

Detailed Testing

Detailed testing involves inspection of a selection of transactions and records at the entities where we are performing tests to verify that they have been created and/or processed in compliance with the BSC or to establish completeness and accuracy at the data flow or metering system level information.

The number of items selected for detailed inspection at each entity will be determined dependent on the:

- Size of the population of items/number of transactions;
- Maturity of the processes operated by the entity;
- Knowledge, experience and skills of the process operators;
- Changes to IT systems at the entity;
- Inherent risks associated with the processes operated by the entity; and
- Open issues/observations relating to non-compliance with the BSC.

Data modelling techniques

The BSC contains complex calculations with respect to; deriving generation and consumption, aggregation, allocation, apportionment and Settlement. A number of models will be utilised to support the BSC Audit. The models use source data provided by Market Participants and re-perform the calculations to check their arithmetical accuracy.

Specific data requests to support the operation of the models are included in the APM for each in-scope entity.

Moderation

Moderation procedures will be performed to ensure consistency. This will involve reviewing all issues and their ratings to ensure they are applied consistently across all audited agents.

4. Clearance Meetings and Reporting

Observations

At the conclusion of testing at each site visit, the BSC Auditor will classify and rank observations based on whether they have resulted in a non-compliance with the BSC and whether it has resulted in a potential impact on the completeness and/or accuracy of Settlement, or not.

Operational Approach: BSC Audit phases (cont.)

1. Planning

KPMG will discuss observations with entities as they arise to determine compensating or mitigating activities in place at the entity. A clearance meeting will be held with entities to discuss and formally agree observations raised by KPMG.

To inform our Assurance Conclusion, the ratings for observations have been defined as follows (and see Appendix 4):

- Settlement impacting non-compliance – a non-compliance with the BSC which, if uncorrected, will impact on the completeness and/or accuracy of Settlement. In this case we will assess the impact as High, Medium or Low, depending on the estimated overall potential impact (MWh) on Settlement;
- Management Letter Points (MLPs) - findings which have no Settlement impact
 - Immaterial non-compliance – a non-compliance with the BSC which is unlikely to have a direct impact on the completeness and/or accuracy of Settlement;
 - Process improvement – the BSC appears to have been complied with but the BSC Auditor has identified the potential for process and/or control improvements at the entity.

Reporting

Following clearance meetings, immaterial non-compliance and process improvement observations will be reported to the audited entity as MLPs, within an overall audit issues document that will set out the Settlement impacting non-compliances noted from our testing. The final issue document will be shared with Elexon.

2. Entity Engagement

3. Fieldwork and data modelling

KPMG will take into account any comments raised by entities on MLPs raised during on-site work, but they will not be discussed in detail during clearance meetings.

All Settlement Impacting Non-compliances will be reported

Where non-compliances have resulted in an impact to Settlement the potential impact will be assessed across all affected MPANs and aggregated over the assurance period.

For the Assurance Conclusion work over Central Systems and CVA MOA, a Reasonable Assurance Report will be issued and presented to the PAB and Panel. The materiality threshold for the year ending 31 March 2024 BSC Audit is 1.1 TWh. Where non-compliance has an aggregated Settlement impact greater than the materiality threshold, the CVA MOA and Central Systems Assurance Conclusion in the BSC Audit Report will be qualified by the BSC Auditor.

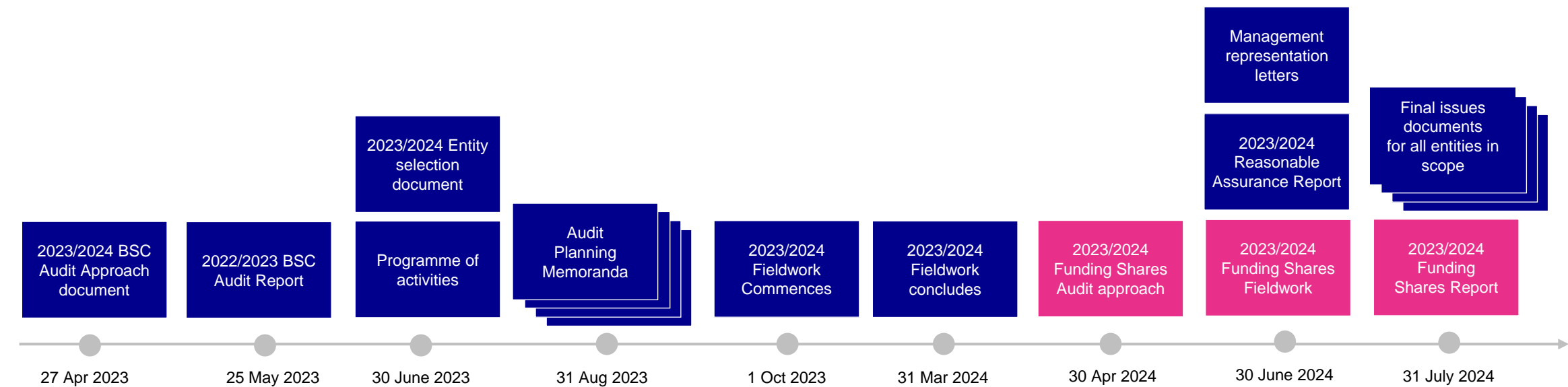
Issues of significance will be reported in full within the Reasonable Assurance Report. This section therefore contains matters which are of sufficient importance by their nature that we feel it appropriate to bring them to the attention of the recipients of the report. We will work with Elexon to produce “worst case” scenario error calculations and also report on key issues.

For Assurance Conclusion work, we will be requesting Elexon to submit a management representation letter prior to the Reasonable Assurance Report being issued.

Operational approach: BSC Audit phases (cont.)

An indicative time-line for delivery of the annual BSC Audit is illustrated below.

- Assurance Conclusion – CVA MOA and Central Systems
- Funding Shares



APPENDICES

APPENDIX 1 RISK APPROACH: SCOPING DETAIL 2023/2024

APPENDIX 2 BSC AUDIT REQUIREMENTS

APPENDIX 3 RISK ASSESSMENT (INDUSTRY SPECIFIC)

APPENDIX 4 BSC AUDIT FINDINGS RATING METHODOLOGY

APPENDIX 5 GLOSSARY OF TERMS

Appendix 1 - Risk approach: Scoping detail 2023/2024



Background and BSC requirements

Per Section H, subsection 5 of the Balancing and Settlement Code ('the Code') the objective of the BSC Audit is to 'provide assurance (to such level as the Panel considers appropriate) that the provisions of the Code and Code Subsidiary Documents in relation to Settlement have been complied with in the Audit Year'. The detailed BSC requirements for the BSC Audit and assumptions made are provided in Appendix 2 of this document.

The provisions of the Code and Code Subsidiary Documents in relation to Settlement over which the Panel requires assurance are agreed annually and recorded in the 'BSC Audit Scope'. The latest BSC Audit Scope for the BSC Year '1 April 2023 to 31 March 2024' will be published on Elexon's website.

For avoidance of doubt, we are planning to perform this work by using information available via investigation of processes, system configuration and flows. There will be no work performed by investigating the actual meters on sites (this will be covered by the TAA Audit). We are also not providing an ISAE (UK) 3000 Assurance Conclusion over SVA Parties.

Compliance for ISAE (UK) 3000 Assurance Conclusion will be assessed in line with the requirements, as documented in the Code and Code Subsidiary Documents, (BSCPs, CoPs or PSLs) which relate to the scope as defined by the Panel.

Section H of the BSC also requires that assurance is provided annually by the BSC Auditor that the provisions of the Code and Code Subsidiary Documents in relation to Funding Shares have been complied with in the Audit Year. Funding Shares is subject to alternative procedures and, as such, a separate Funding Shares Approach document will be produced.



ISAE (UK) 3000 Opinion Audit (Assurance Conclusion)

KPMG LLP, as the BSC Auditor for the year ending 31 March 2024, will provide the BSC Audit Report which contains a reasonable assurance conclusion opinion over the Settlement calculations and allocations at CVA MOAs and Central Systems with respect to the Balancing and Settlement Code and Code Subsidiary Documents. References to the BSC Assurance Conclusion in this 'BSC Audit Approach Document' relate to the KPMG Assurance Conclusion which forms part of the 'BSC Audit Report' and references to the 'BSC Audit Engagement' are to the Assurance work we are performing.

The Assurance Conclusion for the year ending 31 March 2024 will be in respect of Settlement Runs (as defined in Section U2.3.1a of the Balancing and Settlement Code) processed in the year ended 31 March 2024. Given that Settlement Runs occurring during the audit period are considered, errors identified may have arisen from Settlement Days spanning a 26 month period (approximately).

The BSC Auditor undertakes its procedures in accordance with International Standard on Assurance Engagements ISAE (UK) 3000 – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' issued by the Financial Reporting Council (FRC). The expression 'audit' used in connection with this engagement is determined to mean a reasonable assurance engagement performed in accordance with ISAE (UK) 3000 where referred to CVA MOA and Central Systems work.

Our reporting will take into account a number of factors including:

- Whether instances of non-compliance have resulted in a Settlement impacting error (in isolation or in aggregate); and
- Whether the issue has been, or will be corrected by the normal course of operation of Settlement, including the BSC Trading Disputes process

Appendix 1 - Risk approach: Scoping detail 2023/2024



ISAE (UK) 3000 Assurance Conclusion Materiality

Materiality for the BSC Audit year ending 31 March 2024 will be 1.1 TWh as set out in the BSC Audit Scope for 2023/2024.

The assessment of what is material is a matter of professional judgement and will be discussed between the BSC Auditor and Elexon prior to publication of the BSC Audit Report.



Consideration of other work in our Assurance Conclusion

- The Balancing Mechanism ('BM') Audit is conducted by the BM Auditor who is appointed by the Transmission Company pursuant to Section H paragraph 5.1.6 of the BSC.
- Section L of the Code requires that the TAA monitors compliance by Parties in relation to Half Hourly Metering System through spot visits at a representative selection of sites where Metering Equipment is installed. Instances of non-compliances should be provided to the BSC Auditor.

BSC Assurance Conclusion considers the work of the Process Assessment which feeds into Elexon Performance Assurance Framework (PAF), TAA and BM Auditor and will take into account issues which may have a material impact on the conclusion of the assurance work performed under the BSC Audit engagement as part of its ongoing risk assessment.

Appendix 2 - BSC Audit requirements

Section H paragraphs 5.1.2 to 5.1.4 of the Code sets out the objective and scope of the BSC Audit as follows:

'The objective of the BSC Audit is to provide assurance (to such levels as the Panel considers appropriate) that the provisions of the Code and Code Subsidiary Documents in relation to Settlement and in relation to the calculation of Funding Shares have been complied with in the Audit Year.'

The scope of the BSC Audit (save to the extent covered by the scope of the audit to be carried out by the BM Auditor under paragraph 5.1.6) shall include:

- The submission and application of standing and periodic data, used in connection with Settlement, by Parties and Party Agents;
- The processes applied to such data pursuant to the Code and Code Subsidiary Documents;
- The determinations and calculations made by Market Index Data Providers in the provisions of Market Index Data (but only to the extent provided in the relevant Market Index Data Provider Contract);
- The determinations and calculations made by BSC Agents and BSCCo where it provides the Profile Administration Services for the purposes of Settlement; and
- The systems processes and procedures used and applied (by BSC Agents and BSCCo) for the purposes of or in connection with the foregoing.

The scope of the BSC Audit shall not include:

- The registration of Metering Systems in accordance with the Master Registration Agreement; and
- The application by BSCCo of the compensation provisions under Section M4.

The Scope of the BSC Audit is designed to meet the requirements of the Code and the Code Subsidiary Documents, subject to those areas specifically excluded in the 'Auditor Agreement'.

In determining the Scope KPMG made a number of assumptions with regards to the meaning of Section H paragraphs 5.1.2 to 5.1.4 and these are set out below:

- 'Settlement' – means the determination and Settlement of amounts payable in respect of Trading Charges (including Reconciliation Charges) in accordance with the Code (including where the context admits Volume Allocation);
- 'The submission and application of standing data and periodic data' – submission arises from the point of capture by the relevant Party Agent, unless otherwise indicated, and the data relates only to data used in or required by Settlement;
- 'The processes applied to such data' – validation, calculation and allocation performed on Settlement data by Party Agents; and
- 'BSC Agents for the purposes of Settlement' – the Technical Assurance Agent, the Teleswitch Agent and the Profile Administrator have been specifically excluded from the scope of the BSC Audit due to the technical nature of their activities.

The coverage of the fieldwork for the period for those Metering Systems physically located in England, Wales and Scotland.

ISAE (UK) 3000 Opinion (Assurance Conclusion)

Our scope for metering systems will encompass:

All Settlement Runs performed by the SAA in respect of Settlement Days from 1 April 2023 to 31 March 2024 in BSC Assurance Opinion;

As a result the Settlement Days that will be considered as part of the assurance period will approximately span a 26 month period.

For avoidance of doubt, coverage will exclude Post Final Settlement Reconciliation ('DF') Runs which will be considered as a corrective technique only.

Where a Settlement impacting error is detected, either by the BSC Auditor or by a BSC management process that will not be corrected through RF an assessment will be undertaken as to whether that error has been, or will be subject to correction via the BSC Trading Disputes procedure and the effectiveness of these processes assessed by the BSC Auditor. The Trading Disputes process is considered to be a corrective technique that includes both Extra Settlement Determinations ('ESD') and DF Runs.

Appendix 3 - Risk Assessment (industry specific)

Using the top Risks from the 2023/2024 Risk Evaluation Register, we have set out the extent to which these will be considered by the Assurance Conclusion over CVA MOA and Central Systems. We have outlined five risks with the highest impact banding, but have also considered RER and other appropriate risks in completion.

Table on the right shows the CVA market and Central Systems risks ordered by impact band.

Industry Risk Reference	Industry Risk Description	BSC Parties Impacted
019	A Volume Allocation Unit is registered incorrectly or not at all, such that the CDCA does not collect any or the relevant data	Registrant, Licensed Distribution System Operator, CVA Meter Operator Agent
020	CVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all	Licensed Distribution System Operator, CVA Meter Operator Agent, Non-Performance Assurance Parties
021	CVA Metered Data is not retrieved, or processed correctly, or at all, by the CDCA	CVA Meter Operator Agent, Non-Performance Assurance Parties
022	Changes to CVA Metering Equipment are not notified to CDCA	Registrant, Licensed Distribution System Operator, CVA Meter Operator Agent, Non-Performance Assurance Parties
023	A fault with CVA Metering Equipment is not resolved, such that Metered Data is recorded incorrectly or cannot be retrieved	Registrant
024	CVA reference data is not created or transferred correctly, or at all	Registrant, Licensed Distribution System Operator, Non-Performance Assurance Parties

Appendix 3 - Risk Assessment (industry specific) (cont.)

Using the top Risks from the 2023/2024 Risk Evaluation Register, we have set out the extent to which these will be considered by the Assurance Conclusion over CVA MOA and Central Systems. We have outlined five risks with the highest impact banding, but have also considered RER and other appropriate risks in completion.

Table on the right shows the CVA market and Central Systems risks ordered by impact band.

Industry Risk Reference	Industry Risk Description	BSC Parties Impacted
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	Registrant, Licensed Distribution System Operator
028	NETSO does not submit or submits incorrect Settlement data	Non-Performance Assurance Parties
029	The SAA's calculations and processing are incorrect or use incorrect data	Non-Performance Assurance Parties
030	The ECVAA does not carry out processes correctly, such that output files are inaccurate	Non-Performance Assurance Parties
031	The FAA does not accurately process Trading Charges or calculate ad-hoc charges correctly, such that Advice Notes are incorrect	Non-Performance Assurance Parties
032	Manual adjustments to CVA Metered Data are not completed correctly, or at all	Registrant, Non-Performance Assurance Parties
033	An Interconnector Administrator does not submit, or submits inaccurate BM Unit Metered Volume data	Non-Performance Assurance Parties
034	The SVAA does not process or transfer the correct data or does not use approved default data.	Data Aggregator, Non-Performance Assurance Parties

Appendix 4 - BSC Audit Findings Rating Methodology

Overview

The categorisation of reporting findings will not change from previous years. The findings are categorised as either Issues or Management Letter Points ('MLP's) depending on whether there is a potential impact on the completeness and/or accuracy of Settlement.

An impact rating of High, Medium or Low is applied to each issue arising from the Assurance Conclusion.

Ratings will be applied by the BSC Auditor using its professional judgement. A number of underlying principles which provide guidance as to how this will be applied are set out in this document.

Issues will be considered across the entities in scope by the BSC Auditor at an issues 'moderation' meeting to ensure the determination of ratings is consistent



How each finding will be considered?

Each finding will be individually determined but will also be considered in the context of similar findings raised on other entities.

Two entities may have the same underlying issue but if one entity has a mitigating process or control and is responsible for a much lower error rate, impact or residual risk as a result, then a different impact rating may apply.

One split moderation session will be performed during the year, following completion of the fieldwork at all market participants. The aim of this session is to ensure a ratings consistency across each of the entities in scope.



Ratings for findings have been defined as follows:

- Settlement Impacting Non-Compliance – a non-compliance with the BSC that, if left uncorrected, may have an impact on the completeness and/or accuracy of Settlement. In this case we will assess the impact as High, Medium or Low, depending on the estimated overall potential impact on Settlement.
- Immaterial Non-Compliance – a non-compliance with the BSC that is unlikely to have a direct impact on the completeness and/or accuracy of Settlement. These observations will be categorised as 'Management Letter Points' (MLPs); and
- Process Improvement – the BSC appears to have been complied with but the BSC Auditor has identified the potential for process improvements at the entity in scope. These observations will also be categorised as 'Management Letter Points' (MLPs).

Appendix 4 - BSC Audit Findings Rating Methodology

How will we determine the impact of these factors?

For each Settlement Impacting Non-Compliance issue we will rate these as High, Medium or Low after gaining an understanding of the following:

Nature of the issue;

Extent of potential impact of the issue on Settlement in MWh;

Improvement / deterioration (both quantitatively and qualitatively) since the previous BSC Audit;

Whether the number and/or nature of exceptions indicates the issue is pervasive or more widespread;

Impact of the issue on other Audited Entities or Trading Parties;

Extent to which a compliance issue might impact other issues (especially those which have a direct impact on Settlement); and

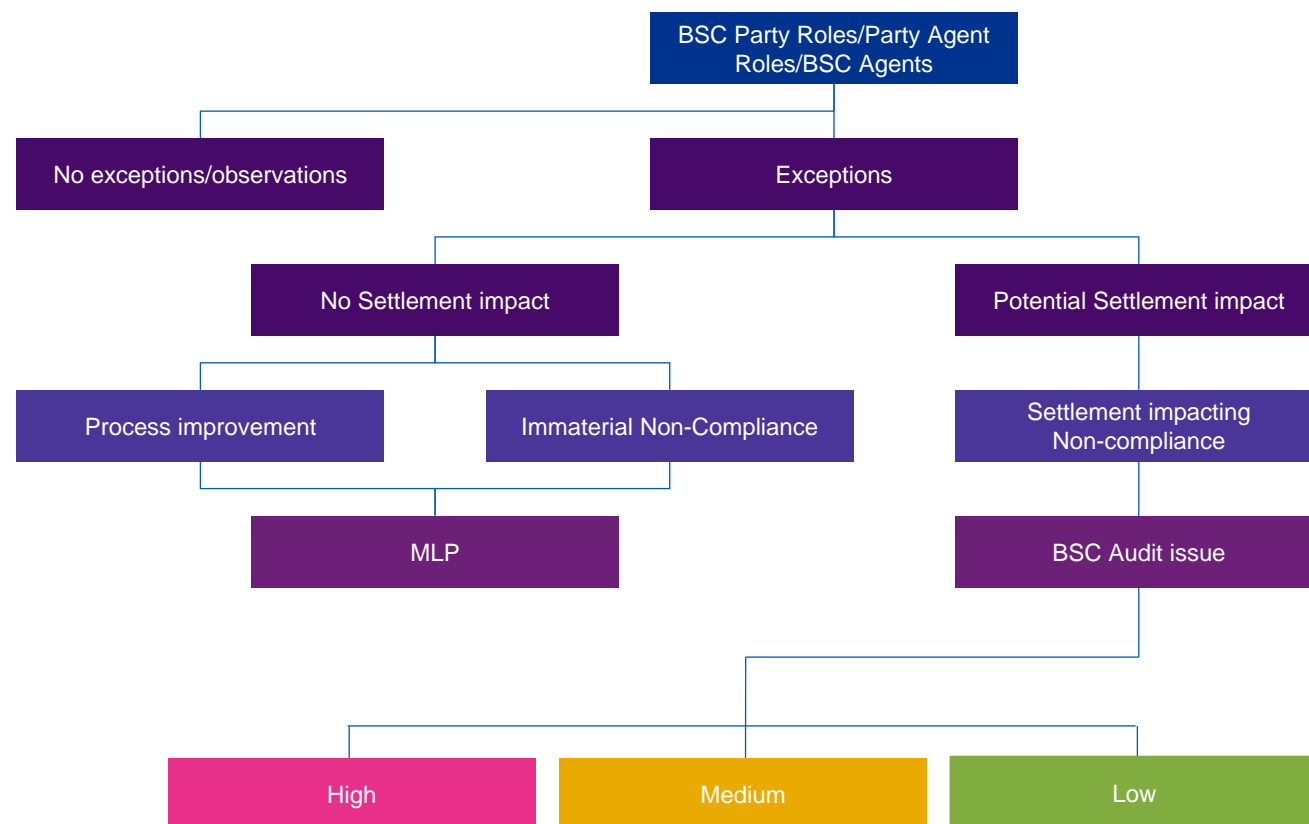
Existence of any mitigating factors (see below).

Mitigating factors might include the following:

Other controls or procedures applied by the entity that reduce the potential impact of the error/non-compliance arising

Whether the issue has been resolved in the BSC Audit period (the importance of the issue remains the same but the required focus to be placed on it by Elexon/PAB will be less)

The diagram on right summarises the rating methodology followed for Assurance Conclusion work.



Appendix 5 - Glossary of terms

Acronyms used in this document have the following meanings (as defined in the Balancing and Settlement Code), unless otherwise stated.

Acronym	Definition	Acronym	Definition	Acronym	Definition
Approach	BSC Auditor's Audit Approach for the year ended 31 March 2024	ECVAA	Energy Contract Volume Aggregation Agent	NHHMOA	Non Half Hourly Meter Operator Agent
Audit Year	Year ended 31 March 2024	EFR	Error and Failure Resolution	PAB	Performance Assurance Board
BM	Balancing Mechanism	Elaxon	Elaxon Limited	PAF	Performance Assurance Framework
BMRA	Balancing Mechanism Reporting Agent	ESD	Extra Settlement Determinations	Panel	BSC Panel
BMU	Balancing Mechanism Unit	FAA	Funds Administration Agent	PAP	Performance Assurance Party
BSC	Balancing & Settlement Code	HHDA	Half Hourly Data Aggregator	Reasonable Assurance	Assurance which provides the user of the report with a relatively high degree of comfort that the subject matter is not materially misstated.
BSCCo	Balancing & Settlement Code Company	HHDC	Half Hourly Data Collector	SAA	Settlement Administration Agent
BSCP	Balancing & Settlement Code Procedure	HHMOA	Half Hourly Meter Operator Agent	SSM	Statement of significant matters
CDCA	Central Data Collection Agent	LDSO	Local Distribution System Operator	SEAE	Suppliers Energy Allocation Error
Central Systems	BSC Central Services	MA	Meter Administrator	Statement	Statement of significant matters
Code	Balancing and Settlement Code	MDD	Market Domain Data	SMRS	Supplier Meter Registration Service
CSD	Code Subsidiary Document	MIDP	Market Index Data Provider	SVA	Supplier Volume Allocation
CRA	Central Registration Agent	MLP	Management Letter Point	SVAA	Supplier Volume Allocation Agent
CVA	Central Volume Allocation	MPAN	Metering Point Administration Number	TAA	Technical Assurance Agent
CVA MOA	Central Volume Allocation Meter Operator Agent	MOA	Meter Operator Agent	TAM	Technical Assurance of Metering
CVA Reg	Central Volume Allocation Registrant	MWh	MegaWatt Hour(s)	TDC	Trading Disputes Committee
DA	Data Aggregator	NHH	Non Half Hourly	TWh	TeraWatt Hour(s)
DF	Dispute Final Run	NHHDA	Non Half Hourly Data Aggregator	UMSO	Unmetered Supplies Operator
DTN	Data Transfer Network	NHHDC	Non Half Hourly Data Collector		



This Approach document is presented for the purpose of the PAB meeting on 27 April 2023 and the circulation of this document is restricted.


Our work and subsequent reports are subject to a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical and independence requirements and professional standards as well as applicable legal and regulatory requirements.

We have prepared this paper (referred to as 'Approach document') in accordance with our BSC Audit and Qualification Agreement dated 17 May 2021 and is subject to disclosure restrictions as set out therein.

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone (beyond that which we may have as the BSC Auditor) for this Approach document.

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Process Assessment Audit

27 APRIL 2023



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The contacts in connection with this document are:



Oliver Meggitt
PAB Chair

Tel: +44 20 7380 4143

Oliver.Meggitt@elexon.co.uk



Marianne Haslam
Risk and Technique Analyst

Tel: +44 20 7380 4282

Marianne.Haslam@elexon.co.uk

The BSC Audit Approach 2023/2024

The BSC Audit will be delivered by KPMG in their role as the BSC Auditor in two distinct streams:

- **Process Assessment (covered in this Approach Document):**

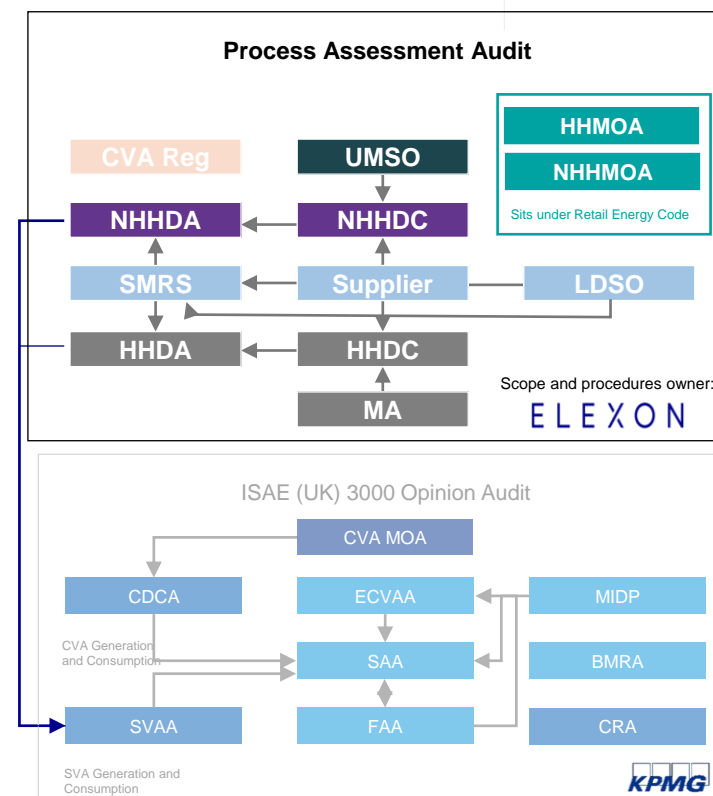
Supplier, SVA Agents and CVA Registrants are within the scope of a Process Assessment Audit, forming part of Elexon's Performance Assurance Framework (PAF). Elexon are responsible for the scope of the detailed audit work as well as the owner of the conclusions reached. Testing at market participants will be performed in a similar way to previous years. Elexon will issue a report summarising the key findings, which will be presented to The Performance Assurance Board (PAB) and The Panel.

- **ISAE (UK) 3000 Opinion Audit (covered in a separate Approach Document):**

Central Systems and Central Volume Allocation Meter Operator Agent (CVA MOA) are within the scope of an ISAE (UK) 3000 Assurance Conclusion (the approach of which is covered in a separate Approach Document);

Key differences in activities performed in Process Assessment Audit compared to ISAE (UK) 3000 Opinion Audit:

- Increased risk based approach to scoping based on Elexon Risk Evaluation Register (RER) and the focus risks (see Appendix 1);
- Enhanced Entity Selection including justification for inclusion;
- Outputs from other Performance Assurance Techniques (PATs) were considered in Entity Selection Process;
- Removal of automatic triggering of Error and Failure Resolution (EFR) process as a result of Medium and High rated BSC Audit issues
- Further enhancement of existing DTN Tests increasing the accuracy of results;
- Improvements to the Audit Planning Memorandum (APM) documents, giving further detailed information related to the audits;
- Continued reduction of Data Requests to parties increasing the reliance on access to DTN rather than reliance on parties.
- Continued amendments and improvements to the Workpapers to align with the new Risks and focus on quality and accuracy of data within flows as well as timeliness.



Operational approach



1. Planning

Risk assessment and entity selection

The scope will be defined by Elexon, including the entities where the BSC Auditor will be performing testing and the composition of each work intensity (based on the risks within the RER set in Appendix 2) . A separate Entity Selection Document provides further details as to the selection criteria and market participants in scope for the BSC Audit Engagement during each assurance period.

2. Entity engagement

APM and Data Requests

Prior to each testing period, a planning meeting will be held with nominated representatives at in-scope entities. For new market entrants, an extended planning meeting will be scheduled to introduce the BSC Audit. Prior to the planning meeting, a draft APM will be made available to each in-scope entity outlining the timeframes, key contacts and data requested.

The APMs will provide further details on the work that will be performed, including a description of the processes that will be covered. This will allow entities to plan effectively for the audits.

Where possible, DTN Data will be used to reduce the volume of data that parties need to provide.

Pre-site enquiry questionnaires will be sent to PAPs after the initial planning meeting to make the time with PAPs during the audit more valuable.

3. Fieldwork and data modelling

Audits will generally take place between October 2023 and March 2024 and will be primarily conducted remotely. The timing of this work will be agreed with entities during the entity engagement phase. The BSC Auditor will also utilise remote auditing techniques and structured ordering of Party Audits to minimise the impact on Parties while retaining the level of assurance expected from the BSC Audit.

Detailed Testing

Detailed testing involves inspection of a selection of transactions and records to verify that they have been created and/or processed in compliance with the BSC. Testing will establish completeness and accuracy of the data flow, or metering system level information in relation to BSC requirements. The BSC Audit will continue to focus on the quality of data processing as well as the timeliness of sending flows.

The testing work programmes continue to be reviewed and improved to focus on the current focus risks. As in previous years, scripts over DTN data will be used to perform testing over full population of transactions. The existing DTN tests continue to be reviewed to improve their effectiveness and reduce the number of false positives. Where DTN data is used to identify potential anomalies prior to the fieldwork, a sample of these will be sent to parties for follow up in advance of the audit dates, leading to a more efficient use of time during the audit itself.

Operational approach (continued)



3. Fieldwork and data modelling (continued)

Data Modelling Techniques

The BSC contains complex calculations with respect to deriving generation and consumption, aggregation, allocation, apportionment and Settlement. A number of models will be utilised to support the BSC Audit. The models use source data provided by Market Participants and re-perform the calculations to check their arithmetical accuracy.

Specific data requests to support the operation of the models are included in the APMs made available to in-scope entities.

Moderation

Moderation procedures will be performed to ensure consistency. This will involve reviewing all issues and their ratings to ensure they are applied consistently across all audited agents.

4. Clearance Meetings and Reporting

Observations

At the conclusion of each audit, the observations will be classified and ranked based on whether they have resulted in a non-compliance with the BSC and whether it has resulted in a potential impact on the completeness and/or accuracy of Settlement, or not. The observations will be discussed with entities as they arise to determine compensating or mitigating activities in place.

A clearance meeting will be held with entities to discuss and formally agree the accuracy of observations raised, however the ratings of these observations will not be discussed.

The ratings for observations have been categorised as follows:

- Settlement impacting non-compliance
- Immaterial non-compliance
- Process improvement

See Appendix 3 for how these categories are defined.

Reporting

Following clearance meetings, immaterial non-compliance and process improvement observations will be reported to the audited entity as Management Letter Points' (MLPs) within an overall audit issues document that will also set out the Settlement impacting non-compliances noted from testing.

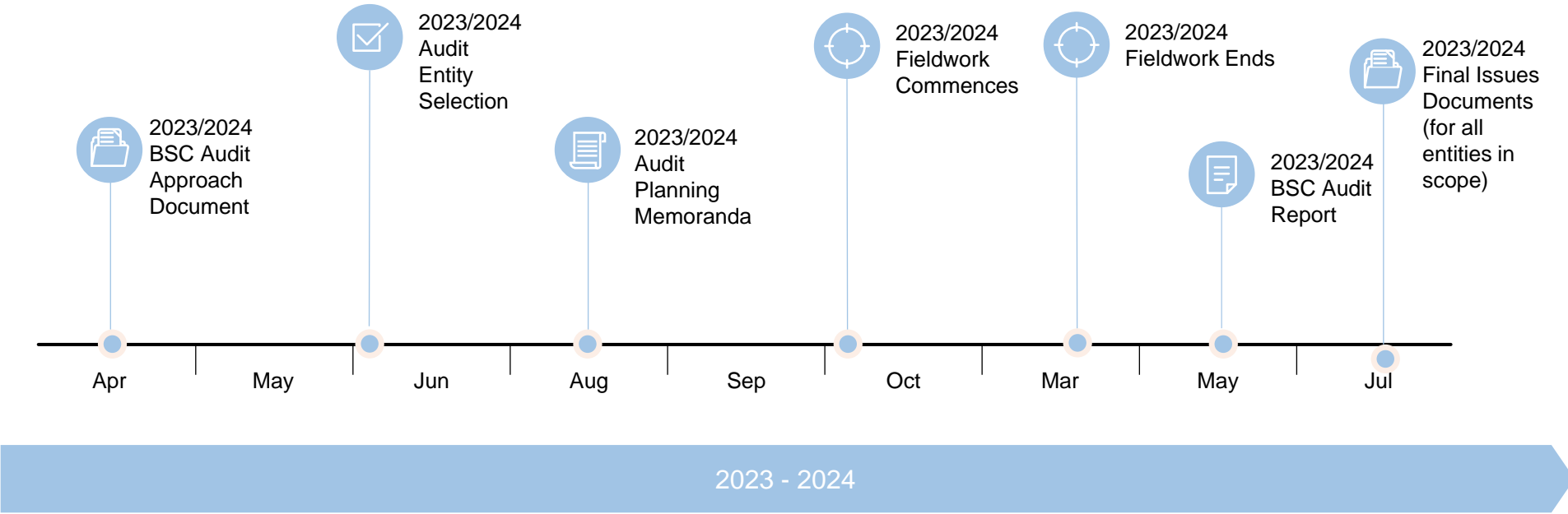
Operational approach (continued)

All Settlement Impacting Non-compliances will be reported.

Where non-compliances have resulted in an impact to Settlement the potential impact will be assessed across all affected MPANs and aggregated over the BSC Audit period. For the Process Assessment Audit, the consolidated findings will be reported by Elexon in a report to PAB.

Parties in scope for the Process Assessment Audit will be requested to sign and return Senior Stakeholder Sign-off Letters. These will endeavour to frame the issues and insights highlighted by the testing performed and indicate the potential financial impact of the issues. The purpose of the Senior Stakeholder Sign-off Letters is to drive further engagement in the improvement of BSC compliance within the parties.

An indicative time-line for delivery of the annual BSC Audit is illustrated on the right.



APPENDICES

APPENDIX 1 DIRECTION FOR THE BSC AUDIT 2023/2024

APPENDIX 2 SVA RISKS 2023/2024

APPENDIX 3 THE BSC AUDIT FINDINGS RATINGS METHODOLOGY

APPENDIX 4 GLOSSARY OF TERMS

Appendix 1 – Direction for the BSC Audit 2023/2024

2023/2024 Focus Risks

The Risk Operating Plan (ROP) 2023/2024 has been produced by Elexon and outlines four focus risk areas (SVA high focus risks) for 2023/2024 :

Risk	Risk Sub Category	BSC Audit Considerations
003	Metering Equipment installation, programming, maintenance and Commissioning	The BSC Audit 2021/22 identified an increase in material error due to the management around the process of Commissioning, including the sending of relevant data flows. However, the majority of Risk 003 responsibilities have moved to the Retail Energy Code (REC).
007	Retrieval of Metered Data	Industry performance remains lower than pre-pandemic levels in all areas of the market
008	Processing of Metered Data	The average number of Suppliers with material instances of large EAC/AAs that are above their applicable threshold has increased in 2022/23, while the BSC Audit 2021/22 also noted a high number of issues relating to this Risk.
017	Exception management	The BSC Audit 2021/22 noted Risk 017 had the highest number of issues and an increase in severity of issues from previous years.

Our focus

The BSC Audit continues to closely align itself with other Performance Assurance Techniques (PATs) and the 2023/2024 BSC Audit will focus on the four SVA high focus risks as outlined in the Risk Evaluation Register (RER) and ROP.

Appendix 2 – SVA risks 2023/24

Risk Reference	Risk Description
001	SVA Metering Point is registered incorrectly or not at all, such that metered data is not collected or aggregated
002	SVA Metering System attributes held in the Supplier Meter Registration Service (SMRS) or by any party in the Supplier Hub are incorrect
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
005	A fault with SVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved
006	On a change of agent, Meter Technical Details are not transferred or processed correctly or at all, such that parties do not use the latest Meter Technical Details
007	SVA Metered data is not retrieved, such that the proportion of estimated data being used in Settlement contributes to performance standards not being met
008	SVA metered data is not processed or transferred correctly, or at all
009	The Data Aggregator does not process metered data correctly or at all, including transfer to SVAA, such that the energy volumes required for Settlement are incorrect or missing
010	On change of Data Collector, meter read history is incorrect or not transferred such that sufficient history is not available for validating and estimating energy volumes
011	Unmetered Supplies volumes are calculated incorrectly or not at all
012	SVA Metering System technical details are created incorrectly
013	Manual adjustments to Metered Data are not completed correctly, or at all
014	Agents are not appointed or de-appointed correctly, such that SMRS is not complete or up to date, members of the Supplier Hub do not hold the correct MPID of other Hub members or the appropriate agents are not appointed
015	SVA reference data is not created or transferred correctly, or at all
016	The energisation status held in SMRS or by any party in the Supplier Hub does not match the physical energisation status of the SVA Metering System
017	Exception reports are not sufficiently managed, such that material exceptions are not addressed at all or in a timely manner
018	Revenue protection processes are not managed sufficiently, such that unrecorded energy volumes are excluded from Settlement
025	Balancing Services provided by Virtual Lead Parties allow error to enter Settlement, such that the energy volumes required for Settlement are incorrect or missing

Appendix 3 - The BSC Audit Findings Ratings Methodology

Overview

The findings are categorised as either Issues or Management Letter Points ('MLP's) depending on whether there is a potential impact on the completeness and/or accuracy of Settlement.

An impact rating of High, Medium or Low is applied to each issue. A number of underlying principles which provide guidance as to how this will be applied are set out in this document. Issues will be considered across the entities in at an issues 'moderation' meeting to ensure the determination of ratings is consistent.



How each finding will be considered?

Each finding will be individually determined but will also be considered in the context of similar findings raised at other entities.

Two entities may have the same underlying issue but if one entity has a mitigating process or control and is responsible for a much lower error rate, impact or residual risk as a result, then a different impact rating may apply.

One moderation session will be performed during the year, following completion of the fieldwork at all market participants. The aim of this session is to ensure a ratings consistency across each of the entities in scope.



Ratings for findings have been defined as follows:

- Settlement Impacting Non-Compliance – a non-compliance with the BSC that, if left uncorrected, may have an impact on the completeness and/or accuracy of Settlement. In this case the BSC Auditor will assess the impact as High, Medium or Low, depending on the estimated overall potential impact on Settlement.
- Immaterial Non-Compliance – a non-compliance with the BSC that is unlikely to have a direct impact on the completeness and/or accuracy of Settlement. These observations will be categorised as MLPs; and
- Process Improvement – the BSC appears to have been complied with but the BSC Auditor has identified the potential for process improvements at the entity in scope. These observations will also be categorised as MLPs.

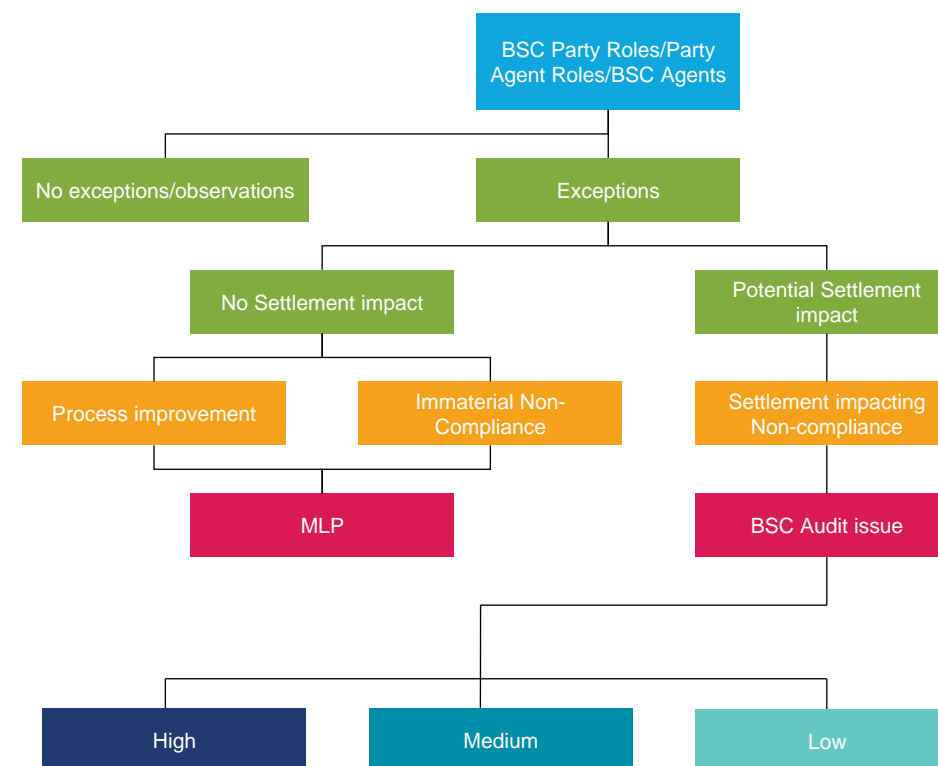
Appendix 3 - The BSC Audit findings Ratings Methodology

How will the impact of these factors be determined?

Each Settlement Impacting Non-Compliance issue will be rated as High, Medium or Low after gaining an understanding of the following:

- Nature of the issue
- Extent of potential impact of the issue on Settlement in MWh
- Improvement / deterioration (both quantitatively and qualitatively) since the previous BSC Audit
- Whether the number and/or nature of exceptions indicates the issue is pervasive or not
- Impact of the issue on other Audited Entities or Trading Parties
- Extent to which a compliance issue might impact other issues (especially those which have a direct impact on Settlement)
- Existence of any mitigating factors (see below), including the following:
- Other controls or procedures applied by the entity that reduce the potential impact of the error/non-compliance arising
- Whether the issue has been resolved in the BSC Audit period (the importance of the issue remains the same but the required focus to be placed on it by Elexon/PAB will be less)

The diagram on the right of this page summarises the rating methodology followed.



Appendix 4 - Glossary of terms

Acronyms used in this document have the following meanings (as defined in the Balancing and Settlement Code), unless otherwise stated.

Acronym	Definition	Acronym	Definition	Acronym	Definition
AA	Annualised Advance	Elexon	Elexon Limited	PAP	Performance Assurance Party
APM	Audit Planning Memorandum	FAA	Funds Administration Agent	PAT	Performance Assurance Technique
Approach	BSC Auditor's Audit Approach for the year ended 31 March 2024	HHDA	Half Hourly Data Aggregator	Panel	BSC Panel
Audit Year	Year ended 31 March 2024	HHDC	Half Hourly Data Collector	RER	Risk Evaluation Register
BM	Balancing Mechanism	HHMOA	Half Hourly Meter Operator Agent	ROP	Risk Operation Plan
BMRA	Balancing Mechanism Reporting Agent	LDSO	Local Distribution System Operator	SAA	Settlement Administration Agent
BMU	Balancing Mechanism Unit	MA	Meter Administrator	SF	Initial Settlement Run
BSC	Balancing & Settlement Code	MIDP	Market Index Data Provider	SSM	Statement of significant matters
BSCP	Balancing & Settlement Code Procedure	MLP	Management Letter Point	Statement	Statement of significant matters
CDCA	Central Data Collection Agent	MPAN	Metering Point Administration Number	SMRS	Supplier Meter Registration Service
Code	Balancing & Settlement Code	MPID	Market Participant Identifier	SVA	Supplier Volume Allocation
CRA	Central Registration Agent	MTD	Meter Technical Details	SVAA	Supplier Volume Allocation Agent
CVA	Central Volume Allocation	MOA	Meter Operator Agent	TAA	Technical Assurance Agent
CVA MOA	Central Volume Allocation Meter Operator Agent	NHH	Non Half Hourly	TAM	Technical Assurance of Metering
CVA Reg	Central Volume Allocation Registrant	NHHDA	Non Half Hourly Data Aggregator	TDC	Trading Disputes Committee
DTN	Data Transfer Network	NHHDC	Non Half Hourly Data Collector	TWh	TeraWatt Hour(s)
EAC	Estimated Annual Consumption	NHHMOA	Non Half Hourly Meter Operator Agent	UMSO	UnMetered Supplies Operator
ECVAA	Energy Contract Volume Aggregation Agent	PAB	Performance Assurance Board		
EFR	Error and Failure Resolution	PAF	Performance Assurance Framework		

