

BSC Audit Scope 2020/21

June 2020



Chris Stock
Version 1.0
25 June 2020

BSC AUDIT SCOPE 2020/21

CONTENTS –

DIRECTION FOR THE BALANCING AND SETTLEMENT CODE (BSC) AUDIT	4
COVID-19 Pandemic and Lockdown	4
SCOPE OF THE BSC AUDIT	6
SVA Process Assessment – Settlement Risks and Testing	6
1. Risk 01 – SVA Registration	6
2. Risk 02 – SVA Attributes	6
3. Risk 03 – SVA Metering Equipment installation, programming, maintenance and commissioning	7
4. Risk 04 - SVA Notification of change to Metering Equipment	7
5. Risk 05 – SVA Fault resolution.....	7
6. Risk 06 – SVA Meter Technical Details transfer and processing	8
7. Risk 07 – SVA Retrieval of Metered Data	8
8. Risk 08 – SVA Processing of Metered Data	8
9. Risk 09 – SVA Data Aggregator Processes Metered Data	9
10. Risk 10 – SVA Meter read history.....	10
11. Risk 11 – SVA Unmetered Supplies	10
12. Risk 12 – SVA Metering Equipment Technical Detail Quality	11
13. Risk 13 – SVA Manual adjustments	11
14. Risk 14 – SVA Agent appointments	12
15. Risk 15 – SVA Reference data	12
16. Risk 16 – SVA Energisation status.....	13
17. Risk 17 – SVA Exception management.....	13
18. Risk 18 – SVA Revenue protection	13
SVA PROCESS ASSESSMENT – INDUSTRY ROLES IN SCOPE	14
Supplier Meter Registration Agents	14
Data Retrieval & Data Processing (Data Collectors)	14
Data Aggregation.....	14
Meter Operators	14
Licensed Distribution System Operators	14
Unmetered Supply Operators.....	14
Meter Administrators.....	15
Supplier Systems and Associated Internal Procedures	15
Data Transfer	15
Off The Shelf Model	15
CVA ASSURANCE OPINION - BSC SYSTEMS AND BSC AGENTS.....	15

BSC AUDIT SCOPE 2020/21

19.	Central Registration	15
20.	Aggregate and Check Contract Volume	16
21.	Credit Cover Management.....	16
22.	Balancing Mechanism Reporting	16
23.	Calculation of Market Index Data.....	16
24.	Calculation and Aggregation of Metered Data.....	16
25.	Calculate Settlement Debits and Credits.....	17
26.	Funds Transfer	17
27.	Market Domain Data.....	17
28.	Supplier Volume Allocation & Reconciliation	17
29.	Trading Disputes	18
30.	Balancing Mechanism	18
ADDITIONAL CONSIDERATIONS.....		18
Implementation of Specific BSC Changes.....		18
AREAS OUT OF SCOPE		19
MATERIALITY THRESHOLD		19
REPORTING		19

BSC AUDIT SCOPE 2020/21

DIRECTION FOR THE BALANCING AND SETTLEMENT CODE (BSC) AUDIT

COVID-19 Pandemic and Lockdown

For the audit year 2020/21, ELEXON has considered the disruptions caused by the COVID-19 pandemic and lockdown measures that were introduced by the government. With the end of the lockdown not yet known, ELEXON and the BSC Auditor will 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.

ELEXON, along with Industry representatives, identified specific Settlement Risks and their associated processes that have been effected by the COVID-19 pandemic and determined an action plan, dividing the Risks into four categories. Detail against each Risk can be found on pages 6 to 15.

BSC Audit Considerations	Recommended action	Associated Risks
Category 1 Considered un-impacted for the BSC Audit.	None.	1, 2, 6, 9, 10 ,11, 14, 15
Category 2 Likely to have a reduced total population as processes in this Risk are triggered by field work which will be reduced or not taking place at all during the COVID-19 lockdown period(s).	A sample of one, and an audit of procedures and training.	3, 4, 12, 18 16 - with the exception of site visit inspections which will have had considerable constraints during COVID-19 lockdown.
Category 3 COVID-19 estimation methods may have resulted in an increase in possible instances and possible erroneous volumes.	Additional focus through more entities audited with associated testing.	8, 17 13 - with the exception of the Long Term Vacant (LTV) process which will have had considerable constraints during COVID-19 Lockdown.
Category 4 COVID-19 lockdown will have significantly impacted Performance Assurance Parties' (PAPs') ability to comply with the BSC.	Reduced focus through less entities audited with associated testing.	5 - faults harder to resolve 7 - PAB has already taken action through Error and Failure Resolution (EFR) and performance monitoring activities which is the more effective compliance route for this Risk over the BSC Audit.

BSC AUDIT SCOPE 2020/21

In addition, Parties' application of the Non Half Hourly (NHH) and Half Hourly (HH) COVID-19 estimation process will be tested, specifically those Parties that ELEXON have not already investigated and to follow up on those Parties ELEXON has tested subsequently and identified issues.

Processes put under unique stress during the initial stages of the COVID-19 lockdown will also be investigated, such as the Disaster Recovery process, effectiveness of remote working and implementation of changes to policies will be reviewed.

Focus Risks and Risk Operating Plan (ROP) alignment

The direction of the BSC Audit is closely aligned to the ROP, which has identified Settlement Risks that ELEXON and the BSC Audit should particularly concentrate on:

- **Risk 003** – SVA Metering Equipment installation, programming, maintenance and Commissioning
- **Risk 005** – SVA Metering Equipment Fault resolution
- **Risk 007** – Retrieval of SVA Metered Data
- **Risk 012** – SVA Metering System technical details are created incorrectly

In addition, there are two existing Risk Events that the BSC Auditor will investigate, which relate to market conditions which have impact on a variety of Settlement risks.

- **Event 001** – BSC Party Agents – issues relating to Customer Preferred Agents (CPA) and the potential for these arrangements to impact Settlement. In addition, this Risk event considers more broadly the impact of 3rd party agents who perform actions which touch on BSC processes and Settlement data.
- **Event 011** – Party Failure – Issues relating to Supplier of Last Resort (SoLR) events, and other instances where Parties or Party Agents cease operating

ELEXON has selected these risks based on:

- The characteristics and assessment of the risk, in which risks which had large impacts and/or volatilities were prioritised;
- The steer obtained from reviewing the PAB Strategy and feedback from industry; and
- Review of the effectiveness of previous Performance Assurance Techniques applied over the years

In addition to the areas of testing identified by the ROP, the frequency and triggers for certain BSC Audit testing will remain as follows:

- Testing of standard systems will only occur where a change to the system has been made; and
- Processes will only be tested where there has been at least one instance of this process being operated within the audit period

Sections that are greyed out indicate that these areas will not be covered in the 2020/21 except at Parties that have material issues raised against those areas.

BSC AUDIT SCOPE 2020/21

SCOPE OF THE BSC AUDIT

This document details the scope of the BSC Audit and terms of reference for the BSC Auditor for 1 April 2020 to 31 March 2021.

The scope of the BSC Audit for 2020/21 will include the functions and processes described below.

SVA Process Assessment – Settlement Risks and Testing

1. Risk 001 – SVA Registration

1.1 The risk that a Metering Point is registered incorrectly or not at all, such that metered data is not collected or aggregated resulting in erroneous, estimated or missing data in Settlement

1.2 BSC Audit testing for Settlement Risk 01 includes:

Role	SVA Work Papers
SMRA	<ul style="list-style-type: none">Processing of standing data changes received from Suppliers and LDSOValidity of standing dataProcessing of Objections and Objection Removal (on Change of Supply)Processing of retrospective amendmentsResolution of D0023 rejections
Supplier	<ul style="list-style-type: none">Processes and controls operated by a Supplier to ensure key processes are operatingUpdates of Registration Details

2. Risk 002 – SVA Attributes

2.1 The risk that SVA Metering System attributes held in the Supplier Meter Registration Service (SMRS) or by any party in the Supplier Hub are incorrect resulting in erroneous or estimated data in Settlement.

2.2 BSC Audit testing for Settlement Risk 02 includes:

Role	SVA Work Papers
SMRA	<ul style="list-style-type: none">Processing of standing data changes received from Suppliers and LDSOValidity of standing dataProcessing of SMRS Refresh RequestsProcessing of retrospective amendmentsResolution of D0023 rejections
Supplier	<ul style="list-style-type: none">Processes and controls operated by a Supplier to ensure key processes are operatingProcessing of data flows - backlogs

BSC AUDIT SCOPE 2020/21

3. Risk 003 – SVA Metering Equipment installation, programming, maintenance and commissioning

- 3.1 The risk that SVA Metering Equipment is installed, programmed or maintained incorrectly where commissioning is performed incorrectly or not at all resulting in erroneous or estimated data in Settlement
- 3.2 Audit work undertaken against Risk 03 will be targeted in line with the 2019 PAF Review Technical Assurance of Metering recommendations to ensure that assurance work is focused on the areas of greatest risk.
- 3.3 BSC Audit testing for Settlement Risk 03 includes:

Role	SVA Work Papers
HHMOA	<ul style="list-style-type: none">Processes around Commissioning
LDSO	<ul style="list-style-type: none">Commissioning

4. Risk 004 - SVA Notification of change to Metering Equipment

- 4.1 The risk that Changes to Metering Equipment are not notified, such that all members of the Supplier Hub do not use the correct Meter Technical Details resulting in erroneous or estimated data in Settlement
- 4.2 BSC Audit testing for Settlement Risk 04 includes:

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none">Processing of standing data changes received from Supplier and MOA
HHMOA	<ul style="list-style-type: none">Processing of reconfiguration, replacement or removal of metering equipmentProcessing of changes in Measurement Class between NHH and HHProcessing of changes in Measurement Class between HH and NHHIdentification and notification of complex sitesBacklogs
LDSO	<ul style="list-style-type: none">Completeness of provision of site technical details
NHHDC	<ul style="list-style-type: none">Processing of standing data changes received from Suppliers and MOA
NHHMOA	<ul style="list-style-type: none">Processing of reconfiguration, replacement or removal of metering equipmentProcessing of changes in Measurement Class between NHH and HHProcessing of changes in Measurement Class between HH and NHHBacklogs

5. Risk 005 – SVA Fault resolution

- 5.1 The risk that a fault with SVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved resulting in erroneous or estimated data in Settlement.
- 5.2 BSC Audit testing for Settlement Risk 05 includes:

BSC AUDIT SCOPE 2020/21

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none">Reporting of consumption on de-energised Meter (D0001) to Supplier and MOAResolution of Inconsistencies
HHMOA	<ul style="list-style-type: none">Processing of requests to investigate inconsistencies (faults)
NHHMOA	<ul style="list-style-type: none">Processing of requests to investigate inconsistencies (faults)
Supplier	<ul style="list-style-type: none">Fault Resolution Processes

6. Risk 006 – SVA Meter Technical Details transfer and processing

6.1 The risk that 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 resulting in erroneous or estimated data in Settlement

6.2 BSC Audit testing for Settlement Risk 06 includes:

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none">Processing of standing data changes received from Supplier and MOA
HHMOA	<ul style="list-style-type: none">Processing of changes of Meter Operator Agent / changes of SupplierProcessing of changes of Data Collector AgentProcessing of registration transfers between CMRS and SMRSProcessing of registration transfers between SMRS and CMRSIdentification and notification of complex sitesBacklogs
NHHDC	<ul style="list-style-type: none">Processing of standing data changes received from Suppliers and MOABacklogs of standing data flows and meter readings
NHHMOA	<ul style="list-style-type: none">Processing of changes of Meter Operator Agent / changes of SupplierProcessing of changes of Data Collector AgentBacklogs

7. Risk 007 – SVA Retrieval of Metered Data

7.1 The risk that SVA Metered Data is not retrieved, such that the proportion of estimated data being used in Settlement contributes to performance standards not being met resulting in estimated data in Settlement

7.2 BSC Audit testing for Settlement Risk 07 has been under review and it was determined that current testing does not encompass Risk 07. New testing will be developed where necessary.

8. Risk 008 – SVA Processing of Metered Data

8.1 The risk that SVA Metered Data is not processed or transferred correctly, or at all resulting in erroneous or estimated data in Settlement.

8.2 BSC Audit testing for Settlement Risk 08 includes:

BSC AUDIT SCOPE 2020/21

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none"> Processing of standing data changes received from Supplier and MOA Processing of HH consumption Validity of consumption Data estimation Backlogs of Incoming/Outgoing flows Resolution of Inconsistencies Processing of Metering System Related Details (D0170) on request after Change of Supplier/Agent event
NHHDC	<ul style="list-style-type: none"> Processing of standing data changes received from Suppliers and MOA Validity of standing data Processing of meter readings collected via hand held unit Processing of meter readings collected via manual meter sheet or other paper record Processing of meter readings collected via Supplier (D0010) or other electronic method Validity of meter readings Override of reads which have failed validation Validity of meter reading withdrawals Processing of meter reading withdrawals Processing of DMA on Change of Supplier Validity of DMA Processing of DMA after RF where have an EAC with no AA at RF and a meter reading has been received post RF Re-performance of DMA calculation performed by EAC/AA calculator Requests for calculation of EAC/AA Adequacy of controls over large EAC/AA Re-performance of calculation performed by EAC/AA calculator Backlogs of standing data flows and meter readings Resolution of D0023 rejections Resolution of D0095 exceptions Processing of Metering System Related Details (D0010 and D0152) on request after Change of Supplier/Agent event
Supplier	<ul style="list-style-type: none"> [NHH only] Processes surrounding the identification and correction of potentially erroneous EACAA

9. Risk 009 – SVA Data Aggregator Processes Metered Data

- 9.1 The risk that 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 resulting in erroneous, missing or estimated data in Settlement
- 9.2 BSC Audit testing for Settlement Risk 09 includes:

BSC AUDIT SCOPE 2020/21

Role	SVA Work Papers
HHDA	<ul style="list-style-type: none">Processing of MDDValidity of MDDProcessing of standing data changes received from SMRSValidity of standing dataObtaining and processing of Line Loss Factors from ELEXON websiteProcessing and validation of BM unit data received from SupplierValidity of HH consumption dataRe-performance of AggregationSending of SPMs to SVAAData/Flow processing backlogs at DAReporting of anomalies to HHDC Agents and Suppliers (D0235)
NHHDA	<ul style="list-style-type: none">Processing and validity of MDDProcessing of standing data changes and consumption received from SMRS and NHHDCValidity of standing data and consumptionRe-performance of AggregationSending of SPMs to SVAANotification of MPANs excluded from the RFData/Flow processing backlogs at DALevel of outstanding D0023 flows reported by NHHDA

10. Risk 010 – SVA Meter read history

10.1 The risk that on Change of Supplier or Agent, Meter read history is incorrect or not transferred such that sufficient history is not available for validating and estimating energy volumes resulting in erroneous or estimated data in Settlement

10.2 BSC Audit testing for Settlement Risk 10 includes:

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none">Processing of Metering System Related Details (D0170) on request after Change of Supplier/Agent event
NHHDC	<ul style="list-style-type: none">Processing of Metering System Related Details (D0010 and D0152) on request after Change of Supplier/Agent event

11. Risk 011 – SVA Unmetered Supplies

11.1 The risk that Unmetered Supplies volumes are calculated incorrectly or not at all, resulting in erroneous or missing data in Settlement.

11.2 BSC Audit testing for Settlement Risk 11 includes:

Role	SVA Work Papers
MA	<ul style="list-style-type: none">Retention and maintenance of EMTD and other information required to perform MA

BSC AUDIT SCOPE 2020/21

	<ul style="list-style-type: none"> functions Receipt and recording of summary inventory records received Fault reporting (notification of missing / unavailable data) and notification of data availability Calculation of deemed meter volumes and provision of output into settlement
UMSO	<ul style="list-style-type: none"> Maintenance and provision of connection agreements Maintenance and provision of UMS inventories Completeness, accuracy and validity of calculation and provision of NHH EACs Creation and provision of UMS Certificates Provision of Standard Settlement Configuration and Profile Class details including disconnections and energisation status
NHHDA	<ul style="list-style-type: none"> Re-performance of Aggregation
HHDC	<ul style="list-style-type: none"> Processing of standing data changes received from Supplier and MOA
NHHDC	<ul style="list-style-type: none"> Processing of standing data changes received from Suppliers and MOA

12. Risk 012 – SVA Metering Equipment Technical Detail Quality

12.1 The risk that SVA Metering System technical details are created incorrectly resulting in erroneous or estimated data in Settlement

12.2 BSC Audit testing for Settlement Risk 12 includes:

Role	SVA Work Papers
HHMOA	<ul style="list-style-type: none"> Identification and notification of complex sites Quality of MTDs (new paper not yet developed)
LDSO	<ul style="list-style-type: none"> Completeness of provision of site technical details

13. Risk 013 – SVA Manual adjustments

13.1 The risk that Manual adjustments to Metered Data are not completed correctly, or at all resulting in erroneous data in Settlement.

13.2 BSC Audit testing for Settlement Risk 13 includes:

Role	SVA Work Papers
NHHDC	<ul style="list-style-type: none"> Correct Incorrect Register Mapping Processing of meter reading withdrawals Validity of DMA Follow up EAC/AA exception report Follow up of EAC/AA filter exceptions Adequacy of controls over large EAC/AA GVC - Compensating Crystallised Errors Implementation of modification P196 Long term vacant sites (NHH)

BSC AUDIT SCOPE 2020/21

Supplier	<ul style="list-style-type: none">• [NHH only] Compensating Crystallised Errors• [NHH only] Long Term Vacant Sites• [NHH only] Processes surrounding the identification and correction of potentially erroneous EACAA• Processes and controls operated by a Supplier to ensure key processes are operating
----------	---

14. Risk 014 – SVA Agent appointments

14.1 The risk that 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 resulting in Estimated data in Settlement

14.2 BSC Audit testing for Settlement Risk 14 includes:

Role	SVA Work Papers
Supplier	<ul style="list-style-type: none">• Processes and controls operated by a Supplier to ensure key processes are operating• Appointments Process• COMC (new paper not yet developed)

15. Risk 015 – SVA Reference data

15.1 The risk that SVA reference data is not created or transferred correctly, or at all, resulting in erroneous data in Settlement.

15.2 BSC Audit testing for Settlement Risk 15 includes:

Role	SVA Work Papers
	No work papers currently in scope.

BSC AUDIT SCOPE 2020/21

16. Risk 016 – SVA Energisation status

16.1 The risk that 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 resulting in erroneous or estimated data in Settlement.

16.2 BSC Audit testing for Settlement Risk 16 includes:

Role	SVA Work Papers
HHDC	<ul style="list-style-type: none">Processing of standing data changes received from Supplier and MOA
HHMOA	<ul style="list-style-type: none">Processing of changes to Energisation StatusBacklogs
LDSO	<ul style="list-style-type: none">Completeness of disconnection of Metering SystemsChanges to energisation status
NHHDC	<ul style="list-style-type: none">Processing of standing data changes received from Suppliers and MOAVisits to De-energised sitesBacklogs of standing data flows and meter readings
NHHMOA	<ul style="list-style-type: none">Processing of changes to Energisation StatusBacklogs
Supplier	<ul style="list-style-type: none">Processes and controls operated by a Supplier to ensure key processes are operating

17. Risk 017 – SVA Exception management

17.1 The risk that Exception reports are not sufficiently managed, such that material exceptions are not addressed at all or in a timely manner resulting in default or estimated data in Settlement.

17.2 BSC Audit testing for Settlement Risk 17 includes:

Role	SVA Work Papers
HHDA	<ul style="list-style-type: none">Reporting of anomalies to HHDC Agents and Suppliers (D0235)
HHDC	<ul style="list-style-type: none">Resolution of Inconsistencies
NHHDA	<ul style="list-style-type: none">Level of D0095 exceptions as reported by NHHDA
NHHDC	<ul style="list-style-type: none">Resolution of D0023 rejectionsResolution of D0095 exceptions
Supplier	<ul style="list-style-type: none">[HH only] Processes surrounding the identification and correction of HH data quality exceptions (D0235)[NHH only] Processes surrounding the identification and correction of NHH data quality exceptions (D0095)

18. Risk 018 – SVA Revenue protection

BSC AUDIT SCOPE 2020/21

18.1 The risk that Revenue Protection processes are not managed sufficiently, such that unrecorded energy volumes are excluded from Settlement resulting in erroneous or missing data in

18.2 BSC Audit testing for Settlement Risk 18 includes:

Role	SVA Work Papers
Supplier	<ul style="list-style-type: none">Processes and controls operated by a Supplier to ensure key processes are operating

SVA PROCESS ASSESSMENT – INDUSTRY ROLES IN SCOPE

Supplier Meter Registration Agents

Each Supplier Meter Registration Agent (SMRA) identifies all Metering Systems attached to a Distribution Network. The SMRA will hold the history of Supplier registrations for each Metering System. They provide information on unmetered exit points with the history of their Supplier registrations. In addition, SMRAs will provide Line Loss Factor Classes. The contractual relationship between Suppliers and SMRAs is encapsulated in the Master Registration Agreement (MRA).

Data Retrieval & Data Processing (Data Collectors)

Retrieval encompasses Meter reading and detection of potential Meter reading faults (on behalf of the MOA).

Data Processing is the validation and conversion of Meter readings into energy consumption, the estimation of missing data using an approved method and the transmission of this data to the DA.

Data Aggregation

Data Aggregation is the aggregation of Supplier or BM Unit specific energy consumption data, after the application of LLF for HH metered data, to produce the aggregated data.

Meter Operators

MOAs hold key information on all Metering Systems attached to the Distribution System including Meter history and technical details. MOAs are also responsible for the installation and removal of Meters and their general maintenance in compliance with the relevant Codes of Practice. MOAs form part of the Supplier hub and as such operate several key interfaces with other Supplier Agents (particularly Data Collectors).

The BSC Audit will not directly cover accuracy of metering or standards of metering installation, however the findings of the Technical Assurance Agent (TAA) under the Technical Assurance of Metering (TAM) technique will be sent to the BSC Auditor for consideration in its reporting.

Audit of CVA MOAs to be targeted is based on previous audit issues identified and the number of actions completed by the Agent during the year.

Licensed Distribution System Operators

Licensed Distribution System Operators (LDSOs) are responsible for the overall management and maintenance of Distribution Systems in addition to the registration of Metering Systems in SMRS.

Unmetered Supply Operators

BSC AUDIT SCOPE 2020/21

LDSOs are responsible for the Unmetered Supplies Operator (UMSO) function. UMSOs are responsible for managing any Unmetered Supplies (UMS) attached to a Distribution Network, and are required to provide specific details to Suppliers and Supplier Agents in order that they can meet their Settlement obligations.

Meter Administrators

Meter Administrators are responsible for calculating the half-hourly allocation for HH SVA UMS and providing this information to the DC.

Supplier Systems and Associated Internal Procedures

Suppliers are responsible for managing their Supplier Agents and for providing key data to their Supplier Agents as set out in the BSC and BSC Procedures.

Data Transfer

The Data Transfer Service and NETA network service are outside the scope of the BSC Audit but the audit will include reviews at market participants' premises to check dispatch and receipt of data messages.

Off The Shelf Model

The majority of the newer 'off the shelf' PAPs do not breach the MSID threshold to fall in scope for the BSC Audit; this is perceived as a gap between the Qualification process and the BSC Audit process. While the size of these smaller PAPs limits their potential impact on Settlement, there are concerns in some cases that some 'off the shelf' PAPs may not have sufficient experience and processes in place in order to operate effectively in terms of Settlement.

ELEXON will utilise the following approach in response to the changing market where looking exclusively at MSID thresholds may no longer be appropriate in all instances.

The BSC Audit will include:

- 1 to 4 'off the shelf' PAPs (varied roles) targeted for a full intensity audit, irrespective of whether or not they fall in scope through MSID threshold. ELEXON will aim to target managed services groups and PAPs demonstrating poor behaviour. (A proportional number of smaller PAPs which do meet the MSID threshold and have performed well in previous audits will be removed from scope to compensate.)

CVA ASSURANCE OPINION - BSC SYSTEMS AND BSC AGENTS

19. Central Registration

The Central Registration Agent (CRA) collects, validates, stores and distributes shared reference data used by other related business processes. This includes the registering of all Meter Points, Metering Systems, Balancing Mechanism (BM) Units, Trading Units, and sets of Aggregation Rules for each BSC Party.

The BSC Audit will include:

- Maintenance of the BM Credit Assessment Export Capability (BMCAEC)
- Maintenance of the BM Credit Assessment Import Capability (BMCAIC)

20. Aggregate and Check Contract Volume

The Energy Contract Volume Aggregation Agent (ECVAA) accepts or rejects Energy Contract Volume Notifications (ECVNs) and Metered Volume Reallocation Notifications (MVRNs). The ECVAA aggregates valid ECVNs and MVRNs to determine the Account Bilateral Contract Volume for each Party's Energy Account. The ECVAA reports the Account Bilateral Contract Volume for each Party and Settlement Period for that Settlement Day to the Settlement Administration Agent (SAA) on a daily basis.

The BSC Audit will include:

- Acceptance of ECVN and MVRN
- Aggregation of valid Energy Contract Volume Reallocation Notifications and Metered Volume Reallocation Notifications
- Submission of data to the Settlement Administration Agent

21. Credit Cover Management

Credit monitoring of BSC Parties is the responsibility of the Funds Administration Agent (FAA), ECVAA and BSCCo. Letters of credit/cash are lodged with the FAA. The ECVAA calculates the Credit Cover Percentage and notifies BSCCo if the agreed Default limits are exceeded.

The BSC Audit will include:

- Application of Credit Cover rules as defined within the BSC

22. Balancing Mechanism Reporting

The Balancing Mechanism Reporting Agent (BMRA) publishes a range of public market information for users of the service and calculates data for submission to Settlement.

The BSC Audit will include:

- The consistency of the data that is included within the reports that are published by the BMRA

23. Calculation of Market Index Data

The Market Index Data Providers (MIDPs) calculate and provide to the BMRA and SAA a market price in respect of each Settlement Period on a half hourly and daily basis. The market price reflects the price of wholesale electricity in the short-term market.

The BSC Audit will include:

- The controls surrounding the calculation and transfer of the Market Index Data to the BMRA and SAA
- Determination and calculation of the Market Index Data (in accordance with the Market Index Definition Statement)

24. Calculation and Aggregation of Metered Data

The Central Data Collection Agent (CDCA) collects and aggregates the metered data from Metering Systems registered in CRA. The volumes for missing or disputed data are estimated in accordance with the BSC and reported to the Central Volume Allocation Meter Operator Agent (CVA MOA) and BSCCo. The Grid Supply Point (GSP) Group Take is calculated in accordance with the Settlement timetable (published on the BSC Website). This information is passed to the Supplier Volume Allocation Agent (SVAA) and is used as the basis for calculating the Supplier Volume Allocation (SVA).

The BSC Audit will include:

BSC AUDIT SCOPE 2020/21

- Completeness of Commissioning and Proving Test records
- Aggregation of metered data registered in CDCA
- Calculation of GSP Group Take

25. Calculate Settlement Debits and Credits

The SAA receives calculated Supplier Volume Allocations, Contract Volume and reallocation data, GSP Group Take and Information Imbalance Price. The SAA performs the Interim, Initial Settlement and Reconciliation runs according to the Settlement timetable and calculates the Credits and Debits resulting from the Settlement of Balancing Mechanism actions and Imbalance cash-out. Settlement reports are sent to BSC Parties to validate, and to the FAA.

The BSC Audit will include:

- Calculation of Credits and Debits to BSC Parties via Balancing Mechanism and the imbalance settlement arrangements
- Calculation of Main and Market Prices as used in imbalance settlement arrangements

26. Funds Transfer

The FAA manages the funds transfer process.

The BSC Audit will include:

- Calculations of the charges for each BSC Party for each Settlement Run
- Aggregation of instructions for Initial Settlement related transfers of money into one charge/payment per BSC Party per day
- Production of Advice Notes/Statements to be sent to BSC Parties on the basis of the required charge payments

27. Market Domain Data

Market Domain Data (MDD) is standing data required for the operation of SVA. The data falls into two categories - Organisation Data and Classification Data:

- Organisation Data includes company name and identifiers for Distributor, Supplier and relevant Supplier Agents.
- Classification Data includes Valid Measurement Requirement Profile Classes, Time Pattern Regimes and Standard Settlement Configurations.

The BSC Audit will include:

- Completeness and consistency of data items entered into MDD
- Input of key data items received from MDD by Data Aggregators (DAs) including Line Loss Factors (LLFs)

28. Supplier Volume Allocation & Reconciliation

Supplier Volume Allocation & Reconciliation is the aggregation of Supplier/BM Unit Purchase Matrices to a GSP Group and calculation/recalculation of the Deemed Take for each GSP Group.

The Temperature Provider is sub-contracted by the SVAA to provide Noon Temperature Data.

The Time of Sunset Provider is sub-contracted by the SVAA to provide Time of Sunset Data.

BSC AUDIT SCOPE 2020/21

The Teleswitch Agent provides the Teleswitch Data.

The Profile Administrator is the agent contracted by BSCCo to derive sets of regression coefficients for each Profile Class. The Profile Administrator will monitor the accuracy of profiles delivered from the Profile coefficients.

The BSC Audit will include application of key standing and dynamic data items used by the SVAA including:

- NHH data (from Supplier Purchase Matrix)
- HH data
- Daily Profile variables (Noon Temperature Data, Time of Sunset Data, Teleswitch Data)
- GSP Group Take (from CDCA)
- LLFs
- Application of regression coefficients
- Application of time of sunset/Teleswitch data
- Application of Default data (including BM Units)
- Production of daily Profiles
- Calculation of Deemed Take
- Calculation of volumes by BM Unit

29. Trading Disputes

The Trading Disputes process is used to correct errors in Settlement.

The BSC Audit will include:

- Procedures and documentation for registration and logging of Trading Disputes in respect of Reconciliation Settlement Runs
- Procedures and documentation in operation for the registration/logging of queries and requests for assistance
- Resolution of Trading Disputes and application of dispute payments

30. Balancing Mechanism

The System Operator shall be audited by the BM Auditor against the requirements of Section H 5.1.6 of the BSC, which relates to the compilation and submission of data to the SAA.

ADDITIONAL CONSIDERATIONS

Implementation of Specific BSC Changes

All BSC Parties and Central Systems have to implement changes approved by the BSC Panel. The releases are issued three times a year (February, June and November) and have to be fully implemented in the affected systems to ensure compliance with the BSC.

The BSC Audit will include:

- Checks to ensure 0 to 3 BSC Modifications or Change Proposals selected by ELEXON have been successfully implemented by Suppliers, Supplier Agents and Licensed Distribution System Operators. (Changes will be selected based on potential material impact.) This testing will focus on confirming the

BSC AUDIT SCOPE 2020/21

successful and compliant implementation of the relevant change(s) rather than looking at Parties' change management processes.

AREAS OUT OF SCOPE

The activities/ data which fall outside the scope of the BSC Audit are detailed below.

Activity/ Data	Reason For Exclusion
Customer billing.	Outside scope of BSC.
Production of Transmission Network Use of System (TNUoS)/ Distribution Use of System (DUoS) reports.	Outside scope of BSC - does not form part of calculation and allocation of funds under the BSC.
MRA disputes procedures.	Outside scope of BSC – included within the Master Registration Agreement.
Contractual relationship between Parties and their Party Agents and between BSCCo and BSC Agent.	Does not form part of the calculation and allocation of Trading Charges under the BSC.
Electricity Market Reform (EMR)	Outside scope of BSC.

MATERIALITY THRESHOLD

The BSC Auditor will 'Qualify' its audit Opinion if it cannot provide reasonable assurance that the total level of error in Settlement is less than the materiality threshold.

The materiality threshold for the BSC Audit for 2020/21 will be calculated closer to the start of the Audit period, which will represent approximately 0.5% of the total annual electricity supplied across Great Britain in 2019.

REPORTING

Unless otherwise agreed with the BSC Panel, the BSC Audit Report for 2020/21 will be presented to the Panel in June 2020.