BSC Audit Approach
for the year ending 31 March 2011

October 2010

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This document sets out our approach for the year ending 31 March 2011.

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Section 1

Audit Requirements and scope

1.1 Audit requirements

1.1.1 Introduction

The requirement for an audit is set out in Section H of 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". (Source: Code Section H5)

1.1.2 Materiality and our opinion

We are responsible for performing a reasonable assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' ("ISAE 3000") issued by the International Auditing and Assurance Standards Board.

The expression 'audit' used in connection with this engagement is determined to mean a reasonable assurance engagement performed under ISAE 3000. Our opinion is designed to give reasonable, but not absolute, assurance. Whether a specific issue will give rise to a qualification of our audit opinion is a judgement made by us as BSC Auditor. Factors which we will consider include:

- Materiality;
- The nature of the issue itself; and
- Whether the issue has been or will be corrected by the normal course of operation of Settlement, this includes the BSC Trading Disputes process.

The agreed materiality threshold in respect of the overall audit opinion for the audit reporting year ending 31 March 2011 is 1.65TWh.

The total aggregate volume of all quantifiable material errors noted by the BSC Auditor in the course of the BSC Audit will be compared against this materiality threshold. The BSC Auditor will not seek to quantify the full extent of all errors in Settlement, as once the threshold has been breached then a qualification of the audit opinion will be triggered.

If information is misstated or if certain information is omitted the materiality of the misstatement or omission depends on the size and nature of the item in question judged in the particular circumstances of the case. The assessment of what is material is a matter of professional judgement and includes consideration of both the amount (quantity) and nature (quality) of misstatements.

1.2 BSC Audit Scope for the year ending 31 March 2011

The scope of our work is determined each audit period by the Panel and, for the year ending 31 March 2011, is set out in the document 'BSC Audit Scope for the BSC Year 1 April 2010 to 31 March 2011, dated 2 March 2010.

We will check compliance with the BSCPs, CoPs or PSLs only to the extent that they are specifically referenced in the Code or where they relate to key areas of risk and controls in the Settlement process.

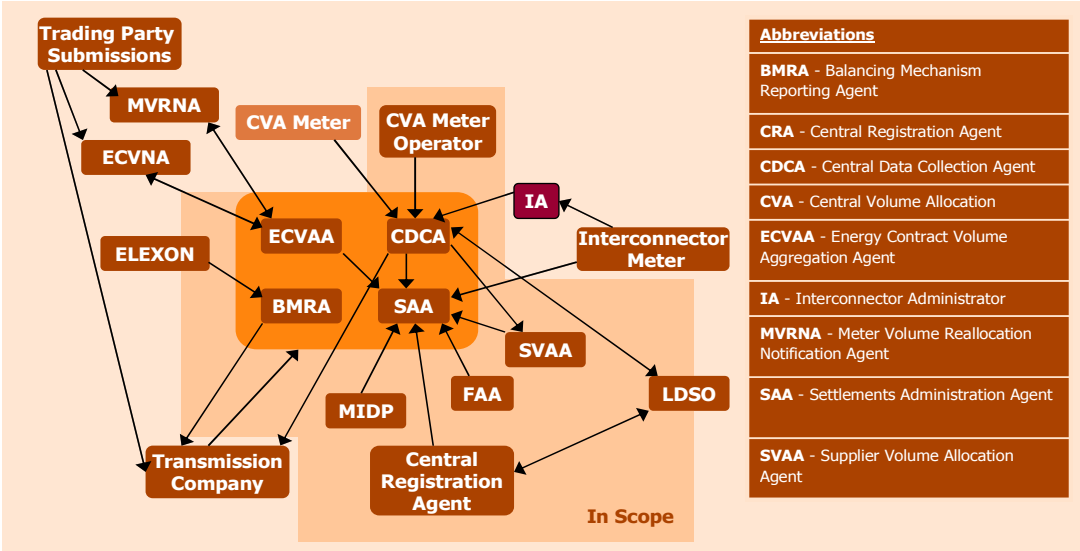
The BM Audit forms part of the BSC Audit and is conducted by the BM Auditor who is appointed by the Transmission Company pursuant to Section H paragraph 5.1.6 of the BSC. The BSC Audit Report will include any issues of significance arising from the BM Audit.

This approach document does not cover our planned work in respect of funding shares. A separate approach document will be provided to encompass our work in respect of funding shares.

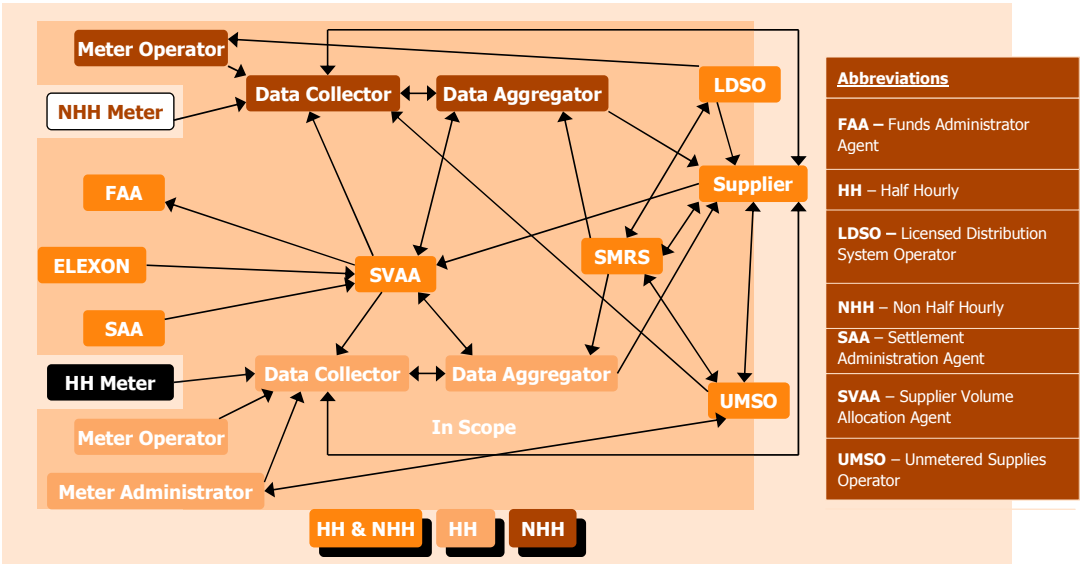
The Audit for the year ending 31 March 2011 will encompass all Settlement Days from 16 February 2009 to 31 March 2011 (approximately a 26 month period) for all Metering Systems physically located in England, Wales and Scotland. All Settlement Runs processed in the year, up to and including Final Reconciliation but excluding Post Final Settlement Run, will be included.

The scope of the audit of the Central Settlement Systems is illustrated in section 1.2.1. The scope of the audit of the Supplier Volume Allocation Systems is illustrated in section 1.2.2.

1.2.1 Scope of the audit of the Central Settlement systems



1.2.2 Scope of the audit of the Supplier Volume Allocation settlement systems



Section 2

Our audit approach

2.1 BSC Audit Approach

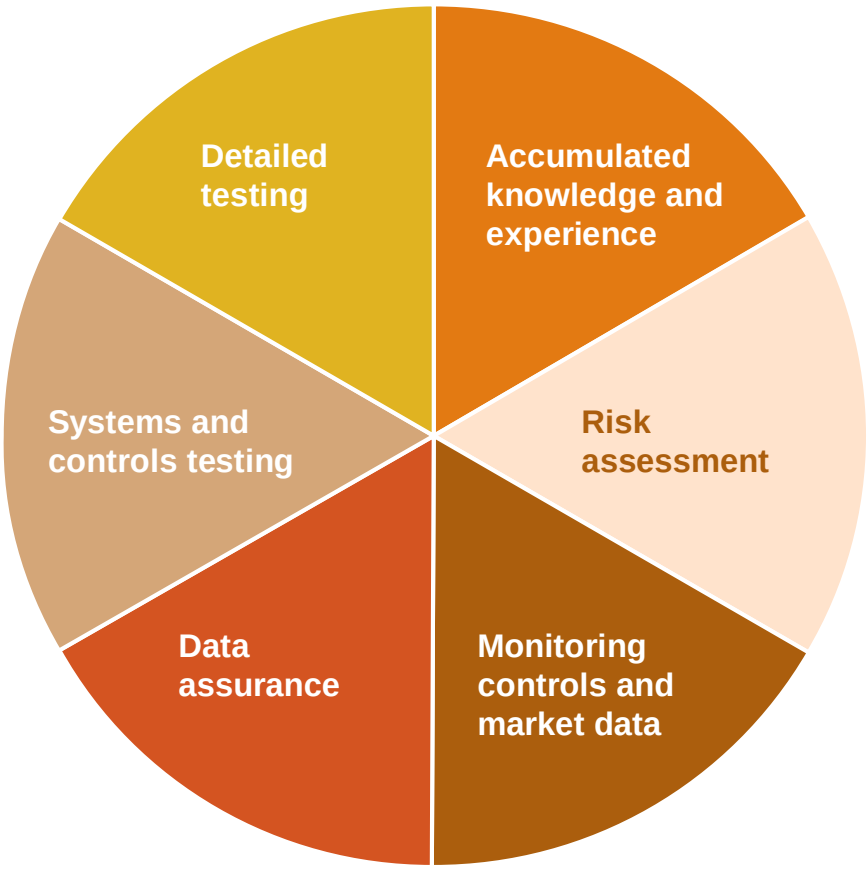
The current BSC Audit has two key components:

- Evaluating compliance with the BSC and CSDs; and
- Assessing the accuracy of data and hence the accuracy of Settlement allocation.

In the following Sections (2.1.1 and 2.1.2) we describe the **assurance techniques** which we use as building blocks to gain our audit comfort and the **audit cycle** into which the phases of our work fit.

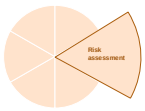
2.1.1 Assurance techniques

In undertaking an audit of such a web of complex processes with many different parties processing data and transferring data between them, and with a strong central monitoring function it is vital to use a variety of complementary audit techniques.



Accumulated knowledge and experience

Essential for an efficient audit is a thorough understanding of the BSC's business and governance arrangements (including the PAF), and the management processes, controls and systems in place at each of the Audited Entities. Knowledge of the industry and the BSC also needs to be continually refreshed and then propagated throughout our team.



Risk assessment

We consider the comparative risks at the individual Audited Entity level as well as taking into account our knowledge of areas of risk within the market (where for example issues have arisen in the past or where a particular process is known to be complex or problematical).

Monitoring controls and market data

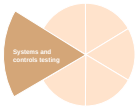
We review and consider the monitoring function performed by PAB and the information which they receive, the information and assurance provided by other PAF techniques and market data including PAR extracts from SMRS databases, information accessed via ECOES and PARMs data.

Data assurance techniques

The BSC contains highly complex mathematics in the form of algebra and formulae to define how the processes and systems should operate.

A relatively minor error in either the functionality of the software or the parameters used in the calculation could lead to a material error in Settlement.

We test the functionality of the software (addressing the risk of systematic error) and that data being used in the calculations is complete and accurate (addressing the risk of manual error).



Systems and controls testing

Wherever possible, in auditing each entity we seek to place reliance on their systems and focus our testing on controls.

Where we are able to rely on these systems and controls we are able to reduce the level of detailed testing performed.

Detailed testing

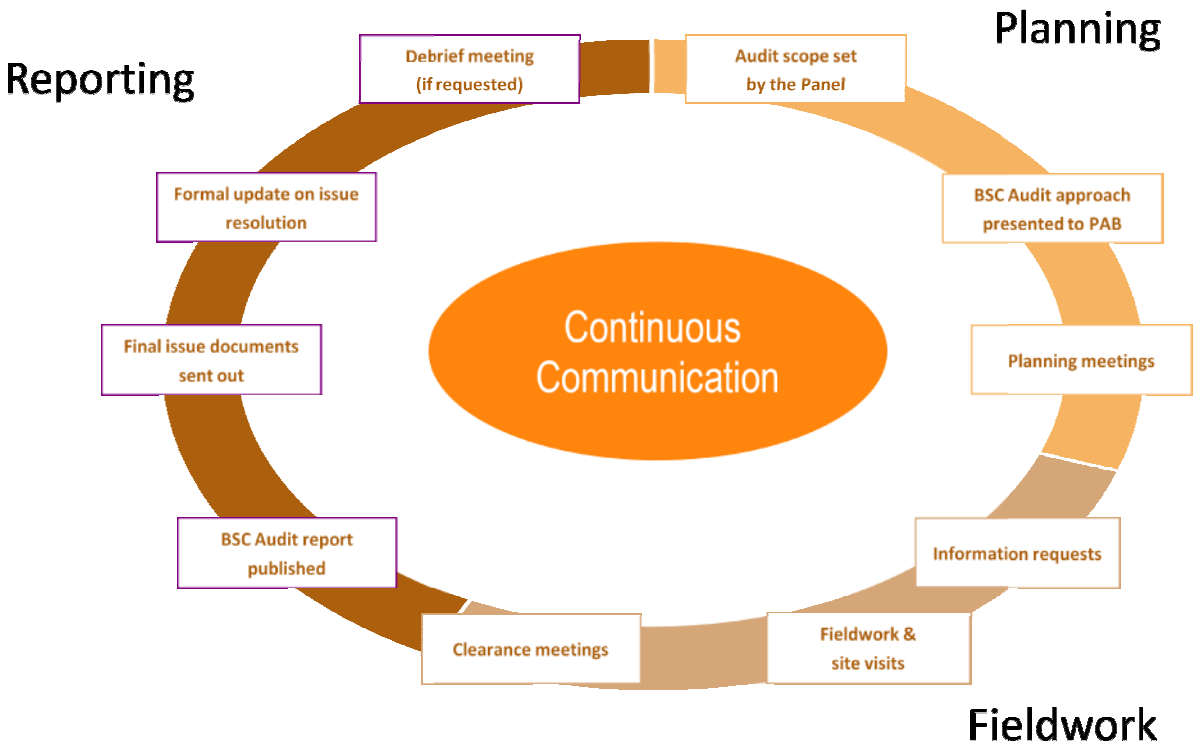
Detailed tests are used to provide evidence of compliance with the BSC or CSD, or to establish completeness, validity and accuracy at the data flow or metering system level (or, conversely to discover errors).

Testing is performed on a sample basis and sample sizes for specific tests are selected (tailored to each Audited Entity) according to the following criteria:

- Size of population/number of transactions/materiality;
- Specific issues/risks identified in the prior year;
- Level of manual intervention;
- Controls surrounding the operation; and
- Level of automation.

2.1.2 The audit cycle

The audit cycle is performed in three main phases – planning, fieldwork and reporting – these, in conjunction with our commitment to continuous communication, are part of the audit cycle as illustrated.



The main features of these key phases are as follows:

Continuous communication

We have lines of communication with ELEXON and Audited Entities which ensure that any issues are identified and flagged at an early stage allowing them to be discussed frankly and addressed promptly.

A web based communication mechanism will be provided for use by Audited Entities, ELEXON and ourselves. This will be used for the following:

- Agendas for planning, clearance and debrief meetings;
- Administrative details for the site visits;
- Information requests for site visits;
- Submission of data requests by Audited Entities;
- Draft issue documents for comment by the Audited Entity and ELEXON; and
- Access to Materiality Report information identifying the individual MSIDs and showing their position in respect of each analysed issue (information relating to other MSIDs would be coded).

The information can also be made available by email or other means as preferred.

Planning

Planning meetings will be held with Audited Entities and additional support given to any being audited for the first time. Detailed information requests will be sent out in advance of the audit visit. Tailored work programmes will be put in place for each Audited Entity, based on a standard set of testing that has been specifically devised for the BSC Audit but amended for the particular circumstances of each Audited Entity.

We will perform a risk assessment to identify those Audited Entities that represent a higher risk to Settlement and those that represent a lower risk, and we will flex the amount of audit work accordingly. In all cases any old or outstanding audit issues will be followed up.

In performing our risk assessment we will take account of the following factors:

- Size of Audited Entity (in terms of MPAN numbers, volume of energy);
- Complexity of systems and processes;
- Role type (i.e. NHHDC or NHHDA);
- Control environment at the Audited Entity and number of known audit issues (identified by the application of our accumulated knowledge and experience);
- Level of manual processing as opposed to automated; and
- Performance in the market and Information received from other PAF techniques.

Rotation will not be applied to the CVA systems or Supplier audits.

Fieldwork

Site visits will generally be scheduled between February and April 2011. Precise timings will be agreed with each Audited Entity. Only one site visit will be performed at the majority of Audited Entities and rotation will be applied.

The fieldwork phase is where we gather the audit evidence that we need to gain our audit comfort. Systems and controls testing (including computer controls) is done to gain assurance on any controls being operated by Audited Entities themselves. The extent of detailed testing will be dependent on how much we are able to rely on this systems and controls testing, where controls are weak we will have to increase detailed test sample sizes. Whilst on site we will also follow up any issues arising as a result of the data assurance techniques that we have applied and any issues noted as a result of our risk assessment and our review of monitoring controls and market data.

Issues identified as a result of our fieldwork will be raised with the Audited Entity as they arise. Audited Entities will also be offered the opportunity to discuss these issues at a formal clearance meeting.

Reporting

The Issue documents will be drafted and provided to Audited Entities in advance of the clearance meeting. Audited Entities will be provided with deadlines for making any further comments on the issue documents and will be asked to confirm their agreement to the issues in writing.

Issues will be allocated an impact rating by the BSC Auditor. Issues will be considered across Audited Entities and professional judgement will be applied in determining the impact of each issue on Settlement. Factors which will be considered include:

- nature of the issue;
- significance of the associated settlement risks;
- extent of the impact of issue in terms of volume; and
- existence of mitigating factors such as compensating controls.

Audited Entities will be given the opportunity to discuss the impact ratings applied and to add additional commentary on issues raised. Final copies of issue documents will be distributed by ELEXON and copies will be available on the web based communication tool.

The BSC Auditor's Report and Statement of Significant Matters will be issued on 10 June 2011 and ELEXON will subsequently provide a formal update on any issues raised to PAB.

Section 3

Key dates and deliverables

The key deliverables of the BSC Audit are as follows:

- BSC Auditor's Report (distributed to all Trading Parties), a version of which is also published on the ELEXON website.
- Statement of Significant Matters (distributed as above). This will contains details of those issues that we judge as not being sufficiently material to warrant inclusion in the BSC Auditor's Report but which, nevertheless, we believe it appropriate to bring to the attention of the recipients of the BSC Auditor's Report.
- Individual Auditor Issue Documents for Audited Entities (distributed to the organisations to which each issue relates by ELEXON).
- Other deliverables as requested by ELEXON.

The BSC Auditor's Report and Statement of Significant Matters will be issued on 10 June 2011. The Individual Auditor Issue Documents for Audited Entities will be delivered to ELEXON on 17 June 2011.

Appendix I

Glossary of terms

Acronyms used in this document have the following meanings (as defined in the BSC), unless otherwise stated.

Acronym	Definition	Acronym	Definition
AA	Annualised Advance	MAR	Meter Advance Reconciliation
Audit period	Year ending 31 March 2011	MDD	Market Domain Data
BM	Balancing Mechanism	MTD	Meter Technical Details
BMRA	Balancing Mechanism Reporting Agent	MIDP	Market Index Data Provider
BMRS	Balancing Mechanism Reporting Service	MOA	Meter Operator Agent
BMU	Balancing Mechanism Unit	MVRNA	Meter Volume Reallocation Notification Agent
BSC	Balancing & Settlement Code	MSID	Meter System Identifier
BSCCo	Balancing & Settlement Code Company	NHHDA	Non Half Hourly Data Aggregation
BSCP	Balancing & Settlement Code Procedure	NHHDC	Non Half Hourly Data Collection
CDCA	Central Data Collection Agent	NHHMO	Non Half Hourly Meter Operator
CoP	Code of Practice	PAB	Performance Assurance Board
CMRS	Central Meter Registration Service	Panel	BSC Panel
CRA	Central Registration Agent	PARMS	Performance Assurance Reporting and Monitoring Service
CVA	Central Volume Allocation	PSL	Party Service Line
EAC	Estimated Annual Consumption	RF	Final Reconciliation Settlement Run
ECVAA	Energy Contract Volume Aggregation Agent	SAA	Settlement Administration Agent
ECVNA	Energy Contract Volume Notification Agent	SMRS	Supplier Meter Registration Service
ELEXON	ELEXON Limited	SO	System Operator
FAA	Funds Administration Agent	SVA	Supplier Volume Allocation
GSP	Grid Supply Point	SVAA	Supplier Volume Allocation Agent
HHDA	Half Hourly Data Aggregation	TAA	Technical Assurance Agent
HHDC	Half Hourly Data Collection	TDC	Trading Disputes Committee
HHMO	Half Hourly Meter Operator	TWh	Terra Watt hour
IA	Interconnector Administrator	UMS	Unmetered Supplies
LDSO	Local Distribution System Operator	UMSO	Unmetered Supplies Operator
LLF	Line Loss Factor		