

Scope of the Funding Shares Audit

Meeting Name	BSC Panel
Meeting Date	10 May 2012
Purpose of paper	For Decision
Summary	The BSC Audit objective includes providing assurance that the provisions of the Code in relation to the calculation of Funding Shares have been complied with. This paper seeks the Panel's agreement to the proposed scope of this part of the BSC Audit.

1. Background

- 1.1 Section H Paragraph 5.1.2 of the BSC states that: "The objective of the BSC Audit is to provide assurance (to such level as the Panel considers appropriate) that the provisions of the BSC and BSC Subsidiary Documents in relation to Settlement and in relation to the calculation of Funding Shares have been complied within the Audit Year."
- 1.2 Section Section H Paragraph 5.2.1 of the BSC requires the Panel to set the scope of the BSC Audit. The Funding Shares Audit is part of the BSC Audit, yet is designed as a distinct and separate piece of work. This paper seeks the Panel's agreement of the scope of the Funding Shares Audit.
- 1.3 The proposed Funding Share Audit scope will continue to include the calculation of the Main Funding Shares, SVA (Consumption) Funding Shares, SVA (Production) Funding Shares, and General Funding Shares (applied on a default basis), checking of BSC Cost shares through to the supporting information provided to each Party and the calculation of Annual Funding Shares through to the files sent to the Funds Administration Agent for their use in calculating Default Share Amounts.

2. Scope Definition

- 2.1 The various Funding Shares set out in Section D of the BSC are calculated each month using a mix of actual and estimated data. Once ELEXON's audited Financial Statements have been published, and the final actual Trading Data used for Funding Shares calculations has been received, a final reconciliation exercise is performed which results in each Party paying amounts for the financial year equating to the final costs for the year allocated using the final Funding Shares.

- 2.2 Each Party receives supporting information setting out how their final invoice is calculated, and the Trading Data used. This enables Parties to re-perform the calculations if they wish to check them.
- 2.3 A separate Funding Shares Audit Opinion for the funding shares relating to the financial year 2011/2012 will be delivered to the Panel and Trading Parties by the BSC Auditor. The Opinion will be referred to in the documentation to accompany the final invoices for the 2011/2012 financial year. This Opinion is scheduled for publication in August 2012 in accordance with the agreed BSC Audit Scope.
- 2.4 More detail concerning the scope of the Funding Shares Audit is attached as Appendix 1.

3. Recommendations

- 3.1 The BSC Panel is invited to:
- a) **APPROVE the proposed scope of the Funding Shares Audit**

List of Appendices:

Appendix 1 – Funding Shares Audit Scope and Approach for Year Ended 31 March 2012

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Funding Shares Audit Scope and Approach for Year Ended 31 March 2012

May 2012

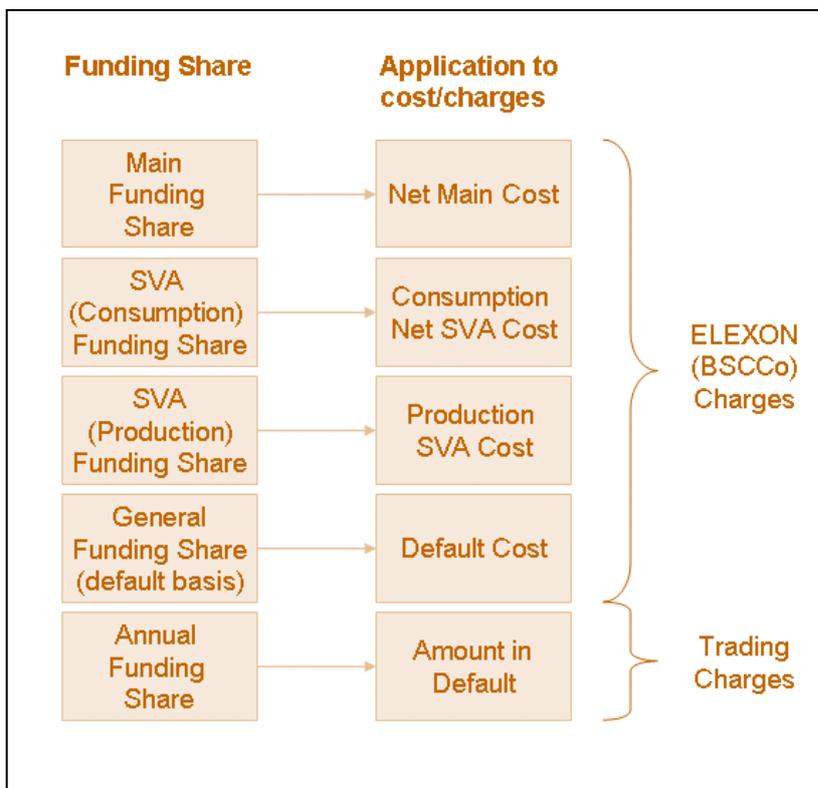
1. Introduction

- 1.1. This document is intended to communicate the scope and planned approach to the Funding Shares Audit for the year to 31 March 2012 ('the period').

Background

- 1.2. Funding Shares are the mechanism whereby the costs of operating the electricity market are shared between the Trading Parties existing in that market. Different Funding Shares are calculated and applied relating to different cost areas.

Diagram 1 – Funding Shares and their application to ELEXON and Trading Charges



- 1.3. The basis for calculating these shares is set out in the Balancing and Settlement Code ('BSC') Section D. The share calculations are performed by ELEXON Limited ('ELEXON') based upon data provided internally and from various other parties.
- 1.4. Funding shares are calculated each month based on the best information available at the time of calculation. A reconciliation exercise is performed at the end of each year based on the final version of the source data. Reconciling bills/credits are issued accordingly.
- 1.5. A schedule, the "BSC Costs Invoice Supporting Information", is sent along with the invoice containing details of the Funding Shares and units used in the calculations.

Basis for the audit

- 1.6. We have been appointed as BSC Auditor by ELEXON. The requirement for an audit of the calculation of Funding Shares, by the BSC Auditor, is set out in Section H of the BSC Code (the 'Code').
- 1.7. The Funding Shares are recalculated within 28 Days of the publication of the audited accounts of ELEXON, acting as BSCCo. The costs to which the Funding Shares are applied are based on these audited amounts. The last published accounts of ELEXON cover the period from 1 April 2011 to 31 March 2012.
- 1.8. 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.
- 1.9. 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 that certain Funding Shares calculations performed by ELEXON and which are included in the scope of our audit are performed in line with the provisions of the BSC. Whether a specific issue will give rise to a qualification of our audit opinion is a judgement made by us as BSC Auditor.

Relevant BSC Sections

- 1.10. The Funding Shares calculations are defined by the Balancing and Settlement Code Section D as follows:
 - "Main Funding Shares" as defined by BSC Annex D-1, Part 1;
 - "SVA (Consumption) Funding Shares" as defined by BSC Annex D-1, Part 2;
 - "SVA (Production) Funding Shares" as defined by BSC Annex D-1, Part 3;
 - "General Funding Shares" (applied on a default basis to create Default Funding Shares) as defined by BSC Annex D-1, Part 4; and
 - "Annual Funding Shares" as defined by BSC Section D, 1.2.1(e).
- 1.11. These Funding Shares are used in the derivation of the following charges:
 - ELEXON (BSCCo) Charges
These are defined by BSC Annex D-4.
The calculation applies the values of Main Funding Shares, SVA (Consumption) Funding Shares, SVA (Production) Funding Shares, and Default Funding Shares.
 - Trading Charge – Amounts in Default
These are defined by BSC Sections N.
The calculation applies the values of Annual Funding Shares.

2. *Scope of the Funding Shares audit*

2.1. The terms ‘Scope’ and ‘Approach’ used in this document are defined in Table 1 below:

Table 1 – Definitions of Scope and Approach

Scope	Areas that the Panel agree to be the subject of audit by the BSC Auditor.
Approach	How we intend to perform the detailed work, which we, as BSC Auditor, undertake in order to obtain the evidence we require to enable us to issue an audit opinion in the agreed form. This depends, to some extent, on the Scope and our own audit methodologies.

2.2. The Panel are requested to agree the Scope of the review by the BSC Auditor on 10 May 2012.

Objectives and scope

2.3. The objective of the Funding Shares Audit is as follows:

A) Review of Funding Shares and associated Charges for 2011/12

Audit the calculation of the Main Funding Shares, SVA (Consumption) Funding Shares, SVA (Production) Funding Shares, and General Funding Shares (applied on a default basis) and associated BSC Cost shares for 2011/12 through to the BSC Costs Invoice Supporting Information provided to Trading Parties;

B) Review of Annual Funding Shares for 2011/12

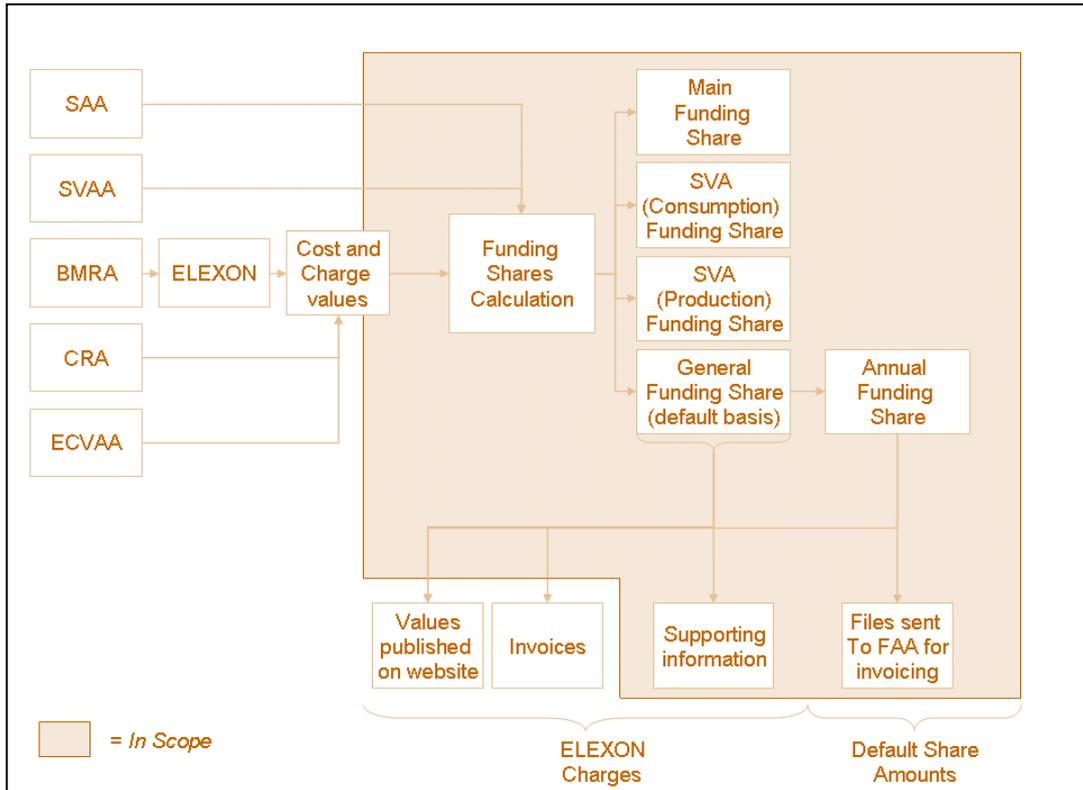
Audit the calculation of the Annual Funding Shares for 2011/12 through to the files sent to the FAA for their use in calculating Amounts in Default.

2.4. The Funding Shares Audit will review the accuracy of the data provided on the BSC Costs Invoice Supporting Information for 2011/12 as referred to in paragraph 14 by considering the way the amounts have been calculated by ELEXON’s Funding Shares Calculation Model from the data input by ELEXON.

2.5. The audit will not include verification of the input data back to source. A review of source data was performed for the financial year ended 31 March 2010. No issues were noted. As a result ELEXON have requested the exclusion of checking of these inputs based on the assumption that cost information is sourced from audited Financial Statements and that much of the relevant data is available to BSC Parties to check the information and calculations themselves.

2.6. The following diagram provides a summary how the audit scope covers the input and output values provided.

Diagram 2 – Summary of Scope Diagram



Exclusions from scope

2.7. As explained above, the Funding Shares Audit focuses primarily on the core of the calculation process. For the avoidance of doubt, the areas listed in Table 2 below are outside the scope of the Funding Shares Audit:

Table 2 – Areas out of scope and reason for their exclusion

Areas out of scope	Reason for exclusion
Verification of data input by ELEXON back to source.	<p>The BSC Funding Shares Audit examines the process for performing the calculations and allocations defined by the BSC.</p> <p>In relation to Funding Shares, these processes are performed primarily by ELEXON based on data provided. The scope of the audit focuses on the calculations performed, rather than the accuracy of the input data.</p> <p>ELEXON have requested the exclusion of checking of these inputs based on the assumption that cost information is sourced from audited Financial Statements and that much of the relevant data is available to BSC Parties to check the information and calculations themselves</p>

Areas out of scope	Reason for exclusion
Verification of the Funding Share calculations that are performed by Third Parties before being input into the Funding Shares System. These are described in Appendix B.	<p>These calculations were included as part of the review of source data during the BSC Funding Shares Audit for FY10 without any exceptions being identified.</p> <p>There are no current plans to extend the audit scope to include this review this year.</p>
Verification of the total BSC and SVA Costs provided by ELEXON to which the Funding Shares are applied.	Cost information is sourced from audited Financial Statements which are available to Trading Parties.
Consideration of the principles underlying the definition of Funding Shares, and any related costs and charges.	The BSC Funding Shares Audit examines compliance with the BSC, not the validity of the underlying principles applied.
Consideration of the accounting policies adopted by ELEXON in accounting for its transactions, costs and revenues.	The application of appropriate accounting policies are not defined within the BSC. Such matters are considered by the ELEXON Group statutory auditors.
Judgements applied by ELEXON in cases where alternative versions of input data are applied.	<p>In calculating the values of Funding Shares, ELEXON may in certain cases apply judgement in the selection of the most appropriate input data (e.g. where there may be conflicting, or incomplete, data available).</p> <p>There is no BSC requirement for these judgements to be formally documented, although any such instances will be highlighted by the audit work and will be discussed with ELEXON.</p>
The application of Annual Funding Shares in allocating Amounts in Default by the FAA.	The BSC Audit will cover the application of Funding Shares only in allocating the associated BSC Costs shares amongst Trading Parties as defined above.
Any amendments made subsequent to this review.	<p>As auditors we are only able to test information provided at the time of our work. Subsequent changes to data or systems may lead to changes in the results.</p> <p>However, it is assumed that the version of data or systems made available to us will be the latest available and will remain unchanged before submission of results by ELEXON.</p>
General controls over the IT infrastructure within ELEXON.	The application of appropriate general IT controls and suitability of infrastructure are not defined within the BSC. Such matters are considered by the ELEXON Group statutory auditors.

3. Approach

Summary

- 3.1. Our review of the values produced by the Funding Shares calculations will include an independent re-performance of the calculations using the final version of the source data provided by ELEXON.
- 3.2. The tables provided in Appendix A summarise the inputs and outputs that should be provided and the approach taken to test and compare this information. Testing performed will be on a sample basis.
- 3.3. The audit will cover the period 1 April 2011 to 31 March 2012 (FY12).

A) Review of Funding Shares and associated Charges for 2011/12

- 3.4. The testing covers the values of Main Funding Shares, SVA (Consumption) Funding Shares, SVA (Production) Funding Shares, and General Funding Shares (applied on a default basis). Our re-performance testing requires the receipt of source data from ELEXON to generate all required values relating to the Funding Share formulae.
- 3.5. The approach to testing will be:
 - (i) Select a sample of Funding Shares to be tested for the year 2011/12;
 - (ii) Obtain the corresponding input values from ELEXON as defined in Appendix A;
 - (iii) Independently re-perform the calculations using these values; and
 - (iv) Match the resulting values on a sample basis to the cumulative weighted average Funding Share values and corresponding share of BSC Cost calculations for the complete financial year as shown on the BSC Costs Invoice Supporting Information details (Sheet A) to be sent to participants.

Table 3 – Values to be matched on the Supporting Information (Sheet A)

Funding Share	Corresponding BSC Cost
SVA (Consumption) Funding Share	Consumption Net SVA Cost
General Funding Share	Default Cost
Main Funding Share	Net Main Cost
SVA (Production) Funding Share	Production SVA Cost

- 3.6. The total BSC Cost values would be provided as input by ELEXON based on management information, but no further work will be undertaken to verify this information.

B) Review of Annual Funding Shares for 2011/12

- 3.7. Annual Funding Shares are calculated on a monthly basis for the purpose of allocating Trading Charge defaults amongst non-defaulting Parties. Each month's Annual Funding Share comprises the average General Funding Shares for 12 consecutive months ending with and including the month in question. The review will cover the Annual Funding Shares produced during the twelve months to March 2012.
- 3.8. The approach to testing will be:
- (i) Determine a sample of Annual Funding Share values to be reviewed;
 - (ii) For these sample months, obtain values of General Funding Shares for that month and the 11 preceding months;
 - (iii) Sample test the calculation of these General Funding Shares values following the approach noted by (A) above;
 - (iv) Independently re-perform the calculation of Annual Funding Shares values using these General Funding Share values; and
 - (v) Match the resulting Annual Funding Shares values for a sample of months to those shown on the files sent to the FAA for their use in calculating Amounts in Default.

4. Key dates and deliverables

- 4.1. Subject to any issues identified as a result of our audit, an opinion will be delivered to the BSC Panel on 9 August 2012.
- 4.2. We will produce a version of the Funding Shares Audit opinion which is suitable for publication on the BSC Website.
- 4.3. Our report will include details of any significant matters that have come to our attention during our work.
- 4.4. Delivery to this timetable is dependent upon the complete, accurate and timely provision of the following:
 - All relevant source data used in the calculations. This must correspond to the final version applicable to the values reported;
 - The relevant allocation mapping details that apply to the source data, including the definition of those elements that should be included and excluded, when deriving the relevant BSC Costs and Charges data;
 - The relevant definitions of Trading Parties and Defaulting Trading Parties;
 - Full cooperation of the team involved in managing the Funding Share calculations and corresponding amendments, and any other ELEXON employee relevant to this assignment; and
 - We do not identify any major issues in the system functionality.
- 4.5. Our report will be based on the concept of reasonable assurance. It will not be a guarantee that the systems will be free from software errors or that the systems will operate in accordance with the relevant BSC requirements in every eventuality.

Appendix A, Tables summarising information required

- A1. The following information should be provided by ELEXON for use in the review of Funding Shares amendments.
- A2. It is important that the necessary input data versions and mappings are defined by ELEXON, and that these correspond to the versions and mappings applied by ELEXON in their own calculation of the amendments to be reviewed. This information will be communicated via a table showing the respective data files, versions and mapping required for each sample item selected.

Table 5 – Inputs and outputs needed for the re-performance of Funding Shares

Inputs	Outputs
<ul style="list-style-type: none"> • Value of “Annual SVA Costs” for the year to March 2012 • Value of “Annual BSC Costs” (less other income) for the year to March 2012 • Value of “BSC NETA Recovery Amount” for the year to March 2012 • Unit volumes taken from the CRA files applicable for the calculations for the year to March 2012 • Unit volumes taken from the ECVAA files applicable for the calculations for the year to March 2012 • Unit volumes taken from PARMS data applicable for the calculations for the year to March 2012 • Other unit information to apply to the calculations of “Main Specified Charges” for the year to March 2012 • Notified versions of the table r01_mappings • A list from ELEXON of those defaulting Trading Parties excluded from the Cost and Charge calculations <p>SQL data tables and views owned by ELEXON:</p> <ul style="list-style-type: none"> • r01_data_files • r01_mappings • r01_ngcids • r01_due • r01_chargetypes • viw_MCNSC • viw_MPSC • viw_MNMC • viw_tradingparties • viw_defaultparties • r01_saa_data • r01_sva_data 	<ul style="list-style-type: none"> • The final version of the BSC Costs Invoice Supporting Information produced to accompany the ELEXON Charge bills raised

Table 6 – Inputs and outputs needed for the re-performance of Annual Funding Shares

Inputs	Outputs
<ul style="list-style-type: none">• Values of General Funding Shares involved in the calculation of the Annual Funding Share values selected• The relevant version of input data, as defined in Table 5, used in the calculation of General Funding Shares provided.	<ul style="list-style-type: none">• Files sent to the FAA for their use in calculating Amounts in Default

Appendix B, Specific exclusions where the calculation defined is performed by a Third Party

- B1. Certain elements of the Funding Share calculation are performed by Third Parties before being input into the Funding Shares System. For these elements, we will be unable to verify that the calculations performed in relation to the determination of Funding Shares have been made in accordance with the Code. These are noted in the following table:

Table 7 - Specific exclusions where calculation defined is performed by a Third Party

Credited Energy Volumes	
Code Requirement	Section D, Annex D1 Parts 1&3 of the Code requires net CVA Production ($P\Sigma+(QCEiaj) + P\Sigma-(-QCEiaj)$) and CVA Consumption ($C\Sigma+(QCEiaj) + C\Sigma-(-QCEiaj)$) values for Trading Parties to be included in the calculation of Main Funding Shares.
Method Applied by ELEXON	Single net CVA Production and CVA Consumption Figures are provided to, and used by ELEXON in the calculation.
Impact on our review	We will be unable to confirm the accuracy of this aspect of the Funding Shares calculation.
Corrected Correctable Supplier Deemed Take	
Code Requirement	Section D, Annex D1 Part 2 of the Code requires a summation of Corrected Correctable Supplier Deemed Take values relevant to the Trading Parties ($pm\SigmaZHjCCSDTHZj$) to be included in the calculation SVA (Consumption) Funding Shares.
Method Applied by ELEXON	The summed values of Corrected Correctable Supplier Deemed Take value are provided to, and used by ELEXON in the calculation.
Impact on our review	We will be unable to confirm the accuracy of this aspect of the Funding Shares calculation.

Appendix C, Glossary of Terms

- C1. Acronyms used throughout this document have the following meanings (as defined in the Balancing & Settlement Code), unless otherwise stated:

Table 8 – Glossary of terms

Acronym	Definition
BMRA	Balancing Mechanism Reporting Agent
BSC	Balancing and Settlement Code
BSCCo	Balancing & Settlement Code Company
CCSDT	Corrected Correctable Supplier Deemed Take
CRA	Central Registration Agent
ECVAA	Energy Contract Volume Aggregation Agent
QCE	Credited Energy Volume
SAA	Settlement Administration Agent
SVAA	Supplier Volume Allocation Agent

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