



# ELEXON BSC Audit Approach 2016/17

Year ending 31 March 2017

Classification: Public

# Contents

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# Key BSC Audit Findings 2015/16

## Executive summary of 2015/16 audit

The BSC Audit Report for 2015/16 is a key document which drives our approach for 2016/17. We have summarized the results of the 2015/16 audit in this executive summary.

Our BSC Audit Report in 2015/16 was drafted on the basis of there being no qualification. We have, however, this year seen further deterioration in BSC compliance at Meter Operator Agents, IT system issues causing a drop in settlement performance and an increase in the magnitude of disputes relating metering issues. Certain legacy audit issues were closed or reduced in severity as a result of efforts by ELEXON, market participants and the PAB however. Other key legacy issues remained open. We used data from the DTN for certain audit testing, which provided much greater clarity over the extent of legacy audit issues.

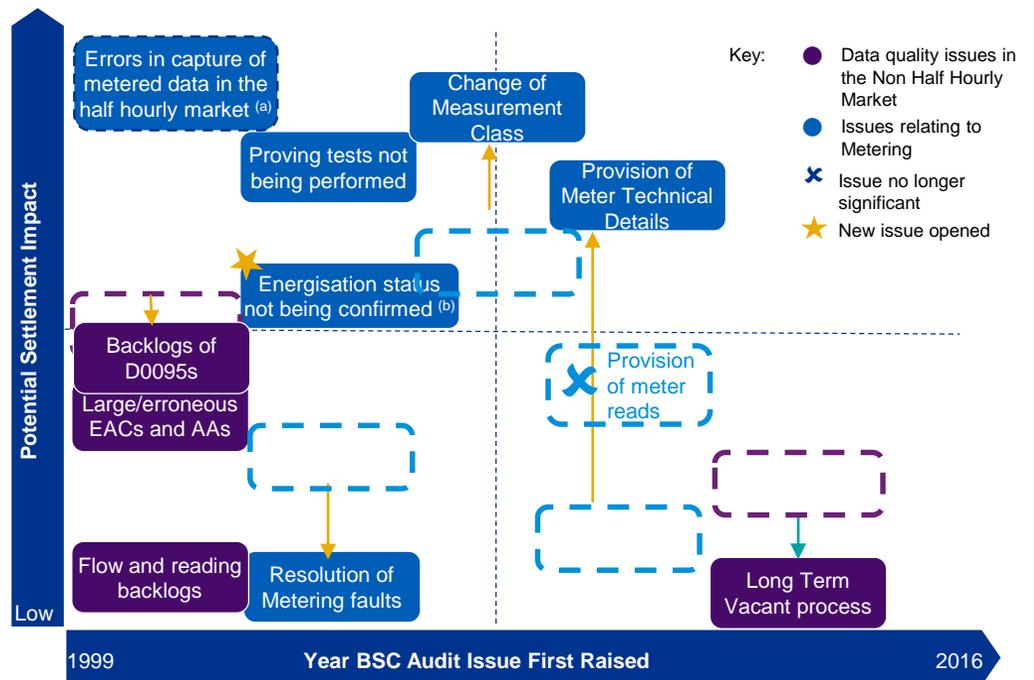
There is significant change across the electricity market, both from a regulatory (e.g. the CMA report) and technical (e.g. P272/smart meter roll out) perspective, which is creating new Settlement Risks. The industry's approach to resolving legacy audit issues is, however, reactive rather than proactive.

Similar to last year, our assurance work indicated that there continues to be two broad areas of concern:

- Issues relating to Metering; and
- Data quality issues in the Non Half Hourly Market.

The 'heat map' opposite shows the individual categories of issues within these two areas, split by ageing and potential impact to Settlements. The arrows indicate the change year on year. We raised one new audit issue category in relation to the Energisation process.

Heat map showing potentially Settlement impacting audit issues identified in our BSC Audit Report (arrows indicate the movement since the 2014/15 BSC Audit).



Note:

- (a) As reported by the Technical Assurance Agent (TAA), whose work is outside of the scope of our assurance opinion.
- (b) 'Energisation status not being confirmed' issue was initially raised in 1999, however with no audit issues identified, it was not reported in 2014/15. As audit issues were identified in 2015/16, the category is marked as a new audit finding, but the date it was originally raised by the previous BSC Auditor has been retained.

## Risk approach: Overview

### Risk approach in a nutshell

Our audit approach and emphasis of testing continues to be aligned to Settlement Risks. We consider factors at a both market and individual market participant level when developing our approach.

The complete scope of the work and our programme of testing is determined by taking market level factors into account. Amongst other things, we consider the approved BSC Audit Scope 2016/17, the Risk Evaluation Register, Disputes, and Market and Significant BSC Audit Issues, which all factor into our understanding of processes posing the highest risk to Settlement and enable us to focus our testing appropriately. We also work collaboratively with ELEXON, allowing us to capture their expertise and to take into account the latest view of changes and/or emerging high risk areas into account.

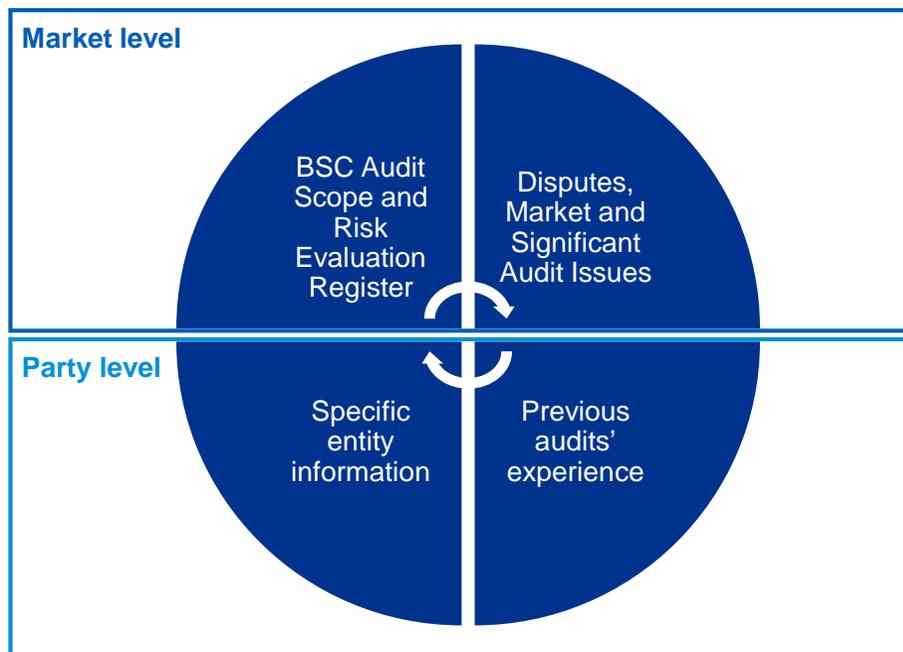
At a market participant level, as in previous audits, we plan to continue having differing intensities of individual audits. This will depend on specific factors, such as severity of existing issues, audit intensity history, MPAN count and type of role. In practice, we will test all in-scope processes as part of the highest intensity audits and will only focus on procedures posing the most significant risk to Settlement during limited intensity work. An example of this is provided in Appendix B to provide a better understanding of what we do.

All risk factors are reflected in our final Audit Entity Selection, which sets out which market participants will be visited and what areas and intensity of assurance testing will be performed, which later feeds into our Audit Planning Memorandums (*what* we test). In addition, those aspects will also drive changes to our work programmes and hub training given to our staff (*how* we test). We will also consider any major projects at audited entities relevant to Settlement systems (e.g. IT system changes) when determining the timing of individual audits (*when* we test).

Further detail of the audit process is provided in Scoping Detail and BSC Audit Phases slides.

As part of our BSC Audit planning we have processes and systems in place within KPMG to ensure that we comply with relevant independence and ethical requirements under ISAE 3000 and KPMG's internal policies..

A simplified view of key sources taken into account during our consideration of audit scope and level of work to be performed at individual entities



# Risk approach: Highlight areas

Our key highlights show areas of the audit where we will place the most emphasis in 2016/17. They include industry driven aspects such as Significant Issues and major themes of our testing strategy.

Area	Activity
<b>Significant Issues</b>	In previous audit cycles we targeted significant issues, such as Proving Tests, Energisation Status not being confirmed or Backlogs of D0095s, and this will be maintained. All of the most significant issues will be part of our testing programmes for all levels of intensity.
<b>BSC Audit Scope Changes in 2016/17</b>	We have reviewed the changes in the approved BSC Audit Scope 2016/17 and are building our test programmes to address these. For example, we will perform more detailed enquiry and/or testing over Change Management and will introduce testing for changes such as P305. We will also introduce testing around commissioning processes at MOAs to determine whether appropriate procedures are in place to ensure timeliness of commissioning completion. As part of developing our test processes, where appropriate, we will hold meetings with technical experts from ELEXON and will also take into account our experience of ad-hoc work performed at two HHDAs caused by IT system failures. Due to the low number of Settlement impacting issues and as per the BSC Audit Scope, we will reduce the scope of our testing in the Unmetered Supply market.
<b>Expansion of use of DTN data</b>	Successful DTN deployment in 2015/16 resulted in a far more insightful audit as it helped to better understand the extent of existing issues and to highlight previously unidentified concerns. We are working with ELEXON to look for opportunities to expand our DTN use to other processes given the successes of using it in the 2015/16 audit. We are prioritizing processes affected by Significant BSC Audit issues and Market Issues during its continued development.
<b>Change of Measurement Class process</b>	Given the greater level of issues from our 2015/16 audit cycle and large expected increase in Change of Measurement Class (CoMC) events in 2016/17, we regard this as the most concerning Significant Issue. Full CoMC sample testing will be performed at entities covering 81% HH and 88% NHH relevant MPANs with all remaining low-risk entities beyond the minimum threshold for audit covered by limited intensity testing. Our assessment of the severity of issues will reflect the increased expected Settlement impact where non-compliant agents process larger volumes of CoMC events.
<b>Spotlight on Market Issues</b>	The impact severity of Market Issues will be reflected in our testing approach. Increased scrutiny of the CVA market in 2015/16 led to a new market issue relating to lack of documented process at smaller agents. We will remain focussed in this area, auditing parties and processes where Settlement Risk is significant. Another new Market Issue, Quality of Site Technical Details held by LDSOs, will also be examined more closely as we are amending our testing and enquiry questions for LDSOs to better capture the quality aspects of D0215 flows.
<b>Better targeted Supplier audits</b>	We will re-focus our Supplier audits, introducing sample testing over Change of Supplier processes.

# Risk approach: Scoping Detail 2016/17

The detailed BSC requirements for the BSC Audit are provided in Appendix A

### Background and BSC requirements

Per Section H, paragraph 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 are provided in Appendix A 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 2016 to 31 March 2017' is 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 auditing performed by investigating the actual meters on sites.

Compliance will be assessed to the extent that requirements as documented in the Code and Code Subsidiary Documents (BSCPs, COPs or PSLs) relate to the scope as defined by the Panel.

The extent to which Parties, who have signed up to the Code and appointed Party Agents, are subject to assurance procedures is determined by the risk to the completeness and accuracy of Settlement associated with a given party. A number of factors are considered including, but not limited to, the role of the party, the number of MPANs managed by that party, experience of the party in participating in the Code, outstanding Issues Documents and changes in people, process and technology.

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.

### Assurance Opinion

KPMG LLP, as the BSC Auditor for the year ending 31 March 2017, will provide the BSC Audit Report which contains an assurance based opinion based on Settlement calculations and allocations with respect to the Balancing and Settlement Code and Code Subsidiary Documents. References to the BSC Assurance Opinion in this 'BSC Audit Approach Document' relate to the KPMG Assurance Opinion which forms part of the 'BSC Audit Report' and references to the 'BSC Audit Engagement' are to the Assurance work we are performing.

The reasonable Assurance Opinion for the year ending 31 March 2017 will be in respect of all Reconciliation Runs processed in that year regardless of the audit period in which the relevant Settlement Day sits. Hence all Settlement Days from mid February 2015 to 31 March 2017 will be considered, as at least one Settlement Run for each of these Settlement Days (SF, R1, R2, R3 or RF) will have occurred in the assurance period. This means that any 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 3000 – 'Assurance Engagements other than Audits and Reviews of Historical Financial Information (revised)' ('ISAE 3000 (revised)') 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 in accordance with ISAE 3000 (revised).

# Risk approach: Scoping Detail 2016/17

The detailed BSC requirements for the BSC Audit are provided in Appendix A.

## Assurance Opinion (continued)

In forming its opinion the BSC Auditor 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.

As mentioned in Background and BSC requirements, additional areas will be brought into scope by BSC Auditor. Analysis on flow activity data extracted from the Data Transfer Network (DTN) will be used to enhance the coverage of our audit work across a number of scope areas.

## Materiality

Materiality for the BSC Audit year ending 31 March 2017 decreased from 1.4TWh in 2015/16 to 1.3TWh as set out in the BSC Audit Scope 2016/17 document published in March 2016.

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 the work of others

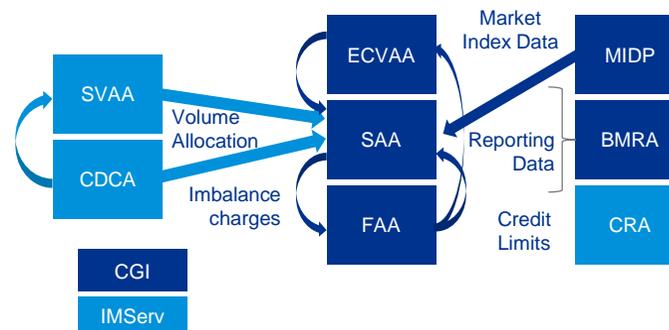
The Balancing Mechanism ('BM') Audit is conducted by the BM Auditor who is appointed by the Transmission Company pursuant to Section H paragraph 5.1.6 of the BSC.

Section L of the Code requires that the Technical Assurance Agent ('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 Audit considers the work of the 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.

## Central Settlements Systems

The testing performed by the BSC Auditor at audited entities 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. The BSC Auditor utilises this data and models as part of the suite of tests it performs over the operation of the Central Settlements Systems. The scope of the audit of the Central Settlements Systems is shown below



## Operational Approach: Overview

### Changes in 2016/17

Our operational approach will not have major changes in 2016/17 as we will build on successes of previous audits.

We will continue to share APMs and Data Requests (including DTN) prior to the audit, which will be agreed with the relevant contact from the parties. The findings will also be reported in the same way.

Some minor changes include:

- Removal of pre-Christmas internal peer review; and
- Removal of some Data Requests, which can be sourced from DTN data.

### Audit Planning Memorandums (APMs) and Data requests

Audit Planning Memorandums (APMs) and Data requests were re-designed, simplifying the effort required on the side of audited entities. Where possible, DTN Data will be used to reduce the volume of data requests that parties need to provide.

Modelling data will also be reviewed to ensure a complete listing is provided in advance of procedures being performed.

### Risk focused audit scope

As shown in Risk Approach section, we are continuing to align our testing to Settlement Risk. As part of this, we have performed a complete review of audit procedures and made testing amendments where necessary.

### Reporting of BSC audit findings

Our findings will be moderated after all on-site work is completed. This will help to have consistent audit ratings across the market. The pre-Christmas peer review will no longer take place. All findings will be recorded directly into the live issues database.

During the final reporting stage, we will discuss quantification of Settlement impact with ELEXON industry specialists earlier than we have done in the past.

### Data Transfer Network (DTN) data

Following successful introduction of DTN-based tests in 2015/16, we will look to improve existing tests and for opportunities to introduce new ones. Where KPMG use DTN flow data 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 site visits, leading to a more efficient audit whilst on site.

### Timing

Our fieldwork will continue to be conducted pre and post Christmas with most audits being performed in February and March. To keep the audit process efficient, we are introducing a maximum two-week period post site visit for parties to resolve and finalize any outstanding queries on our findings. We will aim to finish all site work by 24<sup>th</sup> March to have appropriate time to finalise any outstanding queries and prepare final reporting.

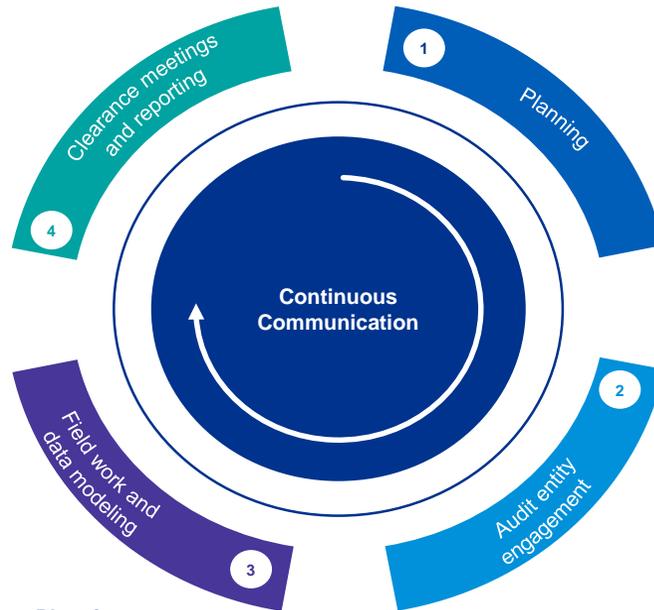


# Operational Approach: BSC Audit phases

The BSC Audit Engagement is structured over four phases:

1. Planning
2. Audit Entity Engagement
3. Fieldwork and Data Modelling
4. Clearance meetings and Reporting

The BSC Audit Engagement is structured over four phases as set out in the diagram below.



## 1. Planning

Risk assessment and Audited Entity selection

Utilising information and available data, the BSC Auditor will determine the risk associated with each market participant to the completeness, validity and accuracy of allocations and Settlement and, therefore, the extent to which they should be subject to assurance techniques. A rotational approach is also followed to ensure that each market participant is subject to full scope assurance procedures at least once every four years.

These sources of data include:

- TAA Audit Findings;
- Number of (and changes in the number of) MPANs managed by the market participant;
- 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.
- Analysis of processes using Data Transfer Network (DTN) flows.

A separate Audit Selection Document provides further details as to the rotational approach, selection criteria and market participants in scope for the BSC Audit Engagement during 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 to relevant sections of the BSC, The Code Subsidiary Documents ('CSDs') and the BSC Audit Scope as set by PAB.

## 2. Audit Entity Engagement

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, assurance procedures and tools used by the BSC Auditor such as the online portal. Prior to the planning meeting, a draft Audit Planning Memorandum ('APM') will be sent to each in scope audited entity which outlines audit timeframes, key contacts and the audit data request. The design of this document was reviewed by BSC Auditor for 2016/17 audit period. The APM will detail, amongst other information, a tailored work programme, which is discussed in phase 3 and will capture minutes after planning and close meetings.

# Operational Approach: BSC Audit phases

The BSC Audit Engagement is structured over four phases:

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### 3. Field Work and Data Modelling

Site visits for fieldwork will take place throughout the assurance period and will generally occur between November 2016 and March 2017. The BSC Assurance Opinion covers a 12 month period. The timing of this work will be agreed with audited entities during the audit entity engagement phase. We will aim to finish all site work by 24<sup>th</sup> March to have appropriate amount of time to finalize any outstanding queries and prepare final reporting.

#### Data Assurance 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 by the BSC Auditor to support the BSC Audit Engagement. The models use source data provided by Market Participants and re-perform the calculations to verify their accuracy.

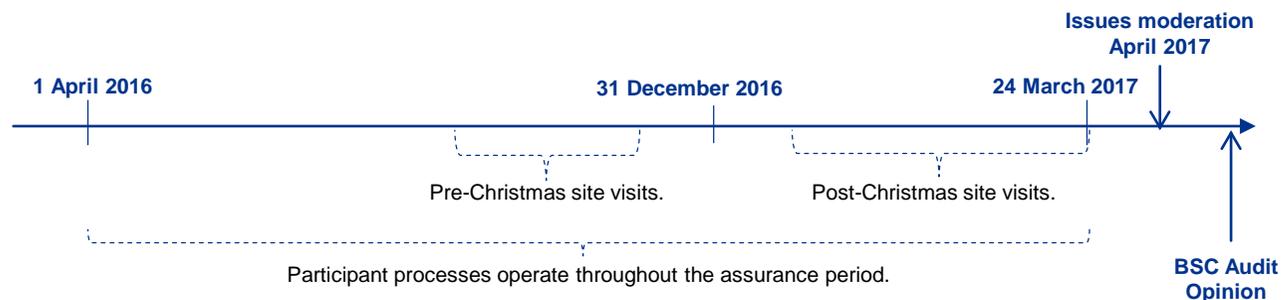
Specific data requests to support the operation of the models are included in the Audit Planning Memoranda sent to in-scope entities.

#### General IT and Entity Level Controls

General IT and Entity Level Controls (GITC) work will continue into 2016/17 audit period. We will update our knowledge of GITCs at entities by confirming and documenting any system or process changes or problems.

#### Moderation

The final issues moderation will remain unchanged, where KPMG hub managers and senior management will meet to produce final issue ratings for the market. As in previous audit periods, issues with impact ratings will then be communicated to ELEXON and relevant audited entities. Pre-Christmas peer review will no longer take place which will allow better judgments when full view of the market is known. Although changes from moderation are not frequent, as a result of this change, issue ratings will also never change more than once after the Close Meeting is concluded.



# Operational Approach: BSC Audit phases

### The BSC Audit Engagement is structured over four phases:

1. Planning
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### Impact on BSC Audit Approach

#### Controls testing

We continue to stress the importance of an effective controls environment operating across the industry and a market participant level, particularly given current industry trends (such as Change of Measurement Class). Where we are able to, we will consider relying on controls as part of our audit approach.

#### Detailed Testing

Detailed testing involves inspection of a selection of transactions and records at Audited Entities 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 audited entity will be determined by the BSC Auditor dependent on the:

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

Specific data requests including number of items selected for detailed testing are included in the Audit Planning Memoranda provided to each Audited Entity in advance of testing.

# Operational Approach: BSC Audit phases

The BSC Audit Engagement is structured over four phases:

1. Planning
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#### 4. Clearance Meetings And Reporting Observations

At the conclusion of testing at each Audited Entity the BSC Auditor will classify and rank observations based on whether they have resulted in a non-compliance with the BSC and whether the non-compliance has resulted in a potential impact on the completeness and/or accuracy of imbalance Settlement, or not. KPMG will discuss observations with audited entities as they arise to determine compensating/mitigating activities in place at the entity. A clearance meeting will be held with audited entities to discuss and formally agree observations raised by KPMG.

Ratings for observations have been defined as follows:

- 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 on Settlement;
- 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. These observations will be categorised as 'management letter points'; and
- 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 audited entity.

For the avoidance of doubt, issues classed as Management Letter Points (MLPs) refer to either Immaterial non-compliance or Process improvements, i.e. findings which have no Settlement impact.

Any instances of non-compliance that have been noted and rated 'Medium' or 'High' by the BSC Auditor will be subject to the Error & Failure Resolution ('EFR') processes operated by ELEXON.

#### Reporting

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

KPMG will take into account any comments raised by audited entities on Management Letter Points raised during on-site work, but MLPs will not be discussed in detail during clearance meetings. It is likely that these matters will not be subject to the EFR process.

For Audited Entities that are subject to audit before Christmas, draft final issues documents will be distributed early in the new year to facilitate timely reporting of the BSC Audit findings.

**All Settlement Impacting Non-compliances will be reported to PAB.**

An annual BSC Audit Report will be issued in June of each year by the BSC Auditor as discussed above. 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. The materiality threshold for the BSC Audit is 1.3TWh for the current assurance period (i.e. the year ending 31 March 2017).

# Operational Approach: BSC Audit phases

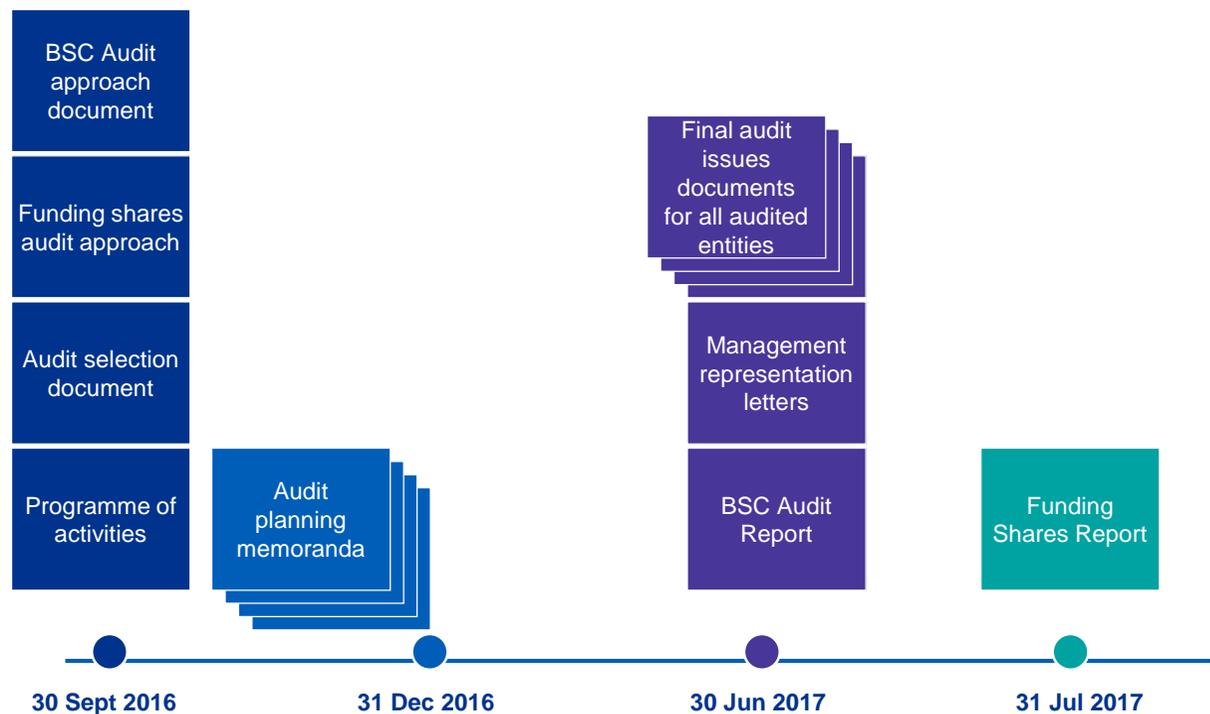
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Where non-compliances have an aggregated Settlement impact greater than the materiality threshold, the Assurance Opinion in the BSC Audit Report will be qualified by the BSC Auditor. Issues of significance will be reported in full within the 'Statement of Significant Matters' section of the BSC Audit Report. The 'Statement of Significant Matters' 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.

As in previous audits, we will be requesting Suppliers to sign management representation letters prior to the BSC Audit Report being issued. A draft of the letter will be included in the Audit Planning Memoranda discussed at the supplier planning meetings.

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





# Appendices

**Appendix A** BSC Audit requirements

**Appendix B** Risk assessment

**Appendix C** BSC Audit findings rating methodology

# 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:

- a) The submission and application of standing and periodic data, used in connection with Settlement, by Parties and Party Agents;
- b) The processes applied to such data pursuant to the Code and Code Subsidiary Documents;
- c) 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);
- d) The determinations and calculations made by BSC Agents and BSCCo where it provides the Profile Administration Services for the purposes of Settlement; and
- e) The systems processes and procedures used and applied (by BSC Agents and BSCCo) for the purposes of or in connection with the above.

The scope of the BSC Audit shall not include:

- a) The registration of Metering Systems in accordance with the Master Registration Agreement; and
- b) 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 has 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 Audit for the period for those Metering Systems physically located in both England and Wales and Scotland will encompass:

- a) All Settlement Runs performed by the SAA in respect of Settlement Days from 1 April 2016 to 31 March 2017;
- b) For avoidance of doubt, coverage will exclude Post Final Settlement Reconciliation ('DF') Runs which will be considered as a corrective technique only.

As a result the specific Settlement Days that will be considered as part of the assurance period are those from 11 February 2015 to 31 March 2017 (approximately a 26 month period).

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.

# Risk Assessment: Settlement Risks

Using the top SVA Settlement Risks from the 2016/17 Risk Evaluation Register we have set out the extent to which these will be considered by the BSC Audit.

In addition to the specific Risk Evaluation Register ('RER') risks in the table below, there are a number of industry related risks which include supplier and agent system changes, public attention on the UK electricity suppliers and general industry wide developments such as Smart Metering. Our audit approach endeavours to address these issues through our rigorous internal training programme for those who form part of the BSC Audit team. Our approach will also keep up with industry changes that may occur throughout the year.

Industry Risk reference	Industry Risk description	BSC Audit Scope Section*
SR0022	The risk that HHMOAs do not provide correct Meter Technical Details to the HHDCs resulting in Meter readings being misinterpreted or not collected.	Meter Operation Data Collection
SR0072	The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.	Data Collection
SR0112	The risk that HHDCs use data from faulty Metering Systems resulting in incorrect data being entered into Settlement.	Meter Operation
SR0073	The risk that stolen energy notified by Revenue Protection units is not used in calculations by Suppliers and NHHDCs resulting in inaccurate data being entered into Settlement.	Data Collection
SR0074	The risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.	Data Collection
SR0111	The risk that NHH Metering Systems are tampered with resulting in under-accounting of energy in Settlement.	Data Collection Meter Operation
SR0024	The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings not being collected.	Meter Operation Data Collection
SR0025	The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings not being collected.	Meter Operation Data Collection
SR0028	The risk that HHMOAs make changes to the Metering System and do not inform the HHDCs resulting in Meter readings being misinterpreted or not collected.	Meter Operation Data Collection
SR0081	The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement.	Data Collection
SR0116	The risk that Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement.	Meter Operation
SR0188	The risk that non Half Hourly Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement.	Meter Operation

# Risk Assessment: Intensity Approach Example - NHHMOA

Different intensity audits enable us to focus our testing on the most appropriate risks to Settlement.

The following section provides an example of how we approach testing HHMOA roles at different intensity levels. This allows us to focus on testing processes relating to the highest Settlement Risks.

As explained in the main Risk Approach section market participants which are determined to be high risk are audited at full intensity. Entity size and market share, previous year issues and their severity, and audit rotation are some of the aspects that are taken into consideration as part of this assessment. In rare occasions, where an entity has a previous year Settlement impacting issue in relation to a process, which is not covered in Medium/Limited intensity, we will test the process in addition to the prescribed testing scope. Processes covered by Full and Medium intensities consist of enquiry based and full sample testing. Limited intensity consists of enquiry and reduced sample sizes. Our testing is designed to enable us to provide reasonable assurance under ISAE 3000, which is the assurance standard under which we deliver our opinion.

The tests within our individual work programmes covered under each intensity are specific to each type of role and also consider a range of factors, including the nature of Significant BSC Audit and Market Issues, Disputes and Settlement Risks.

For a NHHMOA, for example, there are a number of factors we take into account. For processes involving Energisation, Faults, and Removal of meters, if processed incorrectly, these could have an impact equivalent to all of the meter's consumption; Change of Measurement Class is a process that works poorly; and Backlogs is a particularly important test, as we test backlogs of all flows. This enables us to determine changes compared to the previous audit cycles and to determine at a high level if the operation of all NHHMOA processes is appropriate. This allows us to still investigate the processes and risks not immediately covered by Medium/Limited intensity, such as Provision of Meter Technical Details.

The table below outlines what areas we test for each audit intensity for a NHHMOA role.

Process description	Full	Medium/Limited
Processing of changes of Meter Operator Agent / changes of Supplier	Yes	
Processing of changes of Data Collector Agent	Yes	
Processing of changes to Energisation Status	Yes	Yes
Processing of reconfiguration, replacement or removal of metering equipment	Yes	Yes
Processing of requests to investigate inconsistencies (faults)	Yes	Yes
Processing of changes in Measurement Class between NHH to HH	Yes	Yes
Processing of changes in Measurement Class between HH to NHH	Yes	Yes
Backlogs	Yes	Yes

# Audit findings rating methodology

### Overview

- BSC Audit findings are categorised as either BSC Audit Issues or Management Letter Points ('MLP's) depending on whether there is a potential impact to the completeness and/or accuracy of Settlement.
- An impact rating of High, Medium or Low is applied to each BSC Audit Issue arising from the BSC Audit.
- 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 Audited Entities by the KPMG BSC audit team and the KPMG central team at an issues 'moderation' meeting to ensure the determination of ratings is consistent.

### How each finding will be considered?

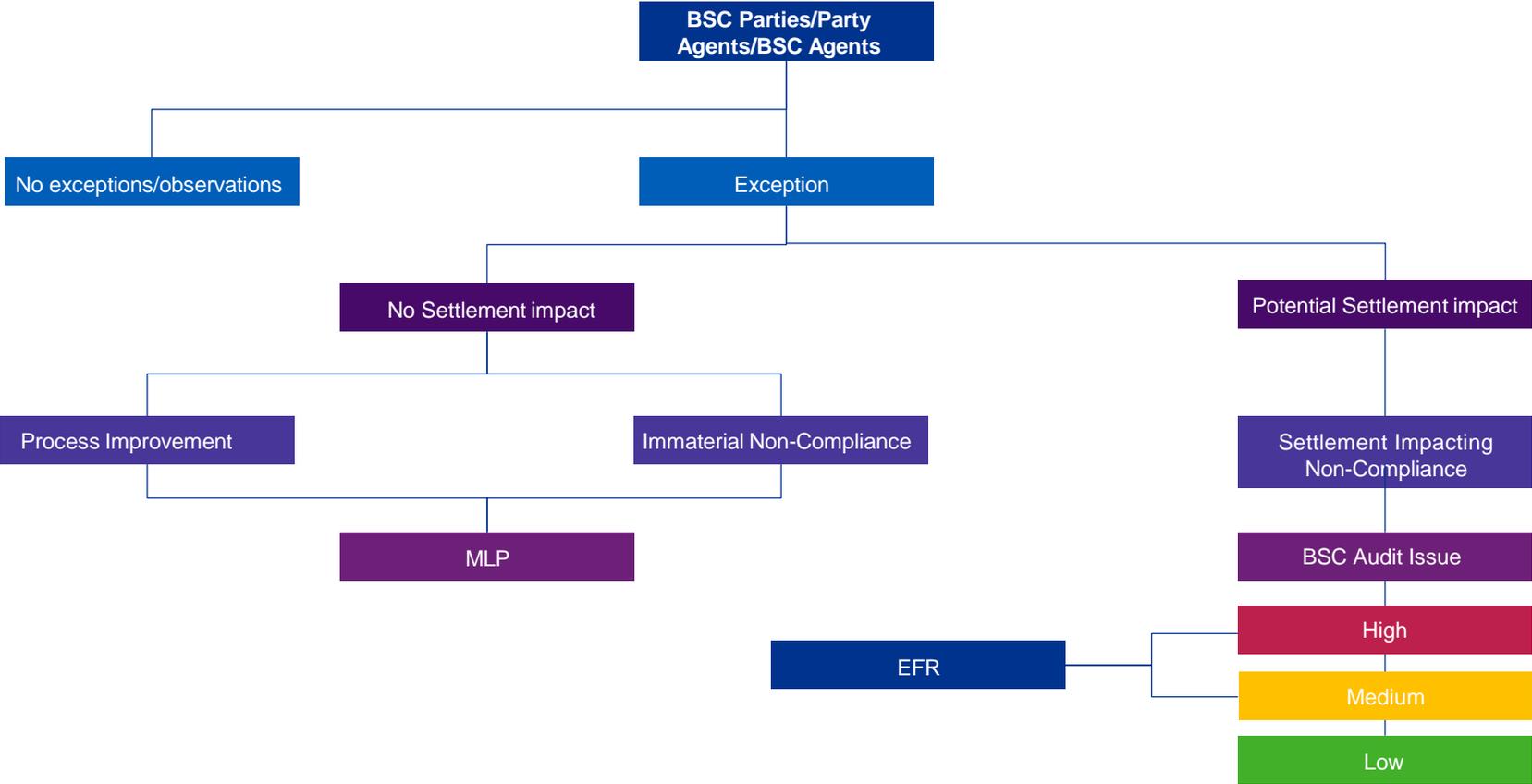
- Each finding will be individually determined but will also be considered in the context of similar findings raised on other Audited Entities.
- Two Audited Entities may have the same underlying issue but if one entity has a mitigating process or control and is responsible for a much lower error rate, impact or residual risk as a result, then a different impact rating may apply.
- The BSC Auditor follows a standard work plan for each type of Audited Entity (tailored for specific risks at each).
- One moderation session will be performed during the BSC Audit 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 Audited Entities.
- Ratings for findings have been defined as follows:
  - **Settlement Impacting Non-Compliance** – a non-compliance with the BSC which, if uncorrected, may 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. Issues rated as High and Medium will be subject to ELEXON's Error & Failure Resolution ('EFR') processes;
  - **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. 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 Audited Entity. These observations will also be categorised as 'Management Letter Points' (MLPs).
- We have outlined the above in the diagram on page 20.

# Audit findings rating methodology

### How will we determine the impact of these factors?

- For each Settlement Impacting Non-Compliance audit 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)
  - Existence of any mitigating factors (see below)
- Mitigating factors might include the following:
  - Other controls or procedures applied by the Audited Entity which 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)

# Audit findings rating methodology





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