

PUBLIC

Risk Operating Plan 2018/19

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RISK OPERATING PLAN 2018/19

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INTRODUCTION

Description of the Risk Operating Plan

The Risk Operating Plan (ROP) is part of the risk based Performance Assurance Framework (PAF) as defined in Section Z of the Balancing and Settlement Code (BSC). The ROP describes the techniques available to the Performance Assurance Board (PAB) to assign to Performance Assurance Parties¹ (PAPs) for each Settlement Risk in the Risk Evaluation Register (RER).

The ROP sets out how the PAB will provide assurance in respect of Settlement and the cost of providing that assurance.

Within Period Revisions of the ROP

Whilst the ROP is reviewed on an annual basis in line with the [Annual Performance Assurance Timetable](#), a 'within period revision' of the ROP may be performed to facilitate variations to risks and/or assurance techniques. This provides the flexibility to refocus should a significant risk arise during the Performance Assurance Operating Period².

PERFORMANCE ASSURANCE TECHNIQUES

There are 16 Performance Assurance Techniques (PATs) available to manage Settlement Risks. Full details of the PATs including impacted Performance Assurance Parties (PAPs)¹ and BSC obligations are provided in Appendix A.

Performance Assurance Technique	Technique Category	Technique Type
Qualification (QUAL)	Preventative	Non-standard
Re-Qualification (RQUAL)	Preventative	Non-standard
Bulk Change of Agent (BCoA)	Preventative	Non-standard
Education	Preventative	Non-standard
Performance Monitoring & Reporting (PM)	Detective	Mandatory
Material Error Monitoring (MEM)	Detective	Standard
Technical Assurance of Metering Systems (TAM)	Detective	Standard

¹ A Performance Assurance Party is defined in BSC Section Z, 5.1.1 (c) as a Supplier, Meter Operator Agent, Data Collector, Data Aggregator, Meter Administrator, Licensed Distribution System Operator and/or Registrant.

² Equivalent to a period of one year, 1 April – 31 March.

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BSC Audit (BSCA)	Detective	Standard
Technical Assurance of PAPs (TAPAP)	Detective	Non-standard
Peer Comparison (PC)	Incentive	Standard
Removal of Qualification	Incentive	Non-standard
Breach and Default (B&D)	Incentive	Non-standard
Supplier Charges (SC)	Remedial	Mandatory
Error and Failure Resolution (EFR)	Remedial	Non-standard
Trading Disputes (TD)	Remedial	Non-standard
Change Mechanisms	Remedial	Non-standard

Table 1: Performance Assurance Techniques

Types of PATs

While a PAT is assigned to a Settlement Risk, it may not be deployed in all cases.

Mandatory PATs are those techniques, which the Performance Assurance Board (PAB) is required to deploy to a PAP because they are mandated by the Balancing and Settlement Code (BSC) (e.g. Supplier Charges). Mandatory PATs may provide assurance in respect of one or more identified Settlement Risks.

Standard PATs are the default techniques, assigned to the relevant Settlement Risk, that the PAB will deploy uniformly across PAPs. Standard PATs may not always be deployed to a PAP and, where this is the case, an explanation will be provided in the Risk Operating Plan (ROP).

Non-Standard PATs are extra techniques that the PAB may consider deploying to derive additional assurance that one or more PAPs are addressing the Settlement Risks that have been assigned to it. Where the PAB deploys a Non-Standard PAT the PAB will provide an explanation to the PAP in line with the relevant BSC Section or Code Subsidiary Document. Where the PAB observes significant failures over a range of risks, it will look to deploy Breach and Default and Removal of Qualification techniques.

PATs Triggered by PAPs

Qualification, re-Qualification and Bulk Change of Agent are PATs that a PAP can trigger.

Deployment of PATs

The PAB is more likely to deploy PATs against those risks with the highest net significance (net significance 12 and above). Where regular data is available, the PAB is able to undertake more frequent and detailed reporting which allows it to have a greater focus on performance improvement. However, the PAB may deploy any of the techniques at its disposal on a case-by-case basis. Where no regular data is available the PAB may also routinely deploy PATs such as BSCA, TAM and/or TAPAP, EFR and Trading Disputes to identify and correct issues reported by industry or ELEXON. The ROP ledger is a spreadsheet in which we set out:

- All Supplier Volume Allocation (SVA) risks with a net significance of 4 and above;
- The impacted PAP for each of the SVA risks;
- PATs assigned to SVA risks for deployment to PAPs;

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- PATs routinely deployed against the top SVA Settlement Risks (those with a net significance of 12 and above); and
- All Central Volume Allocation (CVA) risks and the mandated PATs available for deployment.

Management of SVA Settlement Risks

All 16 PATs can be assigned to any of the SVA risks. The PAB has set a minimum net significance threshold of four, below which no assurance techniques will be deployed, unless mandated by the BSC. Net significance is calculated as described in the [Risk Evaluation Methodology](#).

Settlement Risks identified as having the most severe impact (i.e. a gross impact of 5) will be subject to PATs irrespective of the minimum net significance threshold. Currently there are no SVA Settlement Risks, which fulfil this criterion.

Management of CVA and Central Systems Settlement Risks

The BSC states that all Settlement Risks that affect CVA shall be deemed to be significant in terms of probability and impact on Settlement. The BSC mandates the PATs that we will deploy in order to manage CVA and Central Systems Settlement Risks. In particular:

- The scope of the BSC Audit will encompass Central Systems including the Balancing Mechanism Reporting Agent, Central Registration Agent, Central Data Collection Agent, CVA Meter Operator Agents (MOA), Energy Contract Volume Aggregation Agent, Funds Administration Agent, Market Index Data Provider(s), Settlements Administration Agent, and Supplier Volume Allocation Agent;
- CVA Meter Operator Agents will be subject to the Supplier Volume Allocation Qualification, re-Qualification and Removal of Qualification processes; and
- CVA Metering Systems will be within the scope of the Technical Assurance of Metering Systems technique delivered by the Technical Assurance Agent.

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PATs deployed against top Settlement Risks

The table below shows the deployment of PATs against the top Settlement Risks.

Assigned PATs are those that may be deployed but don't currently meet the criteria for deployment e.g. Breach and Default (B&D) is a technique that may be deployed against any BSC Party or Party Agent but is not deployed unless there is a persistent or material breach of the BSC.

Routinely deployed PATs are those PATs that are deployed on a regular basis e.g. Performance Monitoring (PM) is deployed against top risks (where data is available) and the results of monitoring are reported to PAB on a monthly basis. The results of monitoring also form the basis for the assessment of Parties for EFR. Activities described in the top Settlement Risks are also routinely checked via the BSC Audit (BSCA).

The full ROP ledger is in Attachment B.

SRIN	HH/NHH	Risk Description	Net Sig.	Impacted PAP	Assigned PATs	Routinely deployed PATs
SR0024	NHH	The risk that Non Half Hourly Meter Operator Agents (NHHMOAs) do not provide MTDs to the correct Non Half Hourly Data Collectors (NHHDCs) resulting in Meter readings not being collected.	12	Supplier MOA DC	All except RQUAL All except B&D; SC; TD All except B&D; SC; TD	BSCA - (if poor performance is identified EFR may be deployed). EFR- case-by-case basis following poor performance, not routinely applied to DC. PC- We use PARMS Serial NM12 'Missing Non Half Hourly Meter Technical Details' to compare performance of MOAs against this risk. PM - We use PARMS Serial NM12 'Missing Non Half Hourly Meter Technical Details' to monitor performance of PAPs against this risk.
SR0025	HH	The risk that HHMOAs do not provide MTDs to the correct HHDCs resulting in Meter readings not being collected.	12	Supplier MOA DC	All except RQUAL All except B&D; SC; TD All except B&D; SC; TD	BSCA - (if poor performance is identified EFR may be deployed). EFR- case-by-case basis following poor performance, not routinely applied to DC. PC- We use PARMS Serial HM12 'Missing Non

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SRIN	HH/NHH	Risk Description	Net Sig.	Impacted PAP	Assigned PATs	Routinely deployed PATs
						<p>Half Hourly Meter Technical Details' to compare performance of MOAs against this risk.</p> <p>PM – We use PARMs Serial HM12 'Missing Half Hourly Meter Technical Details' to compare performance of MOAs against this risk.</p>
SR0072	NHH	The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.	16	Supplier DC	All except RQUAL All except B&D; SC; TD	<p>BSCA - (if poor performance is identified EFR may be deployed).</p> <p>EFR – Case-by-case basis following poor performance, not routinely applied to DC.</p> <p>MEM – We use data processed by ELEXON's Large Estimated Annual Consumption/Annualised Advances (EAC/AA) system to identify instances of excessive consumption that exist in Non Half Hourly Data Aggregation.</p>
SR0073	NHH	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.	15	Supplier DC	All except RQUAL All except B&D; SC; TD	BSCA (if poor performance is identified EFR may be deployed).

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SRIN	HH/NHH	Risk Description	Net Sig.	Impacted PAP	Assigned PATs	Routinely deployed PATs
SR0074	NHH	The risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.	15	Supplier DC	All except RQUAL All except B&D; SC; TD	<p>BSCA - (if poor performance is identified EFR may be deployed).</p> <p>EFR – Case-by-case basis following poor performance, not routinely applied to DC. We currently use SP08 'Energy and MSIDs on Actuals' data from the Supplier Volume Administrator Agent (SVAA), which provides ELEXON with the energy volumes settled on AAs at final reconciliation (RF) to determine performance of PAPs.</p> <p>PC – We use PARMS Serial SP08 to compare performance of Suppliers against this risk.</p> <p>PM – We use PARMS Serial SP08 to monitor the performance of PAPs against this risk.</p> <p>Supplier Charges (SC) - SP08</p>



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SRIN	HH/NHH	Risk Description	Net Sig.	Impacted PAP	Assigned PATs	Routinely deployed PATs
SR0081	HH	The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement.	12	Supplier DC	All except RQUAL All except B&D; SC; TD	<p>BSCA - (if poor performance is identified EFR may be deployed).</p> <p>EFR – Case-by-case basis following poor performance, not routinely applied to DC. We currently use SP08 'Energy and MSIDs on Actuals' data from the SVAA to determine the performance of PAPs based on volumes settled on actual (rather than estimate) values at the Initial Settlement Run (SF).</p> <p>PC – We use PARMS Serial SP08 to compare performance of Suppliers against this risk.</p> <p>PM – We use PARMS Serial SP08 to monitor the performance of PAPs against this risk.</p> <p>SC – calculated based on performance against PARMS Serial SP08</p>
SR0111	NHH	The risk that NHH Metering Systems are tampered with resulting in under-accounting of energy in Settlement.	12	Supplier DC	All except RQUAL All except B&D; SC; TD	BSCA (if poor performance is identified EFR may be deployed).
SR0112	HH	The risk that HHDCs use data from faulty Metering Systems resulting in incorrect data being entered into Settlement.	16	Supplier DC	All except RQUAL All except B&D; SC; TD	TAM (if issues are identified EFR may be turned on).

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SRIN	HH/NHH	Risk Description	Net Sig.	Impacted PAP	Assigned PATs	Routinely deployed PATs
SR0116	HH	The risk that Half Hourly Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement.	12	Supplier LDSO MOA	All except RQUAL All except BCoA ³ ; PC ⁴ ; PM; SC All except B&D; SC; TD	TAM (if issues are identified EFR may be turned on).
SR2868	NHH	The risk that non Half Hourly Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement.	12	Supplier LDSO MOA	All except RQUAL All except BCoA; PC; PM; SC All except B&D; SC; TD	BSCA (if poor performance is identified EFR may be deployed).
SR3019		The risk that HHMOAs do not provide correct MTDs, including when HHMOAs make changes to MTDs, to the Half Hourly Data Collector, resulting in Meter readings not being collected or misinterpreted.	12	Supplier MOA DC	All except RQUAL All except B&D; SC; TD All except B&D; SC; TD	<p>EFR– case by case basis following poor performance, not routinely applied to DC</p> <p>PM – We use PARMS Serial HM13 'Quality of Half Hourly Meter Technical details' to monitor performance of PAPs against this risk.</p> <p>TAM – We use data from the Technical Assurance Agent (TAA) on the instances of Meter Technical Details non-compliances with the BSC to measure the performance of PAPs against this risk.</p>

³ Bulk Change of Agent

⁴ Peer Comparison

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Table 2: Top Settlement Risks



PLANNED DEPLOYMENT OF PERFORMANCE ASSURANCE TECHNIQUES (PATS)

In this section we set out the planned deployment of Performance Assurance Techniques (PATs) in 2018/19. We also outline any process changes to PATs that we have identified a need for.

Balancing and Settlement Code (BSC) Audit

The BSC Audit has been in place since the implementation of the BSC. During this time it has remained largely unchanged in its scope, approach and outputs. As an interim measure, ahead of the Performance Assurance Framework (PAF) review's outputs and re-procurement of the BSC Audit contract, ELEXON proposed a review of the Audit in July 2017. The aim of which was to ensure the audit remains focussed on key issues, is flexible, able to drive change and delivers maximum value with minimum disruption to participants.

ELEXON presented the outcome of the review to the Performance Assurance Board (PAB) in September 2017 ([PAB200/09](#)). The PAB agreed the following:

- The BSC Audit approach should remain 'as is' (i.e. one Assurance opinion delivered under the ISAE 3000 standard) for:
 - All elements of the BSC Audit Scope Document pertaining to BSC Systems and BSC Agents; and
 - All elements of the BSC Audit Scope Document pertaining to BSC Parties and BSC Party Agents that are deemed to be 'higher risk' (based on the methodology detailed below).
- The remaining elements of the BSC Audit which relate to BSC Parties and BSC Party Agents that are deemed to be 'lower risk' will be approached through an advisory 'review and recommend/internal audit' approach.
 - This is a key deviation from the previous audit approach in that it does not require an audit opinion to be given and can be delivered in a more user-friendly report including a wide range of information, recommendations and insights.
- A draft version of the BSC Audit scope 2018/19 ([PAB200/09 Attachment B](#)) with the following key changes:
 - A reduced focus on Change of Measurement Class (CoMC) from Non Half Hourly (NHH) to Half Hourly (HH), however checks will remain where there has been a CoMC from HH to NHH;
 - Undertake more checks in relation to operational controls in place for key processes such as MOAs issuing quality Meter Technical Details (MTDs);
 - Undertake checks on the management of BSC Agent appointments; and
 - Undertake more detailed checks on how Suppliers manage the fault investigation process.

The final approved BSC Audit scope for 2018/19 is scheduled for publication on the [BSC website](#) in August/September 2018.

Qualification

At its meeting on 23 February 2017 the PAB raised concerns that the Qualification process does not make it clear that Suppliers must check that Meter Operator Agents (MOAs) have obtained both BSC Qualification and Meter Operation Code of Practice Agreement (MOCOPA) Accreditation or have a contractual agreement with a third party which is MOCOPA accredited before appointing them. There is a risk to Settlement if Suppliers are appointing MOAs who are not capable of carrying out the physical aspect of the MOA role such as Meter installation and fault repairs.

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In order to address the issue ELEXON is currently drafting a Change Proposal to add the following questions to the Self-Assessment Document⁵ (SAD) which forms the basis of the Qualification process:

Supplier: How do you ensure your appointed MOAs are Meter Operation Code of Practice Agreement (MOCOPA) accredited?

MOA: Are you signed up to Meter Operation Code of Practice Agreement (MOCOPA)?

The aim is to ensure that Suppliers have an appropriate process in place when appointing MOAs and that MOAs entering the industry have obtained MOCOPA Accreditation or have a third party arrangement in place in accordance with MOCOPA. The additional questions are not checking or monitoring compliance within MOCOPA. It is intended to provide assurance that Suppliers appoint MOAs who have obtained their BSC Qualification and MOCOPA Accreditation and are capable of fulfilling MOA definition requirements.

The requested implementation date for the change is 28 June 2018 as part of the June 2018 BSC Systems Release.

Technical Assurance of Performance Assurance Parties (TAPAP)

SR0024⁶ and SR0025⁷ are top Settlement Risks⁸ that are ascribed to Meter Operator Agents (MOAs). The risk being, the MOAs do not provide Meter Technical Details (MTDs) to the correct Data Collector (DC) resulting in Meter readings not being collected. SR0024 relates to NHH operations and agents, and SR0025 to HH operations and agents.

During 2016/17 ELEXON highlighted issues with the current process for reporting on missing MTDs and assessing whether Error and Failure Resolution (EFR) is required. In particular:

- The breakdown in MTD transfer is between MOA to MOA, as opposed to MOA to DC, indicating that SR0024 and SR0025 may not be the risks that correctly define this potential issue and that SR0033 and SR0034⁹ may be more appropriate; and
- Although the level of missing MTDs does not appear to indicate a significant industry wide issue, some Performance Assurance Parties (PAPs) contribute substantially more to the process failures which could lead to Settlement impacting issues, particularly in the HH market.

The PAB therefore agreed that ELEXON undertakes a series of targeted TAPAP checks to determine the root cause and impact that selected PAPs are having on Settlement, and to determine whether EFR is required. These checks will be based on the analysis outlined in [PAB197/14](#). We have proposed that these checks occur between November 2017 and February 2018.

⁵ BSCP537 Appendix 1 Self-Assessment Document.

⁶ SR0024 'The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings not being collected'

⁷ SR0025 'The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings not being collected'

⁸ Net significance of 12.

⁹ SR0033 'The risk that old NHHMOAs do not send Meter Technical Details to new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required' and SR0034 The risk that old HHMOAs do not send Meter Technical Details to the new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required'.

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Following the TAPAP check, ELEXON will:

- Determine whether EFR is required for any of the selected PAPs;
- Determine whether further analysis and TAPAP checks should take place;
- Reassess the net significance of Settlement Risks SR0024, SR0025, SR0033 and SR0034;
- Reconsider the Business Unit Settlement Risk Rating (BUSRR) criteria and recommend changes to make them more effective;
- Review the BSC Audit Market Issues and findings against the TAPAP results to check alignment of PATs; and
- Review individual PAP's TAPAP findings against their BSC Audit Issues to check consistency and review the ratings provided by the BSC Auditor.

Technical Assurance of Metering

We are currently considering the scope of the Technical Assurance Agent (TAA) audit 2018/19. Any changes to the current delivery of the TAA audit will be communicated as within period revisions to the appropriate Risk Operating Plan (ROP).

Other Techniques

We are not proposing any changes to the deployment of the following techniques:

- Bulk Change of Agent;
- Breach & Default;
- Change Mechanisms;
- Education;
- Error and Failure Resolution;
- Material Error Monitoring;
- Peer Comparison;
- Performance Monitoring and Reporting;
- Re-Qualification, Removal of Qualification;
- Supplier Charges; and
- Trading Disputes.

We will continue to deploy these techniques against any relevant risk in the usual manner or if Parties and/or Party Agents meet the relevant conditions, e.g. a particularly material issue arises or a BSC Party or Party Agent fails in a number of areas. We will present any changes to the deployment of these techniques to the PAB as a within-period revision to the appropriate ROP.

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FUTURE CONSIDERATIONS

In this section we alert you to any work that we are currently undertaking or any changes to the Balancing and Settlement Code (BSC) that may result in changes to the deployment of Performance Assurance Techniques (PATs) in the future.

Performance Assurance Framework (PAF) Review

We are undertaking a complete review of the PAF which was implemented through Modification P207¹⁰ in November 2007. ELEXON and the Performance Assurance Board (PAB) believe there are opportunities to further enhance the application of the risk-based PAF to address the challenges of a changing industry.

The review is comprised of four work streams:

- Smart Metering rollout;
- PAF procedures e.g. Risk Evaluation Methodology, Risk Evaluation Register and Risk Operating Plan (ROP);
- Review of PATs; and
- Data provision.

Work is already underway on the Smart Metering rollout work stream. We are planning to go to the November 2017 PAB with our assessment of the potential Settlement Risk associated with the Smart Meter Technical Detail processes, identified by the work group. Along with this assessment we will consider appropriate mitigating actions through the application of PATs. We plan to have mitigations in place by Quarter 1 of 2018 in time for the ramp up of the Smart Meter installations.

The PAF Review timescales overview is provided in more detail in the PAB paper ([PAB200/12](#)).

Further details of the PAF review are on the [BSC website](#).

Any changes that may be required to the ROP will take place as within period revisions to the appropriate Risk Operating Plan.

ESTIMATED COSTS FOR DELIVERING PERFORMANCE ASSURANCE TECHNIQUES

The cost of delivering the Performance Assurance Framework (PAF) in 2018/19 is shown below.

Cost Type	2018/19 Forecast
Operational	£586,957

¹⁰ Introduction of a new governance regime to allow a risk based Performance Assurance Framework (PAF) to be utilised and reinforce the effectiveness of the current PAF.

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Contractual	£2,563,512
Total	£3,150,469

Table 4: Risk Operating Plan Forecast Costs.

Operational Costs

We have based the 2018/19 forecast operational costs on timesheets indicating time allocated to PAF activities. Timesheets were re-introduced in April 2017.

Contractual Costs

We derived the 2018/19 contractual costs from the Balancing and Settlement Code (BSC) budget forecasts as of September 2017. These figures include RPI and are subject to amendment to reflect contractual changes and changes to indicative costs e.g. ad hoc and variable expenses.

Key expenditure forecast assumptions include:

- BSC Audit – RPI;
- Qualification – Based on 55 accessions of which 42 will qualify in 18/19;
- Technical Assurance Agent – RPI, 1,546 Supplier Volume Allocation inspections, 60 Central Volume Allocation (including additional costs for multiple Circuit testing) and 100 Supplier Volume Allocation inspections for the specific sample;
- Committee meetings – Performance Assurance Board 12 meetings per year and Trading Disputes Committee 14 meetings per year including 2 ad hoc; and
- Database support and maintenance – No change.

REFERENCES

Links
Risk Evaluation Methodology 2018/19
Risk Evaluation Register 2018/19
Performance Assurance Techniques
PAF Techniques Guiding Principles

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[Glossary](#)

FURTHER INFORMATION

If you have any questions or require further information on the Risk Operating Plan please contact:

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APPENDIX 1

This table lists all the Performance Assurance Techniques (PATs) that the Performance Assurance Board (PAB) **may** deploy against Performance Assurance Parties (PAPs) to mitigate risk to Settlement.

Performance Assurance Technique	Summary	HH/NHH	Impacted PAP	BSC Obligation
Breach and Default Non-standard	Formal notification may be provided to a BSC Party of persistent or material breach of the BSC. A failure to address this breach in all material respects with all reasonable diligence and so far as reasonably practicable may constitute a 'Default'. The Panel may apply specific provisions to Defaulting Parties including (but not limited to): notifying each other Party of such Default, suspending the right of the Party to submit: Energy Contract Volume Notifications, Metered Volume Reallocation Notifications, Bid-Offer Pairs, or, with the prior approval of the Authority, the right to register further Metering Systems and BM Units, or expelling the Party from the BSC in accordance with Section A5.	HH/NHH	LDSO Supplier	The breach and Default provisions are set out in section H3 of the BSC. Section Z of the BSC establishes PAB's responsibilities with regard to the PAB Escalation Cycle detailed in BSCP534 "PARMS Techniques" which may lead to escalation to the Panel.
BSC Audit (BSCA) Standard	The BSC Audit involves reviewing systems and business processes at Performance Assurance Parties, as well as the Central Settlement Systems in order to provide a level of assurance that the calculations and allocations that have been performed within Central Volume Allocation (CVA) and Supplier Volume Allocation (SVA) are in accordance with the BSC and its subsidiary documents.	HH/NHH	DA DC MA MOA LDSO Supplier	The BSC Audit is set out under section H5 of the BSC. The BSC requires that the BSC Audit is a compliance-based audit.

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Performance Assurance Technique	Summary	HH/NHH	Impacted PAP	BSC Obligation
	<p>The scope of the BSC Audit is set by the Panel for each audit year and includes the determination of the annual Audit Materiality Threshold.</p> <p>The BSC Auditor bases its opinion for a 'qualified' or 'unqualified' audit on the level of cumulative error discovered in Settlement against the acceptable level of error as defined by the Materiality Threshold. The Materiality Threshold represents approximately 0.5% of the total annual electricity supplied across Great Britain.</p>			
<p>Bulk Change of Agent (BCoA)</p> <p>Non-standard</p>	<p>Where responsibilities change for large volumes of Metering Systems, this preventative technique ensures that such Bulk Changes of Agent are only carried out where the Panel is satisfied that the Supplier, Supplier Agents and SMRAs involved can undertake the necessary procedures in a controlled and competent manner without adversely impacting their daily operations and other Suppliers within the SMRS; thereby protecting the integrity of Settlements.</p>	NHH	<p>DA</p> <p>DC</p> <p>MA</p> <p>MOA</p> <p>Supplier</p>	<p>Defined in Section J of the BSC and detailed in BSCP513 "Bulk Change of NHH Supplier Agent".</p>
<p>Change Mechanisms</p> <p>Non-standard</p>	<p>The PAB, on identifying a perceived weakness or defect in the arrangements set out in the BSC, may recommend to the Panel that a Modification Proposal is raised. Alternatively, the PAB may instruct ELEXON to raise a Change Proposal to</p>	HH/NHH	<p>DA</p> <p>DC</p> <p>MA</p> <p>MOA</p> <p>LDSO</p> <p>Supplier</p>	<p>Amendments to the BSC, Code Subsidiary Documents, BSC Systems and associated documentation are subject to a formal change procedure as set out in Section F of the BSC.</p>

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Performance Assurance Technique	Summary	HH/NHH	Impacted PAP	BSC Obligation
	address the identified defect. This provides a mechanism to correct areas of weakness within the design of Settlement under the BSC. This limits the scope of the technique to only those applications of the change process made in order to address specific defects relating to Settlement Risks. It is distinct from the more general Change Management function and the assurance that it may provide to Trading Parties.			
Education Non-standard	Publication of guidance on common (market) issues identified by the PAF and on the best ways to address them. This may include a view of root causes of these issues. It may also reference other areas of the BSC that may help in monitoring or controlling the issue in some way. This excludes sharing of business operational practices as these are confidential and are an area where competitive advantage may be gained. In addition to these communication and education mechanisms, ELEXON assigns an Operational Support Manager (OSM) to each BSC Party and Party Agent when they accede to the BSC. The OSM provides a first point of contact and is able to provide support and guidance regarding the BSC arrangements.	HH/NHH	DA DC MA MOA LDSO Supplier	Section C3.1.1 (e) of the BSC states that BSCCo is responsible for the provision of such facilities, services and information in connection with the implementation of the BSC as it may provide or the BSC Panel may require.
Error and Failure Resolution	The Error and Failure Resolution (EFR) processes are managed by BSCCo and constitute a remedial	HH/NHH	DA DC MA	Section C3.1.1 (n) of the BSC states that BSCCo is responsible for monitoring

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Performance Assurance Technique	Summary	HH/NHH	Impacted PAP	BSC Obligation
(EFR) Non-standard	assurance technique that is composed of a number of activities. The objective of the technique is to provide a structured and managed framework for the rectification of Party and Party Agent issues including areas of non-compliance and underperformance against obligations and standards prescribed in the BSC and identified through other PATs. The process includes the provision of general support and information. This technique ensures that action is taken to resolve issues identified by PATs, in particular issues found during the BSC Audit and Technical Assurance checks.		MOA LDSO Supplier	whether any Party is or could be in Default of the BSC (in accordance with Section H3). The Error and Failure Resolution Process allows BSCCo to track areas of non-compliance and is identified in the BSC under section Z and detailed in the associated BSCP. Section Z of the BSC establishes PAB's responsibilities with regard to Error and Failure Resolution which interfaces with the PAB Escalation Cycle detailed in BSCP538 "Error and Failure Resolution".
Material Error Monitoring (MEM) Standard	The Material Error Monitoring process constitutes a detective technique that complements the BSC Audit, Technical Assurance and Trading Disputes processes through the provision of quantitative data designed to quantify the contribution made by Performance Assurance Parties to error and the impact of such errors on Performance Assurance Parties.	NHH	DA DC LDSO MA MOA Supplier	Section C3.1.1 (n) of the BSC states that BSCCo is responsible for monitoring whether any Performance Assurance Party is or could be in Default of the BSC (in accordance with Section H3). Data is collected by the PAB in order to calculate and track identified material errors on a regular basis. This monitoring supports a range of assurance mechanisms including, but not limited to, the BSC Audit as noted in section Z7.1.2(f) of the BSC. It enables BSCCo to model and communicate

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				the impact of identified Settlement errors. The PAB establishes each set of reporting requirements as it considers necessary or appropriate in accordance with Sections Z1.4.2 and Z1.4.3 of the BSC.
Peer Comparison (PC) Standard	Peer Comparison is designed to encourage performance improvement and compliance with the required standard through the publication of named Peer Comparison data to Trading Parties and also publicly on the BSC Website. Suppliers and Supplier Agents are required to submit data for certain key performance Serials (Serials are defined above in the Reporting and Monitoring section). Graphs showing comparative performance levels are produced by BSCCo and then authorised for use by the PAB. A copy is also sent to all participants who appear on the graphs.	HH/NHH	Supplier MOA DC – only NHH at present	The process is identified in the BSC under section Z and is detailed in BSCP533 “PARMS data provision, Reporting and Publication of Peer Comparison Data”. Section Z of the BSC establishes PAB’s responsibilities with regard to Peer Group Comparison.
Performance Monitoring and Reporting (PM) Mandatory	The Performance Reporting and Monitoring process constitutes a detective technique that complements the BSC Audit and Technical Assurance processes through the provision of quantitative data designed to identify performance at key control points in Settlement processes. The Performance Assurance Reporting and Monitoring System (PARMS) Serials and Standards	HH/NHH	DC MOA Supplier	The Serials and Standards are established in either Annex S-1 of the BSC or identified within Section J of the BSC as being further defined in BSCP533 “PARMS Data Provision, Reporting and Publication of Peer Comparison Data”. Section Z of the BSC sets out PAB’s responsibilities with regard to performance monitoring and reporting.

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	<p>are defined Service Levels on Suppliers, Non Half Hourly and Half Hourly Data Collectors, Non Half Hourly and Half Hourly Meter Operator Agents and Supplier Meter Registration Service Agents (SMRAs). The purpose of the Serials is to provide assurance that participants are meeting their obligations in the BSC and Code Subsidiary Documents. The Serial determines the process being measured, and the Standards are the measurement points within the process.</p>			
<p>Qualification (QUAL)</p> <p>Non-standard</p>	<p>This process is designed to provide assurance that new organisations entering the market in certain roles have developed their systems and processes to an appropriate standard in order to meet their obligations under the BSC. This constitutes the approval of "Qualified status" to new participants (applicants) seeking to enter Settlement based upon: a declaration from an officer of the applicant that it will meet the requirements of the BSC and an independent review of evidence and risk-based witnessing of testing.</p>	HH/NHH	<p>DA DC MA MOA LDSO Supplier</p>	<p>Defined in Section J of the BSC and detailed in BSCP537 "Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs". Section Z of the BSC sets out PAB's responsibilities with regard to the Qualification process.</p>
<p>Removal of Qualification</p> <p>Non-standard</p>	<p>The PAB may remove previously granted Qualified status for Supplier Agents based upon historic performance and non-compliance with BSC requirements. As Suppliers must</p>	HH/NHH	<p>Supplier LDSO DA DC MA MOA</p>	<p>Defined in Section J of the BSC and detailed in BSCP537 "Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs". Section Z of the BSC sets out</p>

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	use Qualified Supplier Agents this constitutes a significant response to a breach of the BSC.			the PAB's responsibilities with regard to the Removal of Qualification process.
Re-Qualification (R-QUAL) Non-standard	Once an organisation is Qualified in a certain role (other than Suppliers), that organisation is required to maintain its Qualified status through the re-Qualification process when it makes material Changes to its previously Qualified systems and/or processes. This requires re-approval of "Qualified status" for existing participants (applicants) seeking to make material changes to their systems and processes: a declaration from an officer of the applicant that it will continue to meet the requirements of the BSC and an independent review of evidence and risk-based witnessing of testing.	HH/NHH	DA DC MA MOA LDSO	Defined in Section J of the BSC and detailed in BSCP537 "Qualification Process for SVA Parties, SVA Party Agents and CVA MOAs". Section Z of the BSC sets out PAB's responsibilities with regard to the Re-Qualification process.
Supplier Charges (SC) Mandatory	Supplier Charges constitute liquidated damages that Suppliers incur for failing to meet applicable Performance Levels set out in the BSC. Pursuant to the BSC, each Supplier has agreed that each of the Supplier Charges represent a genuine pre-estimate of loss likely to be suffered by other Parties as a result of the failure of a Supplier to meet the appropriate Performance Level. The PARMS system calculates Supplier Charges per calendar month (reporting period) and by Grid Supply Point Group (GSPG).	HH/NHH	Supplier	Supplier Charges are applied for failure to meet obligations set out in Annex S-1 of the BSC and are applied only to those Serials defined within Annex S-1. The process for managing Supplier Charges is detailed within BSCP536 "Supplier Charges". Section Z of the BSC sets out PAB's responsibilities with regard to Supplier Charges.

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	<p>The charges are capped for each Supplier based on the Supplier energy take in the GSPG thus limiting the liability of any participant in any one reporting period.</p> <p>Ninety percent of the total capped Supplier Charges are then redistributed to other Non Half Hourly Suppliers in each GSPG pro-rated according to the energy registered to each Supplier for that month with a further ten percent of the total charge distributed to Trading Parties.</p>			
<p>Technical Assurance of Metering Systems (TAM)</p> <p>Mandatory, Standard, Non-standard.</p>	<p>The Technical Assurance Agent (TAA) service consists of a combination of sampled and targeted visits to sites with HH Metering Systems registered in SVA and CVA and is designed to monitor the compliance of these Metering Systems with respect to the requirements stated in the BSC and its Subsidiary Documents, in particular the Metering Codes of Practice (CoP). This provides a level of assurance that the metered values being passed into Settlement are representative of actual consumption.</p>	HH	DC LDSO MOA Supplier	<p>The Technical Assurance of Metering Systems is identified in Section Z of the BSC and the functions and activities of the Technical Assurance Agent (TAA) are set out in Section L of the BSC and detailed in BSCP 27 "Technical Assurance of Half Hourly Metering Systems for Settlement Purposes".</p> <p>Section Z of the BSC sets out PAB's responsibilities with regard to the Technical Assurance of Metering Systems process.</p>
<p>Technical Assurance of Performance Assurance Parties (TAPAP)</p> <p>Non-standard</p>	<p>The service consists of a combination of routine and targeted checks and site visits which seek to ensure that each Supplier or Supplier Agent continues to meet its obligations in respect of the BSC.</p> <p>The scope of work for Technical</p>	HH/NHH	DA DC MA MOA LDSO Supplier	<p>The process of Technical Assurance is identified in Section Z of the BSC and defined in BSCP535 "Technical Assurance".</p> <p>Section Z of the BSC sets out PAB's responsibilities with regard to the Technical</p>

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	<p>Assurance is agreed by the PAB on an annual basis. The scope is designed to cover gap areas, recently introduced requirements and significant market issues. Targeted checks may also be performed by BSCCo as and when required. Checks can either be performed centrally or as part of a site visit to a market participant.</p>			Assurance process.
Trading Disputes Non-standard	<p>The process for resolving Trading Disputes is a remedial technique that provides a mechanism for the correction of identified Settlement Errors. A Trading Dispute can arise where errors in the data, processes and/or rules used for the purposes of Settlement are identified and where such errors affect the amounts paid to or from Trading Parties.</p> <p>Trading Disputes can also arise as a result of errors in the determination of whether a Party is in Credit Default.</p>	HH/NHH	Supplier LDSO	<p>The process for settling Trading Disputes under the BSC is set out in Section W of the BSC and is detailed in BSCP11 "Trading Disputes". Section W of the BSC sets out TDC's responsibilities with regard to Trading Disputes.</p>