

255/12 - SCOPE OF PERFORMANCE ASSURANCE FRAMEWORK REVIEW

MEETING NAME BSC Panel Meeting

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Purpose of paper Decision

Classification Public

Summary A summary of the proposed scope of the Performance Assurance Review (Strategic Review 3 on the Strategic Work Programme) for approval.

1. Background

- 1.1 The electricity market is set to change significantly over the next decade. Smart metering will have profound impacts on wholesale electricity and the BSC, changing industry processes, providing unprecedented quantities and granularity of data, and presenting new assurance challenges. Non-Traditional Business Models (NTBMs) have also been becoming more prevalent and more varied. Their prevalence is likely to increase as initiatives like smart metering create new competitive opportunities inside of wholesale electricity.
- 1.2 The Performance Assurance Framework (PAF) through which the BSC provides risk management should evolve to meet the challenges of a changing market. Assurance under the BSC should remain robust, but must not act as an undue barrier to innovation or competition.
- 1.3 The current PAF provides for a flexible, integrated approach to the deployment of techniques. ELEXON and the PAB believe there are opportunities to further enhance the application of the risk-based PAF envisaged in P207¹, to address the challenges of a changing industry. Specific areas of the PAF where we particularly believe this to be the case include the BSC Audit, Market Entry and Exit and the current approach to escalation of non-compliant participants.
- 1.4 The BSC Panel and ELEXON's board agreed a Strategic Work Programme (SWP²) for ELEXON to undertake in 2016/17. It included the review of the Performance Assurance Framework proposed in this document.

2. Objectives

- 2.1 The review should make recommendations for change to systems, processes and the BSC that will, if progressed, provide a PAF that:
 - a) engages Performance Assurance Parties³ in identifying and, from time to time, re-appraising the things⁴ that do and don't matter to them (their risk appetite);

¹ P207 - 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.

² <https://www.elexon.co.uk/wp-content/uploads/2016/04/BSC-Panel-Strategic-work-programme.pdf>

³ A Performance Assurance Party (PAP) is a BSC Party or BSC Agent to whom the Performance Assurance Framework applies. Currently, Suppliers, Meter Operator Agents, Data Collectors, Data Aggregators, Meter Administrators, Licensed Distribution Network Operators and Registrants are PAPs.

⁴ i.e. those areas of the BSC requirements that, for whatever reason, are felt to be particularly significant sources of actual or potential error or adverse impact and, the amount of such error or impact that is tolerable.

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- b) meets the current and future needs of the Panel, the PAB and the wider electricity industry for the delivery of efficient, effective and economic assurance on those things that matter; and
- c) enables the Performance Assurance Administrator (PAA) to deliver a valued and trusted assurance service to BSC Parties under the strategic and tactical guidance of the BSC Panel and PAB.

2.2 Such a PAF should:

- i) Be flexible enough to identify and address current and future settlement risks and issues.
- ii) Be able to assess and communicate both aggregate and individual performance across key risk areas so as to enable strategic and tactical deployment of Performance Assurance Techniques (PATs), eliminating reliance on exhaustive enumeration of low-level Settlement Risks.
- iii) Make use of data sources which BSC Parties trust, give accurate and actionable views of the materiality of non-compliance and that, as much as possible, minimise the reporting burden for BSC Parties and their agents.
- iv) Be supported by systems and processes which are:
 - legally robust;
 - scalable to meet changing assurance needs;
 - enable evidence-based decision making;
 - provide the functionality and content needed to support the delivery of a risk-based PAF;
 - facilitate the coordinated, problem-appropriate, application of PATs; and
 - as inexpensive as possible to maintain or change.

3. Scope

3.1 The entirety of the PAF is in scope for the review, i.e. the set of Settlement Risks monitored, all of the current Performance Assurance Techniques, and wider considerations of engagement with, ownership of and PAB powers relating to the PAF. To ensure the PAF meets the challenges of a rapidly changing industry and continues to provide value to its stakeholders, a systemic approach to its review is required. Detailed reasoning for the proposed scope can be found in Appendix 1.

4. Approach

4.1 The review will be delivered in three phases: planning, delivery and closing. Planning will ensure the scope, approach and governance model set out in this document are appropriate. Delivery will include three work streams: recommendations on the Settlement Risks monitored by the PAF and the PATs currently deployed against them, recommendations on any additional BSC Change required to maintain the effectiveness and efficiency of the PAF, and high-level requirements for any process, data or system change required to enable other recommendations. Closing will ensure any consequent activities are appropriately supported in beginning to implement the recommendations of the review. This includes supporting the early stages of raising any required BSC change(s), ELEXON process changes and any other initiation activities for consequential systems initiatives.

4.2 ELEXON believes the PAB is best-placed to manage the review on the Panel's behalf. Note that we still anticipate that decisions at key decision gates will be made by the Panel, and not by the PAB on its behalf. We also believe that the Panel should appoint a sponsor for the review, to represent the Panel's interests while the review is underway. The sponsor would only need to be nominated once the planning phase is complete and delivery has been approved by the Panel.

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- 4.3 The Director of BSC Operations will act as ELEXON's executive sponsor for the review. An expert group will also be formed to ensure appropriate technical input is available.
- 4.4 The project will take approximately 13 months to complete. More detailed timings will be produced once detailed analysis has been carried out in the planning phase. Planning is expected to take 2 months, delivery 9 months and closing 6-8 weeks.
- 4.5 There are three decision gates for the review. The first is approval of the scope as proposed in this document. The second is on conclusion of the planning phase, when ELEXON will return to the Panel if any material changes to the scope it approves come to light through planning. The third is on conclusion of the delivery phase, when the Panel will be asked to approve the recommendations resulting from the review.

5. Resource

- 5.1 ELEXON anticipates that the review will need resource totalling between 3 and 4 full-time equivalent (FTE) across the 13 months for which it is planned. The resource will mostly come from BSC Operations, who operate the PAF, and Strategy and Delivery, who are responsible for delivering the project (business domain expertise, project management and business analysis). For the avoidance of doubt, the 3-4 FTE anticipated will be spread across considerably more than 3-4 members of staff. The core project team of 3-4 people will account for roughly 2 FTE, with the remainder accounted for by other staff across the business.

6. Recommendations

- 6.1 We invite you to:
 - a) **APPROVE** the scope of the Performance Assurance Review;
 - b) **AGREE** that management of the review should be delegated to the PAB;
 - c) **AGREE** that a Panel sponsor should be nominated after the planning phase is complete; and
 - d) **NOTE** that ELEXON will return to the October Panel for approval of any changes to the scope resulting from the planning phase.

Appendices

Appendix 1 – Detailed Scope and Approach for PAF Review

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Appendix 1 – Detailed Scope and Approach for PAF Review

7. Background

Evolution of the market

- 7.1 **Smart Metering:** The smart metering roll-out will significantly change the processes through which Suppliers and their agents manage metering systems and provide Settlement data to ELEXON. The enhanced capabilities of smart meters and consequent changes to industry processes present opportunities for more accurate and reliable Settlement data. However, the transition to smart metering will also pose significant challenges for the electricity industry and ELEXON's BSC assurance activities. The framework beneath which ELEXON provides Settlement assurance therefore needs to be appropriate for both transitional challenges and enduring arrangements.
- 7.2 For example, many of the current set of risk management techniques deployed by ELEXON in providing Settlement assurance are based on non-half hourly metering processes. Since Smart meters will provide half-hourly data and Settlement processes will eventually change to use it, non-half hourly risk management techniques will no longer be an appropriate way of effectively managing Settlement risk.
- 7.3 **Non-Traditional Business Models:** It is important that the BSC arrangements remain fit for purpose and do not unduly act as a barrier to entry and growth for existing Parties and prospective Parties. This includes parties that (may) operate with either traditional or non-traditional business models (NTBM)⁵.
- 7.4 The Panel has raised concerns that the level of assurance provided by the entry, exit and qualification arrangements may not be sufficient in certain circumstances. For example, in mitigating the risks that 'off the shelf' supply businesses can pose or in addressing the challenges faced when BSC Parties enter Default.

Concerns regarding the PAF

- 7.5 **Efficient and Effective Application of a Risk-based Approach:** The current PAF provides for a flexible, integrated approach to the deployment of techniques. The PAB and ELEXON believe that this flexibility will be important in meeting the challenges posed during and after the rollout of Smart metering. We believe there are opportunities to further enhance the application of the risk-based PAF envisaged in P207⁶ in light of these challenges.
- 7.6 Feedback on, and experience of, delivering the PAF lead ELEXON and the PAB to believe the current risk assessment processes could be evolved to provide further value. For example, while a large number of discrete Settlement Risks are catalogued, there may be benefit in considering a smaller number of more broadly defined risk areas. This could promote greater strategic clarity, an enhanced understanding of the true materiality of poor performance and better support the efficient deployment of Performance Assurance Techniques (PATs).
- 7.7 **Efficiency and Value in Audit under the BSC:** To deliver the objectives of the PAF, PATs should be applied in the most efficient way possible. ELEXON and the PAB believe that there may be alternative and

⁵ According to Ofgem's '[Non-traditional business models: Supporting transformative change in the energy market – Summary of responses to discussion paper](#)' NTBM's are 'business models offering new products or services, or new ways of delivering these, that are different to those traditionally provided in the existing energy market. Those offering such services have diverse motivations (technological, financial, social and environmental) and ownership arrangements, and operate at various scales.' They include, but are not limited to, distributed generation, storage, demand side response, peer-to-peer, prosumers, aggregators, housing associations, ESCOs etc. They are characterised by providing local or bundled services or facilitating greater customer participation in the energy market.

⁶ P207 - 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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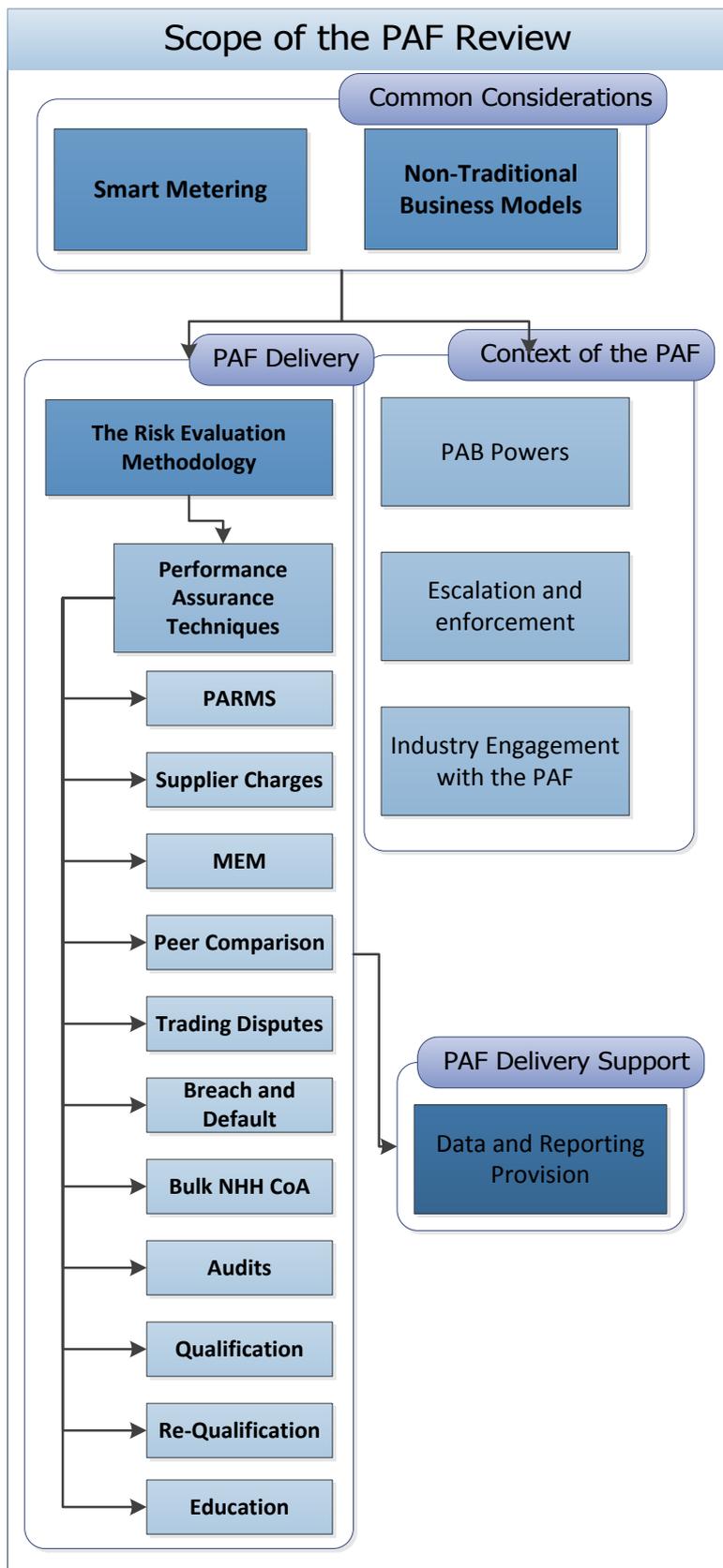
more efficient approaches to the use of Audit techniques under the BSC, which place more emphasis on use of trusted data sources and other PATs to inform the auditors' focus.

- 7.8 **Efficiency and Value in Market Entry and Exit:** The Panel is concerned that the existing processes for Entry, Exit and Qualification arrangements could be more efficient and underpinned with improved guidance and support.
- 7.9 **Addressing Non-Compliance Effectively:** The PAB and ELEXON also feel that the PAA, PAB and the Panel have fewer options than necessary available to address non-compliance. Incentives to comply aren't always strong enough, the escalation process isn't always proportionate to the instances of non-compliance at issue, and available remedies are not always timely. Recent ELEXON investigation suggests that a gap exists between remedial options for low-impact issues and the more 'nuclear' options associated with formal BSC Breach and Default, resulting in there being no appropriate remedy for some material instances of non-compliance.

8. Summary of Scope

- 8.1 The core of the PAF review will focus on the Risk Evaluation Methodology (REM) and defining Settlement Risks and Key Performance Indicators resultant from it.
- 8.2 All of the Performance Assurance Techniques currently used in managing the risks identified in the REM are within scope.
- 8.3 The processes through which ELEXON and the PAB deliver the PAF will be considered.
- 8.4 Data acquisition, storage and provision to end users are included to ensure that the principles and processes of the PAF are supported appropriately.
- 8.5 The powers of the PAB, the ownership of PAF delivery, and industry engagement with the PAF will also be included, to ensure that the wider context within which risk is managed is not an impediment to effective delivery.
- 8.6 The effects of Smart metering and NTBMs on current and future assurance will be considered throughout the review.
- 8.7 The following diagram summarises the scope of the review:

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9. Detailed Scope of the Review

- 9.1 The specific areas to be included in the review of the PAF are set out below, together with a commentary on any aspects of each that have been identified for particular consideration.
- 9.2 In considering these areas, the review will assess the changing needs for assurance arising from Smart metering and Non Traditional Business Models.
- **Smart Metering:** All of the areas outlined below will be considered in the context of current BSC processes, the transitional arrangements required to support effective assurance during the Smart rollout and requirements for post-rollout assurance.
 - **Non-Traditional Business Models:** Given the extent of the review, the intention of ensuring the PAF is applied where it is most needed, the lack of significant numbers of NTBMs when the last extensive review was carried out in 2006, and the high level of change occurring in electricity over the next ten years, detailed exploration of current and emergent forms of NTBM and the effect each may have on the entire scope of the review is necessary to reach sound conclusions.

Settlement Risk Review

- 9.3 The two key elements of the PAF's routine operation are Settlement Risks and PATs. The Settlement Risks set out in the Risk Evaluation Register (RER) should highlight material points of potential failure in BSC-mandated processes. The PATs deployed should be appropriate to the nature of the Settlement Risk(s) and non-compliance at issue.
- 9.4 Routine monitoring of risk and the evidential basis for escalation of PAPs for non-compliance both currently rely heavily on Key Performance Indicators (KPIs) built on data relating to a small sub-set of the total set of Settlement Risks⁷. They have been chosen by the PAB because they are good yardsticks to use as evidence of wider issues with key BSC processes, and because it would be impractical to actively monitor performance against the complete set of (hundreds) of Settlement Risks currently captured.
- 9.5 When performance issues arise, the relatively narrow focus of individual Settlement Risks can complicate identification of root causes, supporting PAPs in addressing them, and in coordinating the effective use of all relevant PATs, including any required escalation, e.g. Breach or Default, for failure to address the issue. This is particularly the case when more extensive problems may be to blame for poor performance against a range of Settlement Risks. The evidence provided by looking at a narrow slice of a BSC process isn't necessarily substantive enough to inform an efficient and proportionate application of techniques.
- 9.6 The review will therefore consider if the current Risk Evaluation Methodology (REM)⁸ could be changed to ensure Settlement Risks better enable the efficient use of PATs. Rather than setting out hundreds of narrow potential failures in BSC processes, the REM could identify a much smaller set of risks in relation to the high-level processes essential to the smooth operation of the BSC, e.g. Change of Supplier and Supplier agent, change of meter configuration, change of measurement class, read collection, validation and aggregation etc. The focus of investigation would then flex to suit the specific matters at hand, with the emphasis being placed on broad initial diagnosis, followed by in-depth analysis fully understand the root causes and impacts of the non-compliance.

⁷ 'Top Settlement Risks', which are subject to annual review through the Annual Performance Assurance Review and any consequent reassessment of the materiality of individual Settlement Risks.

⁸ The REM provides the methodology for identifying and assigning probable materiality to Settlement Risks.

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- 9.7 Performance Indicators should still exist in order to provide a shared and easily understandable indicator of when action is required and should provide broad insight so as to inform the efficient use of other techniques, supplemented with better access to other data where required.
- 9.8 Implied in the above but worth highlighting is that the current emphasis on Suppliers and their agents in the deployment of PAFs will also be reviewed (particularly in the context of NTBMs and the effect they may have on likely points of failure in BSC processes).

PARMS

- 9.9 Much of the data currently in the PARMS system relates to legacy NHH Settlement processes, which will not apply to Smart meters and may not be compatible with Settlement reform resulting from the Smart rollout, including likely mandating of half-hourly data in Settlement. Consequently, to remain relevant, it is likely that PARMS will have to be updated in some way before 2020 to bring it in line with new BSC processes.
- 9.10 The decentralised way in which PARMS currently deals with data provision means that any change to PARMS Serials⁹ results in considerable expense for PARMS data providers (each one must change their method of providing data to match new requirements) and collectively (they must fund ELEXON making necessary changes to the PARMS system). ELEXON costs to date on implementation of the new Serials introduced in 2011 are £264k. Extrapolating on known Party spend, the total cost of change resulting from the last major review of PARMS Serials in 2011 exceed two million Pounds¹⁰. The changes needed to bring PARMS in line with new BSC processes would be at least comparable in terms of their extent, complexity and cost.
- 9.11 Approximately £250k is spent in total per year maintaining PARMS itself and all of the systems specifically developed by data providers to send PARMS data.
- 9.12 Additionally, the PAB and ELEXON have long-standing reservations regarding use of the current set of PARMS Serials and the way in which they monitor risk. The new PARMS Serials introduced in 2011 were not used in actively addressing performance issues, i.e. putting Parties through the Error and Failure Resolution process, until 2015.
- 9.13 TAPAP audits of PARMS data providers carried out in late 2013 and early 2014¹¹ also highlighted widespread issues with consistent application of the high-level guidelines set out for PARMS data provision in BSCP533, Appendix B.
- 9.14 The analysis carried out in the DTN data feasibility study being undertaken by ELEXON on PAB's behalf supports the PAB and ELEXON belief that the existing PARMS Serials and the methodology on which they were designed do not always provide the breadth required to form a view of the materiality of BSC process failures. The conclusions of the study and the specific examples of analysis it has used to demonstrate feasibility support the belief that changes to the monitoring of Settlement Risks could provide improved assurance and greater flexibility to the PAF.
- 9.15 Given the extent of the expense industry will incur even if a *de minimis* approach is taken to changing the PAF and supporting systems, i.e. just bringing both in line with new BSC processes, and concerns about the appropriateness of current reporting, we believe it is the right time to consider more substantial improvements to the PARMS technique and its supporting systems.

⁹ A PARMS Serial is a measure of a key BSC process, i.e. the BSC term for a KPI.

¹⁰ The figure is based on a linear extrapolation from figures given by data providers on condition of anonymity. Based on the extrapolation, approximately £2.1m has been spent by Parties on PARMS since the 2011 changes. Including the £264k spent by ELEXON, approximately £2.4m has been spent in total.

¹¹ 12 Parties were audited by ELEXON, highlighting a range of material issues and inconsistencies. The audit cost approximately £40k to carry out.

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Supplier Charges (Liquidated Damages)

- 9.16 Supplier Charges are liquidated damages. They are derived from performance data held in the PARMS system. The charges are currently based on the principle of pre-estimating loss and are not designed to be penal. They are an attempt to predict the cost to BSC Parties of a particular Supplier failing to fulfil an obligation under the BSC and their application is intended to compensate performing Suppliers for the underperformance of others.
- 9.17 Significant additional data provision and development complexity is created by Supplier Charges being directly linked to PARMS Serials.
- 9.18 As noted above for PARMS, Supplier Charges will require reviewing to align with smart processes and risks. PARMS and Supplier Charges share a system, so the same observations made in relation to PARMS concerning the inevitability, expense and potential for poor return on investment for purely incremental change apply equally.
- 9.19 The PAB and ELEXON share concerns about the current Supplier Charges methodology. The 2016/17 Risk Operating Plan (ROP)¹² includes a review of the charging methodology (the PAF review, if approved with the scope set out here, will deliver it).
- 9.20 Some respondents to the P320¹³ consultation noted, in the context of determining an appropriate mechanism through which to monitor the changes implemented through P322¹⁴, that Supplier Charges do not provide a sufficiently strong incentive for Suppliers to improve their Settlement performance. In its decision letter on P320, Ofgem accepted the observations, agreed that Supplier Charges would not provide a strong enough incentive for migration of PC5-8 metering systems to HH Settlement, and urged the PAB to progress its planned review of Supplier Charges¹⁵.
- 9.21 Supplier Charges are capped to limit their impact on Parties. Ofgem's decision letter on P320 noted that the current capping methodology serves to make them a relatively weak incentive for Suppliers to perform well. Uncapped Supplier Charges last BSC Year totalled £835k. After capping, Supplier Charges for the last BSC Year totalled £414k. Over the last ten years, capped charges have been, on average, 29.6% of uncapped.
- 9.22 The current methodology for pre-estimating loss is based on NHH Settlement processes. The move to mandatory HH metering will result in different impacts from performance failures. The review will consequently consider alternative ways to calculate and levy liquidated damages. For example, it might be appropriate to base such charges on a retrospective view of the materiality of the non-compliances to which they relate (whatever specific non-compliances are chosen), using the same analysis of discrepancies between actual and ideal Settlement positions that would currently form the basis for either an Extra-Settlement Determination (ESD) or the calculation of materiality for normal Trading Disputes.

¹² The ROP sets out the PAB's priorities and planned activities against the PAF in any given Performance Assurance Operating Period, i.e. it provides an annual plan of action for delivering the PAF.

¹³ Reporting on Profile Classes 5 – 8 Metering Systems after the implementation of P272. <https://www.elexon.co.uk/mod-proposal/p320/>

¹⁴ Revised Implementation Arrangements for Mandatory Half Hourly Settlement for Profile Classes 5-8. <https://www.elexon.co.uk/mod-proposal/p322/>

¹⁵ "This qualitative evidence further calls into question the strength of PARMS to incentivise compliance. P320 raises questions about the effectiveness of monitoring compliance via PARMS and particularly the effectiveness of the Supplier Charge. We note that the FMR states that the Performance Assurance Board (PAB) intends to review these charges and we urge the PAB to take this matter forward as a priority."

<https://www.elexon.co.uk/wp-content/uploads/2015/03/P320-D.pdf>

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- 9.23 The data used to carry out the analysis for Trading Disputes or ESDs is currently made available through ad hoc requests to BSC Parties, their agents and/or BSC Agents, but standard formats could be provisioned as the basis for anything mandated on a regular basis through the PAF. See the section below on general data provision for more detail.
- 9.24 Similar to the observations made in relation to the KPIs built upon data for specific Settlement Risks, the existing Supplier Charges methodology focusses on narrow areas of non-compliance, whereas a revised approach could shift focus more flexibly, to more effectively deliver the risk-based PAF, while also giving PAPs confidence that the charges to which they are subject are based upon trusted Settlement data and accurately reflect the impact they have had on the remainder of Settlement.

Material Error Monitoring

- 9.25 Material Error Monitoring (MEM) is, along with PARMS, the other core data-driven PAT under-pinning the PAF. While PARMS is intended to act almost as a set of Service Levels for PAPs, against which they can be charged and for which any changes should be subject to a relatively high level of governance, MEM is intended to provide a more flexible basis on which to monitor risk. Its flexibility should complement other techniques, which rely on the data it provides to operate efficiently and effectively.
- 9.26 The methodology for MEM has historically been connected to the acceptable error threshold used in determining the basis on which the BSC Audit should be qualified. Settlement Risks monitored through MEM are allocated a proportion of the overall threshold and the performance of individual PAPs is then assessed based on their size in the NHH sector.
- 9.27 MEM currently focusses on three areas of Settlement: Large EAC/AA, NHH Unmetered Supplies and NHH Energisation Status. None of them have been above their respective error thresholds for more than half a decade. UMS and Energisation have not been considered market issues for the BSC Audit for many years (the processes relating to them are still audited) and the PAB has not routinely monitored the Settlement Risks relating to them since early 2012. Their low materiality has resulted in proposals for a rotational approach to their audit in future years.
- 9.28 While the risk relating to large EAC/AA is still routinely monitored by the PAB (it remains a useful yardstick of wider process failure, like the 97 and 99% targets), the materiality associated with it has been below threshold for many years and it is likely that the implementation of P272¹⁶ will result in significantly fewer high consumption metering systems being settled on a NHH basis.
- 9.29 The rollout of Smart metering also justifies reviewing MEM's focus. Other risk areas, either resulting from Smart or remaining material after the rollout, may be more material or a better focal point for addressing process failures. Legacy NHH processes should increasingly affect a limited sub-set of metering systems and it is reasonable to anticipate, in light of DECC and Ofgem's desire to see as many meters settled HH as possible, that the Smart rollout will serve as an enabler for the migration of much of the current NHH market to HH Settlement as soon as practicable after the rollout.
- 9.30 Because the use of MEM has, like PARMS, been dictated by Settlement Risks focussed on narrow slices of BSC process, the observations made there about narrowness of focus limiting the usefulness of data-driven techniques in supporting other techniques applies here as well.
- 9.31 Also similar to PARMS, MEM relies on a set of bespoke extracts from NHHDA and Suppliers. The extracts rely on scripts ELEXON provides and which NHHDA and Suppliers run as required to provide ELEXON with the core data for MEM. Issues have recently come to light with this data acquisition process, which suggest there

¹⁶ Mandatory Half Hourly Settlement for Profile Classes 5-8.

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are opportunities to improve the robustness of the data being reported. The bespoke nature of the extracts and tools creates inflexibility, risk and high costs of change (ELEXON, NHHDA's and Suppliers) in provisioning data. The systems which ELEXON has developed to load the extracts are difficult to change for the same reasons. This may partially explain why the focus of MEM has not changed since 2006.

- 9.32 The PAPs who are held to account with the data have also noted that the extract-driven nature of the reporting process (specifically, the practical necessity of only receiving a relatively infrequent extract from NHHDA's) creates problems with using the data to identify and address material Settlement issues. By the time a Supplier is given visibility of the extract, the snapshot of their agent's system is out-of-date. This has two possible effects. Either, the issues it highlights might already been resolved, making investigation inefficient, or recognition and resolution of material non-compliance could be subject to delay, which risks increasing materiality further or complicating resolution.

Peer Comparison

- 9.33 The Peer Comparison PAT is intended to incentivise improvements to Supplier and Supplier agent performance through publication of confidential and non-confidential rankings of Supplier or agent performance against the PARMS Serials. Publication is intended to give Suppliers and their agents a benchmark for performance against the reported Serials and 'name and shame' anyone significantly underperforming relative to the remainder of the market. The prescribed mode and method of publication is set out in BSCP533, Section 4 and any changes (including adding Serials) require that a BSC Change Proposal be raised.
- 9.34 Feedback from PAPs indicates that peer comparison can provide a strong incentive to improve poor performance, where it is carried out against a trusted source of data. It also provides a useful supplement to annually set values of acceptable error for the market, because it allows comparisons to be made between similar Suppliers or agents, giving a relative view of performance that complements comparisons against a fixed threshold.
- 9.35 While the technique itself is useful in incentivising risk management, its use is currently restricted to comparisons of performance for a sub-set of the PARMS Serials. As noted elsewhere in this document, PARMS Serials are narrowly focussed and concerns over the veracity of the data limit its potential for use in Peer Comparison.
- 9.36 The relative inflexibility of the technique is arguably inconsistent with the objectives of a risk-based PAF in much the same way that narrowly focussed data provision is elsewhere. Restricting use of the technique to a prescribed sub-set of PARMS data and making changes to its scope onerous to effect means long notice of a need for new comparisons is needed. This is not always practical now, and will be less so during the Smart rollout, when new risks may emerge relatively quickly and techniques will need to be deployed on relatively short notice to address them.
- 9.37 The technique could also be useful against risks currently addressed through MEM. Historically, MEM has provided a more substantive view of risk than PARMS, because it focusses on MSID-level issues and the data sets under-pinning it allow relatively accurate calculations of Settlement error to occur. It is not however within the scope of BSCP533. Any attempt to extend the technique to include MEM would therefore require a BSC Change (e.g the addition of a new BSCP).
- 9.38 The review will examine if a wider and more flexible use of Peer Comparison is justified. If specific Settlement Risks would benefit from having Peer Comparison applied to them, the relevant BSC Change could be initiated on the conclusions of the review. If a greater degree of flexibility is required in choosing where and when to use Peer Comparison, the review could be used to understand how to provide the PAB with greater flexibility in its use while ensuring it is still used proportionately.

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Trading Disputes

- 9.39 The Trading Disputes process is used to correct Settlement Errors that exceed a threshold of materiality (currently £3k). BSC Parties and ELEXON are able to raise a Trading Dispute where they become aware of a potential Settlement Error that may exceed the threshold. When a Dispute is raised, ELEXON will obtain data from Parties and their agents to calculate the materiality of the issue and an appropriate resolution, and then take a paper to the TDC setting out ELEXON's findings and recommendations.
- 9.40 The technique is generally used reactively, as and when ELEXON becomes aware of a Settlement Error through a BSC Party, their agent or ELEXON's own routine monitoring of Settlement. It is also generally used to address specific Settlement Errors as and when they arise, rather than being used to address known and routine issues of material non-compliance.
- 9.41 While there is nothing inherently wrong with its current use, the technique could, with the provision of sufficiently detailed and trusted data, be applied more proactively by ELEXON and, as noted in relation to Supplier Charges, be used to assess the post-event impact of underperformance. In this way it might offer an alternative to the existing pre-estimate of loss.

Escalation Options

- 9.42 In the event of a party failing to deliver on its BSC obligations there is a path of escalation to ensure risk is managed and persistent non-compliance addressed.
- 9.43 Currently, a PAP who is not performing adequately would be placed into Error and Failure Resolution (EFR) and required to propose an action plan to address the root causes of underperformance. If approved by the PAB, the action plan and any milestones it contains would be monitored by ELEXON and the PAB to ensure remedial action is undertaken and has the expected effect.
- 9.44 If a PAP does not follow its EFR plan or it fails to deliver the expected outcomes, the PAP can be considered for the breach and Default processes (BDP) set out in Section H of the BSC if a BSC Party, or Removal of Qualification (RoQ) if a BSC Party Agent. The PAB can also escalate the lack of compliance through the EFR process itself, either in isolation or as a preliminary to invoking the BDP or RoQ.
- 9.45 ELEXON and the PAB have recently sought to clarify the circumstances in which an escalation should occur. The PAB had expressed concerns about its ability to hold PAPs who persistently or materially breach provisions of the BSC to account.
- 9.46 There are currently no explicit 'middle-ground' options for escalation. A PAP is either in EFR (which is a technique best suited to managing lower materiality or non-persistent performance issues) or is escalated to the Panel under the BDP/RoQ. At the point where an escalation to the Panel occurs, the severity of the actions open to the Panel necessitates that ELEXON provide strong evidence of non-compliance. Such evidence can be difficult to gather when the focus of techniques for which we have sufficiently detailed data is currently as narrow as detailed elsewhere. This may explain why BDP and RoQ have never been carried through to address performance issues.
- 9.47 Feedback from the PAB and ELEXON's operational staff suggests that PAPs may sometimes be reluctant to engage with the PAF or to take the steps necessary to address non-compliance. For example, recent P283 TAPAP checks¹⁷ showed that none of the PAPs audited were compliant with the new commissioning process set out in P283, despite it being implemented in November 2014. Discussion of findings with the audited

¹⁷ https://www.elexon.co.uk/wp-content/uploads/2014/11/07_PAB179_06_Technical-assurance-of-performance-assurance-parties-TAPAP-check-on-The-P283-commissioning-process-1.0.pdf

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parties suggested they did not intend to become compliant in the foreseeable future. Similarly, PARMS TAPAP checks in 2013 found 11 out of 12 audited parties non-compliant¹⁸.

- 9.48 Similarly, the timeliness of available remedies can sometimes create challenges for minimising the risk that non-compliant parties pose. The long delays between a Settlement event and the final reconciliation of that event can result in impractically long waiting times for removing a signatory from the BSC.
- 9.49 The review will consider if a middle ground option between EFR and BDP/RoQ is required, or if the greater access to evidence in support of using the BDP/RoQ resulting from better coordination of PATs would suffice to address existing concerns.

Bulk Change of NHH Agent

- 9.50 Bulk Change of NHH Agent exists to manage the risks associated with Suppliers migrating large quantities of NHH metering systems between agents concurrently. The Smart rollout and any consequent mandating of HH Settlement for smart meters may make the technique obsolete. Recent large migrations of metering systems have deliberately sought to circumvent the bulk CoA provisions by keeping daily numbers of transfers just below the thresholds at which the process would be invoked.
- 9.51 The review will consider if the PAT could be improved and its use aligned better with other techniques. The intended result of the PAT could also, arguably, be delivered more effectively and efficiently through a coordinated and informed use of other Techniques (Audits, MEM, EFR and escalation). Current reliance on a fixed value of metering systems migrated per day may not be the best way to deliver the preventative assurance the technique envisages.

Audits

- 9.52 There are currently three audit techniques under the PAF: Technical Assurance of Metering (TAM), Technical Assurance of Performance Assurance Parties (TAPAP) and the BSC Audit. The techniques are intended to be complementary to one another by providing different forms of audit-based assurance.
- 9.53 TAM involves the Technical Assurance Agent (TAA) doing a set of random and targeted checks on SVA (mandatory HH or Measurement Class 'C' only) and CVA metering systems to ensure Metering Codes of Practice are being followed and Settlement data is consequently reflective of real consumption. The rationale for determining how sites should be chosen is agreed with the PAB on an annual basis and reflects any concerns that exist about particular areas of risk.
- 9.54 The intended use of TAPAP is also agreed on an annual basis and reflects any areas of high risk or known issue for assurance. TAPAP checks can also be carried out on demand inside of a BSC Year to provide assurance against emergent issues. Generally, ELEXON staff carry out the TAPAP audits, but the facility does exist to contract for a third party. TAPAP should consequently be more flexible and immediately responsive than the other, more strictly defined and contractually provisioned techniques.
- 9.55 The BSC Audit is intended to provide a third party assessment of the level and source of non-compliance in Settlement. It is carried out against a threshold of acceptable error set by the Panel on an annual basis. The PAB set the scope of the audit each year in collaboration with ELEXON and the BSC Auditor. The Auditor relies on Settlement data provided by ELEXON to choose an appropriate sample for site visits and determine the market level materiality of BSC process failures.
- 9.56 The audit techniques all currently depend on the REM, RER and data ELEXON consequently holds to define their focus.

¹⁸ https://www.elexon.co.uk/wp-content/uploads/2013/10/12_PAB163_08A_PARMS_TAPAP_Summary_NONCONFIDENTIAL.pdf

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- 9.57 Due to the narrow purpose of the data available to ELEXON, the BSC Auditor spends a significant percentage of its time doing its own sampling and analysis preparatory to doing site visits or assigning market level materiality. Better value could be realised by ensuring that a third party auditor spends as much of its time as possible carrying out site visits and providing advice on remedial action to PAPs, the PAB and ELEXON, with ELEXON furnishing as much of the data it needs as possible.
- 9.58 During the last audit cycle, data available through the DTN feasibility study was used in validating and qualifying the findings of the BSC Auditor during site visits and in determining the conclusions of the audit.
- 9.59 Where TAPAP has been used in the recent past it has uncovered high materiality non-compliances. However, with the ability to do more audits remotely, using data supplied to ELEXON routinely or on request, it could be used to more directly complement the operation of other PATs.
- 9.60 TAM and its methodology for sampling are only as good as the data the PAB use to decide its focus. A broader understanding of non-compliance can only enhance the effectiveness and value for money of this technique as well.
- 9.61 The number of audits conducted through TAM and TAPAP has decreased since the last PAF review. The review will examine if TAM and TAPAP should be used more extensively under a revised PAF.
- 9.62 With more flexible application of PATs and appropriate provision of data the current distinctions between routine BSC Audit, ad hoc use of the BSC Auditor and TAPAP may be unnecessary. The TAM depends on a degree of metering expertise that is not likely to be cost effective to demand of the BSC Auditor, but ELEXON's operational staff could have a greater role to play in ensuring the technique is used efficiently.

Market Entry and Exit

- 9.63 When Parties and their agents want to start or cease participating in the BSC, the PATs relevant to market entry and exit (Qualification, Re-Qualification and Education) seek to minimise the risk of resultant non-compliance and that BSC Parties are not left temporarily or permanently out of pocket as a result of the poor performance or default of participants in transition.
- 9.64 The existing approach to qualification and re-qualification involves potential entrants self-certifying against a standard questionnaire, intended to ensure they have considered and addressed all the key requirements for smooth participation in the arrangements. The Qualification Service Provider also undertakes a risk-based audit in support of the qualification and re-qualification techniques.
- 9.65 The Panel has expressed concerns about the current approach to assuring market entry and exit, in light of the increased prevalence of NTBMs becoming involved in BSC activities. Recent issues with large participant system changes have also highlighted the extent of the BSC risk resulting from existing participants making extensive changes to the processes and systems with which they originally entered the market. Finally, a recent case of a Party who exited and left BSC liabilities which will be problematic to recover has, while an unusual occurrence also caused concern.
- 9.66 The review will consider if the current reliance on self-certification is the most efficient way of delivering the entry/exit PATs, as well as considering if the risk-based audit carried out during the PATS could, as for other audit techniques, be better aligned with the other audit techniques (particularly TAPAP). For example, a targeted set of checks from ELEXON or the BSC Auditor, resulting in an audit report setting out risks of non-compliance, known non-compliances and recommendations on remedial action to take might strike a fair balance between giving entrants and the PAB early, actionable visibility of issues, not creating excessive barriers to entry and exit, providing an evidential basis on which to escalate any issues which are not addressed before non-compliance becomes material, and supporting entrants without removing the emphasis on their ultimate accountability for ensuring they are compliant.

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- 9.67 The Panel has also queried whether it might be appropriate for the market entry process to consider the financial credentials of potential entrants. The BSC can be viewed as a multi-party contract and could, on that basis, seek to perform the same due diligence that parties to other contractual agreements routinely undertake, i.e. ensuring parties with whom you contract are financially reputable. The current market entry provisions in the BSC do not countenance attaching such conditions to joining the BSC. We remain mindful of the mandatory nature of the BSC and note that the omission of such due diligence steps may have been intentional and designed to prevent BSC entry processes becoming a significant barrier to entry, or being misaligned with the conditions for accession to other wholesale electricity codes.
- 9.68 The review will explore the implications of imposing such requirements on entrants, as well as who would be best placed to do so.

General Data and Reporting Provision under the PAF

- 9.69 ELEXON and its service providers support an extensive set of applications intended to provide the PAF and specific PATs with the data and reporting they need. As noted in relation to a number of specific PATs elsewhere in this document, the existing provision of data and systems has been informed by the current REM and provide data for the Settlement Risks the PAB has chosen to monitor closely.
- 9.70 The way in which the systems have been developed has also been constrained by historical constraints of available technology in the past and a desire to ensure continued economy in the delivery of the PAF. The data we currently hold is therefore narrowly focussed by design, but its use is complicated by systems that were built over the last 18 years and that can be costly, complex and risky to change.
- 9.71 The DTN feasibility study and ELEXON's ongoing work to improve our data and reporting services have both suggested ways of improving the scalability of data provision. The DTN study looked at different methods of sourcing data to monitor non-compliance. BPR is focussed on providing a single data and reporting platform, to facilitate flexibility in supplying data to the PAF.
- 9.72 The review will consider if the alternative methods of data provision trialled in the DTN study could, in conjunction with enhanced storage and reporting capabilities, provide an appropriately scalable system and sufficiently broad foundation of data on which to build more flexible and coordinated use of PATs.

Powers of the PAB and administration of the PAF

- 9.73 The PAB's range of powers under the BSC and the way in which it uses those powers might also require review. Smart metering or a revised risk-based PAF may necessitate more flexibility in applying PATs, which may be impeded in some cases by current levels of formal BSC governance surrounding the PAB's use of its powers e.g. changes to Peer Comparison.
- 9.74 Industry engagement with the formal processes through which the focus of the PAF is set each year will also be considered. The annual consultation on the REM, RER, Risk Operating Plan and the publication of the Annual Performance Assurance Report provide BSC parties and PAPs with a means of contributing to the PAF's focus for the year and highlighting any issues of specific concern. The PAF can only operate effectively if engagement with annual PAF strategy results in an appropriate setting of focus.

Related Initiatives

- 9.75 ELEXON is considering its data and reporting strategy. On-going coordination between the two projects will be needed to ensure that they remain complimentary and aligned.
- 9.76 ELEXON is also conducting a feasibility study into use of data direct from the DTN as an alternative to the source data for current PARMS Serials. This has been underway for more than a year. The conclusions of the study will be presented to the PAB in July along with the Panel's decision on the scope of this review. Findings will be incorporated into the wider analysis planned for the assurance review where relevant.

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9.77 Finally, ELEXON will undertake a review of the BSC change process and document architecture (Panel Strategic Review 2). It is anticipated that this review will consider the way in which the BSC captures reporting requirements. The Peer Comparison changes discussed above need to be aligned with the findings of this review. Anything else arising from work on the powers of the PAB and PAF administration may need coordinating with it.

10. Approach

Governance

- 10.1 The PAF Review as proposed will be a significant piece of work, drawing on resource from many areas of the business. The governance, specialist resource and coordination provided by treating it as a full project will be necessary to ensure objectives and timescales are met.
- 10.2 The Panel will ultimately own the review. Regular updates against the timetable and key decision gates will be provided to the Panel and the Panel will be asked to approve the recommendations resulting from it.
- 10.3 The PAB will have significant input into the review and will be the primary body responsible for delivery of the revised PAF. Other bodies will also be involved, e.g. the TDC in relation to Trading Disputes. It is recommended that the Panel delegates ownership of the review to the PAB until final approval is required, because its members have extensive experience of PAF delivery and expertise in the BSC processes at issue.
- 10.4 The executive sponsor for the project will be the Director of BSC Operations, since delivery of the PAF is his accountability and responsibility for routine delivery of the PAF sits entirely inside of his department.
- 10.5 A project board with appropriate terms of reference will be created to ensure the project is being delivered in a way that is consistent with our project delivery approach, internal audit requirements and general project best practice. The project board should include the PAB Chairman, who can ensure the interests of the Panel and the PAB (the key stakeholders for the review) are reflected in project governance.
- 10.6 The review will involve exploring system, data and business process change. A PAF Expert Group should therefore also be created. The function will be responsible for ensuring that the conclusions of the review and any proposals for specific approaches to change reflect the operation of key BSC processes, our architectural principles, other strategic activities underway and technical architecture best practice. The expert group will include industry experts on BSC processes and an ELEXON SME on PAF systems, data and processes from BSC Ops.

Timetable and Key Decision Gates

- 10.7 The project will take approximately 13 months to complete. More detailed timings will be produced once detailed analysis has been carried out in the first phase of the project (planning), but planning is expected to take 2 months, delivery 9 months and closing 6-8 weeks.
- 10.8 The first key decision is for the Panel to approve the scope set out in this document. Subject to the Panel's deliberations on 14 July 2016, planning can start shortly afterwards (middle of July), provided the planning resource listed above is available. The project would conclude in early August of 2017 (see section below for post-completion steps)
- 10.9 The second decision gate will follow the planning phase. It provides an opportunity to return to the Panel, by exception, if validation of scope suggests changes to the original plan are needed.
- 10.10 The final decision gate is for the Panel to approve the conclusions of the review and initiation of consequent projects or BSC Change.

Approach Diagram

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10.11 The following diagram summarises timings, phases, work streams, and key activities and deliverables inside of each work stream.

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