

PUBLIC

PAF Review – Performance Assurance Procedures

Workstream Report

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PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

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EXECUTIVE SUMMARY

The Performance Assurance Framework (PAF) manages risks to the Settlement processes. The PAF Review was initiated by the BSC Panel in March 2017. The review is being delivered through four workstreams: smart metering risks, PAF Procedures, data provision, and PAF Techniques.

This report concludes the second workstream – review of the PAF Procedures.

This workstream has looked at how Settlement Risk is catalogued and quantified, cost-effective deployment of mitigating actions is planned and the effectiveness of such actions is reviewed, and at governance of the PAF.

We have sought to design an improved approach to delivering the PAF, specifically addressing the opportunities for improvement that were identified when the review was initiated.

Our recommendations are set out in this document, which explains what we are proposing and why. Below are the key points; for further detail see the main body, appendices and attachments.

PAF stakeholders contributed to the workstream via the Issue 69 working group. Group members' input was valuable to the review and they told us it was useful for them too. We hope to maintain that involvement going forward.

Key recommendations

The recommendations are aimed at shifting the focus of PAF activities from issue management further towards risk management i.e. consideration of what drives the risk, describe the value of the risk and the options to efficiently deploy mitigations. In particular:

- New Risk Evaluation Methodology that estimates a financial impact of risk in the year
- New set of Settlement Risks with updated categories / sub-categories
- The Performance Assurance Board (PAB) Strategy is reviewed annually and gives steer for Risk Operating Plan
- Risk appetite set by the PAB through Target Impact values
- New format risk register including supporting information and rationales
- Risk Manager role and more effective engagement of parties in the assurance framework
- PAB meeting agenda focused on risk management ahead of issue management

Other recommendations

- The PAB directs ELEXON on actions to manage higher priority risks via policies
- The PAF document set is redesigned to be more reader-friendly and aligned with PAF web pages
- A new 'PAF Document' is published as a guide to the PAF
- A controls log included in the risk register to describe how the controls work, and greater emphasis placed on controls to mitigate risks
- New format of the Risk Operating Plan, with more detail of planned deployment of mitigating techniques
- Use of "events" that cover multiple risks, which the PAB may seek to mitigate
- Quarterly versions of the Annual Performance Assurance Report build a picture of how Settlement Risks are changing through the year

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- Issue register collated and maintained, reported by related risk(s)
- Use of a near miss register in certain scenarios e.g. change implementation
- Settlement Risks reviewed routinely, considering risk indicators, issues, near misses, BSC change, controls
- Log of Risk Management Determinations maintained with link to Settlement Risks
- BSC Change analysis enhanced to further consider the broader scope of Settlement Risk
- More accessible information on the top priority Settlement Risks e.g. on ELEXON website
- PAF Key Performance Indicators refreshed to support commentary on PAF efficiency

Next steps

The recommendations are presented to the Performance Assurance Board for instruction on implementation. ELEXON will endeavour to implement the changes approved for the next assurance year commencing 1 April 2019.

In particular the Risk Evaluation Methodology (REM), the Risk Evaluation Register (RER) and the Risk Operating Plan (ROP) will be issued as follows:

- REM - issued for stakeholder comment after the September 2018 PAB meeting, and presented back for final PAB approval in November
- RER - issued for stakeholder comment after the November 2018 PAB meeting, and presented back for final PAB approval in January 2019
- ROP - published for stakeholder comment after the January 2019 PAB meeting, and presented back for final PAB approval in March 2019

All interested parties are invited to comment on these documents in October 2018, December 2018 and February 2019 respectively. Any questions can be submitted to paa@elexon.co.uk

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SECTION 1 - INTRODUCTION

1. Review of the PAF Procedures

- 1.1 The Performance Assurance Framework (PAF) manages risks to the Settlement processes. The PAF Review project was initiated by the BSC Panel in March 2017¹. The review is being delivered through four workstreams: smart metering risks, PAF Procedures, data provision, and PAF Techniques. At the time of writing, the smart metering workstream had concluded; this report concludes the second workstream - the PAF Procedures.
- 1.2 The PAF Procedures together deliver standard risk management by identifying and evaluating Settlement Risks, taking mitigating actions and reporting the outcomes; they are described in BSC Section Z as the:
- Annual Performance Assurance Timetable (APAT)
 - Risk Evaluation Methodology (REM) – the “evaluation methodology”
 - Risk Evaluation Register (RER) – the “risk register”
 - Risk Operating Plan (ROP) – the “operating plan”
 - Risk Management Determinations (RMD)
 - Annual Performance Assurance Report (APAR)
- 1.3 This workstream has looked at how Settlement Risk is catalogued and quantified, cost-effective deployment of mitigating actions is planned and the effectiveness of such actions is reviewed, and at governance of the PAF.
- 1.4 A number of opportunities for improvement in delivering the PAF Procedures were identified:
- **Engage Performance Assurance Parties** in identifying and, from time to time, re-appraising the things that do and don't matter to them (their risk appetite); increase the quantity and quality of participation in consultations with parties, the Performance Assurance Board (PAB) and the Panel.
 - Meet 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.
 - Improve the **measurability** of Settlement error and the effect assurance has on levels of Settlement error and result in improvements in the amount of error identified and resolved through the PAF over time.

¹ Panel paper 264/07 - https://www.elexon.co.uk/wp-content/uploads/2016/08/27_264_07_PAF_Review_Scope_Approach_Approval_PUBLIC.pdf.

Information on the project can be found on the ELEXON website <https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-framework-review/>

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- Enable the Performance Assurance Administrator (PAA - ELEXON) to deliver a valued and trusted assurance service to BSC Parties under the **strategic and tactical guidance** of the BSC Panel and PAB.
 - Improved Panel, PAB and industry perceptions of: **efficacy** of PAF procedures and **credibility of data**
 - The PAF is **flexible** enough to identify and address current and future settlement risks and issues.
 - The PAF is 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 (PAT – the “techniques”), eliminating reliance on exhaustive enumeration of low-level Settlement Risks.
 - The PAF makes 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.
 - **Supporting systems and processes** 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 techniques; and as inexpensive as possible to maintain or change.
- 1.5 We have sought to address these and develop a new PAF design that provides a flexible and effective structure, is easy for stakeholders to engage with and allows the PAB to direct risk mitigation in the most efficient way. We have looked for approaches that are straightforward and cost-effective to implement and a good cultural fit for the PAB, the PAA and our wider stakeholder community.

Next steps

- 1.6 The PAB is asked to consider these recommendations and direct ELEXON which to implement, with any specific instructions in how to do so.
- 1.7 Where possible, the recommendations should be implemented as soon as possible, in particular for the next Performance Assurance Operating Period (PAOP – the “assurance year” running April - March), commencing 1 April 2019.

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SECTION 2 – RECOMMENDATIONS FOR THE PAF PROCEDURES

2. Recommendations overview

- 2.1 This section sets out the proposed design of the PAF for 2019/2020 onwards, for both the annual cycle to produce the REM, RER and ROP, and delivery of the PAF within the year.
- 2.2 We are not proposing to change the core documents of the PAF Procedures, although we raised Modification P368² to introduce additional flexibility on timing and revisions of them into Section Z. P368 will be implemented on 1 November 2018.
- 2.3 We are not commenting here on the cost of implementing the recommendations as this will vary depending on how they are delivered. The intention is to improve the effectiveness of the PAF, so that the cost of delivering the PAF is proportionate to the level of assurance delivered to the PAB and BSC Parties.

3. Governance Framework

Recommendations in this section – Governance Framework

- Shift focus from primarily focusing on compliance and issue management, further towards risk management
- The PAB considers delegating additional responsibility to the PAA (e.g. via PAB Strategy and policies)
- The PAA introduces the role of a risk manager and assigns a risk owner to each Settlement Risk

Risk management under the BSC

- 3.1 Although Section Z describes an assurance framework, the intention is that it is risk-focused. However, compliance with the BSC is at the heart of the PAF as Settlement Risks can only stem from a non-compliance. We therefore need to achieve a balance between:
 - **Compliance:** “compliance with the external rules that are imposed upon an organisation as a whole”³;
 - **Assurance:** “an objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization”⁴; and
 - **Risk management:** “understanding, analysing and addressing risk to make sure organisations achieve their objectives. So it must be proportionate to the complexity and type of organisation involved.”⁵

² ‘Amendments to Section Z to better facilitate the production of the Risk Evaluation Methodology, Risk Evaluation Register and Risk Operating Plan’ - <https://www.elexon.co.uk/mod-proposal/p368/>

³ International Compliance Association

⁴ Institute of Internal Auditors Practice Advisory 2050-2

⁵ Institute of Risk Management

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- 3.2 The conclusions of this review are not that we need to completely switch our focus away from compliance and reactive operational *issue management*, but rather that we need to shift it further towards *risk management*. The recommendations here are designed to facilitate that shift.

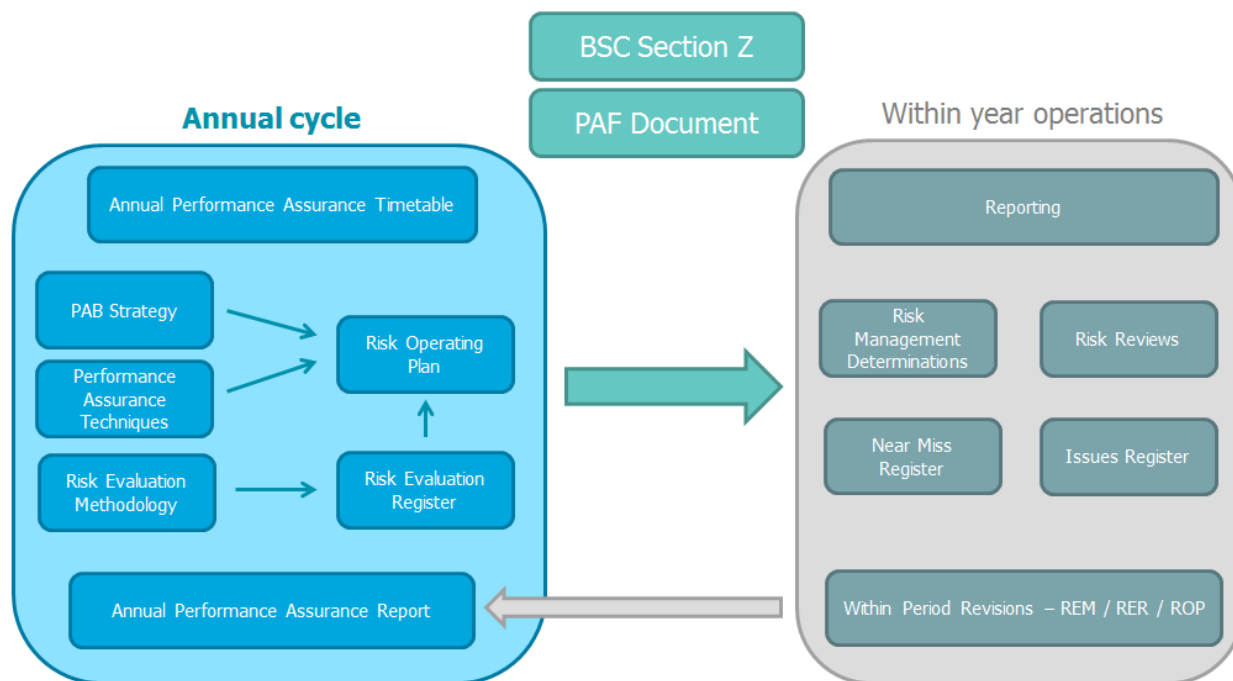
Roles and delegation

- 3.3 Section Z assigns authority to the PAB (sometimes via Panel delegation) to direct how the PAF should be run and to take key decisions; and to the PAA to carry out most of the day-to-day operation of these functions. Parties are invited to input to the PAF through providing comment on the REM, RER and ROP, and of course delivering risk management and being subject to the mitigating techniques.
- 3.4 The PAB may wish to consider some additional delegation to the PAA – under direction of the PAB Strategy and against clear “policies” (see paragraph 5.17) as appropriate. For instance the additional layers of escalation within ELEXON before a party is requested to attend PAB meetings - formal stages to signal the increasing severity of the situation involving the Risk Manager, PAB Chair and possibly select PAB members with party representatives also increasing in seniority/authority. The aim would be that PAB escalations are recognised as a more serious event and provide more options for incentivising compliance and/or co-operation with the EFR process. This would not preclude a party being invited directly to a PAB meeting if appropriate to the circumstances. It may free up the PAB meeting agenda to allow more time on the Settlement Risks and directing risk mitigation, although it may increase activities delivered by ELEXON.
- 3.5 Additionally, the PAB may consider requesting that the Panel delegates preparation and amendment of the list of techniques as per Section Z 5.3.1 to the PAB. The retention by the Panel of this responsibility seems to be disproportionate compared to for example approving the Risk Operating Plan. Although to date, no PATs have been added or removed, the PAT Review workstream may make such recommendations over the next year.
- 3.6 We recommend that ELEXON creates two new roles to deliver specific PAA responsibilities: a risk manager and risk owners. These functions are already delivered by the PAA, but it’s considered they could be more explicitly defined. We are not commenting here on how those roles should be delivered by the PAA, i.e. how the functions are assigned to staff members. See Appendix A for more detail, in summary:
- **Risk manager** - Responsible for the PAA’s delivery of the PAF and ongoing development of risk management, at the PAB’s direction. They should actively engage with stakeholders throughout the year on the risks and mitigation, and promote the right behaviours to maintain the focus on Settlement Risk.
 - **Risk owners** - Responsible for Settlement Risks, on direction of the risk manager. Review risk indicators to assess if the risk appears to be changing and help identify mitigations to achieve the Target Impact.
- 3.7 We aim to encourage more frequent engagement on the Settlement Risks; see stakeholder engagement section in paragraph 5.32. Stakeholder interaction and feedback through the process of this review has clearly demonstrated that parties would like more relevant and informative two-way communication on the PAF and Settlement Risks.

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4. The annual cycle

Before the start of each Performance Assurance Operating Period, the PAB prepares the PAF Procedures.



Recommendations in this section – The annual cycle

- A PAF Document is published as a plain English guide to how the PAF operates and removes duplicated explanations from the other PAF Procedures
- The PAB strategy is refreshed and reviewed annually; provides direction for the ROP and other PAF activities
- New approach to evaluating the materiality of risks including a plausible financial Impact on Settlement for the coming year, and a measure of potential Volatility in that impact value
- CVA risks are treated as significant in consideration of mitigating activities and reviewed regularly
- The REM is reviewed annually and stakeholders invited to comment on it, but a new version is not automatically produced for each assurance year
- A number of additional fields to the current risk register: risk factors, key risk indicators, party types who may cause / control the risk, rationales for risk ratings, supplementary information on impacts and controls outside the BSC
- Maintain a list of “events” within the risk register capturing scenarios that affect many risks / controls, or otherwise could not reasonably be described as risks in their own right. Mitigations could be deployed against them
- Target Impact setting out the impact the PAB wishes to attain for the risk by the end of the year is agreed under the ROP and added to the RER
- More emphasis placed on strengthening controls as a way to mitigate risks
- The APAR is produced quarterly to give a view through the year of progress towards risk targets

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A number of changes to how the PAF Procedures are prepared for each assurance year are recommended to make them more reactive to risk and more accessible for stakeholders.

See Appendix B for a suggested calendar, including an industry day in January where ELEXON can present the risk register and operating plan to parties before they are published for comment.

PAF Document

- 4.1 Currently there is no one place where the assurance framework is described outside of Section Z, and we recognise the stakeholder feedback that the PAF documents aren't sufficiently user friendly. We propose to have a guidance document – the 'PAF Document' that sets out how the PAF is operated, roles and responsibilities and the opportunities for parties to contribute.
- 4.2 Although this would add another document to the PAF suite, we feel a single location where the PAF is described in plain English, which links to the key components such as the risk register and operating plan would make the PAF easier to engage with. Each PAF Procedure document would not need to repeat the procedural information.
- 4.3 It is not intended there would be a new version for each PAOP, but it would be updated to reflect any changes in PAF approach. It would not be a configurable item but the PAB may wish to endorse it for any significant changes.
- 4.4 A provisional draft is provided as Attachment 1.

PAB Strategy

- 4.5 A strategy has been in place for some years listing projects the PAA is undertaking. A strategy is not required by the BSC, but the PAB can develop working practices and procedures it considers necessary (Section Z 1.4.3). A strategic direction for the PAF activities focuses investment of time and resources for the PAA and parties. We propose the strategy is refreshed and going forward reviewed annually.
- 4.6 Similar in approach to business planning, the high level objective(s) in the strategy can cover how the PAF is operated, costs, key risks, or special projects. It would primarily inform the operating plan (ROP).
- 4.7 The PAA would draft the strategy, and work with the PAB Chair and the PAB to review and finalise it. The inputs to the strategy should be broad, for example the BSC Panel strategy, the BSC Change pipeline, issues under discussion in other codes, emerging technologies, market changes, regulatory policies; anything which could result in an effect on BSC Parties and Settlement data in the coming year and beyond.
- 4.8 Parties tell us that investing in risk management is easier with a clear strategy supported by error expressed in financial terms. We recommend the PAB provides the strategy to the BSC Panel for information.

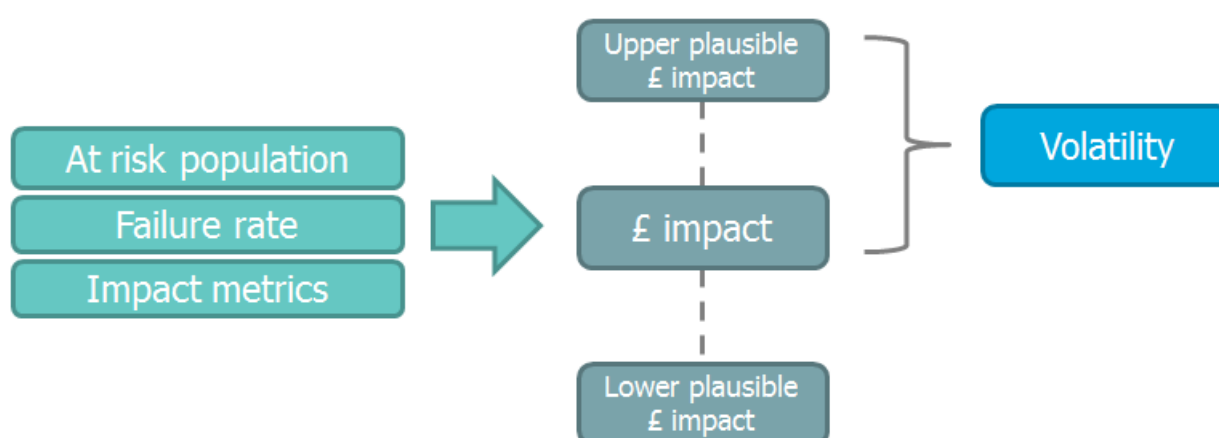
Risk Evaluation Methodology

- 4.9 The proposed methodology is provided as Attachment 2. It will be presented to the September 2018 PAB meeting for the PAB to issue for stakeholder comment, and subsequently presented for agreement in November. Note that as with the full PAF document suite, the intention is to publish it in a new format for the start of the next assurance year on 1 April 2019 (see paragraph 6.6).
- 4.10 Scoring risks is important for prioritisation and decisions on effort (budget) to put towards mitigations.
- 4.11 The Code directs us to take into account probability and impact when rating risks. The current methodology uses a 5x5 matrix of probability and impact to calculate a gross significance, adjusted for control strength to

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give a 'net significance'. Feedback at the start of the PAF Review was that the assessment method should be improved, risks should be measured more accurately, and that a financial estimate of risk impact would be preferable.

- 4.12 We are proposing a new approach to evaluating the materiality of risks, which we believe fulfils these requirements for both types of Settlement Risk:
- **binary** - likely to happen only a few times or not at all, but individual instances could have a high impact
 - **transactional** - likely to happen many times in any year, but the impact from an individual instance is on average low
- 4.13 The new approach establishes a plausible gross financial impact on Settlement for the coming year, and identifies the volatility i.e. the relative distance between the middle and upper plausible impact values as high, medium or low. In summary:



Impact

- 4.14 Our methodology seeks to derive an impact value that represents the most likely error in Settlement in the coming year, in financial terms. It incorporates both the probability (failure rate) and impact (value of the individual failures).
- 4.15 The Impact is a prediction based on available data and judgement of what the likely error would be if risk mitigations were not deployed.
- 4.16 Compelling use of data was a key project objective, however availability of data will vary by risk as ELEXON only has access to certain data sets⁶. The data may only give a partial indication of the risk, e.g. PARMs Serials can report instances with particular features, but some may be legitimate (i.e. not errors), therefore the Serials do not give a definitive statement of non-compliances. We aim to achieve the objective by using as broad a range of relevant data items as possible, overlaid with realistic assumptions.

⁶ The data provision workstream of the PAF Review project will recommend alternative data sources that could be used in PAF risk management; due to conclude mid 2019

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- 4.17 We have not used detailed scenario modelling to replicate Settlement processes and calculate accurate probable risk profiles – for most risks that would not be possible and we don't consider it would be efficient to spend time trying. We will take historical data into account as that is a useful starting point to forecast future performance, recognising that was influenced by many factors including the controls and PAF techniques applied in those years. Therefore we will also consider what factors may cause any of the metrics (at risk population, failure rate etc.) to be different in the coming year, e.g. upcoming regulatory changes.
- 4.18 We are not proposing to distinguish between Settlement Runs when evaluating error volumes, that is, disregarding non-compliances affecting Settlement volumes at earlier run types. Other than for the SP08 performance standards for energy on actual data by certain runs, BSC obligations are generally not run specific. Whilst error that impacts later runs may be of higher concern, we feel that disregarding non-compliances at earlier runs might not drive the right behaviours in terms of preventing future risk and avoiding the costs of identifying problems, working on exception reports and rectification actions.
- 4.19 Examples of data sources for the at risk population, failure rate and other metrics (key risk indicators) are in Appendix C.
- 4.20 The Impact values can be placed into bands to support categorisation and reporting. The provisional bands we are recommending are below; the PAB may wish to revise these when all the risks are scored after November 2019.

Impact rating	Description
5	Extreme - Potential financial impact of £25m or more
4	Major - Potential financial impact of between £10m and £25m
3	Moderate - Potential financial impact of between £2m and £10m
2	Minor - Potential financial impact of between £500k and £5m
1	Incidental - Potential financial impact of less than £500k

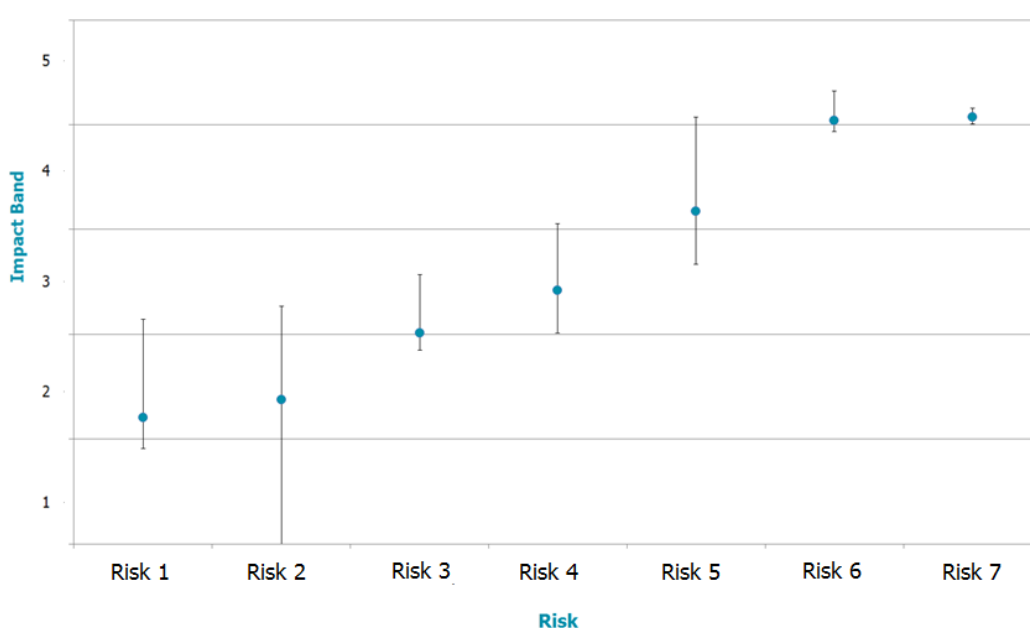
- 4.21 We acknowledge that even a "minor" impact could be significant if it is skewed towards a few smaller parties. If the PAB or the PAA is aware that this situation is occurring, the PAB's risk appetite may change and it may wish to take some different mitigating action – see the ROP section below.
- 4.22 We note that some party types are not affected directly by errors in Settlement charges or allocation of energy volumes, for instance Party Agents. However, they may be impacted by costs associated with managing exceptions, resubmitting information, chasing missing data, operating workarounds etc. Indeed, Section Z directs the PAB to have regard to the efficient, accurate and co-ordinated transfer of Metering Systems between Suppliers and Supplier Agents. Some of the new fields we are proposing in the RER will allow for such impacts to be captured for consideration in risk mitigation.

Volatility

- 4.23 In deriving an Impact rating, we also identify an upper and lower plausible range, which comes from inherent uncertainty in forecasting the contributing factors. The degree of uncertainty varies by risk; it is useful and important to understand because it should influence how we choose to mitigate the risks.
- 4.24 We have identified several causes of volatility:

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- a) Lack of information about the risk perhaps because it is a new process, leading to a high degree of estimation and assumption
 - b) Highly binary events, hard to predict whether one will occur in the period
 - c) Diverse impacts e.g. whether the failure could impact high or low volume metering systems
- 4.25 To illustrate how these causes may inform mitigation decisions, for cause a) the PAB may wish to deploy additional detective techniques to gather information about the risk; whereas for cause c) the PAB may wish to strengthen controls or target certain PAP types to limit the chance of high volume sites being affected.
- 4.26 The diagram below shows an example of how risks scored in this way could be presented with the forecast error value, and the upper/lower plausible range.



- 4.27 The fields in the risk register defining the scoring would be:

RER

ID	The risk that...	Impact	Impact Rationale	Impact band	Lower Impact	Upper Impact	Volatility	Volatility rationale
#	Title	£		1-5	£	£	H/M/L	

A worked example is provided in Appendix D.

Other REM points

- 4.28 In regards to the PAF Review project objective to treat Central Volume Allocation (CVA) and Supplier Volume Allocation (SVA) risks equally, we note that Section Z 5.1 instructs us to treat all CVA risks as “significant”. We propose to deliver on both these intents by scoring risks using the same methodology, but performing

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regular reviews of the key risk indicators for CVA risks - we anticipate approximately quarterly would be appropriate, dependent on how often refreshed key risk indicators are available.

- 4.29 We are proposing the REM is reviewed annually and stakeholders invited to comment on it, but that a new version is not automatically produced for each assurance year as now. There would be a single version live at any time, with changes made as necessary either during the annual review or as a within period revision. It is intended that the REM is issued alongside the RER, so stakeholders can see (and comment on) the methodology and the resultant risk register together. See the section on stakeholder engagement further on for more information about options for facilitating better interaction in general with interested parties.
- 4.30 We are proposing new categories to aid understanding and reporting of risks; full details are in the risk register.

Registration and appointments	Metering	Data retrieval and processing	Central aggregation and trading charges
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- 4.31 Note that it would be misleading to add up individual risk Impact values to a total Settlement Risk error value, as there will be some double counting where an error appears in multiple risks. Similarly, addressing one risk may reduce error in another risk due to the "meter to bank" flow of data, and of errors. We should seek to understand the main points at which this could happen in order to forecast the impact of mitigations.

Risk Evaluation Register

- 4.32 A template for the risk register and a provisional list of risks are provided as Attachments 3 and 4 respectively. It will be presented in its final version to the November 2018 PAB meeting for the PAB to issue for stakeholder comment, and subsequently presented for agreement in January 2019. Note that as with the full PAF document suite, the intention is to publish the approved content in a new format for the start of the next assurance year on 1 April 2019.
- 4.33 Provision for the RER is set out in Section Z. We would recommend the PAA performs the annual review based on the version live at the time. We recommend ELEXON provides additional support to PAPs in understanding the register and encourage feedback on the risks, e.g.:
- PAA to deliver engagement such as one-one meetings, webinars, updated web pages describe the key risks and the changes proposed – particularly for the annual review, but through the year too
 - A change log within the RER sets out what has been amended in each draft / live version and why
 - PAA provides a visual display of the risks, preferably mapped to BSC processes so parties can see where the risks are falling
 - Risks are presented in a way that those relevant to individual PAP roles can be filtered and extracted – in particular where the roles can cause or control a risk.
 - Risks are presented in categories to e.g. see which part of the arrangements have the potential to introduce more Settlement error.
- 4.34 The current RER has 208 risks, which are described at a granular level to avoid cumulative impacts that mask root causes. The revised risk register drawn up under the project has aggregated risk areas, with key causes as "risk factors". The risks can be merged or split (e.g. by risk factor or market segment) at any time if that better supports measurement and management.

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4.35 We have proposed some controls are treated as risks due to their impact on the error value of non-compliances i.e. commissioning and key exception reports. We don't recommend there are hard and fast rules to what is defined as a Settlement Risk (beyond the definition in the BSC of a non-compliance that affects Settlement / processes used for effecting Settlement). Capturing and describing risks should be determined by the PAB to focus attention on problem areas and facilitate effective risk management.

Risk register fields

4.36 We are proposing a number of additional fields in the risk register:

- **Risk factors** - prevalent / material root causes, i.e. processes which if not performed compliantly are most likely to cause the risk to manifest. This approach allows us to recognise the main non-compliances PAPs should seek to avoid, without many low impact risks included on the register, masking more important risks.
- **Key risk indicators** – the main data items by which we can measure the probability of any failures occurring and the impact if they do, allowing parties to understand how risks have been evaluated.
- **Performance Assurance Parties** – Currently the risk register lists any PAP role in some way involved in a risk. We are proposing that the party types who may cause (via the risk factors) or those who may be able to help control a risk are identified separately. This could be flagged in the consultations for material changes to the RER, to encourage them to respond.
- **Rationales** - We are proposing to include rationale fields for the risk Impact, Volatility, control strength and (in the operating plan) target Impact. This will assist stakeholders in understanding why the ratings are being used, and support them in reviewing and submitting comments.
- **Supplementary information** – Stakeholders told us that understanding impacts of risks and of controls that fell *outside* of the BSC would be useful to aid parties in understanding and controlling their own risks, including in securing investment and internal focus. ELEXON's guidance on managing SP08 for Non-Half Hourly performance (97%)⁷ is an example, which parties find useful. We therefore propose to include fields in the risk register to capture this information.

Events

4.37 We are proposing to create a list of "events" to accompany the risks. We observed that there were scenarios influencing risks that couldn't be described as risks in their own right, or affected multiple risks which would make it hard to helpfully capture them on the risk register. This was backed up by responses to a request for information we issued in May 2018, in which stakeholders noted a number of similar situations that they viewed as key risks, see Attachment 8.

4.38 We have provisionally termed these as events, and we recommend a list is maintained within the risk register, see Attachment 3. We suggest that they are considered as part of the annual RER review and as market arrangements evolve (see PAB Strategy); and in terms of mitigating their effects, when the operating plan is being drafted (see below).

List of Performance Assurance Techniques

⁷ <https://www.elexon.co.uk/guidance-note/supplier-guidance-achieving-97/>

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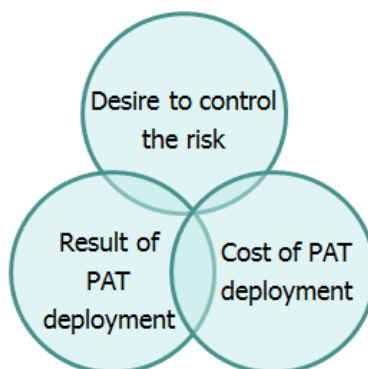
- 4.39 Section Z of the BSC requires the Panel to publish a list of the available PATs; the list is provided on the website and also within the ROP. We don't propose any change to the PATs at this time⁸.

Risk Operating Plan

- 4.40 Proposed templates for the ROP (word document and an accompanying excel ledger) are in Attachments 5 and 6 respectively. A full version will be presented to the January 2019 PAB meeting before publication for stakeholder comment, and final approval in March 2019. As with the other PAF documents, the intention is to publish the approved content in a revised format for the start of the next PAOP on 1 April 2019.
- 4.41 Section Z5.6 sets out the provisions for an operating plan in which the PAB determines the techniques that should be applied to each risk and the estimated cost of the techniques.
- 4.42 To date, the operating plan has focused on the top Settlement Risks (those with a Net Significance of 12 or above) and described those specific techniques assigned for use in the year to help mitigate them. Many of the PATs are described as being available either for use (e.g. Qualification and Error and Failure Resolution (EFR)) or mandated (e.g. Supplier Charges). Few techniques are deployed deliberately and with a described intended outcome. Costs are presented as total operational and total contractual (for the three external service providers). Due to the many-many relationships of the risks, PAP roles involved, and the number / type of techniques available, the operating plan can be difficult to present in a useful format.

Target ratings

- 4.43 In order to more clearly focus PAF resource, we are proposing a Target Impact is set. This expresses the PAB's risk appetite: the type and amount of Settlement Risk that can be tolerated in the coming year where the availability / cost of appropriate mitigation is factored in. When setting the Target Impact, the PAB should consider the extent to which the risk should be controlled, what is feasible with the PATs available, and what is a reasonable amount to invest in those PATs.



- 4.44 The result would be a **target impact** value, expressed in financial terms, a **variance** from current impact value, and any **reduction in the volatility level** that the PAB wishes to achieve.

⁸ The PATs are being reviewed under another workstream of the review - <https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-framework-review/>

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We propose that the targets are included in the published version of the risk register for clarity, along with the rationale for the target. In summary:

RER								ROP				
ID	The risk that...	Impact	Impact Rationale	Impact band	Lower Impact	Upper Impact	Volatility	Volatility rationale	Target Impact	Variance	Target rationale	Target volatility
#	Title	£		1-5	£	£	H/M/L		£	£		Tolerate / reduce

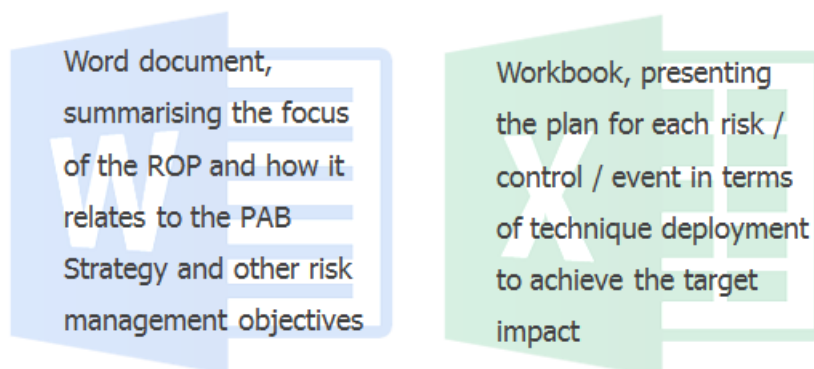
- 4.45 The PAB and the PAA would work together to establish the most appropriate techniques and the extent to which they could mitigate the risk (reduce the error volume / value), and an appropriate budget for doing so.

Other ROP points

- 4.46 We recommend that more emphasis should be placed on how controls can be strengthened to mitigate risks; the PATs can also be applied to controls as they are described in the BSC, which affect Settlement processes.
- 4.47 As noted in the RER section above, we propose that mitigation of the “events” is considered. For example education for certain party types, or post-Qualification audits on new entrants that have outsourced Settlement functions.
- 4.48 Some performance standards are defined in the BSC, e.g. Serial SP08 (see BSC Section S-1 2). In setting the Target Impact for related risks, the PAB may choose to use that as the minimum tolerable performance standard or set a different tolerance (higher or lower) for the year. The priority of the risks does not negate the obligation on BSC Parties and their agents to be compliant with the Code. The PAB could also seek to change the standard in the BSC to reflect a realistic tolerable error level – or to remove the standard from the BSC altogether, to give flexibility to the Panel / PAB to determine acceptable error volumes.

Techniques available for deployment

- 4.49 The ROP template we have drafted is in two parts, as now:



- 4.50 Parties will be able to filter by their role and understand what circumstances may lead to them having the technique deployed, and how that links to any targeted improvement in the risk.
- 4.51 We have distinguished between techniques that are likely to be planned for use in the year (such as audits), and those that should be available for use to react to situations such as EFR (for material non-compliances), Trading Disputes (to correct error in Settlement) or Qualification (for new parties).

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- 4.52 In determining the extent to which a technique is likely to be effective in reducing risk, we should assume that parties will co-operate and take necessary corrective action to resolve issues and implement controls. EFR / escalation provides for action against parties that are failing to do so.

Costs

- 4.53 Deployment of techniques will take into account costs to serve estimates to support the PAB's decision making around the budget to allocate to risk mitigation.

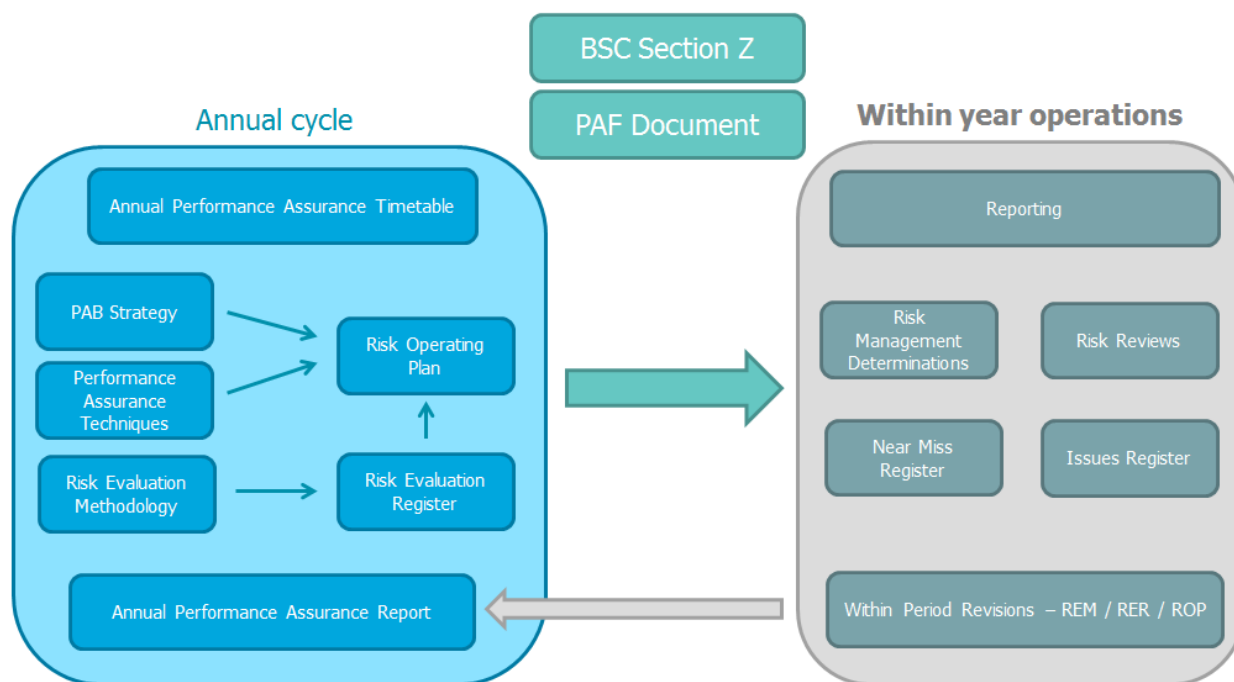
Annual Performance Assurance Report

- 4.54 The APAR is described in Section Z; it provides a summary of the results of the assurance procedures, the extent to which risks were mitigated and the cost of PAT deployment – compared to the budget set in the ROP.
- 4.55 The main recommendation of this review for the APAR is that versions are produced quarterly which track these results and costs through the year. By actively pausing to reflect on progress towards Target Impacts, we can evaluate if PAT deployment should be amended, or indeed if the targets should be amended. Additionally, it would provide information to feed into the development of the PAB Strategy and ROP for the next PAOP (which must be worked on some months before the PAOP ends), and allow publication of the APAR sooner after the year ends as much of the information is already collated.
- 4.56 An example APAR template is in Attachment 7, which includes commentary on the top risks, risk themes, observations on key drivers of risks, which risks have increased/decreased in significance through the year, and what the PAB has done to mitigate risks. Budget information is included, and also comment on PAB/PAP engagement.
- 4.57 Recommendations for future PAOP(s) would be set out, including new / amended PATs and ways of delivering the PAF.
- 4.58 If the PAB approves this recommendation, the first quarterly version would be produced in July 2019. We recommend it is written by the PAA, and issued to the PAB for information and comment. The PAB may choose to note any key points to the Panel, or do that at the end of the year.
- 4.59 We do note that in commenting on the extent to which PATs have mitigated risks, there may be unknown factors not visible to the PAA or PAB that have influenced risks and issues in the year, within PAP organisations. However, we should seek to evaluate PAT impact as far as possible. A benefit of increased stakeholder engagement is that we may gain insight into such factors and be able to better take them into account / react to them.

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5. Within year operations

The Performance Assurance Operating Period (PAOP) runs from 1 April to 31 March. Within the period, techniques are deployed, key risk indicators monitored and reported on, risks reviewed and the PAF Procedures amended.



Recommendations in this section – Within year operations

- Three main areas of the proposed PAF reporting suite: risk reporting, party reporting and insights
- Risks are reviewed according to an agreed schedule, so that higher priority risks are reviewed most frequently
- A register is maintained capturing all issues (non-compliances) mapped to the related risk(s)
- A near-miss register is used to inform risk assessment and management, initially deployed in certain circumstances
- The PAB develops “policies” for key risks, through which it can direct the PAA in how to treat certain risks
- A log is maintained by the PAB Secretary of Risk Management Determinations made
- The within-period revision process is expedited where possible
- Reviews of BSC Change is formalised and the conclusions made available to stakeholders
- Various improvements suggested to stakeholder engagement
- The current PAF Key Performance Indicators are refreshed and reported routinely
- A PAB decision log / precedent register is maintained to support decision making and consistency

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Reporting

5.1 Reporting underpins the operations of the PAF. There are three main areas of the proposed PAF reporting suite:

Risk reporting	PAP reporting	Insight
<p>Each Settlement Risk would be reviewed at the agreed frequency, primarily using the key risk indicators used to rate it for the RER, to identify any increase / decrease in significance.</p> <p>The PAA would present a high level risk dashboard to the PAB and stakeholders showing any movement in risk ratings and noting key messages.</p> <p>As necessary, more detailed risk reports would be provided to the PAB on individual risks, in particular where further action may be required to meet the target impact.</p>	<p>For each Settlement Risk in focus based on the target ratings set by the ROP, the PAA would identify the potential contribution of each PAP either from the potential to cause the risk to occur or delivering a control.</p> <p>The PAA would build up and maintain a risk profile on each PAP, to give insight into likely resilience to emerging risks or other changes.</p> <p>Peer comparison would allow PAPs to see their risk contribution against other PAPs</p> <p>Usually, PAP contribution reporting would accompany risk reports, but if a PAP was observed to be excessively contributing to any risk at any time, the PAA would propose action to the PAB against the relevant risk(s) as RMDs for PAT deployment, or escalations for failure to manage compliance.</p>	<p>General health of the market commentary.</p> <p>Routine review of data items such as Annual Demand Ratios, Group Correction Factors, Transmission Losses, System Prices, Generation Capacity/Demand Capacity checks, and Energy volume changes across Settlement Runs.</p> <p>Information and metrics relating to emerging risks, new technologies e.g. use of behind the meter devices.</p>

Sources of information

- Key risk indicators – the PAA manages these, and as noted above the main ones are listed in the RER. Stakeholders would be encouraged to suggest new ideas.
- PAT findings (may also be key risk indicators) – in particular from the detective techniques such as audits, PARMS Serials and Material Error Monitoring. PAT findings should always be reported in relation to the risks, rather than as standalone reports.
- Issues and near-misses – see below
- Market insight data – ELEXON monitors many data items that can give valuable insights about trends, data quality, and Settlement accuracy at a macro level.
- Stakeholder insight – ELEXON staff members such as technique owners and Operational Support Managers (OSM) will be available for PAPs and other stakeholders to share information about current or potential issues and what risks they are concerned about, to help inform the PAB’s decisions.
- Change Proposals, Issues and Modifications – both draft or formally raised; proposed changes indicate the BSC obligations / processes that could be improved, or are new and may introduce risk.

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- Industry change – e.g. from Ofgem or other Codes
 - Innovations and market development – e.g. use of new technology or new business models, which may introduce risk or be an opportunity to improve Settlement data quality.
- 5.2 There will be many ways to present information on the risk landscape, issues and progress with risk mitigation. We are not recommending any particular formats of PAF reporting here, rather, key principles:
- Co-ordination of information from varied data sources
 - Key messages drawn out – the “so what?”
 - Use of dashboards to flag pertinent information, such as would be aimed at senior management to capture attention and encourage action; further detail provided where necessary
 - Present information aligned with the Settlement Risks wherever possible

Risk reviews

- 5.3 We are proposing that when the ROP is developed, a schedule of Settlement Risk reviews is agreed, whereby the higher priority and CVA risks are reviewed more frequently – perhaps quarterly or monthly, and lower priority risks are reviewed every 6-12 months. All risks would be reviewed at least once a year as part of the annual RER review.
- 5.4 The purpose of the review would be to assess if the risk was increasing, decreasing or stable from the forecast Impact, and the affect that any deployed PATs appeared to be having. If the risk was changing, or the PATs were not progressing the risk towards the Target Impact (or had already exceeded it), the PAA would suggest changes to the PAB for approval (e.g. RER, ROP or RMD variations) as within period revisions or at the next review.
- 5.5 The type of PAT deployment may influence the frequency of review e.g. if the key risk indicator was a monthly PARMs Serial, versus data from the annual BSC Audit.
- 5.6 The schedule could be varied; there may be reasons that the PAA skips a review, or reviews a risk ahead of the schedule, for example:
- Changes in generic risk metrics such as system prices
 - Change Proposals or Modifications
 - Reports of new material issues
- 5.7 The reviews would look at the key risk indicators, RMDs, issues and near-misses, related BSC change, other factors including those in the reporting section above, that may influence the risk for the remainder of the year. The PAA would refresh any necessary fields in the RER as a within period revision.
- 5.8 The risk reviews are an important part of keeping the PAF as a live process, that facilitate continuous management of risks.

Issue register

- 5.9 To date, the majority of the PAF’s focus has been on issues – where risks have manifested. In proposing to move the focus onto risks, we are not suggesting that issues are no longer important, rather that they should be used to inform risk management to prevent future instances.
- 5.10 We are recommending that a single register is maintained capturing all issues (non-compliances) mapped to the related risk(s) to inform risk reviews.

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5.11 A list of proposed fields for the issues register is included in Appendix E.

Near-miss register

- 5.12 A near-miss register is a common feature of risk management; it provides an important opportunity to stop risks manifesting at all or to a material extent. We recognise that as PAPs are individual commercial entities, they may not actively report near-misses to ELEXON routinely. We see a similar reluctance in use of the re-qualification and Bulk Change of Agent techniques, where parties actively avoid inviting PAF attention.
- 5.13 However, we can see real benefit and opportunity in using a near-miss register in specific situations, e.g. new parties going live or in the early days after implementation of a BSC change that has had material implications for particular PAP types.
- 5.14 We do employ a similar approach in audits, where low materiality observations (Technical Assurance of Performance Assurance Parties - TAPAP), MLPs (BSC Audit) and Category 2 non-compliances (Technical Assurance of Metering - TAM) are captured to alert the party to where their operations could be improved. ELEXON can then support in rectification if required.
- 5.15 The Issue 69⁹ working group felt that a near-miss process should avoid assigning blame or resulting in negative consequences for the party, although in some circumstances we might want to obtain confirmation that the root cause / weakness had been addressed so future (material) instances would be prevented. Any reporting into the risk reviews of near-misses would be anonymous outside of ELEXON and the PAB.
- 5.16 We recommend that a near-miss registers is used; initially deployed in certain circumstances as described above. We envisage that ELEXON would issue guidance to affected parties and track progress. A list of proposed fields for the near-miss register is included in Appendix F.

Risk policies

- 5.17 The operating plan determines how the techniques should be deployed to manage the risk; but not which PAPs should have those techniques applied in the year in order to meet the Target Impacts. Sometimes application will be prescribed by the BSC for all parties in the relevant roles, e.g. Supplier Charges. Other times deployment will be at the PAB's discretion based on an individual party's (potential) contribution to a risk the PAB wants to mitigate.
- 5.18 Currently we use the Business Unit Settlement Risk Ratings¹⁰ to identify, for each measured top risk, which parties are compliant (green), have a low level of error / non-compliance (amber) or have a level of error / non-compliance that is above the tolerance set by the PAB (red). This approach aligns with good practice but we would recommended it is enhanced to reflect the wider range of risk indicators we are aiming to use in risk evaluation, and support meeting the Target Impacts.
- 5.19 We are proposing the PAB develops "policies" for key risks, through which it can direct the PAA in how to treat certain risks, e.g. those in focus in the year. That will allow the PAA and parties to work consistently to a pragmatic set of guidelines that set out the PAB's view as to what is acceptable performance, how the PAA

⁹ <https://www.elexon.co.uk/smg-issue/issue-69/>

¹⁰ <https://www.elexon.co.uk/guidance-note/business-unit-settlement-risk-ratings-busrrs/>

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should manage underperformance, and any triggers for further techniques, application of EFR or escalation. The policy should offer an indication of why parties may get a technique deployed against them in line with the ROP.

- 5.20 As noted before, deploying PATs according to the PAB's risk appetite doesn't supersede the obligation on PAPs to be fully compliant with the BSC.

Risk Management Determination log

- 5.21 RMDs are decisions the PAB takes to deploy PATs against individual PAPs; they should reflect what is provided for in the ROP and be targeted at mitigating risk to the extent described by the target risk rating.
- 5.22 Section Z assigns responsibility for RMDs to the PAB, and consequently they are captured in the PAB minutes. However, they are not recorded explicitly as RMDs, and there is no log of which risks they relate to. Having a record of PAT deployment by risk will support risk reviews and reporting.
- 5.23 We propose that a log is maintained by the PAB Secretary that can be reviewed by the PAA and PAB as a source of risk indicators, and otherwise reported e.g. in the PAF KPIs (see paragraph 5.34). A list of proposed fields for the RMD register is included in Appendix G.
- 5.24 Note that a PAT cannot be deployed unless it's provided for in the ROP, so if the PAB wishes to apply a new technique to a type of PAP, that should be preceded by a change to the ROP. For techniques such as Supplier Charges or PARMS Serials, which are mandated to all PAPs in the relevant party type on a continuous basis, an entry on the RMD register would not add value.

Within period revisions

- 5.25 An objective of this PAF Review is to make the PAF more dynamic and responsive to change. Within period revisions provide for in-year change to the evaluation methodology, the risk register and the operating plan. However, to date these have proven to be somewhat cumbersome to carry out. The PAB is required to consult on material changes and the monthly PAB meeting schedule means a change can take 3-4 months to be proposed, reviewed and approved.
- 5.26 We think that the process could be sped up with some consideration of how the PAA communicates the change to the PAB to approve / decide on materiality and how the stakeholder comment process is managed. For instance, through use of ex-committee decisions (at the PAB's discretion), clarity of affected PAP roles and targeted information about the change, or use of on-line comment tools. The draft PAF Document (Attachment 1) contains examples of what might be (im)material.
- 5.27 We would envisage the REM changing the least, although the PAB may wish to adjust impact bandings or volatility indicators to better support risk analysis and decisions over risk mitigation.

Reviews of BSC and industry change

- 5.28 The PAA reviews all BSC Changes (primarily Modifications and Change Proposals) for impacts on the risks or controls as part of ELEXON's internal impact assessment process.
- 5.29 We are recommending this review is formalised and made more visible, and expanded to include events (see paragraph 4.37).
- 5.30 The review of changes should explicitly include consideration of:
- Avoiding or reducing potential risks introduced by the solution

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- Introduction/strengthening of controls
 - Opportunities for improved risk reporting (e.g. enhanced or automated monitoring of processes to remove burden from parties or improve reporting accuracy)
 - How the PAF should be deployed before, during and after implementation of the change (e.g. near miss reporting, re-Qualification, or post-implementation audits)
 - Any action required if the change is not approved
 - How changes are batched into releases, and any additional risks or opportunities from the combination of changes (e.g. the burden on particular types of PAP)
- 5.31 Conclusions and any recommendations for action should be presented to the PAB in sufficient time to act on them.

Stakeholder engagement

- 5.32 Consistent feedback from stakeholders throughout the PAF Review has been the importance of engaging with them in a clear way. They can provide critical views from the front line - PAPs are affected by risks that manifest and they run the operations that can avoid, control or exacerbate Settlement errors. The PAF is there to protect BSC Parties, and help ensure they and their agents receive accurate, timely data from other participants.
- 5.33 We are recommending a number of ways to improve engagement going forward; many of these are described in detail elsewhere in this report. See Appendix H for a consolidated list. Feedback via OSMs, the ELEXON customer survey and PAB member insights will tell us if we are getting this right.

PAF Key Performance Indicators

- 5.34 We recommend the current PAF Key Performance Indicators¹¹ (KPI) are refreshed and reported to the PAB within the quarterly APAR; see Attachment 7. The KPIs should measure whether the PAF is operating in an efficient and effective way. Metrics that could be of use include risk reviews completed according to the schedule, stakeholder comments received on RER/ROP changes, volume and type of stakeholder engagement events, PAB meeting statistics.

PAB meetings

- 5.35 The general theme of this report has been a move away from a focus on issue management, to the risks. The PAB agenda is critical to achieving this. Issues should be presented and discussed within the context of risks and whether the forward-looking Impacts and Target Impacts should change to reflect the situation and the PAB's risk appetite.
- 5.36 We recommend a decision log / precedent register is maintained by the PAB Secretary to support decision making and consistency; this could link to the PAB's policies on key risks.
- 5.37 Suggested agenda sections (outside the standard meeting administration):
-

¹¹ <https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-reports/>

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- Risk register review – top risks dashboard, new/closed risks, latest reviewed risks, general comment on risk landscape, impacts from BSC change
 - Papers for approval/information – documents the PAB is required to approve or produce, PAT-related information (outside of the relevant risks)
 - Issue management – review of issues (risks that have manifested) including actions and progress e.g. EFR plans and escalations which can take up a high proportion of meeting time
- 5.38 We suggest that the PAB considers where particular items of business could be managed ex-committee. For instance could any decisions be taken outside of the monthly meeting to reduce time taken to complete actions and avoid extended timescales for within period revisions. However, such arrangements should not over burden PAB members or reduce scrutiny and transparency.

6. Other areas of review objectives

Recommendations in this section – Other areas

- The PAF document set is published in a design format that supports parties in better understanding each document and the whole PAF process, and aligns with the PAF pages on the ELEXON website

Non-traditional business models

- 6.1 A key objective of the PAF Review was to consider how the PAF could manage the challenges presented by non-traditional business models such as the 'off the shelf' Supplier and Agent IDs brought through Qualification by service providers who then operate the back office processes. We have developed the PAF design to be sufficiently flexible and robust enough to respond to any such scenarios. For instance:
- Events – we have included this scenario as an event in the RER, to provide opportunity for the PAB to evaluate mitigating actions required where multiple risks are involved
 - PAP risk profile – building up more information about a PAP's operations to gain insight into business models and organisation structures than may mean they are more or less exposed to Settlement Risks
 - PAB Strategy – the PAB can direct focus on any area of concern
 - PAB policies – envisioned as a vehicle for the PAB to set expectations of performance against risks in focus; the PAB may wish to direct the PAA to include certain PAP types under certain circumstances

Licensed Distribution System Operator

- 6.2 Another aim of the review was to consider how the PAF could better address risks related to Licensed Distribution System Operator (LDSO) activities. Relevant aspects of the proposed PAF design are:

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- PAF risk profile – the BSC doesn't distinguish between LDSOs and operators of embedded networks (e.g. the Independent Distribution Network Operator – IDNO – as recognised under the DCUSA¹²). The size of the BSC Parties operating as LDSOs, their background as an established regional operator or the extent to which their networks are embedded may be important in understanding if and how the PAFs may contribute more or less to certain non-compliances and risk of Settlement error
- PAF roles in risk factors and controls – drawing out more clearly where and how PAFs can cause or control risks; this field will be refreshed in the new risk register
- Stakeholder engagement – the proposed risk manager function has responsibility for proactively meeting with stakeholders to increase communication in both directions – better understanding of compliance and the impact of non-compliance, and understanding what risks parties are concerned about
- PAB Strategy – the PAB can direct focus on any area of concern

CVA risks

- 6.3 This review has been tasked with establishing a more equal footing for CVA and SVA risks, although the BSC does direct that all CVA risks are treated as significant in terms of probability and impact. As noted earlier, we propose this is done through carrying out regular re-assessments of the key risk indicators to ensure any changes to the impact of CVA risks are detected and managed in an appropriate timescale. This would not preclude a risk being reviewed sooner if there was a significant event (e.g. a large trading dispute). The PAB should also place appropriate focus on CVA risks when considering mitigating actions in the operating plan.
- 6.4 We note that knowledge of CVA processes is more limited generally in the BSC constituency, which could inhibit risk evaluation and management. We feel the following elements of the proposed PAF approach will help:
- The refreshed risk register, with root causes described, provides the opportunity to capture more information about the CVA risks
 - Use of available data to assess the impact of CVA risk impact allows consideration of proportionate focus from the PAF, so risks don't go undetected and error enters Settlement
 - We are proposing that the roles involved are identified, which isn't included in the current register for CVA risks
- 6.5 The PAA can establish engagement with CVA experts and encourage reviews of the risk register.

Design of the document set

- 6.6 To improve accessibility to the PAF, we are recommending the document set is designed so the parts fit together with supporting structure of the web pages. For instance using colours and symbols to indicate where the document sits in the process of risk evaluation, risk register and operating plan.

¹² Distribution and Connection Use of System Agreement - <https://www.dcusa.co.uk/SitePages/Documents/DCUSA-Documents.aspx>

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Supporting systems and processes

- 6.7 The PAA runs a number of systems and processes to manage the risks and related data, and produce reports. We are not recommending here any particular tools or applications that may be used to support the PAF, e.g. a database to hold the risk register, data analysis tools to assess risk indicators and produce reports. The PAT Review and Data Provision workstreams of this project will likely suggest enhancements and new approaches to data sources, uses, collection and reporting.
- 6.8 In general, we would recommend running the new PAF approach on a more manual basis for a period of time before deciding if and how to use particular systems. No mandated activities would be ceased unless the requirement was changed. We anticipate ELEXON will propose an approach to the PAB in the coming months for data and reporting before and immediately after implementation of this new PAF design.

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SECTION 3 - NEXT STEPS

7. Implementation of the approved PAF design

- 7.1 The PAB is asked to consider the recommendations set out in this report, and direct the PAA as to which should be approved, if there are any particular conditions for doing so, and whether there are any other changes the PAB considers necessary.
- 7.2 ELEXON will endeavour to implement the changes for 1 April 2019. The timetable for updating and approving the REM, RER and ROP are already underway:
- The REM¹³ will be issued for stakeholder comment, at the PAB's instruction, after the September 2018 PAB meeting, and presented back for final PAB approval in November.
 - The RER will be issued for stakeholder comment, if approved by the PAB, after the November 2018 PAB meeting, and presented back for final PAB approval in January 2019.
 - The ROP will be published for stakeholder comment, if approved by the PAB, after the January 2019 PAB meeting, and presented back for final PAB approval in March 2019.
- 7.3 ELEXON will seek to provide additional support to stakeholders through these reviews, by providing (for instance) examples of scored risks, opportunities for teleconferences and to discuss risks and technique deployment with ELEXON staff.
- 7.4 Other key areas for consideration are
- **transition of the top risk focus** – by December 2018, we will have a provisional view of the forecast materiality of Settlement Risks in the coming year, and how that compares to the risks currently scored with a Net Significance of 12 or over. The PAB may choose to transition gradually or as a big bang to ensure focus on material non-compliances is maintained, balanced against investing PAA and party resource in managing EFR plans etc for lower impact risks (according to the new scoring methodology).
 - **reporting** - will need to be developed (see paragraph 5.1 above), which may evolve of the first year or so of working with the new Settlement Risks and other elements of this proposed design.
- 7.5 BSC Parties and Party Agents remained required to be compliant with the BSC, so it will be reasonable for the PAB to decide to keep monitoring some risks through the transition period, even if the area of the non-compliance is agreed to be lower risk in the new risk register and Target Impact in the operating plan.

¹³ See PAB paper PAB212/10 - <https://www.elexon.co.uk/meeting/pab-212/>

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SECTION 4 - FURTHER INFORMATION

8. Delivery of the review

8.1 This workstream has been delivered in four steps.

8.1.1 Review of the current BSC provisions and working practices that set out how the PAF is delivered, against the objectives of the PAF Review. We presented our Findings Report¹⁴ to the PAB in November 2017.

8.1.2 Other risk management approaches may in whole or in part provide useful models and techniques for the BSC PAF. We presented our Options Report¹⁵ to the PAB in November 2017.

8.1.3 Development of the new PAF design based on Findings and Options Reports. This report presents our conclusions and recommendations.

8.1.4 Applying the revised Risk Evaluation Methodology to produce a new set of Settlement Risks in the risk register. The proposed REM and the draft RER are presented as attachments to this report.

Stakeholder Engagement

8.2 Throughout the workstream we have convened meetings of the Issue 69 working group, to help us assess approaches. The group met four times. We have also sought to engage with other stakeholders such as smaller Suppliers and Licence Distribution System Operators (LDSO) to get input from as broad a range of entities as possible.

8.3 We issued an RFI to get feedback on what BSC Parties and other stakeholders saw as risks, and we fed that into our development of the RER, see Attachment 8. We were very pleased to receive sixteen responses to this. More active engagement with PAPs on risks that they see as significant is part of our ongoing engagement plan.

8.4 We recommend that the PAF web pages on the ELEXON website are updated to better present the PAF documents and supporting information.

Interaction with other PAF Review workstreams

8.5 In particular:

- We considered the approach the [Smart Metering workstream](#)¹⁶ had taken to the risk identification and impact quantification.
- Elements of the PAF design will interact with the [PAT Review workstream](#) – for instance how outputs from the techniques can be best reported to support Settlement Risk analysis.

¹⁴ Paper PAB202/10A - <https://www.elexon.co.uk/meeting/pab-202/>

¹⁵ Paper PAB202/10B - <https://www.elexon.co.uk/meeting/pab-202/>

¹⁶ See papers presented to the PAB in January, February and May 2018 - <https://www.elexon.co.uk/group/performance-assurance-board-pab/group-meetings/>

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

- Elements of the PAF design will interact with the [Data Provision workstream](#) – indicating (in the short term) what data is most useful for measuring the risks, and in the longer term what other data is available for risk evaluation and to support risk mitigation.

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

GLOSSARY

- APAR - Annual Performance Assurance Report
- APAT - Annual Performance Assurance Timetable
- BSC - Balancing and Settlement Code
- CVA - Central Volume Allocation
- EFR - Error and Failure Resolution
- OSM - Operational Support Manager
- PAA - Performance Assurance Administrator
- PAB - Performance Assurance Board
- PAF - Performance Assurance Framework
- PAOP - Performance Assurance Operating Period
- PAP - Performance Assurance Party
- PARMS - Performance Assurance Reporting and Monitoring System
- PAT - Performance Assurance Technique
- REM - Risk Evaluation Methodology
- RER - Risk Evaluation Register
- RMD - Risk Management Determination
- ROP - Risk Operating Plan
- SVA - Supplier Volume Allocation
- TAA - Technical Assurance Agent
- TAM - Technical Assurance of Metering
- TAPAP - Technical Assurance of Performance Assurance Parties

LIST OF ATTACHMENTS

1. PAF Document (draft)
2. Risk Evaluation Methodology (final draft)
3. Risk Evaluation Register (template)
4. Risk Evaluation Register (provisional risks)
5. Risk Operating Plan (template)
6. Risk Operating Plan ledger (template)
7. Annual Performance Assurance Report (template)
8. RFI responses

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

APPENDICES

A. Risk manager / risk owner role details

- **Risk manager**

Responsible for the PAA's delivery of the PAF and ongoing development of risk management, at the PAB's direction. The RM should actively engage with stakeholders throughout the year on the risks and mitigation.

- Support the work of the PAB, attend PAB meetings
- Propose strategy for risk management in the nearer and longer term
- Propose improvements to the PAF
- Support stakeholders in commenting on the PAF Procedures; ensure comments fully considered
- Co-ordinate collection, analysis and reporting of key risk indicators; propose changes to risks, including emerging risks
- Track completion and effectiveness of mitigating actions
- Provide PAF training and information to all stakeholders; deliver useful up to date communications

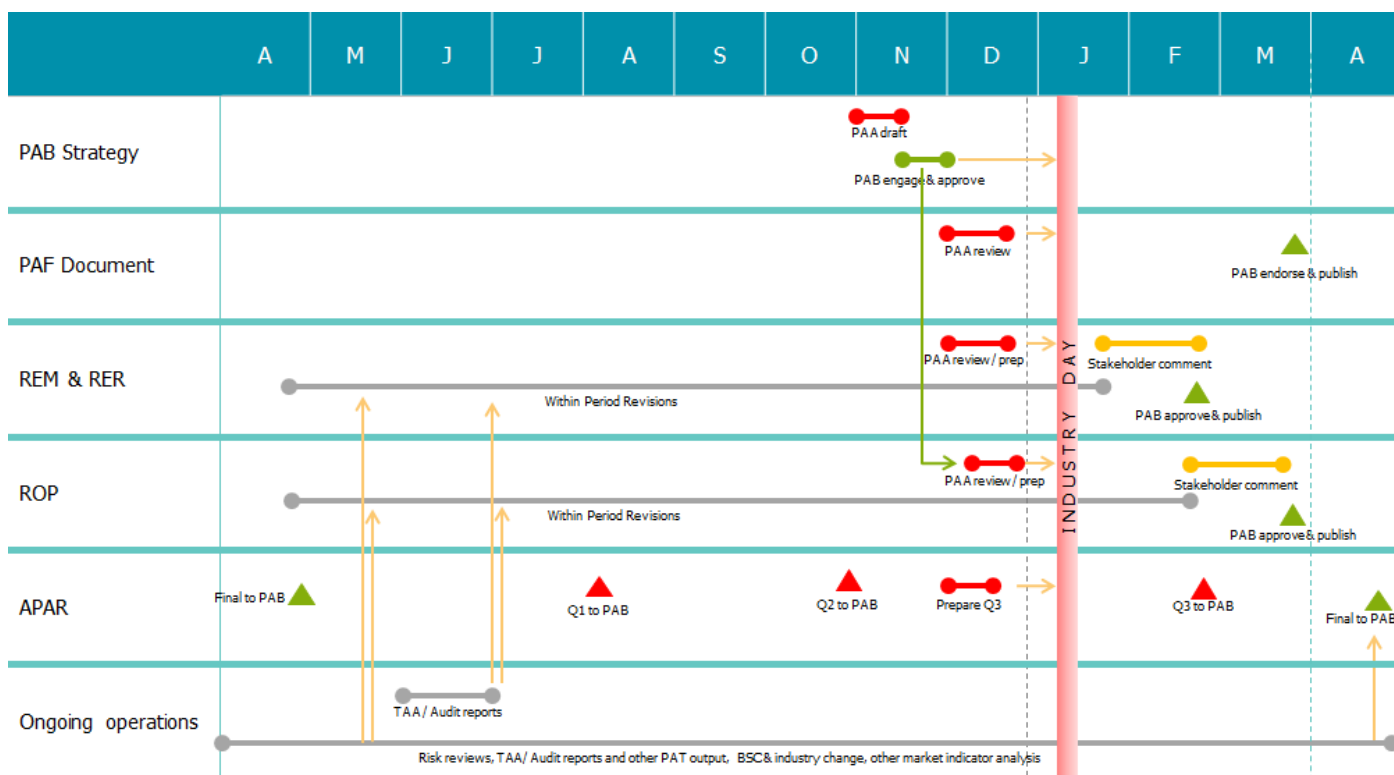
- **Risk owner**

Responsible for Settlement Risks, on direction of the Risk Manager. Review risk indicators to assess if the risk appears to be changing and help identify mitigations to achieve the target risk rating.

- Review risks as per schedule or other drivers
- Consider metrics that could be new risk indicators
- Work with the RM to rate risks, propose target risk ratings and PAT deployments, and suggest changes to controls
- Review findings from techniques and suggest necessary action
- Report on risks to the PAB, parties, BSC Service Providers and publically
- Provide advice and education internally and externally on the risks
- Maintain the information in the risk register that relates to their assigned risks
- Help assess BSC / industry change to identify potential new risks or close redundant ones

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

B. Example calendar for PAF Procedures annual cycle



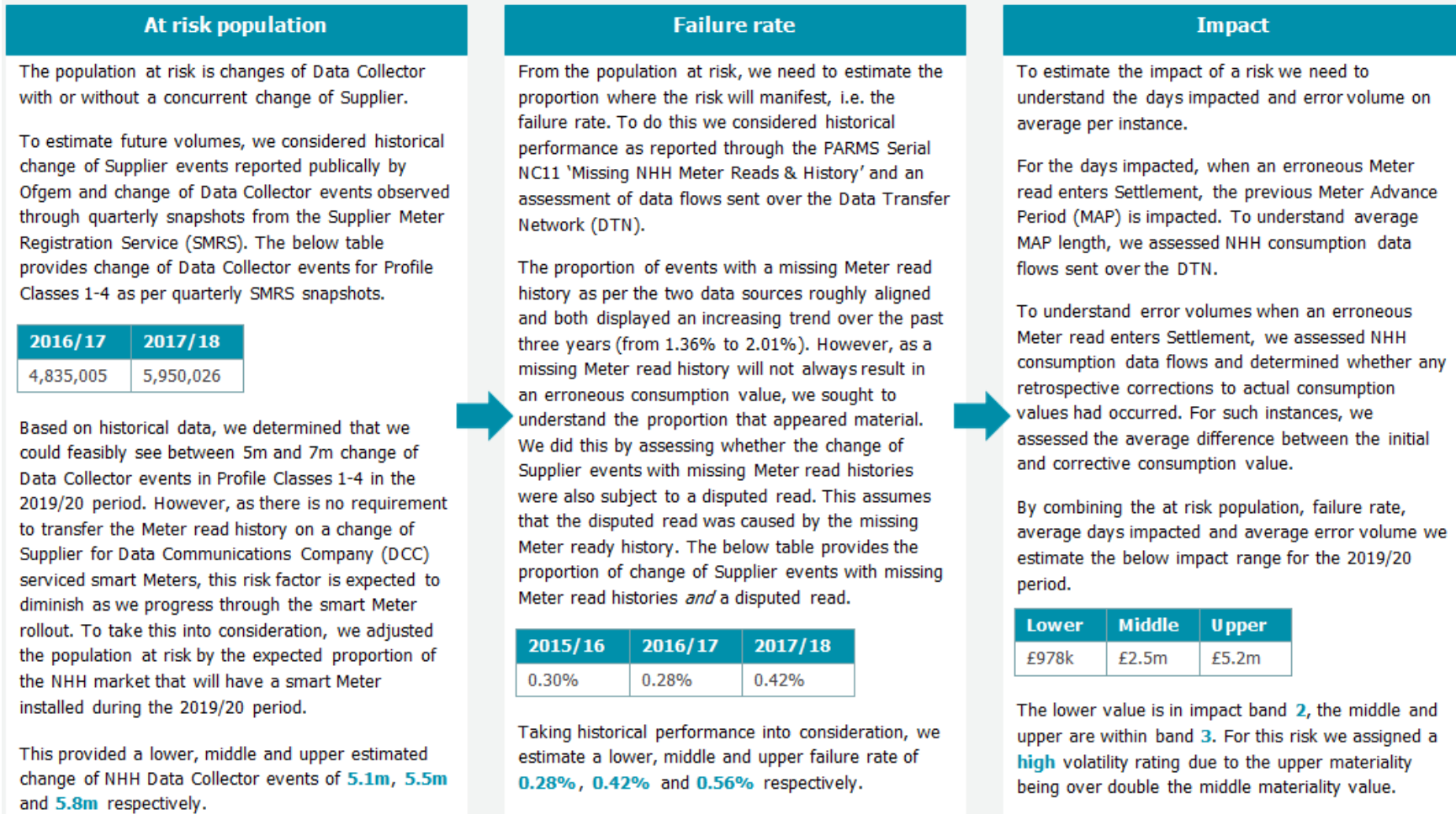
C. Example data sources for risks scoring

- Output of techniques e.g.
 - PARMS Serials
 - Trading Disputes information
 - BSC Audit issues and findings of Technical Assurance of Performance Assurance Party audits
 - Non-compliances identified by the Technical Assurance Agent
- Data Transfer Network data flows (where ELEXON has access periodically or ad hoc)
- Quarterly extract from Supplier Meter Registration Systems (SMRS)
- Central BSC systems data (e.g. system prices)
- Other publically available information (e.g. Ofgem data on Change of Supplier events)

D. Example scored risk

The risk that... on Change of Supplier or Change of Agent, Meter reading history is incorrect or not transferred such that sufficient history is not available for validating and estimating energy volumes, **resulting in...** erroneous or estimated data in Settlement.

For this initial assessment, we focused on the impact of missing Meter read histories in the Non-Half Hourly (NHH) market, as this is anecdotally where the risk has historically manifested. This is due to the Meter read history (provided by the previous Data Collector) being needed to valid a change of Supplier read in the NHH market. As there is no change of Supplier read in the Half Hourly (HH) market, the risk will not have a similar impact. In later iterations, we may want to include an assessment of the impact in HH.



E. Issue register fields

Issue details	Issue ID	Unique identifier / number
	Date added	Date that the Issue was added
	Workflow Status	Active/Closed (e.g. closed when Audit Issue closed, or when performance is back above the standard, or when EFR plan considered closed)
	Date closed (if closed)	[date]
	Risk ID	The ID of the Settlement Risk that is linked to this issue
	Risk category	The risk category as stated on the Risk Evaluation Register
	Risk sub-category	The risk sub-category as stated on the Risk Evaluation Register
	Risk factor	If relevant, the risk factor(s) that are linked to this issue
	Affected Performance Assurance Party	Name of party
	Issue event	A short description of what the circumstances of the event is and what went wrong. Usual ones: Audit issues (individual and/or market level), TAM and TAPAP non-compliances, PARMS Serials and Material Error Monitoring indicating non-compliance (or other type of monitoring of stats available to us) with a measure in a process Less usual ones: Trading Dispute investigation indicating a non-compliance, Party self-reporting or on another party
	Relevant Performance Assurance Technique	Name of relevant PAT
	Deployment notes	Rationale for deployment / outcome desired
	Linked Issue ID(s)	If the issue is also raised against other risks, capture separately but reference them
Issue actions	1	e.g. OSM or risk owner discusses issue, cause and fixes with party, and proposes a technique deployed (Risk Management Determination)
	2	e.g. party submits EFR plan and OSM monitors to completion
	3	e.g. OSM escalates party for non-completion or non-cooperation... etc

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

F. Near-miss register fields

Near-miss ID	Unique identifier / number
Date added	Date that the near-miss was added
Risk ID	The ID of the Settlement Risk that is linked to this near-miss
Risk Category	The risk category as stated on the Risk Evaluation Register
Risk Sub-category	The risk sub-category as stated on the Risk Evaluation Register
Risk Factor	If relevant, the risk factor(s) that are linked to this near-miss
Affected Performance Assurance Party	Name of party
Near-miss event	A short description of what the circumstances of the near-miss, what went wrong and why it didn't result in any substantive loss.
Near-miss reported by	Name / contact details
Near-miss follow up	A short description of what lessons we have learned, what has subsequently been reviewed and any improvements we made.

G. Risk Management Determination register fields

Initial RMD (if applicable)	RMD ID	Unique Identifier / Number
	Date	Date that the RMD was made
	Workflow Status	Active/Closed (i.e. PAT is deployed or has been switched off)
	Date closed (if closed)	[date]
	Risk ID	The ID of the Settlement Risk that is linked to this issue
	Risk Category	The risk category as stated on the Risk Evaluation Register
	Risk Sub-category	The risk sub-category as stated on the Risk Evaluation Register
	Affected Performance Assurance Party	Name of party
	Risk Management Determination	e.g. PAT switched on, PAT amended, PAT extended, new PAT added to action etc
	Relevant Performance Assurance Technique	Name of relevant PAT
	Deployment notes	Rationale for deployment / outcome desired
Revised RMD (if applicable)	Date of Revision	[date]
	Description of revision	e.g. a further TA check
RMD Queries (if applicable)	Date raised	[date]
	Query	[ref to letter or short description]
Query Response (if applicable)	Date sent	[date]
	Response	[ref to letter or short description]
RMD Appeal (if applicable)	Date raised	[date]
	Appeal	[ref to letter or short description]

PAF REVIEW – PERFORMANCE ASSURANCE PROCEDURES

H. Stakeholder engagement proposals

- Redesigned risk register (RER) and operating plan (ROP) with more information including rationales e.g. for risk rating, control strength, target risk rating and technique deployment
- Key risk indicators provided in the risk register to enable stakeholders to understand how risks are evaluated
- PAF event held in January, in particular to give parties information ahead of the RER/ROP reviews, and share views and concerns about BSC risks
- Invite contributions of non-BSC impacts and good practice for controls, as supplementary fields in the risk register
- Risk Manager role to co-ordinate and oversee engagement, and have 1-1 and group discussions on risk management and keep OSMs informed
- Diagram of BSC processes showing the risks
- Redesigned document set, easier to navigate, find information and avoids repetition
- Information on key risks easily available on the website and/or as one pagers
- Quarterly version of the annual report (APAR) published to report progress through the year
- PAB Strategy published for stakeholders to understand direction and objectives of the PAF
- Consider offering tailored sessions, e.g. webinars by party role to look at key risks and PATs to be deployed for them; or information pack to new Qualification applicants including risks / controls for their role(s)