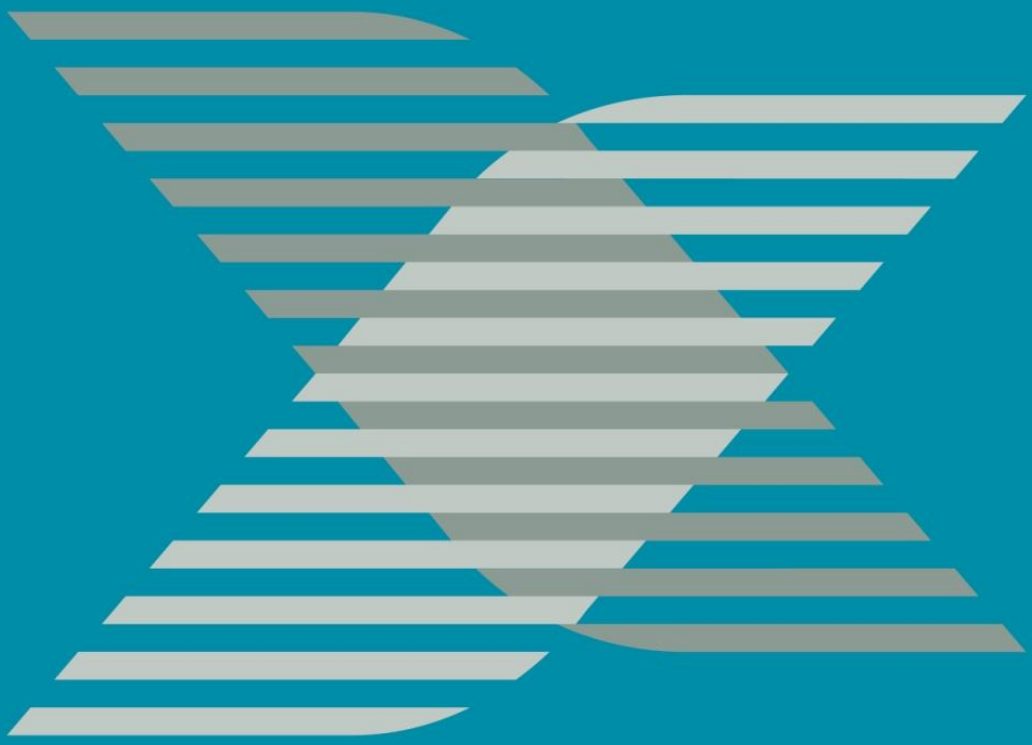
# Performance Assurance Procedures

## Risk Evaluation Methodology

## 2015/16



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# Overview

The Balancing and Settlement Code (BSC) requires the Performance Assurance Board (PAB) to establish and maintain a methodology that it will use to assess Settlement Risks, determine their significance in relation to Settlement and evaluate Performance Assurance Parties (PAPs) performance against these risks. This methodology is called the Risk Evaluation Methodology (REM).

The PAB are required to review and update the REM on an annual basis by consulting with and considering comments received from PAPs and other interested Parties. Following this process the PAB approve and adopt the REM.

This is the REM for the Performance Assurance Operating Period (PAOP) 8 – 1 April 2015 to 31 March 2016.

**Performance Assurance Board (PAB)**

The PAB is appointed by, and reports to the BSC Panel.

The PAB conducts and administers activities to provide assurance that all participants in the BSC arrangements are suitably qualified and the relevant standards maintained.

**Performance Assurance Operating Period (PAOP)**

Performance Assurance Operating Period (PAOP) is a period of time over which assurance processes are reported on. The PAOP is normally set as the twelve month period from 1 April to 31 March each year.

# Target Audience

All BSC Parties, BSC Agents and Performance Assurance Parties as defined within the BSC.


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**Contents**

**Overview** ..... **3**
**1. Introduction** ..... **5**
Underpinning Principles of the Risk Evaluation Methodology ..... 5
Scope of the Risk Evaluation Methodology ..... 6
**2. Identification of Settlement Risks** ..... **6**
Settlement Risk Identification and Closure ..... 6
Settlement Risks Categories ..... 7
Sources of Information ..... 8
**3. Evaluation of Settlement Risks** ..... **8**
Gross Significance ..... 8
Net Significance ..... 17
Risk Evaluation Key Assumptions ..... 18
**4. Performance Assurance Techniques** ..... **19**
Determine Performance Assurance Techniques ..... 19
Assessing Mitigating Performance Assurance Techniques ..... 19
**5. Assessing Materiality of Settlement Risks in Relation to Performance Assurance Parties** ..... **22**
Monitoring Settlement Risks ..... 23
**References** ..... **25**
**Further Information** ..... **25**


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# 1. Introduction

## Underpinning Principles of the Risk Evaluation Methodology

This document sets out the requirements that the Performance Assurance Board (PAB) will follow to:

- Identify Settlement Risks;
- Evaluate identified Settlement Risks; and
- Assess the materiality of such Settlement Risks in relation to Performance Assurance Parties (PAPs).

The Risk Evaluation Methodology is designed to ensure fairness and consistency in the application of Performance Assurance Techniques (PATs) to PAPs, and is carried out as prescribed in the Balancing and Settlement Code (BSC) Section Z and in accordance with the Annual Performance Assurance Timetable (APAT).

**Annual Performance Assurance Timetable (APAT).**

The APAT is an annual timetable for carrying out the review of the Risk Evaluation Methodology, the Risk Evaluation Register, the Risk Operating Plan, the Risk Management Plans and the Annual Performance Assurance Report in relation to each Performance Assurance Operating Period.

### Definition of Settlement Risk

Section Z, paragraph 5.1.1 (a) and (b) of the BSC defines a Settlement Risk as:

(a) "*a risk of any failure or error in a step or process required under the Code (including in each case a risk which has materialised as an actual failure or an error) for the purpose of effecting Settlement or otherwise required in connection with Settlement in accordance with the provisions of the Code;*"

*(b) "references to the significance of a Settlement Risk are to be construed in terms of both the probability of the failure or error (referred to in paragraph 5.1.1(a)) and its impact on Settlement;*"


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## Scope of the Risk Evaluation Methodology

The scope of the Risk Evaluation Methodology (REM) is the activities the Performance Assurance Board (PAB) and the Performance Assurance Administrator (PAA) will carry out to deliver the Performance Assurance Procedures for Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) risks.

**Performance Assurance Administrator (PAA)**
ELEXON, acting on the behalf of the Performance Assurance Board.

### The distinction between SVA and CVA risks with regards to delivering the Performance Assurance Procedures

SVA Settlement Risks are subject to a full assessment of probability and impact in order to determine the overall significance of the risk. The PAB will deploy Performance Assurance Techniques (PATs) according to the significance of SVA Settlement Risks.

CVA Settlement Risks are all deemed to be significant in terms of both probability of failure and impact on Settlement. This is a requirement of Section Z of the Balancing and Settlement Code (BSC). Probability and impact for these risks are given the highest rating as a matter of course and are not subject to changes year on year.

# 2. Identification of Settlement Risks

## Settlement Risk Identification and Closure

We use the current Risk Evaluation Register (RER) as a baseline and the review includes:

- Net significance of Settlement Risks (Section 3);
- Settlement Risks description and assumption; and
- Closure and/or addition of Settlement Risks.

New risks may be identified from changes to processes, for example Modifications, Performance Assurance Board (PAB) Strategy work streams and/or via Performance Assurance Parties. ELEXON will validate these to ensure that they are Settlement Risks as defined in the Balancing and Settlement Code (Section Z5.1.1).

**Risk Evaluation Register**
The Risk Evaluation Register (RER) sets out the Settlement Risks identified and evaluated by the Performance Assurance Board in accordance with the Risk Evaluation Methodology. The RER is comprised of an excel spreadsheet listing all the risks and a word document (setting out the review process and any updates).

**Within-period revision**


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As risks are identified or revised through either annual review or within-period revisions, the PAB:

- Validates the risk to ensure that it is a Settlement Risk;
- Categorises the Settlement Risk using the categories, defined below; and
- Evaluates the Settlement Risk using the criteria specified in Section 3.

Any new Settlement Risk identified is recorded in the RER. Risks that are not Settlement related will be disregarded (but may be noted and recorded elsewhere if it is relevant to ELEXON or the PAB).

A revision by the Performance Assurance Board of the Risk Evaluation Register, Risk Operating Plan or a Risk Management Plan within a Performance Assurance Operating Period or after the deliverable has already been approved for use.

## Settlement Risks Categories

The Performance Assurance Agent (ELEXON acting on behalf of the Performance Assurance Board (PAB)) has identified nine categories under which Settlement processes can be grouped. These categories facilitate the process of risk analysis and aid assessment of Settlement Risks. Each of the categories below can be viewed against the current risks in the Risk Evaluation Register (RER). This is a non-exhaustive list which may be added to or refined as risks are identified.

- Meter reading acquisition;
- Derivation of energy volumes;
- Allocation of energy volumes to Half Hourly (HH) Periods;
- Allocation of HH energy volumes to Trading Parties;
- Correction of HH energy volumes between Trading Parties;
- Derivation of energy imbalance volumes;
- Derivation of energy imbalance cash flows;
- Allocation of Trading Charges to Trading Parties (and Collection); and
- Miscellaneous.

**Settlement Risk Categories**
Each category relates to areas of the Settlement process (rather than participant specific activities). As the risk analysis work progresses, additional categories may be added by ELEXON or the Performance Assurance Board as required.


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## Sources of Information

The following are the main sources of information used to review Settlement Risks. This is a non-exhaustive list which may be added to or refined as risks are identified:

- New and closed Balancing and Settlement Code Audit issues during the previous and current Performance Assurance Operating Period (PAOP);
- The results and outcomes of the application of the Performance Assurance Techniques during the current PAOP;
- Panel and Panel Committee papers presented during the current PAOP;
- Change Proposals (CPs) and Modifications (both approved and rejected) during the current PAOP;
- Outcome of Draft Change Proposals (DCPs), issues, standing issues in the current PAOP;
- Outcome from PAB strategy work streams;
- Potential Settlement Risks that have been highlighted by industry and made available to the Performance Assurance Agent; and
- Feedback from discussion with Performance Assurance Parties on Settlement Risks and their net significance.

# 3. Evaluation of Settlement Risks

Each Settlement Risk will be evaluated and defined in terms of the following attributes:

- Gross Settlement Risk significance;
- The controls that are in place, and the strength of those controls; and
- Net Settlement Risk significance.

## Gross Significance

The gross significance of a Settlement Risk is assessed by considering the probability and impact that a risk would have on Settlement if no controls were applied. Gross Settlement Risk represents the 'worst case' scenario for each Settlement Risk.


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The Performance Assurance Board agrees the probability and impact ratings for each Settlement Risk (discussed below), and then calculates the gross significance of the risk by multiplying the probability rating by the impact rating.

| Example for Calculating the Gross Significance |
|---|
| **SR0072** The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.<br>The gross significance will be:<br>$5(\boldsymbol{Probability}) \times 4(\boldsymbol{Impact}) = 20$ |

Figure 1: Example for Calculating Gross Significance

The gross significance value for each Settlement Risk is recorded in the Risk Evaluation Register. Gross probability, impact and significance, offers a method to measure the relative importance of Settlement Risks and facilitates a comparison of other Settlement Risks relative to each other. It should not be interpreted as the absolute magnitude of each Settlement Risk.

### Settlement Risk Probability

Settlement Risk probability is the likelihood of a Settlement Risk occurring and is scored using a numeric scale between 1 and 5, where 1 is the least likely and 5 the most likely. In the case of the risk-based Performance Assurance Framework, Settlement Risk probability is defined as the chance of a Settlement Risk occurring during a single Performance Assurance Operating Period.

All CVA Settlement Risks are deemed to be significant in terms of probability and are always scored as a 5.

| Probability Rating | Description |
|---|---|
| **5** | It is highly likely that the Settlement Risk will occur during a single Performance Assurance Operating period (PAOP). |
| **4** | It is likely that the Settlement Risk will occur during a single PAOP. |
| **3** | Approximately, the Settlement Risk is as likely to occur as not occur during a single PAOP. |
| **2** | It is unlikely that the Settlement Risk would occur during a single PAOP. |
| **1** | It is highly unlikely that the Settlement Risk would occur in a single PAOP. |

Table 1: Probability Rating for Settlement Risks


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*Guidance for Assessing the Probability of Settlement Risks*

The Performance Assurance Board takes into account various factors when assessing Settlement Risk probability, including (but not limited to):

- The opportunity for failures to occur – the greater the volume and frequency of process events which contribute to the risk, the greater the opportunity for an error to arise;
- The complexity of the process(es) which might contribute to the risk – a more complex process might be more subject to errors than a simple process;
- The level of manual intervention in the process(es) – a significant level of manual intervention within a process increases the likelihood of errors arising within that process;
- The incentives surrounding the process(es) – where adverse incentives exist, it might be more likely that a process is not completed correctly, or at all; and
- Consideration of the performance history of the process (es) that contributes to the Settlement Risk, e.g. Performance Assurance Reporting Management System (PARMS) serial data and the prevalence of associated Balancing and Settlement Code Audit issues.

| Example: Assessing the Probability |
| --- |
| **SR0072:** The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement. We reviewed the data relating to this Settlement Risk:<br>• Opportunity for failures: Many (over 28m NHH Metering Systems);<br>• Manual intervention: Retrieval of Meter readings is a manual operation in NHHDC service; and<br>• Performance history: The erroneous Estimated Annual Consumption/ Annualised Advance (EAC/AA) issue has been a prevalent Balancing and Settlement Code Audit issue since 2001.<br>Based on the above and Table 1, we assigned a **probability rating of 5** |

Figure 2: Example for Assessing the Probability


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### Settlement Risk Impact

Settlement Risk impact represents how severe the impact of the Settlement Risk would be if it occurred. We measure the impact rating by the extent to which it would have an impact on the Supplier Volume Allocation (SVA) Objectives. The PAB has two objectives in the context of SVA; BSC Section Z 5.1.4 states that the PAB:

*"…shall have regard to the following (so far as consistent with the provisions of the Code) save where to do so would, in the opinion of the Performance Assurance Board or Panel as applicable, substantially prejudice the interests of all Performance Assurance Parties collectively or a class of Performance Assurance Parties collectively:*

*(i) the efficient, equitable and accurate allocation of energy between Suppliers resulting from the aggregated consumption of Metering Systems for which each Supplier is responsible; and*

*(ii) the efficient, accurate and co-ordinated transfer of Metering Systems data by Performance Assurance Parties between Suppliers and Supplier Agents."*

We score the Settlement Risk impact using a numeric scale between 1 and 5, where 1 is the least severe and 5 the most severe.

All CVA Settlement Risks are deemed to be significant in terms of impact and are always scored as a 5.

The scale is further detailed in Table 2 overleaf.


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| Impact Rating | Description |
|---|---|
| **5** | The Settlement Risk has the potential to threaten the Balancing Mechanism and industry Settlement procedures as a whole; causing severe problems for customers, industry, the System Operator and/or ELEXON. Extreme Settlement Risks would have significant financial and/or political consequences on Performance Assurance Parties (PAPs). |
| **4** | The Settlement Risk has the potential to impact one or more Grid Supply Point (GSP) Groups and would have a significant impact on the business plans of multiple PAPs. |
| **3** | The Settlement Risk could have an impact on a particular area of Settlement and/or the business plans of one or more PAPs. |
| **2** | The impact of the Settlement Risk is not severe enough to pose a threat to PAPs' businesses, but is significant enough for the industry to consider addressing via corrective measures. |
| **1** | The Settlement Risk is not severe enough to pose a threat to PAPs' businesses and could be dealt with using normal business procedures; or the cost and effort required to address the Settlement Risk outweighs the benefit. |

Table 2: Impact Rating for Settlement Risks

*Guidance on Assessing the Impact for Settlement Risk*

When assessing the impact of a Settlement Risk, ELEXON and the Performance Assurance Board (PAB) initially consider the result identified in the risk description and determines the extent to which the result falls into one of the result types described in Table 3 below. The PAB/ELEXON uses the guidelines in the table when assessing the impact of a Settlement Risk.

Settlement Risks are moderated using any additional observed evidence available, particularly any associated Balancing and Settlement Code Audit issues or information from materiality calculations linked to the risk.


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| Result Type (as identified in Risk Description) | Initial Range of Impact Rating | | Rationale |
|---|---|---|---|
| **Old or default data will be applied and used** | 1 to 2 | The Settlement Risk is not severe enough to pose a threat to Performance Assurance Parties' (PAPs') businesses and could be dealt with using normal business procedures or the cost and effort required to address the Settlement Risk outweighs the benefit.<br>**Or**<br>The impact of the Settlement Risk is not severe enough to pose a threat to PAPs' businesses, but is significant enough for the industry to consider addressing by corrective measures. | Old or default data might not be the best representation of reality but might provide the best approximation for a period of time. In some cases the use of old or default data in relation to Half Hourly (HH) Metering Systems might be considered to be less satisfactory than for the Non Half Hourly (NHH) equivalent. This is because HH metered consumption patterns might be more volatile than NHH consumption and, generally, any estimations made are based on smaller sample sizes. |
| **Data is missing or unavailable for use** | 2 to 3 | The impact of the Settlement Risk is not severe enough to pose a threat to PAPs' businesses, but is significant enough for the industry to consider addressing via corrective measures.<br>**Or**<br>The Settlement Risk could have an impact on a particular area of Settlement and/or the business plans of one or more PAPs. | The unavailability of data is likely to not only have a greater impact than use of old data but is also likely to require greater efforts to resolve. Where data is missing the impact is considered to be constrained by the magnitude/nature of the missing data. |
| **Erroneous data will be applied and used** | 3 to 4 | The Settlement Risk could have an impact on a particular area of Settlement and/or the business plans of one or more PAPs.<br>**Or**<br>The Settlement Risk has the potential to impact one or more Grid Supply Point (GSP) Groups and would have a significant impact on the business plans of multiple PAPs. | In some cases the use of erroneous data might be considered to have a similar impact to the unavailability of data. However, where erroneous data is used there is considered to be no constraint on the impact since the error could significantly deviate from the magnitude/nature of the correct data. |
| **Extreme instances of erroneous data or extended instances of missing / old data** | 5 | The Settlement Risk has the potential to threaten the Balancing Mechanism and industry Settlement procedures as a whole, causing severe problems for customers, industry, the System Operator or ELEXON. Extreme Settlement Risks would have significant financial or political consequences on PAPs. | Extreme Settlement risks are unlikely to arise except in limited circumstances where identified risks are moderated upwards.<br><br>It may be anticipated that risks arising in Central Systems which, would impact the whole of Imbalance Settlement would fall into this range of impact. |

Table 3: Guidance on Settlement Risks' Impact


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| Example for Assessing the Impact |
| --- |
| **SR0072:** The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.<br><br>While performing an assessment of the impact of this risk, we looked at the overall error in relation to the NHH annual take which equated to approximately 0.2%[1] (pre-Final Reconciliation Run (RF) error/NHH). Taking this and the rating on Table 3 above into consideration; we assigned an **impact of 4** for this risk. |

Figure 3: Example for Assessing Impact

### Settlement Risk Control

Having identified a list of Settlement Risks and assigned the impact, probability and gross significance to each, the Performance Assurance Board (PAB) will assess what controls are in place to mitigate against the Settlement Risk occurring. Having considered all relevant controls, the PAB will determine net significance values for each Settlement Risk. For the purposes of this methodology:

- A control is identified as any Balancing and Settlement Code (BSC) defined requirement or otherwise established mechanism that should be applied routinely to the Settlement processes; and
- The Performance Assurance Techniques, e.g. Performance Assurance Reporting and Monitoring System (PARMS), BSC Audit *are not considered* to be controls. They are tools that will be deployed to provide industry with additional assurance.

Examples of controls include failure monitoring (e.g. exception reports or validation), failure mitigation (e.g. use of default and estimation methods) and defined standards (e.g. commissioning of Metering Systems). Once the set of controls for each Settlement Risk has been identified, the PAB (which may delegate to the BSCCo) will assess the effectiveness (or "strength") of each control in the set; as shown below.

[1] 185,625,580 MWh as at year ending 30 September 2007.


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| Control Strength | Description |
|---|---|
| **Low** | Where the control strength is low, or no controls exist, net Settlement Risk significance will be gross Settlement Risk significance multiplied by **1.0** (i.e. will equal gross Settlement Risk significance). |
| **Medium** | Where the control strength is medium, net Settlement Risk will be gross Settlement Risk significance multiplied by **0.8.** |
| **High** | Where the control strength is high, net Settlement Risk will be gross Settlement Risk significance multiplied by **0.6**. |

Table 4: Control Strength for Settlement Risks

### Controls Type & Mechanism

When assessing the strength of controls, the PAB first considers each individual control and takes account of various factors in relation to the control type and mechanism.

*Control Type*

- **Preventative** controls seek to ensure that an issue does not arise in relation to a risk and so might be seen to be strong controls;
- **Detective** controls identify where an issue has arisen and generally require further corrective controls to address the identified issue.; and
- **Corrective** controls seek to ensure that an issue is addressed and so might be seen as effective controls. However, their strength might be considered lower than preventative controls as the impact of the issue might have already been felt.


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*Control Mechanism*

**Higher Strength**

- Routinely Applied Automated Processes: Well designed and thoroughly tested automated processes (e.g. **Meter reading validation**) can provide robust and consistent control mechanisms

**Medium - Strength**

- One-off Automated Processes: Automated processes that are triggered infrequently or by exception (e.g. **confirmation of the inclusion of a Metering Point in the reading schedule**) provide robust and consistent control mechanisms but may not be using up-to date algorithms/data if not maintained
- Routinely Applied Manual Processes: Manual processes (e.g. action taken to address invalid meter reads) are more prone to error than appropriately designed and tested automated solutions

**Lower Strength**

- One-off Manual Processes: Infrequent manual processes (e.g. **undertaking a proving test**) are very prone to error and require careful management to ensure consistency

Figure 4: Guidance on Control Strength for Settlement Risk

The overall strength (low, medium, high) of the aggregated set of controls is then assessed on a case by case basis by considering how the individual controls work together and the available supporting evidence, such as the prevalence of BSC Audit issues arising in areas subject to the controls.


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| Example Assessing Control Strength |
| --- |
| **SR0072:** The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.<br><br>For this risk the PAB recognised the following as controls:<br><br>• Meter reading validation;<br>• The Non Half Hourly Data Collector (NHHDC) informs the Supplier of incorrect Meter register mappings;<br>• Investigate inconsistencies process;<br>• Site visit checks by the NHHDC; and<br>• Estimated Annual Consumption/Annualised Advance (EAC/AA) validation.<br><br>The control above for SR0072 contains several controls of varying strength for example Meter reading validation tends to be higher strength and site visits are lower strength; therefore we assigned an overall **control score of medium** for this risk. |

Figure 5: Example for Assessing Control Strength

## Net Significance

### Assessing Net Significance

Once we have identified the control strength for a Settlement Risk as low, medium or high, we multiply the equivalent value of the control (as defined in Table 4) and the gross significance;

$$Net\ Significance = Probability\ \times Impact\ \times Control$$

Therefore, net significance represents a 'best case scenario' for each Settlement Risk. As a result of taking the controls into account, the net Settlement Risk significance is scored using the same scale as gross Settlement Risk (i.e. out of 25) and decimals are rounded normally.


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| Example for Calculating the Net Significance |
| --- |
| **SR0072:** The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.<br><br>SR0072 has a Probability of **5**, Impact of **4** and control strength of **Medium**; therefore:<br><br>$$\boldsymbol{Net\ Significance\ for\ SR0072:\ 5\ \times 4 \times 0.8 = 16}$$ |

Figure 6: Example for Calculating Net Significance

### Settlement Risk Thresholds

The Performance Assurance Board (PAB) will prioritise its deployment of resources against Settlement Risks according to their net significance. The PAB have determined that SVA Settlement Risks with a threshold of 12 or above are top Settlement Risks. Top Settlement Risks are managed through the application of Performance Assurance Techniques (PATs).

## Risk Evaluation Key Assumptions

When identifying and evaluating Settlement Risks, we applied the following assumptions:

- The preceding steps in the process have been successfully completed thus excluding the cumulative impact of errors in the risk evaluation process;
- A Settlement Risk can be triggered by multiple root causes; for example, the identified root causes for SR0072 includes:
    - Incorrect Meter reads (e.g. transposed digits);
    - Meter readings for a new Meter entering data collection before the final reading associated with the old meter does; and
    - Incorrect Change of Supplier/deemed readings;
- Control mechanisms will be defined in the Balancing and Settlement Code or established to detect, prevent or correct impact of errors in Settlement;
- Assurance will be delivered across all Settlement runs for all Settlement Risks with a greater focus on earlier runs for Half Hourly (HH) risks (e.g. Initial Settlement Run (SF)and Initial Reconciliation Run (R1)) and later runs for Non Half Hourly (NHH) risks Third Reconciliation Run (R3) and Final Reconciliation Run (RF));


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- Generic controls which generally apply to all risks such as disaster recovery processes and system security controls *are not considered* as controls in the Risk Evaluation Register; and
- Settlement Risks are relevant to any Performance Assurance Party which might send, receive or take action in respect of processes, controls or data which relate to the risk in question.

# 4. Performance Assurance Techniques

## Determine Performance Assurance Techniques

Once the Settlement Risks are identified and evaluated the Performance Assurance Board (PAB) assigns the mitigating Performance Assurance Techniques (PATs) against those risks and corresponding roles in the Risk Operating Plan.

## Assessing Mitigating Performance Assurance Techniques

Details of the PATs (as approved and published by the Panel from time to time) can be found on the Performance Assurance pages of the BSC website.

For each Settlement Risk identified/evaluated by the process detailed in section 2 and 3, the PAB will assess the PATs that are best suited to mitigate the Settlement Risk by considering:

- Its own professional judgement;
- The cost/benefit of applying the PATs to the Settlement Risk;
- Past-precedent for similar Settlement Risks;
- General risk management best practice, for example:
    - The application of preventative techniques to high-impact Settlement Risks; and
    - Consideration of corrective PATs to Settlement Risks that are low impact (and possibly high probability).

For each Settlement Risk, the Performance Assurance Agent (ELEXON on behalf of the PAB) will identify:

- The 'mandatory' PAT(s);


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- The 'standard' PAT(s); and
- The 'non-standard' PAT(s).

ELEXON will also record the projected cost for deploying the PATs across the Risk Evaluation Register and will also highlight any variations to the previously published BSCCo (ELEXON) Business Plan (including any impact on the approved BSCCo budget).

### Mandatory Performance Assurance Techniques

Mandatory PATs are those techniques that the PAB is required to apply to a Business Unit (BU) who has been assigned the Settlement Risk in question because they are mandated by the Balancing and Settlement Code (e.g. Supplier Charges).

### Standard Performance Assurance Techniques

Standard PATs are the default techniques that the PAB will apply to a BU who has been assigned the Settlement Risk in question in the Material Business Unit's (MBU) Risk Management Plan (RMP). Standard PATs may be switched off for a BU and where this is the case, an explanation will be provided.

### Non-Standard Performance Assurance Techniques

Non-standard PATs are techniques that the PAB may consider applying to derive additional assurance that the BU is addressing the Settlement Risks that have been assigned to it in the MBU's Risk Management Plan (RMP). Where Non-Standard PATs are applied to address a Settlement Risk, an explanation will be provided in the MBU's RMP.

**Business Unit (BU)**
A market participant/ role code combination. Performance Assurance Techniques are deployed at BU level.

**Material Business Unit (MBU)**
Group of one or more Business Units for the same legal entity. Risk Management Plans are deployed at MBU level.


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| Technique | Type | Category |
|---|---|---|
| **Qualification** | P | Non standard |
| **Re-Qualification** | P | Non standard |
| **Bulk Change of Agent** | P | Non standard |
| **Education** | P | Non standard |
| **Performance Monitoring and Reporting** | D | Mandatory |
| **Material Error Monitoring** | D | Standard |
| **Technical Assurance of Metering Systems** | D | Mandatory, standard, non-standard |
| **BSC Audit** | D | Standard |
| **Technical Assurance of Performance Assurance Parties** | D | Non standard |
| **Peer Comparison** | I | Standard |
| **Removal of Qualification** | I | Non standard |
| **Breach and Default** | I | Non standard |
| **Supplier Charges** | R | Mandatory |
| **Error and Failure Resolution** | R | Non standard |
| **Trading Disputes** | R | Non standard |
| **Change Mechanisms** | R | Non standard |

Figure 7: Diagrammatic Representation of the ROP

CVA PATs are deployed as mandated within the BSC. In particular:

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


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# 5. Assessing Materiality of Settlement Risks in Relation to Performance Assurance Parties

A Settlement Risk is considered material to a Performance Assurance Party (PAP) where:

- There is a risk that a PAP may cause or contribute to the occurrence of the risk by failing to perform an obligation under the Code or any Code Subsidiary Document; and
- The significance of the risk has been determined to be significant by the PAB.

A Settlement Risk may be material to a PAP because it relates to a class (e.g. Supplier, Meter Operator Agent, Data Collector, Data Aggregator, Meter Administrator, Licensed Distribution System Operator and/or Registrant) to which the PAP belongs or it may relate to the PAP individually.

### Risk Operating Plan

The Risk Operating Plan (ROP) sets out the Settlement Risks and the Performance Assurance Techniques (PATs) that the Performance Assurance Board (PAB) will apply to manage Settlement Risks relating to Supplier Volume Allocation (SVA), Central Volume Allocation (CVA) and Central Systems processes.

### Risk Management Plans

Risk Management Plans (RMPs) document the Settlement Risks and the Performance Assurance Techniques (PATs) relevant to each Performance Assurance Party/Material Business Unit; in effect, the RMP is a version of the Risk Operating Plan (ROP) tailored for each organisation. RMPs can be updated throughout the Performance Assurance Operating Period. The RMP does *not* monitor performance. The approach to applying RMPs is explained below.

### Approach to Application of Performance Assurance Techniques (detailed in the RMP)

To appear on a Risk Management Plan (RMP), a Settlement Risk must have at least one Performance Assurance Technique (PAT) available to be deployed (in the Risk Operating Plan (ROP)). The Performance Assurance Board (PAB) then assesses the Settlement Risk for each associated Business Unit (BU) to determine how rigorous it will be in the application of PATs.

Typically, when a BU is identified as having the potential to contribute to a particular Settlement Risk (or to have caused a Settlement Risk to materialise as an issue), it is assigned those PATs that are flagged as 'mandatory' and 'standard' for the Settlement Risk


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in question. There is no flexibility in the application of mandatory PATs and they must always be applied to address the Settlement Risk to which they relate.

If the PAB feels that it is appropriate, then fewer standard PATs (from the shortlist against the Settlement Risk in the ROP) may be applied to the BU e.g. audit may not be applied to small PAPs. Conversely, the BU may have some of the additional non-standard PATs (from those available in the ROP) assigned to it e.g. Error and Failure Resolution and Technical Assurance of Performance Assurance Parties if a particular problem is detected. For each Settlement Risk that has been assigned to a BU, the BU will only have those PATs that are 'linked' to the Settlement Risk on the ROP assigned to it.

Where a BU has been assigned fewer standard PATs, or additional non-standard PATs, the PAB provides the rationale for this in the BU's RMP. Where the PATs do not differentiate between the mandatory and standard PATs, no rationale will be provided in the RMP.

The PAB creates an initial RMP for each MBU. When there is a change in circumstance, such as a trigger for Re-Qualification or a TAPAP check, it makes amendments to an MBU's RMP to reflect this by the application and/or disapplication of non-mandatory PATs.

On an annual basis, following the review of the Risk Evaluation Register (RER) and the ROP, the PAB is presented with all the RMPs to review and, if necessary, amends the RMPs for the following PAOP in relation to the RER, ROP and additional information from the BU. The PAB considers all BU Settlement Risks on an individual basis and for each Settlement Risk that the BU has, the PAB determines what PATs (from the shortlist in the ROP) it wishes to apply to the BU. RMPs can also be updated on a monthly basis if the BU's performance changes or there are associated changes to the RER and the ROP.

Having assessed each Settlement Risk individually, the PAB considers all of the Settlement Risks that the BU has as a whole. This will enable the PAB to identify any opportunities for greater efficiency in the application of PATs by considering where a single PAT can be applied once to address more than one Settlement Risk.

## Monitoring Settlement Risks

The Performance Assurance Board (PAB) considers how each Business Unit's (BU's) performance might impact and/or contribute to the materiality of the Settlement Risk; and uses the Performance Assurance Techniques (PATs) available to minimise the impact on Settlement. This is facilitated by reviewing the Business Unit Settlement Risk Ratings (BUSRRs and the Settlement Risk Report. Each is discussed in turn below.


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### Business Unit Settlement Risk Rating

The Business Unit Settlement Risk Ratings (BUSRRs) have been developed to determine the extent of a BU's materiality. The PAB approves criteria for determining a BUSRR for all the top Settlement Risks which are currently measurable. Applying these criteria allows the PAB to assess the materiality of the top Settlement Risks for each Performance Assurance Party.

### Settlement Risk Report

The Settlement Risk Report (SRR) illustrates market trends and industry performance subject to the availability of data and is presented to the Performance Assurance Board (PAB) on a monthly basis. It looks at the performance of Suppliers and Meter Operator Agents[2] in relation to top Settlement Risks and provides an overview of the BUSRRs for each Settlement Risk. Within the context of each Settlement Risk, the PAB uses the information provided in the SRR to explore the extent to which a BU might impact or contribute to the materiality of the Settlement Risk. For example, one BU operating in a well-managed environment, may pose inherently less risk to the successful delivery of a process than another BU with the same Settlement Risk but with a less well developed management process.

[2] Other relevant role codes may be included if performance data becomes available


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## References

| Document |
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| **BSC Section Z** |
| **Glossary** |
| **Performance Assurance Processes:**<br>• **Risk Evaluation Methodology**<br>• **Risk Operating Plan**<br>• **Risk Management Plan** |
| **Settlement Risk Report (non-confidential version)**, see 'historical meetings'. |

## Further Information

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