



Supplier Guidance on Achieving 97%

Who is this document for?

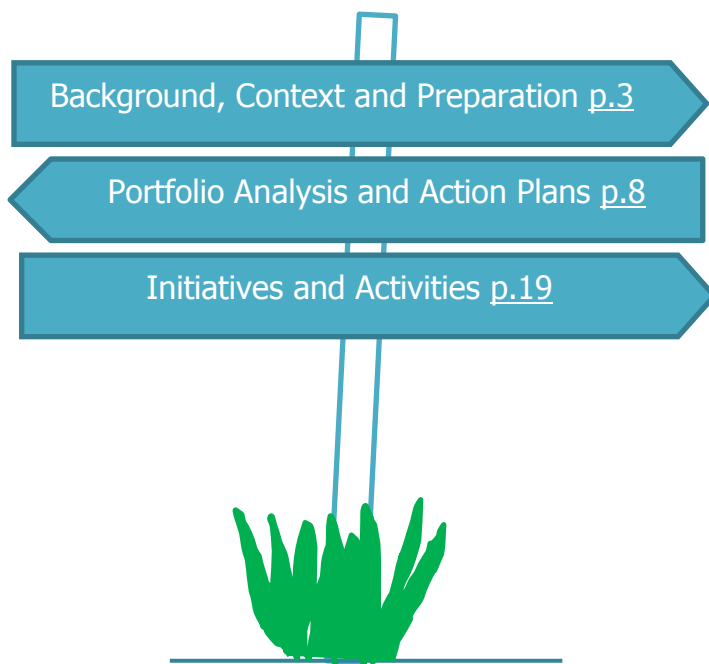
If you can answer 'yes' to these questions then this document is for you:

- Are you a Non Half Hourly Supplier?
- Do you need to improve your percentage AA performance?
- Are you looking to learn or re-learn the principles and approach to good Settlement performance?

What's the purpose of this document?

When we talk about 97%, we mean a Supplier's obligation¹ to settle 97% of its total Non Half Hourly (NHH) metered energy on Annualised Advances (AA) by the Final Reconciliation Run (RF). This document is to help Suppliers meet and maintain this BSC obligation.

Finding your way around



Depending on your knowledge and experience you may want to jump to the most relevant section, rather than read the whole document.

The first section explains why 97% is important, where it fits into the Balancing and Settlement Code and the critical people you will need to work with to achieve 97%.

The second section talks about the approach you may wish to take to understand what is causing the underperformance and how to put this into a formal rectification plan.

The last section goes through some typical activities that help in achieving 97%.

¹ As set out in [BSC Section S-1](#)

How to Use this Document

This document assumes a certain amount of knowledge and use of terminology. To help people who may be new to the industry or the world of performance assurance we have included information points. If you're looking for an overview of how Settlements works then a good place to start is our [website](#).

Keep an eye out for information points



Throughout the document whenever an important term or concept is mentioned an information point will be shown to briefly define what we mean. It's important you understand what we mean by these terms, and so if you require more information please check on our [website](#) or with your [Operational Support Manager \(OSM\)](#).

Every Supplier has different systems, customers, staff, business strategies and so on. How best to achieve 97% will also therefore differ between Suppliers. What works for one Supplier may not work for another. This document draws on the experience of Suppliers that have achieved 97% and the expectations that [ELEXON](#) and the [Performance Assurance Board \(PAB\)](#) have for achieving 97%. It is by no means an exhaustive list of activities and solutions to improve %AA.

You'll need to ensure that you properly assess any action you take to ensure that it will deliver the benefit that you expect and that you are aware of any adverse effects.



OSMs offer dedicated operational support to you our customers – BSC Parties and Party Agents. If you're not sure who your OSM is please check the [Qualified Persons Workbook](#).

Some context for 97%

Before we get into the detail it's important to understand the context and requirements around 97%.

When you qualified² as a Supplier you agreed to abide by the rules and regulations set out in the Balancing and Settlement Code (BSC) and its Code Subsidiary Documents. This includes the requirement to settle 97% of your total NHH energy on AAs by RF. If you are not achieving 97% and are not taking reasonable steps to address this underperformance you may be placed in [Error and Failure Resolution](#) (more on this later) and asked to submit an action plan detailing the problems and the solutions.

We are here to help. Your **OSM** is there to provide support and guidance for you to achieve 97%. We would really encourage you to make the most of this relationship.

We measure your NHH %AA performance using [PARMS](#)³ serial [SP08a](#). You can see how you and other Suppliers are doing against SP08a by looking at the [Peer Comparison graphs](#) published on the [BSC Website](#).

PARMS

What is PARMS?



The **Performance Assurance Reporting Monitoring System** or **PARMS** is a database that holds Supplier and Supplier Agents performance metrics. SP08 is used for monitoring Settlement performance and is submitted by a BSC Agent known as the SVAA and Supplier Charges are applied to underperforming Suppliers against the standard. The other main areas PARMS measures is the Supplier appointments process, transfer of key data items and quality of key data items. More details on PARMS can be found on our website.

The requirement to achieve 97% is for each GSP Group. We will focus and manage your %AA at both the Supplier ID and GSP Group level as appropriate.

Measuring your %AA performance is just part of the [Performance Assurance](#) we do on behalf of the industry. We take a risk based approach to Performance Assurance as detailed in the [Performance Assurance Framework \(PAF\)](#).

Settlement Risk 74 (SR0074) is 'the risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.' The risk you pose to SR0074 is assessed and provided to you in your Supplier Dashboard and summarised as a **red**, **amber** or **green** rating, known as a [Business Unit Settlement Risk Rating or BUSRR](#)

To measure performance against this risk for the BUSRR we apply the standard in the Code that states that by RF Suppliers should settle NHH sites at 97% of energy on AAs (Section S-1 paragraph 2.2.1).

However the BUSRR looks at an aggregated view of Supplier's performance across all GSP Groups and a span of days. This is different to the provisions of the Code, which states that a Supplier should adhere to performance levels each Settlement Day and in each GSP Group (Section S-1 2.1.3 and 2.2.1).

² More information on Qualification can be found on the [BSC Website](#).

³ For more information on PARMS see [BSCP533](#) (including [Appendices A](#) and [B](#)).

To calculate SR0074 BUSRR we obtain data weekly from the Supplier Volume Allocation Agent (SVAA) which provides ELEXON with the energy volumes settled on AAs at RF aggregated by Consumption Component Classes Identifiers (CCC Ids). Please note that this data differs from SP08a serial, as it does not include CCC Ids for losses. For the purpose of the BUSRR calculation we also exclude export. Export energy is included in SP08a Supplier Charges, in line with the provisions of Section S-1 (2.2.2 (b)).

For more information on the SR0074 BUSRR, please refer to our BUSRRs guidance note.

If your performance in the SR0074 BUSRRs is RED for three consecutive months or you remain below 97% for a prolonged period we will likely initiate the Error and Failure Resolution (EFR) process.

EFR is a key remedial technique in ELEXON's Performance Assurance Framework. It assures [ELEXON](#), the [Performance Assurance Board](#) (PAB) and the rest of the industry that you understand identified performance issues and have robust plans in place to correct them in a timely manner. As part of the EFR process, you agree with us what steps you'll take to resolve the identified performance issues. We also use EFR to provide you with advice and guidance.

If we initiate EFR for not achieving 97%, we'll ask you to provide an action plan detailing the steps you'll take to resolve the issue and the timescales for completion. You'll need to keep your OSM updated on the progress against each step or milestone.

By providing this information, we can monitor how you are doing trying to reach 97%. When all actions are completed and you're achieving 97%, the cessation of the EFR process will be agreed with us and/or the [PAB](#). More information on [EFR](#) can be found [here](#).



What is PAB?

The [Performance Assurance Board](#) is a BSC Panel sub-committee responsible for providing assurance that all participants in the BSC arrangements are suitably qualified and that the relevant standards are maintained. The committee is made up of industry experts who act impartially and must not represent any one Party or class of Parties.

How to get to 97%

This section will talk you through some of the issues and areas you will need to consider when trying to **reach or maintain 97%**.

First it is worth highlighting why 97% matters. Put simply, estimated data is bad for Settlement and for your business because:

- It may adversely affect your customer billing
- Distribution and Transmission Use of System charges (DUoS & TUoS) are based on Settlements data
- You risk exposing yourself to greater Imbalance Charges (for details on how Imbalance Charges are calculated please see our [Beginners Guide to the Electricity Arrangements](#)). If you've been basing your trading forecasts largely on estimated data you may be buying too much or too little energy. The longer you wait to find out what your customers have been consuming the longer you have to wait to get your money back (e.g. the time between R3 and RF is more than four and a half months).
- You agreed to settle 97%AAs when you acceded to the Code
- You are charged for any underperformance at R3 and RF via the [Supplier Charges](#) technique.

Do you have management commitment?

The issues that underlie %AA performance are likely to emanate from across the business and resolving them will require a **significant level of cooperation** between the various teams and departments that complete the process.

For example, some issues can be mitigated if addressed during the sales process, while others will require changes to core IT systems.

If you want a successful project to address %AA issues the **first priority should be obtaining support from management** at the appropriate level to deal with the cross business issues that will be encountered by the project team. Without this commitment, the project will struggle to achieve any significant or lasting improvements.

It is likely the level of resource needed in order to address the root causes affecting %AAs will require senior management approval. Ensuring that a **senior manager sponsors the project** will help secure this investment. If you need to complete an EFR action plan we would ask you to include this manager on the plan.

Management commitment cannot be over-emphasised, especially in a large organisation, where differing locations, conflicting business targets and internal politics have great influence on performance. High visibility of the target and education of staff throughout the business is critical to the success of the project. Staff will not give commitment to achieving a target if they do not understand the requirement or how it affects their business.

Do you need a project?

We are often asked if a formal project is really needed to achieve 97%. Our experience has shown that it is very rare for a Supplier whose business as usual activities are not resulting in 97% to get there without the use of a project. We therefore strongly encourage you to set up a project to address your Settlements performance and consider how these activities can be brought into business as usual.

The project should resolve existing issues and fix the underlying causes, such that businesses as usual activities maintain 97%.

The scope and structure of this project will depend on your assessment of the activities needed to address the problems. Whether the EFR action plan is a summary of your project or one of the same will also depend on the scope and size of the project. Ultimately it is for you to decide. Either way you should use appropriate and recognised project mechanisms to ensure that the project is successful.

Who should be involved in the project?

Most Suppliers who have achieved improvements in this area have said that a **dedicated team** is very important. **Appropriate skills and capability** must be appropriately allocated to realise the goals of the project. Again we cannot emphasise enough that committing and completing a successful 97% plan takes time and effort.

We suggest that a core of experts be involved in the project team in order to deliver real benefits. You will also need to take care that other areas of their business do not suffer if they divert key resources to these issues. All of these considerations should be captured as part of a properly managed project.

Where do my Agents fit in?

As a Supplier you are responsible for your performance and your Agents. You will need to **work with your Agents to achieve 97%**. You should review your contracts with your Agents to ensure that they will deliver the performance that you need. Contracts with Agents should include services that link with your obligations.

It is important that good management and operational relationships are established and maintained with Agents. You should consider regular meetings with your Agents to discuss issues and agree solutions. Action plans between you and your Agents may be needed to monitor and agree timescales for events. These meetings can form part of the operational escalation process where normal operational contacts have failed to resolve an issue.



Is it better to have a contract which ensures your Data Collector (DC) attempts to read all sites to which they are appointed, or that they have an access rate to achieve? The latter could mean that they read the same meters all the time.

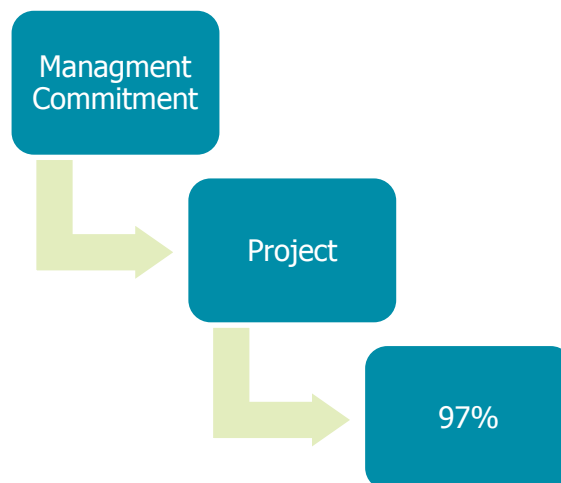
Some questions to think about:

- How often do you need to meet with your Agents?
- How are your Agents performing?
 - Do you have sufficient Service Level Agreements (SLAs) in place with your Agents?
 - What KPIs do you have for your Agents performance?
- What reports and information can they provide you?

For example, one simple measure could be to measure %AA performance per Data Collector (DC). If the relationship between a Data Aggregator (DA) and a DC is simple, (i.e. you always appoint them in pairs) you can measure %AA by DA and therefore understand the DC's performance.

However, if Agent appointments are not simple then you need to consider how you will measure the NHHDC's performance. Many NHHDCs will provide this type of reporting for you if you ask. We have seen examples of reports from NHHDCs to Suppliers that are very detailed. We believe that this type of reporting is very valuable to you and encourage you to talk with your DCs about the reports that they can provide for you. If you are unable to obtain DC performance reports from your Agents you should use the data available to you (i.e. D0004⁴, D0010⁵, and D0019⁶).

Summary



⁴ D0004 - Notification of Failure to Obtain Reading

⁵ D0010 - Meter Readings

⁶ D0019 - Metering System EAC/AA Data

97% Plans and Investigations

Before you can manage your %AA you need to do some analysis to understand your existing performance and portfolio. You'll need to know where processes are not working or could be improved. This section covers some of the data sources available and how to identify problems. If you need to provide ELEXON an action plan as part of EFR this section also includes some suggestions on how you may want to present your findings.

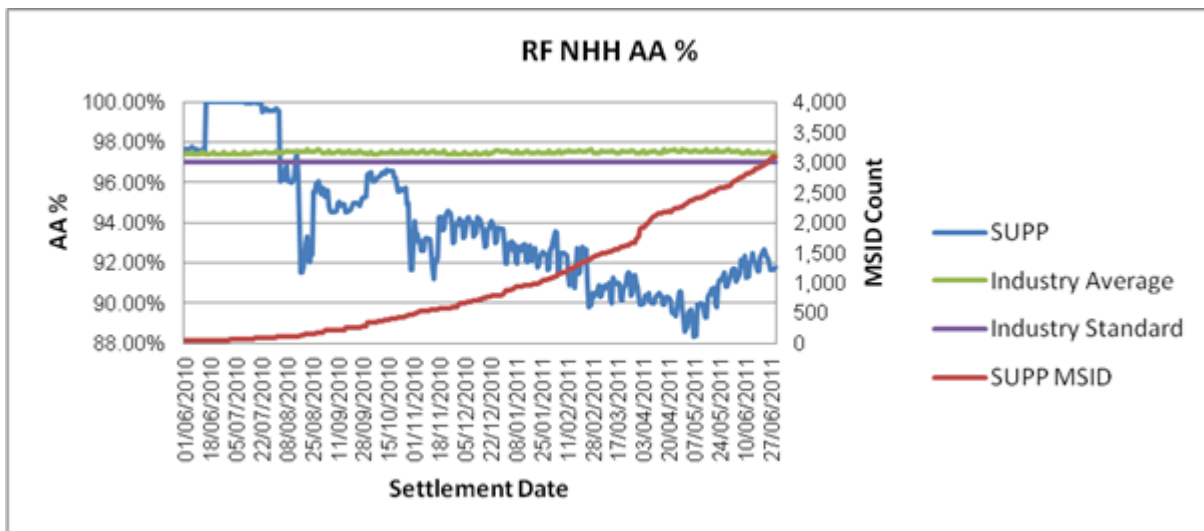
How do you know how you're doing?

Before you can make any detailed decisions, and to ensure that those already made are good, some form of performance monitoring is required. This will let you see the impact your actions are having.

As well as your own reports you can use the reports that we send you, such as the 'SO – 009- AA %' report, which shows your %AA performance across the Settlement Runs.



The graph below is an extract from this report.



You should monitor exceptions created within your business processes. You will need to decide how to prioritise the data flows and exceptions you manage. Understanding the reasons why exceptions are created will assist you in improving the process and help avoid exceptions.

Visibility of exception levels is key to understanding how your processes are working. We recommend that you seek information from your Agents on the number of exceptions they have relating to your Metering Systems (e.g. number of NHHDA failed instructions i.e. D0023s⁷).

⁷ Failed Instructions

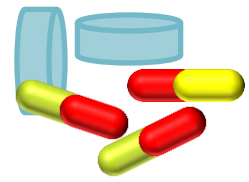
We can provide a host of other reports to support your monitoring. You should already be receiving some of these from your OSM. Make sure that the reports you receive are still the most relevant for your business, as requirements do change. Here are some of the more popular ones:

| Report | Benefit |
|---|--|
| SO – 009: AA Graphs | <ul style="list-style-type: none"> • Detailed view of SP08 (%AA & MSID count for each Settlement day and GSP Group). • You can compare your performance against the industry average. • This report can be provided weekly. |
| SO - 010 - Default EAC (NHH) | <ul style="list-style-type: none"> • One way to improve %AA is to reduce the number of MSIDs settling on a Default EAC. This report identifies the % of Metering Systems settling on Default EACs. • Can be trigger to investigate root causes (see below). • This report can be provided weekly. |
| SO - 016 - Supplier PARMS Analysis | <ul style="list-style-type: none"> • PARMS can also be used to identify issues with your Agents performance. Whilst you should have your own monitoring reports for your Agents this report provides detailed analysis of performance against the key PARMS serials. • Visualise historic and current performance for each PARMS serial. • This monthly report also shows a breakdown of your Supplier Charges. |

In order to understand what is contributing to your performance you will need to undertake root cause analysis.

Am I treating the Symptom or the Root Cause?

It's very easy to think you're resolving a problem causing underperformance, when really you're tackling the symptom of the problem. For example, reducing a backlog of material D0095s⁸ will most likely lead to %AA improvements. But the D0095 is really a symptom of whatever is causing the D0095. So what is causing the D0095? You should therefore **avoid defining problems in terms of its symptoms**, as it will obscure the real cause and lead to solutions that fail to address the fundamental condition.



Root cause analysis will allow you to identify the factors that resulted in the nature, the magnitude, the location and the timing of your %AA. It will allow you to identify what behaviours, actions, inactions, or conditions need to be changed to improve your performance.

When investigating root causes we encourage the use of the **5-whys technique** – asking why five times.

What is 5-whys?

The **5-whys** is a question-asking technique used to explore the cause-and-effect relationships underlying a particular problem. The primary goal of the technique is to determine the root cause of a defect or problem.

Here is an example of the technique at work:

Q1: Why are we getting an E13 SSC [D0095] exception?

- A1: Because the NHHDC hasn't sent a D0019 with the latest EAC and SSC

Q2: Why hasn't the NHHDC sent a D0019?

- A2: Because the NHHDC has rejected our D0052⁹ (we have received a D0310¹⁰)

Q3: Why has the NHHDC rejected our D0052?

- A3: Because the SSC effective date on our D0052 is different to the effective date on the D0150¹¹ from the Meter Operator

Q4: Why is the effective date of the D0052 different?

- A4: Because we took it from the appointment date on the request to change the SSC (D0142¹²) and not the date on the D0150 from the Meter Operator

Q5: Why did we use the appointment date?

- A5: Because our system has been designed to work that way.

So in this example a system change is required to solve the root cause. If this root cause is not addressed E13 exceptions will continue to be created. This will result in a Default EAC being used and a decrease in %AA, as the meter will be settling on estimated rather than actual data.

⁸ Non Half Hourly Data Aggregation Exception Report

⁹ Affirmation of Metering System Settlement Details

¹⁰ Notification of Failure to load or receive Metering System Settlement Details

¹¹ Non Half-hourly Meter Technical Details

¹² Request for Installation or Change to a Metering System Functionality or the Removal of All Meters

You will need to tackle the symptoms and the root causes to achieve and maintain 97%. If your underperformance was a headache, simply taking pain killers to address the headache (symptom) would not cure the root cause of the headache, which could be any number of things.

What data can I use for Root Cause Analysis?

You should already have a variety of data sources where you can measure the performance of your business processes. You will need to make judgements about the necessity and priority of each measure.

You should consider implementing routine monitoring of key control points in Settlements so that you are aware of any failure or underperformance before it affects the overall performance. The earlier you can capture problems the quicker you can fix them.

A good question to ask is **Where are my failure points for Settlements?**

These data flows show the journey of a meter read into Settlement. Each of these flows could fail and prevent a meter read getting into Settlement and improving %AA:



These are some of the critical data flows used to determine your energy consumption. You should have a way of validating and reconciling each of them. Where there are unexpected results or exceptions, appropriate actions should be taken. Let's have a look at some of these data flows in more detail.

D0010 - Meter Readings

As a Supplier you can receive a D0010 from the NHHDC and the Meter Operator Agent (MOA). If you receive a Customer Own Read (CoR) or a Pre-Payment Meter read (via D0188¹³) you will also send D0010s to the NHHDC. It's sounds obvious to say, but if the meter read is wrong then all subsequent use of the D0010 data will also be wrong.

As a control you may like to consider validating D0010s yourself. You should check that any D0010s you send to your NHHDCs are being processed and not failing validation. It's also worth checking that your NHHDCs are processing all D0010s, rather than storing them in hold tables.

D0019 - Metering System EAC/AA Data

Once your NHHDC has calculated the EAC/AA values it will send a copy of these values to you via a D0019 flow. This is your record of the consumption that the NHHDC is sending to Settlement.

¹³ D0188 - Key Transaction Details

Receiving a D0019 does not mean that the data gets in to Settlement, only that the NHHDC has calculated the values and sent them onto the NHHDA. In some cases, the NHHDA may reject the D0019 resulting in a D0023 flow from the NHHDA to the NHHDC. You should ensure that your Agents resolve any D0023 exceptions in a timely manner.

You should monitor D0019's to verify that:

1. You receive a D0019 for each valid meter reading (D0010)
2. The consumption values calculated by the NHHDC are consistent with your view of the customer's consumption
3. Any customers qualifying for Change of Measurement Class (CoMC) are identified
4. Any erroneous excessive consumption is corrected.

You will need to decide what Reconciliation Runs to monitor D0019s. The earlier Settlement Runs you monitor, the earlier you can resolve issues.

On a Change of Supply (CoS) gain you may also consider asking the NHHDA for the latest EAC/AA history and check the dates of the last AA. Where the dates for the AA are more than 14 months ago, you know there is likely to be an issue getting reads. This would allow you to prioritise this site and take action before R3/RF.

D0041 - Supplier Purchase Matrix Data File Analysis

NHHDA sends Settlement data to the Supplier Volume Allocation Agent (SVAA) using the D0041 file. This file contains aggregated Estimated Annual Consumption (EAC) and AAs. You should note that the D0041 does not take into account the effect of profiling and so will not match the weekly reports we send you or that we use to monitor 97%. Analysis of the D0041 can provide you with:

1. overall %AA performance by Supplier ID
2. %AA performance by GSP Group
3. %AA performance by NHHDA
4. %AA Performance by Standard Settlement Configuration / Profile Class.

To perform this monitoring you can use the "D0041 Tool"¹⁴ provided by us. Please speak to your OSM if you would like to obtain a copy. This spreadsheet can load and summarise a D0041 prior to analysis. However, if you are using multiple NHHDAs or you have multiple Supplier IDs may find it more efficient to obtain or develop a more sophisticated system to perform the analysis and reporting.

It's the D0041 data that we use as part of the [Erroneously Large EAC/AA process](#). This is a monthly process that forms part of the [Material Error Monitoring](#) technique from the PAF.

¹⁴ The D0041 Tool is not supported and we cannot be held responsible for its use or reliability.

What is the Erroneously Large EAC/AA process?

Each month NHHDA’s run a script to extract any EAC/AAs over defined thresholds per Profile Class. Each Supplier and NHHDC must investigate and confirm to ELEXON if the large EAC/AAs are genuine or erroneous. We offer [training](#) in this area to help you improve your resolution of large EAC/AAs.

It is worth remembering that should you remove an erroneously large AA your %AA performance will be impacted. Similarly, if you replace an erroneous AA with an EAC your %AA will effected. However, if you remove an erroneously large EAC and replace it with a smaller EAC, or even better an AA your %AA performance will improve. In order to understand why consider how %AA is calculated:

$$\%AA = \frac{AAs}{AAs+EACs} \times 100 \text{ ...so to look at two contrasting examples:}$$

| Removal of an erroneously large AA | Removal of an erroneously large EAC |
|---|---|
| Before: $\frac{100,000}{100,000+100,000} \times 100 = 50\%$ | Before: $\frac{100,000}{100,000+100,000} \times 100 = 50\%$ |
| After: $\frac{80,000}{80,000+100,000} \times 100 = 44.4\%$ | After: $\frac{100,000}{100,000+80,000} \times 100 = 55.6\%$ |



What’s the materiality calculator?

In addition to sending you a list of instances to investigate ELEXON also send you a materiality calculator. This can be used to validate and predict your Erroneously Large EAC/AA error. If your portfolio is small enough to analyse in excel, you may also use this calculator as a way to profile your D0019 data. This may be useful when forecasting your performance. For more information please contact your [OSM](#).

D0081 - Supplier Half Hourly Demand Report Analysis

The SVAA sends each Supplier a Half Hourly Demand Report (D0081) after each SVA run (SF, R1 etc.). This report will allow you to replicate the calculations performed by us to monitor your %AA performance. Using the D0081 to monitor %AA has the distinct advantage that it will tell you exactly the same numbers as in the ELEXON reports. However, there are some disadvantages:

- It is less timely than the D0041 analysis
- It is not possible to disaggregate the numbers to the same degree as the D0041.

We monitor NHH %AA using PARMS serial SP08a for Supplier Charges



What is SP08?

SP08a is the PARMS serial used to monitor Supplier's percentage of energy settled on AAs. SP08b monitors HH Metering Equipment at above 100kW premises and SP08c for HH Metering Equipment at below 100kW premises. All are submitted to ELEXON by SVAA. Any underperformance against SP08 a, b or c will incur a Supplier Charge. Details on Supplier Charges can be found [here](#), and can be discussed with your OSM.

For those who are more technical, SP08a should correspond to Consumption Component Class (CCC)Ids 17, 17a and 18, 32, 33 ([Section X-2](#) table X-8) from the D0081 and the CCC Ids for losses, (20, 21, 34 and 35). This means it is a complete view of data including export and losses which has been [profiled](#) and adjusted for [GSP Group Correction](#).

Using a combination of D0081 and D0041 analysis will allow you to really understand your %AA performance in more detail.

How do I present my EFR action plan?

If you're not in EFR then you won't need to submit an action plan to ELEXON. However, it may still be useful to use this approach if you want to improve or maintain %AA.

Before you can write the plan you should undertake some analysis to understand where the under performance is rooted. Once each failing is understood and quantified, it can be included in the plan and the expected improvements can be tracked.

The accumulation of each improvement will provide a forecast for achieving 97%. The plan should include suitable milestones that allow the project to be monitored and any slippage to be quickly addressed. It may be that you need to revise your action plan over time and return to the planning stage based on the monitoring and results from your plan to date.

The milestones you set should be realistic and based on quantitative data that can be linked to particular initiatives or actions. Ideally a 97% plan should include a milestone for achieving 97%. However, if it is not clear how you will reach 97% then your plan should have milestones that detail how you will reach a stage where 97% can be included in the plan. A template for your action plan can be found in [BSCP538](#). The image below shows what section C of this template looks like:

| MILESTONES | | |
|------------|-----------------------|-------------|
| Milestone | Milestone Description | Target Date |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

The first question to ask is:

Which MSIDs are not settling on an AA at RF and why?

- This can be summarised in a table and could include the associated energy with each pot.

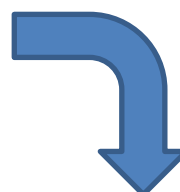
Some additional questions to consider:

1. What GSP Groups and Reconciliation Runs will I focus on?
2. What volumes of backlogs do I have (e.g. D0095s, failed reads)?
3. What are my success criteria?
4. What internal reporting do I have – how often, who sees it, and what's done with the data?
5. How do I investigate root causes?

You should include the answers to these questions in your plan as and when you have them.

It is recommended that you determine your %AA milestones using a bottom up approach. This will require you to determine how much improvement you'll realise from each activity. The plan should show when each %AA milestone will be achieved. A good starting point is to establish your status at RF and reconcile it against the ELEXON reports such as the 'S0 - 009- ABCD AA %' report. This view should then be broken down to identify where the issues sit. Here is a high level example of how this approach could be summarised:

| Supplier ID ABCD @ RF | MSIDs | Energy MWh | % |
|-----------------------|--------|------------|------|
| AA | 20,000 | 140,000 | 80% |
| EAC | 5,000 | 35,000 | 20% |
| Total | 25,000 | 175,000 | 100% |



| Issue | MSID Count | Energy Volume (MWh) | %AA |
|---------------------------------------|------------|---------------------|-----|
| Read Required | 2000 | 14,000 | 8 |
| Standing Data Mismatch | 1000 | 7,000 | 4 |
| Pre-payment Meter Issue | 1000 | 7,000 | 4 |
| D0010 received / missing D0019 | 800 | 5,600 | 3.2 |
| Failed D0010s | 700 | 4,900 | 2.8 |
| Missing CoS Read | 500 | 3,500 | 2 |

Note: This example has applied the same volume of energy to each MSID.

For each of the issues there will be a number of root causes. Each of the root causes can be summarised in a similar fashion. For each root cause there should be a remedial action.

For example, in order to resolve the 'Reads Required' issue, a special reads programme could be initiated. Typically this initiative would have its own key performance indicators that you agree as a project team in advance, to monitor progress and take appropriate action:

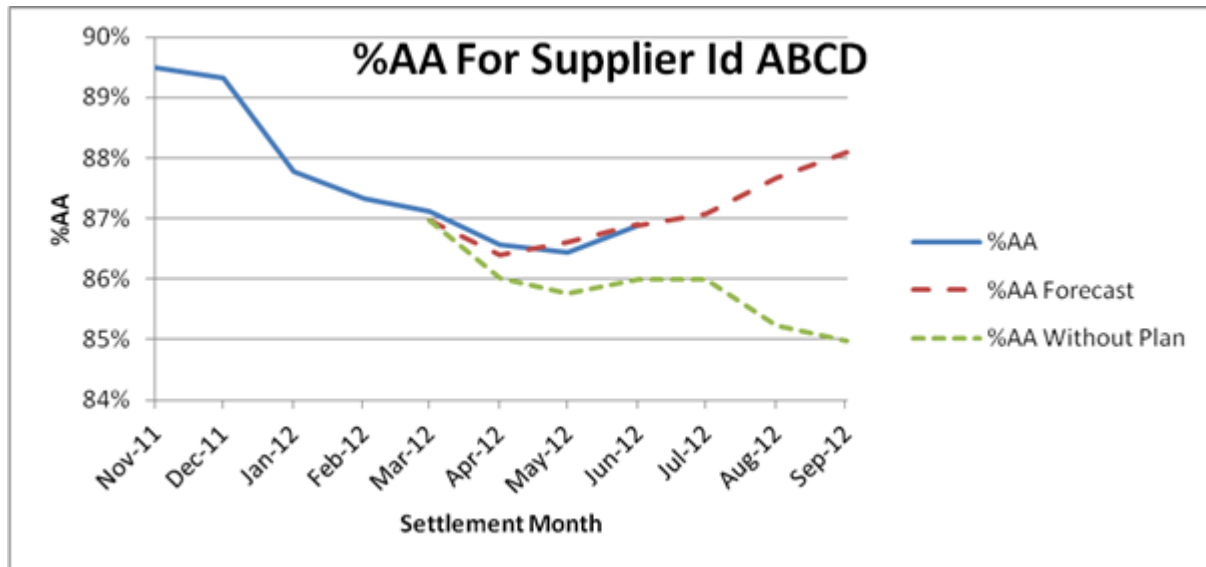
| Read Initiative | | Sent | Target Response | Actual Response (YTD) | RAG | Area Responsible |
|------------------------|-------|------|-----------------|-----------------------|-------|--------------------------------|
| Letters | MSIDs | 1000 | 300 | 120 | AMBER | Billing – Joe Blogs |
| | MWh | 7 | 2.1 | 0.84 | | |
| | %AA | 4 | 1.2 | 0.48 | | |
| Call Centre | MSIDs | 500 | 350 | 200 | GREEN | Customer Service – Joe Blogger |
| | MWh | 3.5 | 2.45 | 1.4 | | |
| | %AA | 2 | 1.4 | 0.8 | | |
| Site Visit Read | MSIDs | 500 | 350 | 150 | RED | Billing – Joe Blogs |
| | MWh | 3.5 | 2.45 | 1.05 | | |
| | %AA | 2 | 1.4 | 0.6 | | |

You may also need to break this down further by for example GSP Group and / or Profile Class to really understand where the problems lie. You will also need to consider what preventative measures you can take. For example, to minimise the number of reads required you could prioritise the hard to access sites early in your read cycle. You could go further and identify risks and mitigations for each activity you plan to undertake. We strongly recommend that each activity has an owner who is responsible for delivering that initiative.

It is unlikely that any initiatives you undertake will be 100% successful. For example if you plan to initiate a special reads programme for 500 sites, you may only get reads from 100 of those. These 'success rates' should be taken in to consideration when forecasting your %AA and setting your milestones.

The layout and format of your plan is also really important. Think about the best way to present your data and results.

You should consider including a graph like this one:



The graph shows Supplier 'ABCDs' predicted %AA with and without taking any corrective steps to improve performance. Each month the blue line is extended to show what was actually achieved.

Recap

It sounds obvious to say, but a 97% action plan should detail how you plan to achieve and maintain 97%! There are three key elements:

- Identify the MSIDs that are failing at RF, the root causes and the energy associated with the causes. **Don't forget to include lost appointments.** These will still be contributing to your Settlement Performance until they pass RF.
- Detail the action you plan to take to address each of the root causes and what you plan to prioritise.
- Forecast what impact your actions will have on your %AA and when. These predictions should form the basis of your EFR milestones e.g. to achieve 95.4 %AA by 30 April.

Some Example Initiatives and Activities to help you Achieve 97%

We will now go over some common initiatives and activities that have worked for other Suppliers. There is no one size fits all solution for 97% and so you will need to work out what activities will work best for your company. There may be some short term or quick wins that you can do, before moving onto longer term activities which may require, for example, process changes or recruitment of new staff.

What will yield the biggest %AA gains for the same effort? For example, obtaining additional readings for larger customers or addressing excessive consumption? We suggest identifying all the possible activities that could gain %AA increases and working out the expected benefit and cost of each activity.

Letter Writing

Many Suppliers have experienced good results from writing to customers who do not have a meter reading and asking for a Customer Own Reading (CoR). Analysis of either yours or NHHDC or NHHDA systems can reveal which Metering Systems do not have a reading at RF. You can use this information to drive letter writing or an email exercise. In addition your website could promote Customer Own Reads and allow submissions of them.

The success of this process will depend of the type of customers that are missing a reading. You may decide to use different communication methods for different types of customers. You can repeat this process periodically until they have addressed the root causes.

Once you get a read you should ensure that it passes validation and enters Settlement. The receipt of a D0019 does not mean it's in Settlement. If you have a site that has not had a read in a few years, or has been settling on a Default EAC, you will need to get at least two valid reads over a couple of months to get an AA and pass validation.

Review CoRs

You are obliged to send any data received from your customer relating to consumption to your NHHDC for processing. Some Supplier systems do not always pass on the CoRs to the NHHDC, especially where they have been received outside of a billing window. You may find extra readings sitting on your systems that have not been used in Settlement. We suggest that you verify all CoRs have been sent to the relevant NHHDC.

Reminder: You must send all CoRs to your NHHDC!

Customer Training for CoRs

If you have customers with difficult to access sites, you should **consider training the customer's staff to obtain Customer Own Readings**. This approach may not be appropriate in every case but can be very effective especially where the customer's staff make regular visits to the sites.

This training may be achieved by arranging for an appropriate person to accompany the customer's staff while on site visits and showing them how each of the meters should be read. You should consider creating a **template document for data capture**. This document would be tailored to ensure that the correct readings are obtained for all meters and registers.

Pre-Payment Reading

Failure to send Pre-Payment Meter (PPM) readings to the NHHDC can result in poor %AA performance. Usually, the PPM infrastructure operator will send readings directly to the Supplier along with other payment details. It is important that you forward at least one meter reading to the NHHDC (if one is available) every quarter. You should **review all PPMs without a reading** and investigate why they do not have one. This may be due to a metering problem, misdirected payments, meter tampering or process failure. Resolving any identified issue will improve the %AA performance.



Did you know you're required to send at least one PPM read every quarter?

Portfolio Reconciliation

Ensuring that you and your Agents systems hold consistent data may resolve the effects of poor process controls. Performing a portfolio reconciliation will reveal if there are inconsistencies that need to be addressed. Portfolio reconciliation may be performed in a number of ways and levels of sophistication.

The basic process would be to confirm that the registrations and appointments for a specific date are consistent across the Supplier Meter Registration Service (SMRS), Supplier and Agent systems. This will require you to check the data held by your Supplier Meter Registration Agents (SMRAs, also known as MPAS and provided by Distributors) against the equivalent data from each of your NHHDCs. You can then identify any anomalies by comparing the data from each source.

Agent Appointment Controls

You need to ensure that you appoint and register Agents for all Metering Systems for which you are the registrant. Any failure in the Agent appointment process will inevitably lead to other issues. You are advised to review your Agent appointment process and look **for control points within the process that can be monitored (e.g. D0155¹⁵, D0148¹⁶, D0151¹⁷)**. You should consider how you will ensure that the Agent appointment process completes successfully for all Metering Systems and where the common failure points are. Once you are aware of the failure points, you can implement the appropriate controls.

An example of a control point for the appointments process is where an Agent fails to accept or reject an appointment. At the very least there should be monitoring to ensure that a D0148 is sent to all Agents at the end of the process. **You can use PARMs serials** to see how you are performing in the appointments process. You can also use the serials to see how your Agents are performing in other key areas such as the transfer and quality of Meter Technical Details.

Special attention needs to be given to the situation where Agents are appointed or de-appointed on a Change of Supplier. Often this can result in the Agents being appointed to the wrong Supplier. Good quality monitoring in this area would also allow you to pick up on erroneous CoS and CoA events, which could cause performance problems and impact the customer.

You should consider setting up a team to interface with your Agents. **This team could arrange periodic meetings with each Agent where issues and solutions can be addressed.**

Reading Frequency

If you are not getting meter reads you will not be settling on AAs. You should review the frequency at which your Agents read the meters. Just adopting the last Supplier's reading frequency may not deliver the optimum return for the reading effort.

You should consider setting annual consumption thresholds for different reading cycles so as to optimise the return from reading effort. This could be further extended to take into account the reading success rate for different geographical areas or point of sale information about access arrangements.

¹⁵ D0155 - Notification of Meter Operator or Data Collector Appointment and Terms

¹⁶ D0148 - Notification of Change to Other Parties

¹⁷ D0151 - Termination of Appointment or Contract by Supplier

Reading Cycle Adherence

You should ensure that your Agents are attempting to read all the Metering Systems in accordance with the reading cycle specified during the Agent appointment. In line with the reading cycle, the NHHDC should provide you with Meter Readings (D0010) or a Notification of Failure to Obtain Reading (D0004). If the NHHDC does not send either flow, it indicates that the NHHDC has not attempted to read the meter and a potential issue exists for the Metering System.

New to the market?

We've found that some new Suppliers don't have agreed read cycles with their Data Retrievers/NHHDCs.

This can often be a cause of poor Settlement performance in the later Settlement Runs.

We would really encourage you to set up proper agreements with your NHHDCs when entering the market to prevent problems later.

You should consider setting up **monitoring and regular reports that highlight where the NHHDC has not sent a D0010 or D0004** in line with the reading schedule. A summary of this output could be included in the management reporting information pack and to the team that manage the Agents. Appropriate procedures should exist to address any failures that the reports highlight.

Failure to Obtain Meter Reading

When your NHHDC fails to obtain a meter reading, they should send you a D0004 data flow. This report should provide you with information about why the NHHDC was unable to obtain the reading. **This is vital as this is the only information that you would normally get from the site or premise.** You should be monitoring D0004 flows and taking suitable action to address any on-going failures.

The "Site Visit Check Code¹⁸" and optionally the "Additional Information¹⁹" data items on the D0004 flow will provide information for you to act on. Some of these codes will require immediate action (e.g. code 02 'Site not occupied' or code 05 'Metering Equipment Damage') others may only require action if there is continuing failure to obtain a reading (e.g. two or more consecutive code 20s 'No Access').

In many cases, you may find that the NHHDC is using Site Visit Check Code 20 (No Access) excessively and that very little further information is being provided. If you find this to be the case, you should **talk to your Agents about improving the quality of data** they are providing. NHHDC field staff should be encouraged to provide sufficient data to support Supplier processes for dealing with long term no access sites. If you act on this information you may find that your meter readers are more inclined to provide better data.

¹⁸ J0024

¹⁹ J0012

Meter Reading Validation

The NHHDC is the sole judge of a meter reading's validity. However, there is value in you performing a check on the meter readings that you receive from your NHHDCs. You will usually perform reading validation pre or post bill production, and this can be the basis of a useful feedback mechanism to the NHHDC.

It is suggested that you consider reporting any readings that you have considered good enough for billing but the NHHDC has flagged as "invalid" and any reading flagged as "valid" that are not good enough for billing to your NHHDC. You can send this information to the NHHDC so that they are able to consider it when performing further validation. You will need to agree a suitable process with the NHHDC to allow this to work. You should note that you cannot instruct a NHHDC to change the validation status of a reading. This process is intended to provide the NHHDC with additional information that can be considered when performing reading validation. D0095 Resolution

Your NHHDCs should provide you with D0095 exceptions (normally in accordance with the timetable issued by ELEXON for D0095 reporting). This report informs you of anomalies that exist in the NHHDC database. This is a **key control point within the Settlement** systems that allows you to identify and resolve any problems.

Not all D0095 exceptions will report a material problem. You need to be able to distinguish the **material exceptions** and correct data to clear them. We have published a guide for resolving D0095 exceptions that you can obtain via the [BSC Website](#). Many D0095 exceptions will have a direct or indirect impact on your ability to achieve 97% and ensuring that the exceptions are addressed is key to achieving targets.

Addressing D0095 exceptions is a complex process that requires reference to various other data sources to establish where the anomalies are rooted. This needs to be followed by a corrections process that can involve Supplier and Agent systems. Careful controls are needed to ensure that work is not duplicated when the exceptions existing in more than one D0095 file are addressed. You will need to consider carefully the level and type of resource that you apply to this role and the degree to which automation is employed.

Must Read Process

Implementing a must read process can significantly improve the number of meter readings that are obtained. The process **identifies customers or meters that have not been read for a period of time** e.g. 6 months. These instances are then flagged for reading on an enhanced data collection process.

This process could involve data retrieval staff, letter writing, telephone calls and appointments. Exactly which mechanisms to use and the criteria for initiating them will depend on your specific circumstances and the read cycle for the customer. The process could also start when two or three routine visits have failed to obtain a reading.

Don't forget there is a license condition to use best endeavours to inspect a meter every two years. If successful this should result in a reading.

Tenancy Changes and Vacant Properties

While a tenancy change is not a BSC process, it can result in Settlement problems in some scenarios. You should consider reviewing tenancy changes that have remained incomplete for more than a year. This could indicate that the premise is no longer in use, allowing you to de-energise or even disconnect the meter point and therefore improve Settlement performance.

You need to consider your **policy for dealing with vacant properties**. Where you no longer have an active tenant at a site, you will continue to incur a Settlement liability until the meter is read.

Often when the premise is empty, obtaining a reading can be very difficult. This can lead to safety and revenue protection issues. Even after the meter is read it is likely that the new EAC will be bigger than actual consumption. You need to consider what level of action you take for longer term vacant properties, for example the Long Term Vacant process (LTV).

Ultimately, you need to consider at what point you will De-energise the Metering System. Clearly, De-energising a Metering System has a cost that needs to be balanced with the risks to performance of leaving it Energised. Experience has shown that many apparently idle services are active and that potential customers are not being billed. Analysis of a sample of idle services can help to construct persuasive cost benefit arguments for addressing this issue.

An example policy may include the following steps:

- after 3 months – send letter to the occupier;
- after 5 months – attempt telephone contact;
- after 9 months – arrange special reading;
- after 12 months – attempt to De-energise the site;
- after 15 months – seek Warrant of Entry.

Vacant property policies should interact with Suppliers' must read policies.

Have you considered the Long Term Vacant Process (LTV)?

Point of Sale Information

Your registration team will have a greater chance of success if the information provided to them by the sales function is fit for purpose. You should consider **implementing a registration quality gate** that verifies the data received from the sales team prior to initiating the registration process. You should have a clear set of criteria for this quality gate so that the sales team is fully aware of what is needed for a successful registration and customer set up. **This could include site access details and agreements**. This is especially important for larger customers with difficult to access premises (e.g. water sites, telephone masts or military installations).

Data Quality Team

Data is a key asset in the operation of any business and Data Quality is a key Supplier issue. You need to consider setting up a team to look after your data. This team will need the management support from all the departments that acquire, process, or rely on the data.

This team can be given responsibility to identify and ensure the resolution of any data quality issues. This may include monitoring all data entering and leaving the business processes. You should seek to **identify where data quality is damaged** and make recommendations for improvements. You should also **implement controls** that ensure that damage caused to your poor data quality is minimised. It is important that this type of team produce regular reports on performance so that the other departments can appreciate the effects of data quality.

Involvement of Call Centre staff

Your call centre or Customer Relationship Management staff has an important role to play in achieving 97%. You should ensure that they are aware of the importance of obtaining meter readings whenever possible. You can consider using **call centre staff to obtain meter readings** although this will need to be balanced against other call centre objectives.

Training

Many problems that affect Settlement are due to operator misunderstanding of the Settlement processes leading to misjudgement of the consequence of well-intentioned actions. You should review the level of Settlement training you provide to staff that make decisions about the way data is processed or the resolution of issues.

Do your staff realise the impact of their work and the wider Settlement processes?

Can ELEXON help you by providing training? Why not ask your OSM?

Checklist Summary

Which initiatives will you use?

| | |
|---------------------------------------|--|
| Letter Writing | |
| Review CoRs | |
| Customer Training for CoRs | |
| Pre-Payment Readings | |
| Portfolio Reconciliation | |
| Agent Appointment Controls | |
| Reading Frequencies | |
| Reading Cycle Adherence | |
| Failure to Obtain Meter Reading | |
| Meter Reading Validation | |
| D0019 Monitoring | |
| D0095 Resolution | |
| Must Read Process | |
| Tenancy Changes and Vacant Properties | |
| Point of Sale Information | |
| Data Quality Team | |
| Involvement of Call Centre Staff | |
| Training | |

Key Data Flows to Monitor

This is just a selection of data flows that we think you should be monitoring to help your Settlement performance. Your Agents may be able to provide you with reports on some of them. There are many others you may wish to consider!

| Data Flow | How can this help? |
|---|---|
| D0010 - Meter Readings p.11 | <ul style="list-style-type: none"> Ensure that these are being processed and not failing validation. They are the first step in getting an AA. Don't forget that even if you are billing your customer based on HH data from an AMR or smart meter, this doesn't guarantee that the NHH meter read (D0010) used for Settlement purposes is getting into Settlement. |
| D0018 - Daily Profile Data Report | <ul style="list-style-type: none"> This is important if you want to reconcile your D0081 or your SP08a data. NHH data is profiled by SVAA, so any Settlement volumes prior to this will not be profiled. |
| D0004 - Notification of Failure to Obtain Reading p.22 | <ul style="list-style-type: none"> It's important to understand and take action on any failed attempts to read the meter. Are the right site visit check codes being used? |
| D0019 - Metering System EAC/AA Data p.11 | <ul style="list-style-type: none"> There is lots you can do with a D0019, including volume validation and cross-checking against D0010s. |
| D0041 p.12 | <ul style="list-style-type: none"> This is the NHHDA's view of your Settlement Volumes. This data is not profiled, excludes losses and GSP Group Correction. |
| D0081 p.13 | <ul style="list-style-type: none"> This is SVAA's view of your Settlement Volumes. These volumes are what we use to monitor %AA. It's important to know how these volumes are derived. |
| D0086 ²⁰ | <ul style="list-style-type: none"> One flow that has not been mentioned is the D0086. Many Settlement issues arise during the Change of Supplier process. You may wish to consider monitoring the D0086s to ensure Change of Supply reads are what you expect. |
| D0095 p.23 | <ul style="list-style-type: none"> Not all D0095s are equal as far as Settlement impact is concerned. You should ensure D0095s are worked by you and your agents to prevent backlogs occurring and reduce Settlement impact. The NHHDA is the last agent with whom you still get meter level data, and so acts as the last control point to resolve exceptions. |
| D0023 p.11 | <ul style="list-style-type: none"> Another exceptions report that you won't ordinarily see. Confirm with your NHHDCs that these are being worked. You may have received a D0019 and therefore expect this volume to make its way to Settlement. Make sure a D0023 isn't stopping it getting there! |

²⁰ D0086 - Notification of Change of Supplier Readings

Need more information?

If you have any other queries, please contact your [Operational Support Manager](#) (OSM). If you do not know who your OSM is, please email OSMmanagement@elexon.co.uk.

Useful Links

- [Beginners Guide to the Electricity Arrangements](#)
- [BSC Section S-1](#)
- [BSC Section X-2](#)
- [BSCP533](#)
- [BSCP538](#)
- [Business Unit Settlement Risk Rating](#)
- [ELEXON](#)
- [Erroneously Large EAC/AA process](#)
- [Error and Failure Resolution](#)
- [GSP Group Correction](#)
- [Long Term Vacant Process](#)
- [Material Error Monitoring](#)
- [Operational Support Manager \(OSM\)](#)
- [PARMS](#)
- [Peer Comparison graphs](#)
- [Performance Assurance Board](#)
- [Performance Assurance Framework](#)
- [Qualified Persons Workbook](#)
- [Supplier Charges](#)
- [Training](#)

For more information please contact the **BSC Service Desk** at bscservicedesk@cgi.com or call **0370 0106950**

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