Guidance

Business Unit Settlement Risk Ratings (BUSRRs)

Introduction

Who is this document for?

If you can answer "yes" to these:

1. Are you a Supplier or Meter Operator?
2. Do you want to understand how you are performing against the Top Settlement Risks and the impact this could have on your organisation?

This document is for you.

What's the purpose of this document?

To help you understand what BUSRRs are, how they are calculated and the impact your performance against the BUSRRs may have for your organisation.

Finding your way around

We provide information on all of the BUSRRs here so, if you are only interested in just one, you may wish to read the introductory sections and then skip to the section you need.

Contents:

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 the About ELEXON page of our website.

ELEXON also offers training to BSC Parties and Party Agents including regular training events for people that are new to working with the Balancing and Settlement Code (BSC) and its procedures (Introducing ELEXON Seminars). Please contact your Operational Support Manager (OSM) if you feel you would benefit from this training.

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 OSM.

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.

What are BUSRRs?

The Performance Assurance Framework

The Performance Assurance Framework (PAF) was introduced in 2008 to provide assurance that:

- Energy is allocated between Suppliers efficiently, correctly and accurately
- Suppliers and Supplier Agents transfer Metering System data efficiently and accurately
- Calculations and allocation of energy and the associated Trading Charges are performed in line with the requirements detailed in the BSC.

Each year, the BSC Panel and the Performance Assurance Board (PAB) deploy the Performance Assurance Framework (PAF) to manage Settlement Risks.

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.

Performance Assurance Techniques (PATs) are applied to Performance Assurance Parties (PAPs) based on the Settlement Risks that they pose.

A PAP is the legal company or entity who operates as a Supplier, Licensed Distribution System Operator (LDSOs) or one of the Party Agents that helps Suppliers and LDSO complete Settlement activities.

However, the risk that organisations pose to Settlement is usually assessed at a **Business Unit (BU)** level. The Business Unit is the Market Participant ID (a four alpha character code) which applies to a discreet part of the business and one particular role.

The PAB, with support from us (ELEXON), identify, evaluate and prioritise the risks that may occur within Settlement and the extent to which they apply to each BU.

The Risk Evaluation Register is used to record all the potential risks to settlement and determine the **Top Risks.**

Where we are able to, we then use reporting to monitor how the operations of relevant Business Units contribute to the level of risk each of the Top Risks pose. We use **Business Unit Settlement Risk Ratings (BUSRRs)** to do this.

There are two types of BUSRRs, Risk and Performance:

- The BUSRR that has not been adjusted is based purely on the data reported by the parties and measured by BUSRR criteria. This is known as the Performance BUSRR.
- The BUSRR that has been adjusted for consideration of size is referred to as the **Risk BUSRR.**

Both the Performance and Risk BUSRRs are presented to the PAB. This allows the PAB to make informed decisions concerning the risk posed by an organisation which is underperforming. The Parties are only presented with their Performance BUSRRs to ensure they are provided a true indication of their performance and potential risk to Settlement.

For more information on how we operate the PAF and calculate the Top Risks to Settlement please visit the Performance Assurance page of the BSC Website.

Introducing BUSRRs

A BUSRR is a broad indication of the relative industry risk posed by the MPID for each Settlement Risk.

Rating	Level of risk
RED	Higher
AMBER	Cautionary
GREEN	Low

The BUSRRs are reported to PAB each month in a confidential report called the **Settlement Risk Report**.

BUSRRs are reported for each of the Top Settlement Risks we are able to monitor. Top Settlement Risks are those deemed most likely to become a Settlement Issue at industry level if Parties poorly perform against them:

Settlement Risk	Half Hourly (HH)/Non Half Hourly (NHH)	Risk Description	Type of BU BUSRR calculated for
SR0024	NHH	The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs (Data Collectors) resulting in Meter readings not being collected.	NHHMOA Supplier
SR0025	HH	The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings not being collected.	HHMOA Supplier
SR0072	NHH	The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.	Supplier
SR0074	NHH	The risk that NHHDCs do not collect and/or enter valid Meter readings resulting in old/default data entering Settlement.	Supplier
SR0081	HH	The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement.	Supplier
SR3019	HH	The risk that HHMOAs do not provide correct MTDs, including when HHMOAs make changes to MTDs, to the Half Hourly Data Collectors (HHDCs) resulting in Meter readings not being collected or misinterpreted.	HHMOA Supplier

An overall BUSRR that provides a view of performance across all the Top risks is also calculated for Suppliers and Meter Operators (MOAs).

The next section explains how each of the BUSRRs is calculated and how you can begin initial investigations into poor performance.

Once the BUSRR has been calculated based on performance (the Performance BUSRR), it can be modified by other criteria which we use to determine risk (the Risk BUSRR). The criteria we use to determine the Risk BUSRR is explained in the individual explanations for each risk.

SR0024 Performance BUSRR Calculations for Suppliers and MOAs (a NHH Risk)

The BUSRR for Settlement Risk SR0024 assesses the risk that Non Half Hourly Meter Operator Agents (NHHMOAs) do not provide Meter Technical Details (MTDs) to the correct Non Half Hourly Data Collectors (NHHDC), when there has been a Change of Supplier (CoS) and simultaneous Change of Agent (CoA), resulting in Settlement data not being collected by the NHHDC.

The NM12 PARMS Serial is a reported by NHHDCs on NHHMOAs; NHHDCs report against every MSID they should have received NHHMTDs for, from NHHMOAs following a Change of Agent (CoA) or Change of Supplier (CoS). NHHMTDs are sent over the Data Transfer Network (DTN) using the D0150 flow or any other electronic method as agreed.

NHHMOAs should send MTDs to the new NHHDC within 10 working Days of the Effective from date (EFD) of a CoA or CoS event. The NHHDC submits the data to PARMS and we collate the following information for each Supplier and NHHMOA:

- Number of unique registrations held at any point in the previous 14 months to snapshot day
- Number of registrations for which no D0150 is held
- Number of D0150s missing between +17 WD and +39 WD from EFD (before R1)
- Number of D0150s missing between +40 WD and +84 WD from EFD (before R2)
- Number of D0150s missing between +85 WD and +154 WD from EFD (before R3)
- Number of D0150s missing between +155 WD and +292 WD from EFD (before RF)
- Number of D0150s missing from +293 WD from EFD (after RF)

A two-step approach is used to calculate the SR0024 BUSRR:

- **Compliance measure:** If the sum of the missing MTDs for a Supplier or Agent for Settlement Runs before R1, R2, R3, RF and for runs after RF is greater than 0.5%, of the total number of MSIDs that should have been sent, the Party is above threshold if it is equal to or less than 0.5% the Party is below threshold.
- **Performance measure:** The performance measure considers the percentage of the MTDs that are missing for before R3, before RF and after RF. If 25% of the MTDs are still missing at these run types the organisation is above threshold.

The performance BUSRR is then calculated:

Measure	RED	AMBER	GREEN
Over 99.5% of MTDs have been sent for all registrations after 17 Working Days onwards and less than 25% of those that are missing are for registrations that have been in effect for more than 85 Working days (before R3).	The percentage of **TOTAL** missing NHHMTDs is greater than 0.5% of NHH registrations within the snapshot window **AND** of those missing more than 25% are still outstanding +85 WD after the Registration EFD	The percentage of total missing NHHMTDs (before R1 to after RF) is greater than 0.5% of NHH registrations within the snapshot window AND the percentage of NHHMTDs missing before R3 to after RF is less than 25% **OR** if the percentage of total missing NHHMTDs (before R1 to After RF) is less than 0.5% AND the percentage of D0150s missing before R3 to after RF is greater than 25%	The percentage of total missing NHHMTDs (before R1 to after RF) is less than 0.5% of NHH registrations within the snapshot window **AND** the percentage of NHHMTDs missing before R3 to after RF is less than 25%

Adjustment

This BUSRR may be adjusted for consideration of size; the smaller the Supplier Energy Share, the less risk posed by poor performance. This is presented to the PAB, alongside the unadjusted Performance BUSRR. Parties are provided with their unadjusted Performance BUSRR only.

Supplier - The Performance BUSRR is then adjusted to take into account the organisation's share of the market (in the case of Suppliers only) and if the Supplier has less than 2% of the market share they will receive a negative adjustment, taking them more towards GREEN, as a reflection that they are a lower risk to the industry. This is called the Risk BUSRR and is presented alongside the Performance BUSRR to the Performance Assurance Board

Meter Operator - The Performance BUSRR is then adjusted to take into account the MOA's volume of registrations within the past 14 months. If the MOA has less than 2% of the Registrations in the previous 14 months they will receive a negative adjustment, taking them more towards green, as a reflection that they are a lower risk to the industry. This is called the Risk BUSRR and is presented alongside the Performance BUSRR to the Performance Assurance Board.

SR0025 Performance BUSRR Calculations for Suppliers and MOAs (a HH Risk)

The BUSRR for Settlement Risk SR0025 assesses the risk that HHMOAs do not provide Meter Technical Details (MTDs) to the Half Hourly Data Collectors (HHDC), when there has been a Change of Supplier and simultaneous Change of Agent, resulting in Settlement data not being collected by the HHDC.

The HM12 Serial is reported by HHDCs on HHMOAs; HHDCs report against every MSID they should have received HHMTDs for from HHMOAs following a CoA or CoS. HHMTDs are sent over the (DTN) using the D0268 flow or any other electronic method as agreed.

Old HHMOAs should send MTDs to the HHDC within 5 working Days of the Effective from Date (EFD) of the change of Agent. The HHMOA submits the data to PARMS and we collect the following information for each Supplier and HHMOA:

- Number of unique registrations held at any point in the previous 14 months to snapshot day
- Number of registrations for which no D0268 is held
- Number of D0268s missing between +17 WD and +39 WD from EFD (before R1)
- Number of D0268s missing between +40 WD and +84 WD from EFD (before R2)
- Number of D0268s missing between +85 WD and +154 WD from EFD (before R3)
- Number of D0268s missing between +155 WD and +292 WD from EFD (before RF)
- Number of D0268s missing from +293 WD from EFD (after RF)

A two-step approach is used to calculate the SR0025 BUSRR:

- **Compliance measure:** If the sum of the missing MTDs for a Supplier or Agent for Settlement Runs before R1, R2, R3, RF and for runs after RF is greater than 0.5%, of the total number of MSIDs that should have been sent, the Party is below the compliance threshold.
- **Performance measure:** These BUSRRs are then adjusted by considering the percentage of the MTDs that are missing for before R2, before R3, before RF and after RF. If any of the MTDs are still missing at these run types, the Supplier of HHMOA receives it is below threshold, if none are missing, it is above threshold.

The performance BUSRR is then calculated:

Measure	RED	AMBER	GREEN
Over 99.5% of MTDs have been sent for all registrations after 17 Working Days onwards and none of those that are missing are for registrations that have been in effect for more than 40 Working days (before R2).	The percentage of **TOTAL** missing HHMTDs is greater than 0.5% HH Registrations within the snapshot window **AND** there are **ANY** HHMTDs still missing +40WDs after the EFD.	The percentage of **TOTAL** missing HHMTDs is **greater** than 0.5% HH registrations within the snapshot window AND the percentage of HHMTDs missing +40 WD or longer after the EFD is less than 0% **OR** If the percentage of **TOTAL** missing HHMTDs is **less** than 0.5% AND there are **ANY D0268s missing** +40 WD or longer after the EFD	The percentage of **TOTAL** missing HHMTDs is less than 0.5% HH registrations within the snapshot window **AND** **none** are missing +40WD after the EFD

Adjustment

This BUSRR may be adjusted for consideration of size; the smaller the Supplier Energy Share, the less risk posed by poor performance. This is presented to the PAB, alongside the unadjusted Performance BUSRR. Parties are provided with their unadjusted Performance BUSRR only.

Supplier - The Performance BUSRR is then adjusted to take into account the organisation's share of the market (in the case of Suppliers only) and if the Supplier has less than 2% of the market share they will receive a negative adjustment, taking them more towards green, as a reflection that they are a lower risk to the industry. This is called the Risk BUSRR and is presented alongside the Performance BUSRR to the Performance Assurance Board.

Meter Operator - There are no size adjustments for MOAs in this case because we do not have the information available to determine the relative size of a HHMOA's business. There is no difference between the Risk and the Performance BUSRR presented to the PAB.

SR0072 Performance BUSRR Calculations for Suppliers (a NHH Risk)

The BUSRR for Settlement Risk SR0072 assess the risk that non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.

We monitor and report this for each NHH Supplier.

To do so, we obtain information from Non Half Hourly Data Aggregators (NHHDAs) that shows us where consumption is much higher or lower than we would expect for that type of customer ('Profile Class' indicates customer type, as in the table below). This indicates to us that the meter readings processed in these cases were suspiciously high or low, thus justifying investigation and validation from the associated Supplier. The validation thresholds are provided in the tables below:

Profile Class	Description	Threshold (kWh/Year/Register)	
		Upper	Lower
01	Domestic Unrestricted	128,000	-50,000
02	Domestic with Switched load	88,000	-50,000
03	Non-Domestic Unrestricted	200,000	-35,000
04	Non-Domestic with Switched load	140,000	-35,000
05	Load Factor < 20%	220,000	-35,000
06	Load Factor 20% to 30%	320,000	-35,000
07	Load Factor 30% to 40%	430,000	-35,000
08	Load Factor > 40%	552,000	-35,000

This information is provided to ELEXON each month and processed by ELEXON's Large EAC/AA system. The system compiles a complete list of the instances of excessive consumption that currently exist in NHHDA.

What are AAs and EACs?

AAs are Annualised Advances -The rate of consumption for a Settlement Register over the period between two meter readings. The value is nominally expressed as kWh/Year, but this is only for ease of understanding and cannot be relied upon as a true value.

An EAC is an Estimate of Annual Consumption – Again the value is nominally expressed in kWh/Year. It is used in settlement until an AA is calculated.

This is sent out to each Supplier in an "Instance Report" and the Supplier is given an opportunity to inform ELEXON if any of the instances were genuine (there can be cases, such as if the Profile Class was incorrect, where this occurs).

ELEXON takes the error reported against a Supplier ID and adds it together, ignoring the sign of the error. So, for example, a Supplier ID with 50MWh and -50MWh of error against two instances would have 100MWh of error reported towards the BUSRR.

Only instances which have been in the Large EAC/AA System for more than a month and inside a 15-month window in Settlement (error within the 3 months immediately post-RF, and the 12 months immediately pre-RF) is included when calculating the Supplier's level of error

An individual Supplier threshold is then applied to this error level to determine the Supplier's BUSRR.

Using the annual demand figure as a guide, ELEXON has determined that the total value of acceptable error in the market is 165,000MWh.

Individual Supplier ID thresholds are determined by multiplying market-level error by the NHH energy share of the Supplier ID. For example, a Supplier ID with a Non Half Hourly (NHH) energy share of 20% would be allocated an acceptable error threshold of 33,000MWh (20% of Gross Uncorrected Energy Error [GUEE]

$$165{,}000MWh \text{ X } 0.2 = \ 33{,}000MWh$$

The only exception to this is where a Supplier ID has less than 2% NHH energy share, in which case it will be given a minimum threshold of 3,300MWh (equivalent to the threshold allocated at 2% NHH energy share).

The BSC's objective is for Market Participants to resolve all instances (where possible), whilst at the same time emphasising that the instances with highest materiality should be resolved first to reduce overall impact on Settlement. Therefore the following criterion is used to incentivise Suppliers to resolve as many instances as possible, with a focus on those with the greatest volume of erroneous energy:

Measure	RED	AMBER	GREEN
A Supplier remains below its threshold for acceptable error	Above set threshold	Below set threshold **AND** with at least 10% of error coming from instances of 500MWh of volume or higher	Below set threshold **AND** with less than 10% of error coming from instances of 500MWh of volume or higher

SR0074 Performance BUSRR Calculations for Suppliers (a NHH Risk)

SR0074 assess the risk that NHHDCs do not collect and/or enter valid Meter readings resulting in old/default data entering Settlement. SR0074 **BUSRR** applies only to import Measurement Class (MC) A Metered sites.

To measure performance against this risk report 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, high-level 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).

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, albeit export energy is included in SP08a Supplier Charges, in line with the provisions of Section S-1 (2.2.2 (b)).

ELEXON then calculates:

- Each Supplier's overall RF performance.
- The percentage difference from 97% is noted for each Supplier.
- Using the percentage difference we can calculate the associated EAC or AA energy from 97% using each Supplier's total energy volumes.

What is SVAA?

The SVAA receives from Data Aggregators aggregated Settlement Data for each Supplier for each of the Settlement Runs we undertake. It aggregates this data by CCC ID and ensures that for each Grid Supply Point (GSP) Group this figure matches the volume of energy demand that our central Meters shows has been used in that GSP Group.

The data is aggregated from D0081 "Supplier Half Hour Demand Report" flows sent by SVAA. At ELEXON, we use the data collated and sent by SVAA to determine a Supplier's performance against SR0074. This report is completed after the SVAA has used customer "Profile" data to allocate the consumption of each type of Customer to the most likely HH usage patterns across the day/week and year.

This view is often different from the view a Supplier receives from its NHHDA through the D0041 "Supplier Purchase Matrix" which is run before the data has Profiling applied.

Both PAB and ELEXON use the SVAA report as it reflects the true Settlement position. For more information about Profiling please visit our Profiling page.

What is a CCC id?

CCC Ids are defined in Section X-2 of the Balancing and Settlement Code. They allow identifying energy associated with a given Measurement Class, metered or unmetered supplies, export or import sites etc. When sending Settlement Data to SVAA, NHHDCs and NHHDAs will allocate metered volumes to a corresponding CCC Id.

This calculation reports a negative energy volume to any Supplier who failed to achieve 97% Settlement to AAs for import sites over the period. This negative volume represents the amount of energy settled on EACs excluding the 3% of EAC volume that is permissible under the current obligation.

The calculation will report a positive energy volume to any Supplier who achieved above 97% Settlements to AAs for import sites over the period. The positive volume represents the AA energy where performance has exceeded the current 97% obligation.

An energy threshold of 700MWh below the 97% standard is in place per month for those Suppliers that have a negative energy volume that month. This enables ELEXON to separate those that are the biggest risk to the overall performance of the industry.

Measure	RED	AMBER	GREEN
At Supplier settles at least 97% of its energy on AAs for import sites at RF.	Exceed the 700MWh threshold of EAC Energy settled below 97% at an aggregated level across all GSP Groups at RF for the reporting period	Settle below 97% on AAs at RF overall at an aggregated level across all GSP Groups, but has not exceeded the 700MWh threshold for the reporting period	Settle above 97% on AAs at RF at an aggregated level across all GSP Groups for the reporting period

SR0081 Performance BUSRR Calculations for Suppliers (a HH Risk)

SR0081 assesses the risk that HHDCs do not enter valid Meter readings resulting in old/default data entering Settlement. SR0081 **BUSRR** applies only to Settlement of import MC C Metered sites.

To measure performance against this risk report we apply the standard in the Code that states that for all MC C metering systems across all Settlement Runs (from SF onwards) Suppliers should settle 99% of energy on Actuals (Section S-1 2.2.4). However the BUSRR looks at an aggregated, high-level 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. Furthermore, this data differs from SP08b serial, as it does not include CCCIDs for losses. For the purpose of the BUSRR calculation we also exclude export in line with the provisions of Section S-1 (2.2.5 (b)).

To measure Supplier compliance with this obligation we obtain data from the Supplier Volume Allocation Agent (SVAA) which provides ELEXON with the energy volumes settled on Actuals at SF, R1, R2, R3 and RF. Please note that different Settlement runs cover different time periods. Please also note that this provides a view of performance at Half Hourly Data Aggregators (HHDA) level, not HHDC, therefore will include data affected by exceptions as reported by HHDA to Suppliers via the D0235.

ELEXON then calculates:

- Each Supplier's overall SF and R1 performance.
- The percentage difference from 99% is noted for each Supplier at R1 as an energy volume.
- Using the percentage difference we can calculate the associated Actual or Estimated energy from 99% using each Supplier's total energy volumes at R1.

HH Suppliers are obligated to Settle 99% of reads on Actual data at all Settlement Runs. ELEXON monitors performance at SF and R1 in particular to ensure that Suppliers have robust processes in place to meet the 99% target at later Settlement runs.

The calculations report a negative energy volume to any Supplier who failed to achieve 99% Settlement to Actuals on import sites over the period for R1. (Negative volume represents the amount of energy settled on Estimates excluding the 1% of Estimates volume that is permissible under the current obligation).

The calculations report a positive energy volume to any Supplier who achieved above 99% Settlements to AAs over the period at R1. The positive volume represents the AA energy where performance has exceeded the current 99% obligation at R1.

An energy threshold of 400MWh below the 99% standard at R1 is in place per month for those Suppliers that have a negative energy volume that month. This enables ELEXON to separate those that are the biggest risk to the overall performance of the industry.

Measure	RED	AMBER	GREEN
A Supplier settles at least 99% of its energy for import sites on Actual Energy at SF and R1.	Settle below 99% on Actuals at **SF and R1** overall at an aggregated level for the reporting period and **exceed the 400MWh** threshold of Estimated Energy settled below 99% for the reporting period **at R1**	Settle below 99% on Actuals at either **SF, R1 or both** overall at an aggregated level for the reporting period but has not exceeded the **400 MWh** threshold for the reporting period **at R1**	Settle above 99% on Actuals at **SF AND R1** at an aggregated level for the reporting period

SR0081b Performance BUSRR Calculations for Suppliers (a HH Risk)

SR0081b is the equivalent of SR0081 Half Hourly measure, with the exception that SR0081b focuses specifically on Settlement for import MC E Metered sites. It was introduced as a "for information" BUSRR on 1 April 2017. Currently it is not regarded as a Top Settlement Risk and does not count towards an overall BUSRR rating.

To measure performance against this risk we apply the standard in the Code that states that for all Settlement Runs (from SF onwards) Suppliers should settle 99% of energy on Actuals.

To measure Supplier compliance with this obligation we obtain data from the SVAA which provides ELEXON with the energy volumes settled on Actuals at SF, R1, R2, R3 and RF. Please note that different Settlement runs cover different time periods.

ELEXON then calculates:

- Each Supplier's overall R1 and R2 performance.
- The actual, estimated and total energy is noted for each Supplier at R1and R2.
- Using the percentage of performance at R1 and R2 a rating is allocated.

HH Suppliers are obligated to Settle 99% of reads of customers belonging to import MC E on Actual data at all Settlement Runs. ELEXON monitors performance at R1 and R2 in particular to ensure that Suppliers have robust processes in place to meet the 99% target at later Settlement runs.

Measure	RED	AMBER	GREEN
A Supplier settles at least 99% of its energy on Actual import Energy at R1 and R2.	Settle below 99% on Actuals at **R1 and R2** overall at an aggregated level for the reporting period	Settle below 99% on Actuals at either **R1 or R2** overall at an aggregated level for the reporting period	Settle above 99% on Actuals at **R1 AND R2** at an aggregated level for the reporting period

What do we mean by reporting period for SR0074, SR0081 and SR0081b?

Settlement Risk Report Tool is an application which ELEXON uses to create BUSRR ratings for all Top Settlement Risks. ELEXON prepares those reports and present them to PAB on a monthly basis.

Each Settlement Risk uses different dataset and relates to different BSC obligations. As a result, each Risk will refer to different timescales and snapshots of data. Once all monthly processes relating to Top Settlement Risks are complete, ELEXON can then create set of BUSRR reports.

SR0074 refers to obligation set out in BSC Section S-1 2.2.1 which defines the performance levels Suppliers need to meet for their Non half-hourly portfolio (MC A) at different Volume Allocation Runs (VAR) from First Reconciliation VAR to Final Reconciliation VAR.

SR0081 refers to obligation set out in BSC Section S-1 2.2.4 which defines the performance levels Suppliers need to meet for the HH Measurement Class C portfolio.

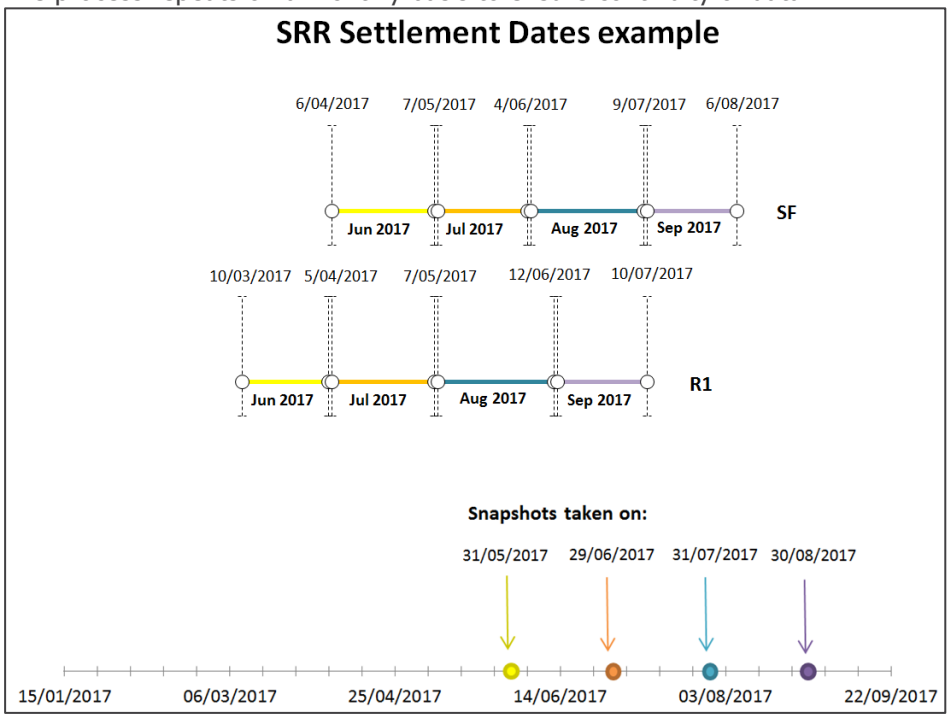
SR0081b refers to obligation set out in BSC Section S-1 2.2.8 which defines the performance levels Suppliers need to meet for the HH Measurement Class E portfolio.

SVAA receives metered data grouped by CCC IDs, Settlement Dates and Suppliers from NHHDAs and HHDAs. This data, adjusted by losses and Group Correction Factors is aggregated and sent to ELEXON on a weekly basis. This information is released in line with SVAA calendar published on ELEXON Portal.

When running the monthly BUSRR report for PAB, ELEXON will evaluate the latest date for which performance data is available for each VAR. Once the latest dates are obtained, they are compared against the dates that were latest in previous reporting month e.g. in preparation for June 2017 PAB meeting ELEXON checked the dates available for each VAR on 31 May 17. ELEXON then examined the latest set of dates used in previous month and chose day +1 for each VAR to ensure continuity of data. This is presented in the table below:

VAR	Latest date available previous PAB month (4 May 2017) +1 day, i.e. DATA FROM	Latest date available on 31 May 2017, i.e. DATA TO
SF	6/04/2017	7/05/2017
R1	10/03/2017	5/04/2017
R2	6/01/2017	1/02/2017
R3	27/09/2016	23/10/2016
RF	10/03/2016	7/04/2016

The process repeats on a monthly basis to ensure continuity of data:



SR3019 Performance BUSRR Calculations for Suppliers and MOAs (a HH Risk)

The BUSRR for Settlement Risk 3019 (SR3019) assesses the risk that Half Hourly Meter Operators (HHMOAs) do not provide correct MTDs, including when HHMOAs make changes to MTDs, to the Half Hourly Data Collectors (HHDCs) resulting in Meter readings not being collected or misinterpreted.

We use HM13 Serial data collected from the Performance Assurance Reporting and Monitoring System (PARMS) and reporting from the Technical Assurance Agent (TAA) to calculate this BUSRR.

What is PARMS?
PARMS is a database that contains information on how a Supplier and its Supplier Hub is performing. If you are a Supplier or an agent within a Supplier's hub and don't already know how PARMS data is obtained, we recommend that you read our PARMS Guidance. Not all of the information obtained by PARMS is used to calculate the BUSRR, some is also used to calculate Supplier Charges and others not used as part of any further calculations but reported to PAB for information. If you are a Supplier and do not already know about Supplier Charges, please refer to the Supplier Charges section of the BSC Website.

What does the TAA do?

The TAA monitors compliance with metering requirements set out in the BSC and its subsidiary documents. It consists of a combination of sampled and targeted visits to sites with Half Hourly Metering Systems registered in SVA and CVA. For more information please visit the Technical Assurance section of the BSC Website.

The PARMS Measure

The HM13 Serials Measures the quality of HH MTDs. HHMTDS are usually sent over the Data Transfer Network (DTN) via the D0268 flow, although they can be sent by any other electronic method as agreed. In order to get an indication of the quality of HHMTDs sent, we measure how many times the HHMTDs were re-sent using the same Metering System Meter Technical Details (MSMTD) Effective from Date (EFD) where there has been a change in a key / mandatory field of the D0268. The HM13 Serial also measures how many Meters have been affected by the resubmitted MTDs.

HM13 therefore records three "Standards".

- Standard 1 is the total number of D0268 received within a reporting period (a calendar month),
- Standard 2 is the total number of D0268s resubmitted and
- Standard 3 is the number of Meters affected by the re-submissions.

The key fields are those fields in the MTDs that could most impact Settlement if incorrect. Resubmissions of MTDs, with changes to key fields, indicate that the Half Hourly Meter Operator Agent (HHMOA) may not have robust processes in place to input, validate and send its MTDs. The key fields in Meter Technical Details are:

- Outstation Id, Meter Id
- Outstation number of channels

- Measurement Quantity Id
- Meter Multiplier, Pulse Multiplier
- CT and/or VT ratios
- Access to ME at Password Level 3
- Associated Meter Id (where there is no main and check Meter and Meter Code of Practice (COP) on a change of COP.

Please see BSCP533 Appendix B for further details on Key Fields.

The HM13 Serial is reported by the HHDCs on HHMOAs. HHDCs report against each HHMOA they have received a D0268 from and the associated Supplier. As it takes time for the Data Collectors to produce and send these reports to us and then it takes us additional time to validate and collate them all, PARMS data is reported in the Settlement Risk Report two months later than the months to which it related (so data collected for August would be reported in an October Settlement Risk Report).

The TAA Measure

We combine the data from HM13 with that received from the TAA for the same reporting period as the HM13 data. The TAA sends us data on the instances it has found where the HHMTDs are not compliant with the requirements in the Balancing and Settlement Code (**BSC**).

It is important to note that a single inspection visit can produce more than one type of non-compliance.

The TAA will visit a random sample of 1% of all Measurement Class C HH Metered sites. Should a site you are registered for be included in this sample they will contact you to arrange a site visit.

How we calculate the BUSRR

We calculate the BUSRR for SR3019 based on the proportion of non-compliant visits by the TAA against the proportion of re-sent HHMTDs.

The reports we use to assess performance against SR3019 and calculate the associated BUSRRs show the proportion of non-compliant visits (because the MTDs are inaccurate as identified by the TAA only) of total visits made by the TAA and the number of resent HHMTDs.

Suppliers and MOAs are given a **RED**, **AMBER** or **GREEN** BUSRR based on criteria agreed by the PAB. The table below shows the criteria for each rating:

Measure	RED	AMBER	GREEN
Accurate MTDs sent to the HHDC the first time. **and** MTD related non-compliances raised by TAA across a rolling 12 month period	More than 2% of MTDs sent are corrections; and More than 5% of TAA visits are non-compliant	More than 2% of MTDs sent are corrections **or** More than 5% of TAA visits are non-compliant	Less than 2% of MTDs sent are corrections **and** Less than 5% of TAA visits are non - compliant

Why do we use both the HM13 and TAA data for SR3019?

HM13 and the TAA visits essentially monitor the same overall risk; the risk that HHMOAs do not provide the correct MTDs (including when HHMOAs make changes to MTDs), to the HHDCs, resulting in Meter readings being misinterpreted or not collected.

Those parties who have not had a TAA visit in the past 12 months will only be measured against the Percentage of re-sent D0268s. This means that those who do not have a TAA site visit within 12 months, will only be able to reach AMBER for poor performance. If these parties continuously be AMBER they will need to have discussions with their OSMs in order to ascertain how to improve their performance and gain a GREEN rating.

Adjustment

The BUSRR for this Risk is not adjusted for consideration of size.

Calculation of the Overall BUSRR for Suppliers

For each Supplier ELEXON calculates an overall BUSRR to give an indication of how the Supplier is performing in aggregate against the Top Settlement Risks we monitor.

This is calculated by issuing the Supplier with a score for each of the BUSRRs that we have measured for it. The scores are:

Red BUSRR=0

Amber BUSRR=0.5

Green BUSRR = 1

The BUSRR scores are added together and divided by the number of Settlement Risks that a BUSRR was produced for the Supplier.

The overall BUSRR is then calculated from this score:

Measure	RED	AMBER	GREEN
Overall BUSRR score is 0.66 or more to reflect a good overall performance for a Supplier	Overall BUSRR score is 0.32 or less	Overall BUSRR score is above 0.32 and below 0.66.	Overall BUSRR score is 0.66 or more.

If you have received three consecutive overall RED BUSRRs your OSM will need to provide PAB with an overview of your performance against each of the applicable monitored Top Risks. Your OSM will contact you to obtain information if this happens. After the PAB meeting your OSM will brief you on what took place at the meeting and whether PAB requested any further action from your organisation.

How are BUSRRs reported to me and what action should I take?

Every month you will receive dashboards from your OSM. For Suppliers the dashboards are PowerPoint slides and for MOAs an excel spreadsheet that highlight your BUSRR for each Settlement Risk that we measure, the breakdown of data that we use to calculate this and your organisation's overall BUSRR.

The dashboards contain the performance BUSRR and are not adjusted for size as the Risk BUSRRs that are reported to PAB are. This is so that you have a clear picture of your Settlement performance and the opportunity to address any problems as soon as possible.

If you think you should be receiving this information but are not at the moment, please contact your OSM.

Strikethrough

This occurs if ELEXON has not received enough information to accurately calculate the BUSRR and only applies to SR3019, SR0024 or SR0025 as appropriate.

If an agent does not submit PARMS Serial data for HM12, HM13 or NM12 or the information a Supplier sends to ELEXON in its Data Provider Information (DPI) file does not match what its agents have sent by the required deadline, the applicable Supplier ID receives a strikethrough against its risk BUSRR for SR3019, SR0024 or SR0025 as appropriate.

In these cases we still allocate Suppliers with a **RED**/**AMBER**/**GREEN** performance BUSRR in line with the criteria detailed above (albeit calculated with an incomplete set of data).

For the purposes of the overall BUSRR calculation for Suppliers, this BUSRR value is treated as a **RED,** irrespective of risk BUSRR. Therefore Suppliers should follow up any strikethroughs with its agents.

When you receive your dashboards, you should investigate any **AMBER** and **RED** BUSRRs to determine the cause of performance issues and highlight these with your OSM by the deadline your OSM gives you.

You can get help in improving performance from the following sources:

Settlement Risk	Where to find help
SR3019	If you are a Supplier, the Serials to Supplier report will provide you with the backing data which includes a breakdown of the numbers by the HHDC that provided them to us and from the TAA. If you are an MOA your OSM will be able to provide you the backing data if you ask them. If you are a Supplier, you should contact your DC who reports this data to us to determine the MOA and MSIDs involved. You can then investigate with the relevant MOAs the causes of them re-sending multiple D0268s. If you are a MOA, you should also obtain the backing data from the relevant DC to ensure that its records of re-sent D0268s match yours. You should then investigate the root cause reasons leading to D0268s being re-sent and put measures in place to address these. Please contact your OSM to discuss addressing TAA compliance performance. Also refer to our guidance on addressing Common Non-Compliances found by the TAA.
SR0024	If you are a Supplier, the Serials to Supplier report will provide you with the backing data which includes a breakdown of the numbers by the NHHDC that provided them to us. If you are a MOA your OSM will be able to provide you the backing data if you ask them. If you are a Supplier, you should contact your DC who reports this data to us to determine the MOA and MSIDs involved. You can then investigate with the relevant MOAs why the MTDs have not been sent and track progress with the Agent until they are. If you are a MOA, you should also obtain the backing data from the relevant DC to ensure that its records of missing MTDs match yours. You should ensure the MTDs are sent as soon as possible and investigate and address the root causes that led to MTDs not being sent in a timely manner.

Settlement Risk	Where to find help
SR0025	If you are a Supplier, the Serials to Supplier report will provide you with the backing data which includes a breakdown of the numbers by the HHDC that provided them to us. If you are an MOA your OSM will be able to provide you the backing data if you ask them. If you are a Supplier, you should contact your DC who reports this data to us to determine the MOA and MSIDs involved. You can then investigate with the relevant MOAs why the MTDs have not been sent and track progress with the Agent until they are. If you are a MOA, you should also obtain the backing data from the relevant DC to ensure that its records of missing MTDs match yours. You should ensure the MTDs are sent as soon as possible and investigate and address the root causes that led to MTDs not being sent in a timely manner.
SR0072	Please refer to our guidance on Erroneous Large EAC and AA management and Resolution You can also watch our video which provides training in resolving erroneously large EAC/AAs.
SR0074	Please refer to our guidance on How to achieve 97% on AAs by RF
SR0081	Please refer to BSCPs 502 and 503 for further information on processes for HH Settlement.

Subjective Adjustments

In some cases, we apply adjustments *over and above the approved criteria* to the risk BUSRR. With enough evidence to prove that performance against a risk is better than the risk BUSRR indicates, we may apply a subjective adjustment in advance of the PAB meeting

This allows us to consider any unusual or one off circumstances under which performance was particularly poor in a risk area. The amendments also allow us to review evidence to suggest our data, or the criteria applied, is not accurately reflecting what happened (or is happening) in practice.

We make a subjective adjustment to the risk BUSRR; we do not amend the performance BUSRR or the underlying data. If we apply a subjective adjustment, there may be a jump from a red performance BUSRR to a green risk BUSRR. This is the only time that this level of difference between performance and risk BUSRRs can occur.

We make a subjective adjustment to the risk BUSRR; we do not amend the performance BUSRR or the underlying data.

You should contact your OSM with supporting evidence if you believe that they may qualify for a subjective adjustment.

For SR0022, SR0024 and SR0025 we require confirmation from the applicable Data Collectors that the evidence presented is correct.

Error Failure and Resolution (EFR)

If you obtain three RED BUSRRs (the size adjusted Risk BUSRRs) for one of the Top risks we monitor we will investigate to determine if we should turn on the EFR Technique.

We apply EFR to rectify the risk identified through action plans which are tracked until the risk has been resolved. Information on what happens when EFR is applied can be found in our EFR Guidance or discuss this with your OSM.

If you are in EFR for a particular risk, we report your progress to PAB each month based on the following criteria:

GREEN status	AMBER status	RED status
Plan on track	Minor slippage in milestones but overall plan is on track	Milestones substantially slipped and/or plan at risk

To have EFR turned off you need to have:

- Obtained three consecutive months of '**GREEN**' performance BUSRRs against the relevant Settlement Risk
- Successfully completed your action plan.

Further Information

- Please speak to your Operational Support Manager and they will be able to guide you. Also see the OSM guidance.
- You can also contact the Settlement Operations team at paa@elexon.co.uk or Anna Millar (EFR Analyst).

For further information please contact the **BSC Service Desk** at bscservicedesk@cgi.com or call **0370 010 6950**.

Useful Links

- Balancing and Settlement Code
- BSCP533 Appendix B
- Common Non-Compliances
- ELEXON Website
- Erroneous Large EAC and AA Management and Resolution or watch the video
- How to achieve 97% on AAs by RF
- PARMS Guidance

- Performance Assurance
- Profiling
- Qualified Persons Workbook
- Supplier Charges
- About ELEXON