



Business Unit Settlement Risk Ratings: How they are calculated

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Effective From: September 2011 Performance Reports
(including the July 2011 PARMS reporting period)

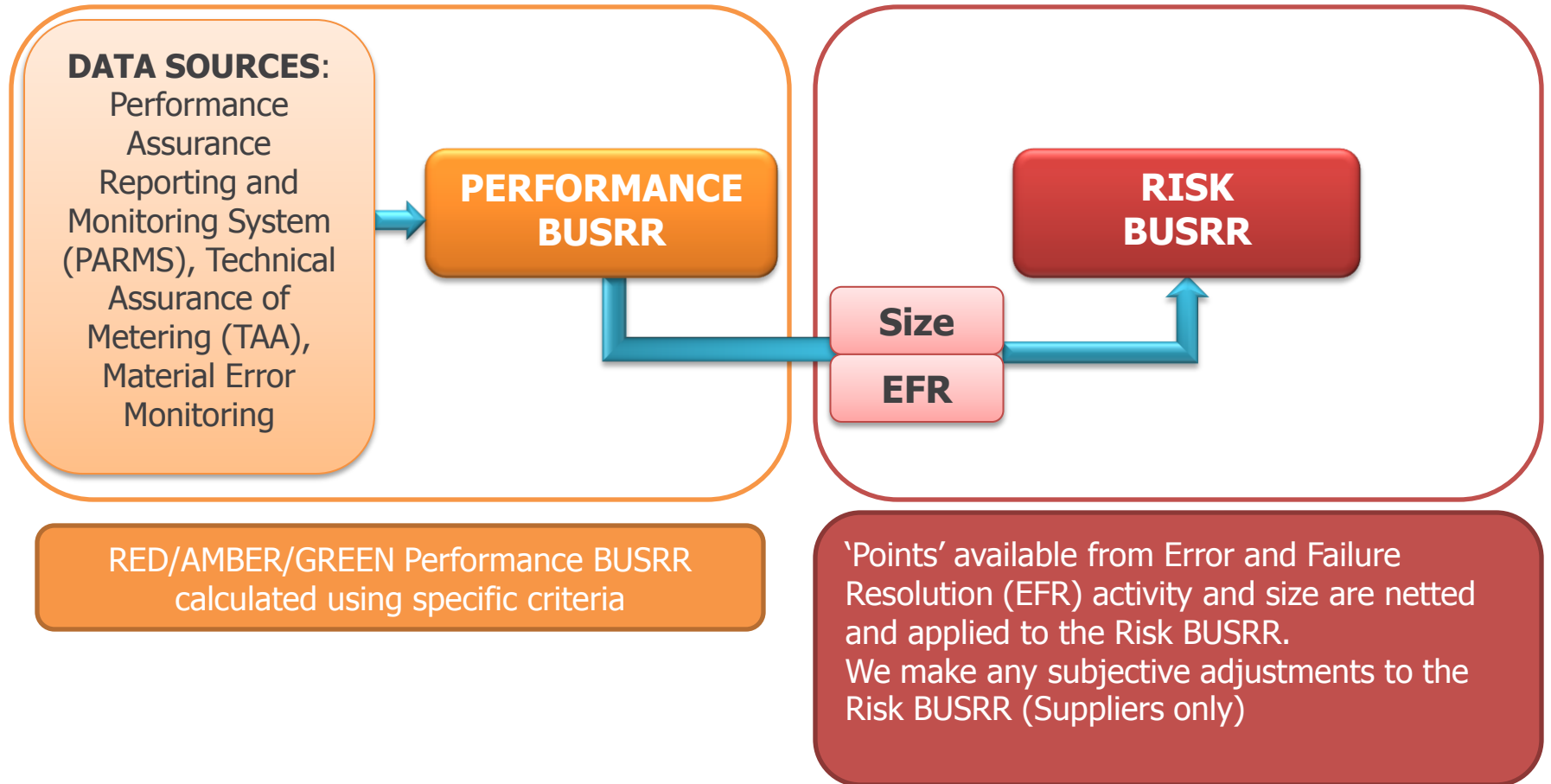
- » Business Unit Settlement Risk Ratings (BUSRRs) have been in place since November 2008
- » The PAB use these to monitor performance of the top measureable Settlement Risks - all those with net significance ≥ 12 for Suppliers and MOAs
- » We've reviewed the criteria for applying the ratings a number of times; the most recent change relates to the new PARMS serials implemented in June 2011 (CP1334)
- » The following sections are included in this presentation:
 - Calculation of the Performance BUSRR (page 5)
 - Calculation of the Risk BUSRR (page 22)
 - Calculation of the Overall BUSRR (page 31)
 - Monthly Dashboard Process (page 35)
 - Frequently Asked Questions (page 38)
 - Examples (page 45)

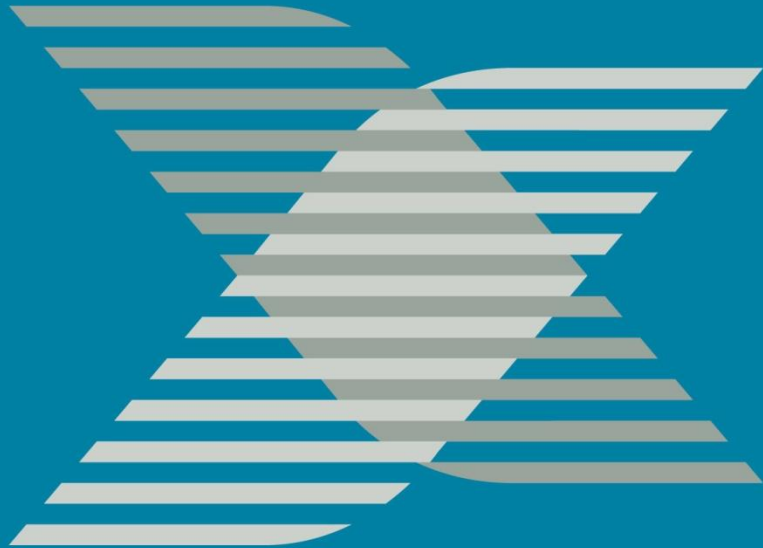


Reporting Overview

- » Each month we provide a report to the PAB:
 - Each Supplier's performance over eight Settlement Risks; and
 - Each Meter Operator Agent's (MOA) performance over four Settlement Risks
- » For each applicable Settlement Risk, we give each Supplier and MOA **Performance BUSRR** and a **Risk BUSRR** of **Red**, **Amber** or **Green**
- » We also calculate an **Overall BUSRR** for Suppliers
- » Each month we'll send you a dashboard containing your BUSRRs*
 - * Note that we calculate BUSRRs on the 21st working day of the month, however the we may produce the dashboards after this day. The information in the dashboards uses the latest PARMS data. If there are PARMS submissions between the 21st working day of the month and the production of the dashboards, the data may not match the BUSRRs
 - We send you an initial dashboard to enable you to comment on your performance and a final dashboard once this has been agreed by the PAB
 - Suppliers see their individual Risk and overall BUSRRs and the data we used to calculate to them
 - MOAs see their individual Risk BUSRRs
 - PAB sees the Performance, Risk and Overall BUSRRs of all Suppliers and MOAs

Performance and Risk BUSRRs





Calculation of Performance BUSRRs for Each Settlement Risk


Top Settlement Risks – At a Glance

Settlement Risk Number	Settlement Risk Title	Net Significance	Monitored On	Performance BUSRR Calculation Data	Risk BUSRR Calculation Data
SR0072	The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.	16	Suppliers	EAC/AA Material Error Monitoring Data	EFR
SR0073	The risk that stolen energy notified by Revenue Protection units is not used in calculations by Suppliers and NHHDCs resulting in inaccurate data being entered into Settlement.	15	Not Monitored	No relevant metric data available	N/A
SR0074	The risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.	15	Suppliers	SP08a 'Energy and MSIDs on Actuals', SP09 'NHH Defaults'	Size, EFR
SR0022	The risk that HHDCs do not use the correct Meter Technical Details resulting in Meter readings being misinterpreted or not collected.	12	Suppliers, HHMOAs	HM13 'Quality of HHMTDs'	Size (Suppliers only), EFR
SR0024	The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings being not collected.	12	Suppliers, NHHMOAs	NM12 'Missing NHH MTDs'	Size (Suppliers only), EFR
SR0025	The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings being not collected.	12	Suppliers, HHMOAs	HM12 'Missing HH MTDs'	Size (Suppliers only), EFR

Top Settlement Risks – At a Glance

Continued

Settlement Risk Number	Settlement Risk Title	Net Significance	Monitored on	Performance BUSRR Calculation Data	Risk BUSRR Calculation Data
SR0028	The risk that HHMOAs make changes to the Metering System and do not inform the HHDCs resulting in Meter readings being misinterpreted or not collected.	12	Suppliers, NHHMOAs	TAA Data showing site visits with Meter Technical Detail Non-Compliances	Size (Suppliers only), EFR
SR0086	The risk that for UMS NHHDCs do not process new or updated EACs and associated Settlement details (D0052) resulting in inaccurate energy volume allocation (UMS).	12	Suppliers	UMS Material Error Monitoring Data	EFR
SR0093	The risk that on concurrent change of NHHDC/NHHDA for UMS, new NHHDCs do not receive the latest UMS EAC from the old NHHDCs resulting in Metering Systems being settled on default EAC values which are likely to be inappropriate for Unmetered Supplies.	12	Suppliers	UMS Material Error Monitoring Data	EFR
SR0111	The risk that NHH Metering Systems are tampered with resulting in under-accounting of energy in Settlement.	12	Not Monitored	No relevant metric data available	N/A



SR0072 'NHHDC process incorrect meter readings resulting in erroneous data entering Settlement' Net Significance 16 (Monitored on Suppliers)

» Performance BUSRR Criteria:

- **RED** – Supplier's Error is above either its Post or Pre RF Error threshold
- **GREEN** – Supplier's Error is equal to or under both its Post and Pre RF Error threshold
- Note that there is no Amber performance BUSRR for this Settlement Risk
- Data source: EAC/AA Material Error Monitoring Data

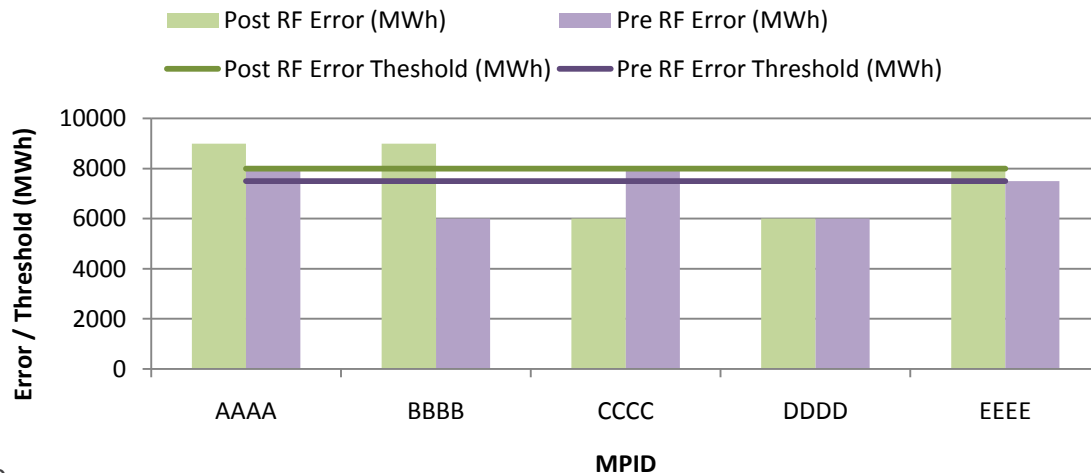
» Risk BUSRR adjustments (See slides 22-30):

- EFR
- No size adjustment


Example of how the Performance BUSRR is calculated for SR0072

MPID	Post RF Error Threshold	Post RF Error	Pre RF Error Threshold	Pre RF Error	Performance BUSRR	Comments
AAAA	8,000MWh	9,000MWh	7,500MWh	8,000MWh	RED	Over Post and Pre RF Error threshold = red
BBBB	8,000MWh	9,000MWh	7,500MWh	6,000MWh	RED	Over Post RF Error threshold (but under pre-RF threshold) = red
CCCC	8,000MWh	6,000MWh	7,500MWh	8,000MWh	RED	Over Pre RF Error threshold (but under post RF threshold) = red
DDDD	8,000MWh	6,000MWh	7,500MWh	6,000MWh	GREEN	Under Post and Pre RF Error threshold = green
EEEE	8,000MWh	8,000MWh	7,500MWh	7,500MWh	GREEN	Post and pre RF Error is equal to post and pre-RF thresholds = green

EAC/AA Gross Error



Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the EFR and subjective adjustments to the Risk BUSRR as necessary



SR0074 'The risk that NHHDCs do not collect and /or enter valid Meter readings resulting in old/default data entering Settlement'

Net Significance = 15 (Monitored on Suppliers)

» Performance BUSRR Criteria:

- **RED** – Average RF < 96%

OR 96% ≤ Average RF < 97% **AND** >0.5% default EACs at RF

- **AMBER** – 96% ≤ Average RF < 97%

OR Average RF < 96% **AND** <0.1% default EACs at RF

- **GREEN** – Average RF ≥ 97%

OR 96% ≤ Average RF < 97% **AND** <0.1% default EACs at RF

- Data source: Average RF - PARMs Serial SP08a, Default EACs at RF - PARMs Serial SP09

» Risk BUSRR adjustments (See slides 22-30):

- Energy Market Share at RF ("Size" <2%)
- EFR

Example of how the Performance BUSRR is calculated for SR0074

MPID	SP08a Performance	SP09 Performance	Performance BUSRR	Comments
AAAA	97.2%	0.05%	GREEN	SP08a>97% so SP09 performance is not taken into account
BBBB	97.2%	0.4%	GREEN	SP08a>97% so SP09 performance is not taken into account
CCCC	97.2%	0.6%	GREEN	SP08a>97% so SP09 performance is not taken into account
DDDD	96.3%	0.05%	GREEN	96%<SP08a<97% <u>and</u> SP09<0.1% = green
EEEE	96.3%	0.4%	AMBER	96%<SP08a<97%, 0.1%<SP09<0.5% (so SP09 has no impact on BUSRR) = amber
FFFF	96.3%	0.6%	RED	96%<SP08a<97% and SP09>0.5% = red
GGGG	95%	0.05%	AMBER	SP08a>96% and SP09<0.1% = amber
HHHH	95%	0.4%	RED	SP08a>96% and SP09 >0.1 = red
IIII	95%	0.6%	RED	SP08a>96% and SP09>0.1% = red

- » Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the size, EFR and subjective adjustments to the Risk BUSRR as necessary



SR0022 'HHMOAs do not provide correct Meter Technical Details to the HHDCs resulting in meter readings being misinterpreted or not collected'

Net Significance = 12 (Monitored on Suppliers and HHMOAs)

» Performance BUSRR Criteria:

- **RED** – Percentage of D0268s accurate first time < 90%
- **AMBER** – $90\% \leq$ Percentage of D0268s accurate first time < 100%
- **GREEN** – Percentage of D0268s accurate first time = 100%
- D0268 'Half Hourly Meter Technical Details'
- Data source: PARMS Serial HM13
- Percentage of D0268s accurate first time will be calculated using as follows:

$$= 100 - \left[\left(\frac{\text{total number of D0268s resubmitted (standard 2)}}{\text{total number of D0268s received with reporting period (standard 1)}} \right) * 100 \right]$$

» Risk BUSRR adjustments (See slides 22-30):

- Energy Market Share at SF ("Size" <2%)
- EFR

Example of how the Performance BUSRR is calculated for SR0022

MPID	HM13 standard 1	HM13 standard 2	Performance BUSRR	Comments
AAAA	20	0	GREEN	% MTD accurate first time $= 100 - \left[\left(\frac{\text{Resubmitted (standard 2)}}{\text{Received (standard 1)}} \right) * 100 \right]$ $= 100 - (0/20 * 100) = 100\% = \text{Green}$
BBBB	20	1	AMBER	% MTD accurate first time $= 100 - \left[\left(\frac{\text{Resubmitted (standard 2)}}{\text{Received (standard 1)}} \right) * 100 \right]$ $= 100 - (1/20 * 100) = 95\% = \text{Amber}$
CCCC	20	4	RED	% MTD accurate first time $= 100 - \left[\left(\frac{\text{Resubmitted (standard 2)}}{\text{Received (standard 1)}} \right) * 100 \right]$ $= 100 - (4/20 * 100) = 80\% = \text{Red}$

- » Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the size, EFR and subjective adjustments to the Risk BUSRR as necessary



SR0024 'The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings being not collected'

Net Significance = 12 (Monitored on Suppliers and NHHMOAs)

» Performance BUSRR Criteria:

- **RED** – > 10% D0150s missing before R3 (standard 5) or any D0150s missing in any other subsequent reconciliation runs (standard 6-7)
- **AMBER** – ≤ 10% D0150s missing at R3 (standard 5) and none at subsequent reconciliation runs (Standard 6-7)
 - Note that the numbers of D0150s missing at runs before R3 (standards 2-4) does not affect this rating
- **GREEN** – 100% of D0150s received before SF (i.e. standards 2-7 are 0)
 - D0150 'Non-Half Hourly Meter Technical Details'
 - Data source: PARMS Serial NM12
 - Percentage of MTD missing at each run type will be calculated as follows:
$$= \left(\frac{\text{number missing at run type x (standard 2-7)}}{\text{number of live registrations (standard 1)}} \right) * 100$$
 - Note that 'before R3' only refers to standard 5 of NM12, it is not the total of standards 3 to 5

» Risk BUSRR adjustments (See slides 22-30):

- Energy Market Share at RF ("Size" <2%)
- EFR


Example of how the Performance BUSRR is calculated for SR0024

MPID	NM12 Performance *							Performance BUSRR	Comments
	Std 1 (Registrations held)	Std 2 (Number with no D0150)	Std 3 (D0150 missing before R1)	Std 4 (D0150 missing before R2)	Std 5 (D0150 missing before R3)	Std 6 (D0150 missing before RF)	Std 7 (D0150 missing after RF)		
AAAA	10,000	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	GREEN	Standards 2-7 are 0% = Green
BBBB	10,000	500 (5%)	200 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	AMBER	5% of D0150s are missing overall (standard 2). None missing after R1 (standards 4-7) = Amber
CCCC	10,000	500 (5%)	200 (2%)	50 (0.5%)	50 (0.5%)	0 (0%)	0 (0%)	AMBER	5% of D0150s are missing overall (standard 2). Only 0.5% missing before R3 (standard 5) < 10% = Amber
DDDD	10,000	1500 (15%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	AMBER	All D0150s in the reporting period have been received by R1 as standards 3-7 are 0%. Although 15% of D0150s are missing overall (standard 2), this does not affect the amber rating= Amber
EEEE	10,000	500 (5%)	0 (0%)	0 (0%)	0 (0%)	50 (0.5%)	0 (0%)	RED	5% of D0150s are missing overall (standard 2). 0.5% of D0150s in the reporting period are missing after R3 (standard 6) = Red

» Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the size, EFR and subjective adjustments to the Risk BUSRR as necessary

* The number of missing D0150 (Meter Technical Details) are submitted into PARMS for Standards 2-7. The percentage of missing D0150s are calculated using the following formula:

$$= \left(\frac{\text{number missing at run type} \times (\text{standard 2-7})}{\text{number of live registrations (standard 1)}} \right) * 100$$



SR0025 'HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in meter readings not being collected'

Net Significance = 12 (Monitored on Suppliers and HHMOAs)

» Performance BUSRR Criteria:

- **RED** – > 10% D0268s missing before R1 (standard 3) or any D0268s missing in any other subsequent reconciliation runs (standard 4-7)
- **AMBER** – ≤ 10% D0268s missing at R1 (standard 3) and none at subsequent reconciliation runs (Standard 4-7)
 - Note that the numbers of D0150s missing at runs before R1 (standard 2) does not affect this rating
- **GREEN** – 100% of D0268s received before SF (i.e. standards 2-7 are 0)
 - D0268 'Half Hourly Meter Technical Details'
 - Data source: PARMS Serial HM12
 - Percentage of MTD missing at each run type will be calculated using PARMS Serial HM12 as follows:
= $\left(\frac{\text{number missing at run type x (standard 2-7)}}{\text{number of live registrations (standard 1)}} \right) * 100$

» Risk BUSRR adjustments (See slides 22-30):

- Energy Market Share at SF ("Size" <2%)
- EFR

Example of how the Performance BUSRR is calculated for SR0025

MPID	HM12 Performance *							Performance BUSRR	Comments
	Std 1 (Registrations held)	Std 2 (Number with no D0268)	Std 3 (D0268 missing before R1)	Std 4 (D0268 missing before R2)	Std 5 (D0268 missing before R3)	Std 6 (D0268 missing before RF)	Std 7 (D0268 missing after RF)		
AAAA	1,000	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	GREEN	Standards 2-7 are 0% = Green
BBBB	1,000	50 (5%)	20 (2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	AMBER	5% of D0268s are missing overall (standard 2). Less than 10% missing before R1 (standard 3). Standards 4-7 are 0% = Amber
CCCC	1,000	150 (15%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	AMBER	Some D0268s are missing but none after R1 (Standards 3-7 are 0)= Amber
DDDD	1,000	50 (5%)	20 (2%)	10 (1%)	0 (0%)	0 (0%)	0 (0%)	RED	5% of D0268s are missing overall (standard 2). 1% of D0268s were received after R1 (standard 4) = Red

» Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the size, EFR and subjective adjustments to the Risk BUSRR as necessary

* The number of missing D0268 (Meter Technical Details) are submitted into PARMs for Standards 2-7. The percentage of missing D0268s are calculated using the following formula:

$$= \left(\frac{\text{number missing at run type x (standard 2-7)}}{\text{number of live registrations (standard 1)}} \right) * 100$$



SR0028 'The risk that HHMOAs make changes to the Metering System and do not inform the HHDCs resulting in Meter readings being misinterpreted or not collected'

Net Significance = 12 (Monitored on Suppliers and HHMOAs)

» Performance BUSRR Criteria:

- **RED** – Percentage of site visits with Meter Technical Detail Non-Compliances raised by the TAA across a rolling 12 month period \geq 10%
- **AMBER** – $5\% \leq$ Percentage of site visits with Meter Technical Detail Non-Compliances raised by the TAA across a rolling 12 month period $<$ 10%
- **GREEN** – Percentage of site visits with Meter Technical Detail Non-Compliances raised by the TAA across a rolling 12 month period $<$ 5%
- Data source: TAA Meter Technical Detail Non-Compliances: **1.01** – Incorrect MTDs (key fields) held by DC, **2.01** – Incorrect MTDs held by MOA, **2.02** – Incorrect MTDs (non-key fields) held by DC and **2.03** – MTDs not provided
- The 10% figure is derived from industry average performance over 12 months. Previously this has been revised quarterly, however this is now at a level that is consistent with other BUSRR Criteria and so the next review will be at the same time as BUSRRs relating to the new PARMs Serials are reviewed. The 5% was revised from 8% by the PAB in August 2011.


» Risk BUSRR adjustments (Suppliers only - see slides 22-30):

- Energy Market Share at SF ("Size" $<$ 2%)
- EFR

Example of how the Performance BUSRR is calculated for SR0028

MPID	% site visits with MTD non-compliances	Performance BUSRR	Comments
AAAA	4%	GREEN	% site visits with MTD non-compliances < 5% = Green
BBBB	8%	AMBER	5% < % site visits with MTD non-compliances < 10% = Amber
CCCC	15%	RED	% site visits with MTD non-compliances > 10% = Red

- » Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the size, EFR and subjective adjustments to the Risk BUSRR as necessary



SR0086 'The risk that for UMS NHHDCs do not process new or updated EACs and associated Settlement details (D0052) resulting in inaccurate energy volume allocation (UMS)'

Net Significance = 12 (Monitored on Suppliers)

» Performance BUSRR Criteria:

- **RED** – Supplier's error is above its threshold
- **AMBER** – Supplier's error is equal to or under its threshold but the error has increased since the last extract
- **GREEN** – Supplier's error is equal to or under its threshold and its error has not increased

• Data source: UMS Material Error Monitoring Data

» Risk BUSRR adjustments (See slides 22-30):

- EFR
- No size adjustment

» This data is also used to monitor SR0093

'The risk that on concurrent change of NHHDC/NHHDA for UMS, new NHHDCs do not receive the latest UMS EAC from the old NHHDCs resulting in Metering Systems being settled on default EAC values which are likely to be inappropriate for Unmetered Supplies' – Net Significance 12

The data is not separately reported to the PAB or included on the Supplier's Dashboard under SR0093

Example of how the Performance BUSRR is calculated for SR0086

MPID	UMS Error Threshold	UMS Error – this extract	UMS Error – last Extract	Performance BUSRR	Comments
AAAA	8,000MWh	9,000MWh	10,000MWh	RED	Over UMS Error threshold = red (error from last months extract threshold therefore not taken into account)
BBBB	8,000MWh	9,000MWh	8,500MWh	RED	Over UMS Error threshold = red (error from last months extract threshold therefore not taken into account)
CCCC	8,000MWh	6,000MWh	5,000MWh	AMBER	Under UMS Error threshold but error has increased since the last extract = amber
DDDD	8,000MWh	6,000MWh	7,000MWh	GREEN	Under UMS Error threshold and error has decreased since the last extract = green

- » Note that the BUSRR here is the **Performance BUSRR**, not the Risk BUSRR. We apply the EFR and subjective adjustments to the Risk BUSRR as necessary



Calculation of Risk BUSRRs




How Risk BUSRRs are calculated

- » For **Suppliers**, we adjust the Performance BUSRR by size, EFR activity and subjective adjustments to create the Risk BUSRR (see slides 24 - 30)
- » For **MOAs**, we do not have any reliable data on size of organisations. Therefore it is not possible for us to made size adjustments. We adjust the Performance BUSRR by EFR activity where it has been turned on in relation to a top measureable Settlement Risk and subjective adjustments to create the Risk BUSRR (see slides 25,27,29 and 30).



How do we calculate the Risk BUSRR? - Size

- » The PAB deem small Suppliers as having less of an impact on Settlement
- » Any Suppliers with energy share of <2% are given a -1 in the BUSRR adjustment calculation (this is a 'good' adjustment)
 - For HH risks we use energy share at SF to measure this. For NHH risks we use energy share at RF
- » We don't apply size adjustments to SR0072 (large EAC/AA) or SR0086 (UMS)
 - Instead we use individual Supplier thresholds to calculate the BUSRR, which incorporate size



How do we calculate the Risk BUSRR? – EFR Action Plans to directly address Settlement Risks

- » We apply an EFR adjustment against any Supplier or MOA that has an EFR Action Plan in place to address specific top Settlement Risks (e.g. 97% or large EAC/AA action plans)
- » The contributions to the BUSRR adjustment calculation are as follows:
 - -1 (good)
 - MPID is in EFR for performance against the risk and is fully on track with its Action Plan milestones
 - 0 (none)
 - MPID is not in EFR for the risk; or MPID is in EFR for the risk and is roughly on track with milestones (e.g. within about 0.5% of predicted milestone for SR0074)
 - +1 (bad)
 - MPID is in EFR but hasn't submitted an Action Plan on time; MPID has a plan but is off track with milestones; or MPID has not provided sufficient updates to its OSM
- » The rationale is that Suppliers and MOAs on track with Action Plans are fully managing the risk whereas those not on track are not managing the risk
- » Note that BSCP538 requires Parties to update their OSM on the progress of their action plans within 5 Working Days of each milestone in the plan



How do we calculate the Risk BUSRR? – EFR BSC Audit Related Action Plans

- » We apply an EFR adjustment to Suppliers with BSC Audit Issues linking to any of the top Settlement Risks reported in the dashboard
 - We'll use the Audit Issues vs Settlement Risks mapping spreadsheet to work out the linkage (High/Medium rated issues only). Your mapping for 2010/11 Audit issues was sent to your organisation, a copy is available from your OSM on request
- » We monitor Suppliers' progress against their EFR Action Plans
- » The contributions to the BUSRR adjustment calculation are as follows:
 - +1 (bad)
 - Supplier is not on track with its Action Plan(s) to address BSC Audit Issue(s) that link to a top Settlement Risk, and/or hasn't provided sufficient updates to its OSM
 - One score no matter how many related Audit Issues there are. If some issues are on track but one is not we apply a +1 adjustment
- » Reporting by exception, so no 'good' feed in
- » Rationale is that Suppliers not on track with Action Plans are not managing the risk
- » Note that BSCP538 requires BSC Parties to update their OSM on the progress of their action plans within 5 Working Days of each milestone in the plan



How do we calculate the Risk BUSRR? – Final Adjustment

- » We net the points from size and EFR activities
 - **< 0, good adjustment.** Risk BUSRR moves from **RED** to **AMBER**, or **AMBER** to **GREEN**
 - **= 0, no change** from Performance BUSRR to Risk BUSRR.
 - **> 0, bad adjustment.** Risk BUSRR moves from **GREEN** to **AMBER**, or **AMBER** to **RED**
- » You cannot jump from a Red Performance BUSRR to a Green Risk BUSRR or a Green Performance BUSRR to a Red Risk BUSRR through this adjustment mechanism no matter how small or large your number of adjustment points

Example of how we calculate Risk BUSRRs (Suppliers)

MPID	Settlement Risk	Performance BUSRR	Market Share	EFR Activity	Risk BUSRR	Comments
AAAA	SR0024	GREEN	0.5%	In EFR for SR0024. On track with action plan. 2 BSC Audit related action plans – Neither on track	GREEN	-1 (size), -1 (EFR activity – related action plan) , +1 (BSC Audit Action plans) = -1. Green remains green
BBBB	SR0022	GREEN	3%	In EFR for SR0022. Not on track with action plan. 2 BSC Audit related action plans – Neither on track	AMBER	+1 (EFR activity – related action plan) , +1 (BSC Audit Action plans) = +2. Green converts to amber. No size adjustment as market share >2%. Although total score is +2, you only move from green to amber
CCCC	SR0024	AMBER	0.5%	No EFR Activity	GREEN	-1 (size), 0 (EFR activity) = -1. Amber converts to green
DDDD	SR0074	AMBER	1%	In EFR for SR0074. On track with Action Plan. 2 BSC Audit related action plans – On track	GREEN	-1 (size), -1 (EFR activity) = -2. Amber converts to green
EEEE	SR0074	RED	0.5%	In EFR for SR0074. On track with Action Plan. 2 BSC Audit related action plans – On track	AMBER	-1 (size), -1 (EFR activity) = -2. Red converts to amber. Although total score is -2, you only move from red to amber
FFFF	SR0072	RED	1%	In EFR for SR0072. Roughly on track with action plan milestones. 2 BSC Audit related action plans – on track	RED	0 (EFR Activity) = 0. No adjustment for size for SR0072. Red remains red

Example of how we calculate Risk BUSRRs (MOAs)

MPID	Settlement Risk	Performance BUSRR	EFR Activity	Risk BUSRR	Comments
AAAA	SR0024	GREEN	In EFR for SR0024. On track with action plan.	GREEN	-1 (EFR activity). Green remains green
BBBB	SR0022	GREEN	In EFR for SR0022. Not on track with action plan.	AMBER	+1 (EFR activity) . Green converts to amber.
CCCC	SR0028	AMBER	In EFR for SR0028. On track with Action Plan.	GREEN	-1 (EFR activity) . Amber converts to green
DDDD	SR0025	RED	In EFR for SR0025. Roughly on track with action plan milestones.	RED	0 (EFR activity). Red remains red



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
- » These adjustments allow us to consider any unusual/one off circumstances under which performance was particularly poor in a risk area. They also allow us to review evidence to suggest our data/the criteria is not accurately reflecting what happened (or is happening) in practice. Note that although we may 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
- » Suppliers should contact their OSM if they believe that they may qualify for a subjective adjustment
- » For SR0022, SR0024, SR0025 and SR0028 we required confirmation from the applicable Data Collectors that the amended data is correct



Calculation of Overall BUSRR

How do we calculate the overall BUSRR?

- » The formula we use to calculate the overall BUSRR for Suppliers is:
(Note that we do not calculate an overall BUSRR for MOAs)

$$\text{BUSRR Score} = 0.0 \left(\frac{\text{Number of RED Risks}}{\text{Total Number of Risks}} \right) + 0.5 \left(\frac{\text{Number of AMBER Risks}}{\text{Total Number of Risks}} \right) + 1.0 \left(\frac{\text{Number of GREEN Risks}}{\text{Total Number of Risks}} \right)$$

The 'Total Number of Risks' is the total number rated for a Supplier ID and does not include any 'n/a' risks


The BUSRR calculation above produces an overall score resulting in the ranking below:

BUSRR Score	Overall BUSRR
0.00 – 0.32	RED
0.33 – 0.65	AMBER
0.66 – 1.00	GREEN

In limited cases, a subjective adjustment can be made to the overall BUSRR

- » A Supplier may have n/a risks if they do not operate in the market that the risk relates to
- » See the worked example on slide 34

Strike-through effect - Incomplete/Missing PARMS data

- » If an agent does not submit PARMS Serial data for HM12, HM13 or NM12 or a Supplier does not submit a complete DPI file by the required deadline, the applicable Supplier ID and MOA ID receives a strike-through against its Risk BUSRR for SR0022, SR0024 or SR0025 as appropriate
- » For the purposes of measuring performance, we still allocate Suppliers / MOAs 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, this BUSRR value is treated as a RED, irrespective of Risk BUSRR
- » E.g.  **RED** for the purposes of the overall BUSRR calculation
- » Suppliers should follow up with agents submitting late data

Example of how the Overall BUSRR is calculated

Matl Bus Unit	SR0072	SR0074	SR0022	SR0024	SR0025	SR0028	SR0086	Overall
MPID	(Sig - 16)	(Sig - 15)	(Sig - 12)	(Sig - 12)	(Sig - 12)	(Sig - 12)	(Sig - 12)	BUSRR
A	Green	Green	Amber	Red	Amber	Green	Amber	Amber
B	Red	Amber	Green	Amber	Amber	Red	Green	Red
C *	N/A	Green	N/A	N/A	Amber	Amber	Green	Green

	Total Number of Risks	Number of Red Risks	Red Risk Score (= number / total *0)	Number of Amber Risks	Amber risk Score (= number / total *0.5)	Number of Green risks	Green Risk Score (= number / total *1)	Total BUSRR Score (=Red Risk Score + Amber Risk Score + Green Risk Score)
A	7	2**	0	3	0.21	2	0.29	0.5
B	7	4**	0	2	0.14	1	0.14	0.28
C	4	0	0	2	0.25	2	0.5	0.75

* MPID C has fewer applicable risks as it only operates in the NHH Market

** includes green and amber struck through risks



Monthly Dashboard Process



A reminder about the monthly dashboard process

- » Your OSM will send initial (draft) dashboards to you around the start of the month to give you an opportunity to comment and provide additional information to your OSM on the BUSRR values, before they are submitted to the PAB
 - *Backing data for SR0028 is also provided separately from the dashboards, but the BUSRR value based on this data is included in the report*
- » We will tell you the cut off for candidate subjective adjustments when you receive your draft dashboard. Speak with your OSM if you intend to submit information/evidence for a candidate subjective adjustment
- » The PAB views and approves BUSRRs for all Suppliers and MOAs at its monthly PAB meeting, which is normally on the last Thursday of every month
- » Your OSM will send Final dashboards to you after the PAB meeting, usually at the same time as the draft dashboards for the next month



Treatment of RED Settlement Risks

- » Your OSM requires updates from you on RED risks as standard every month. Please keep your OSM up to date on any activities affecting your BUSRR, so that they in turn can update the PAB
- » If you are RED for a particular Settlement Risk for three consecutive months, the PAB will consider applying EFR for that Settlement Risk
- » If you do not submit complete DPIs for three consecutive months, the PAB will consider applying EFR in relation to submission of the DPI file
- » If a Supplier has an overall RED BUSRR for three consecutive months, the OSM is required to provide a performance update to the PAB on risk areas contributing to the rating
- » If performance doesn't improve within appropriate timescales, we may initiate EFR (if not already applied), then ultimately escalation to the PAB
 - *Outside of the BUSRR process, we may also escalate a Supplier or Supplier Agent to the PAB if it is behind on its agreed EFR milestones or due to other poor performance indicators*
 - *The PAB is interested in any major performance changes, positive and negative*



Frequently Asked Questions



Frequently Asked Questions

- » What reporting period does the data cover?
 - The report and calculations use the latest data available. We get the data from PARMS, the Technical Assurance Agent and our Material Error Monitoring. We report all data monthly, except Material Error Monitoring data for SR0086, which is reported quarterly. The reporting period for each piece of data is included on each page of the Supplier Dashboard
- » How was the assessment criteria determined?
 - We looked at the data available relating to each of the top Settlement Risks - then agreed with the PAB the criteria for determining the BUSRR for each Settlement Risk – The PAB agreed the latest set of criteria for Settlement Risks not associated with PARMS Serials in March/ April 2010 (PAB Papers 110/06 and 111/01). The PAB agreed the criteria for Settlement Risks with associated PARMS serials was agreed by the PAB in April 2011 (PAB 123/06) for use from the September 2011 dashboards covering the July PARMS reporting period



Frequently Asked Questions

» Will the PAB review the criteria again?

- We will review the BUSRR criteria that use the new PARMS Serials when we have sufficient data to determine whether the current BUSRRs are appropriate. In addition we will review the SR0028 criteria (which was previously reviewed quarterly) at this point. We will also look at whether reporting on any other Supplier Agents is possible.

» What can I do if I disagree with the BUSRRs?

- The PAB approve the BUSRRs. They can't be changed, but, if there are particular activities contributing to your performance, please let your OSM know as soon as possible so that we can determine the relevance and report to the PAB as necessary. This may also affect a subjective adjustment to your BUSRR.
- If you have any suggestions for a change to the BUSRR measures and / or criteria, please inform your OSM so that we can consider it in the next BUSRR criteria review.

Frequently Asked Questions

- » SR0022, SR0024, SR0025 and SR0028 have a threshold for Red that the PAB reviewed quarterly. What is the process for this and what are the previous values?
- When the PAB agreed the revised BUSRR criteria in March 2010, it agreed that it would review these thresholds quarterly. However with the changes from September 2011 to SR0022, SR0024 and SR0025 criteria based on the new PARMs Serials, we will no longer review these quarterly. There will be a review of the criteria for these risks when we have sufficient data to determine whether the current BUSRRs need any amendments.
 - For SR0028 we look at the industry average data over the rolling previous 12 months and calculate any proposed changes to the criteria. We have reviewed this quarterly in the past but will next be reviewed at the same time as we review the criteria for SR0022, SR0024 and SR0025
 - We will present any changes to the BUSRR criteria to the PAB in the Non-Confidential Settlement Risk Report, which you can find on the ELEXON website ([PAB Meetings & Papers](#))
 - The previous year's and current values for SR0028 are as follows:

EFD	Nov 2010	Feb 2011	May 2011	Aug 2011
Red	>12.75%	>12%	>12%	>10%
Amber	Between 10% and 12.75%	Between 8% and 12%	Between 8% and 12%	Between 5% and 10%
Green	<10%	<8%	<8%	<5%



Frequently Asked Questions

- » The PAB changed the criteria for SR0072 in May 2011, why was this?
 - Prior to May 2011, the criteria for SR0072 was Red if over post RF threshold; Amber if under post RF threshold but above pre-RF threshold; and Green if under both pre and post RF threshold. The PAB agreed to change this from May 2011 (PAB122/06) to better align the PAB focus with the Trading Disputes Committee's (TDC) focus; the TDC's focus is to reduce the level of pre-RF Error to allow the closure of the Erroneously Large EAC / AA Trading Disputes. The aim of changing the BUSRR criteria is to increase Suppliers' focus on pre-RF Error by giving this a Red BUSRR if above threshold.



Frequently Asked Questions

- » How does the PAB use the information?
 - The PAB receives the information monthly and uses it to review performance at Supplier ID and MOA ID level
- » Do the Performance BUSRR and the adjustment factors have numeric values which the PAB use to calculate the Risk BUSRR?
 - No, the Performance BUSRR is a category of Red, Amber or Green. The adjustment criteria may overall suggest a positive or negative adjustment. An overall positive adjustment for a Settlement Risk would move a Supplier ID from either Red to Amber or Amber to Green. An overall negative adjustment for a Settlement Risk would move a Supplier ID from either Green to Amber or Amber to Red



How do I get more information?

- » Please speak to your Operational Support Manager; or
- » Zaahir Ghanty (Market Compliance Analyst)
 - 📞 020 7380 4362
 - ✉ Zaahir.ghanty@elexon.co.uk
- » Katie Wilkinson (EFR Analyst)
 - 📞 020 8380 4376
 - ✉ Katie.wilkinson@elexon.co.uk
- » Settlement Operations Analyst
 - ✉ paa@elexon.co.uk



Have a go yourself!

Example (1)

- » From the following data, work out the Performance BUSRR and the Risk BUSRR
- (NB. all data is for Supplier AAAA whose energy share is 1.5% NHH at RF and 5% HH at SF, there are no subjective adjustments)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR
SR0072	Supplier's EAC/AA Post RF Error is 57 Mwh. Its Post RF threshold is 50 Mwh. Its Pre RF Error is 100Mwh and its Pre RF Threshold is 120Mwh	No related EFR Activity		
SR0074	SP08a performance is 95.9%. SP09 performance is 0.05%	Fully on track with Risk specific Action Plan. Two related Audit issues, EFR Action Plans both on track		
SR0022	HM13 performance: standard 1 = 100, standard 2 = 8	Not on track with Risk specific action plan. No related Audit Issues		
SR0024	NM12 performance: standard 1 = 10,000, standard 2 = 800, standards 3-7 = 100 for each standard	No EFR Activity		
SR0025	HM12 performance: standard 1 = 1,000, standards 2-7 = 0 for each standard	No risk specific action plan. 2 related Audit Issues. On track with these action plans		

Example (2)

- » From the following data, work out the Performance BUSRR and the Risk BUSRR
- (NB. all data is for Supplier A whose market share is 1.5% NHH at RF and 5% HH at SF, there are no subjective adjustments)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR
SR0028	8% of site visits have a Meter Technical Detail non-compliance	No EFR activity		
SR0086	Supplier's error this month is 50 Mwh. Its threshold is 60 Mwh. Its error last month was 45 Mwh	More or less on track with Risk Specific Action Plan. 3 related Audit issues. On track with two of these plans but not with the other		
Overall BUSRR	(Use all 7 Settlement Risks above) Incomplete data was received for SR0024 and SR0025			

Answers

Example – Answers (1)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR	Comments
SR0072	Supplier's EAC/AA Post RF Error is 57 Mwh. Its Post RF threshold is 50 Mwh. Its Pre RF Error is 100Mwh and its Pre RF Threshold is 120Mwh	No related EFR Activity	RED	RED	<p>Performance BUSRR: Supplier's EAC/AA Error is above its Post RF threshold, so its Performance BUSRR is red</p> <p>Risk BUSRR: No EFR Activity, so no adjustment for this, SR0072 is not subject to a size adjustment, so the Risk BUSRR is also red</p>
SR0074	SP08a performance is 95.9%. SP09 performance is 0.05%	Fully on track with Risk specific Action Plan. Two related Audit issues, EFR Action Plans both on track	AMBER	GREEN	<p>Performance BUSRR: SP08a performance is <96%, so step 1 of the Performance BUSRR calculation gives an initial red. SP09 performance is <0.1% so step 2 adjusts the performance BUSRR to amber</p> <p>Risk BUSRR: Supplier's NHH market share is 1.5% which gives -1 score; fully on track with risk specific action plan which gives -1 score. On track with Audit related action plans which gives no adjustment. Overall calculation gives a -2 which converts the amber performance BUSRR to a green risk BUSRR</p>

Example – Answers (1)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR	Comments
SR0022	HM13 performance: standard 1 = 100, standard 2 = 8	Not on track with Risk specific action plan. No related Audit Issues	AMBER	RED	<p>Performance BUSRR: % MTD accurate first time $= 100 - \left[\left(\frac{\text{Resubmitted (standard 2)}}{\text{Received (standard 1)}} \right) * 100 \right]$ $= 100 - [(8/100) * 100] = 92\% = \text{Amber}$ as between 90% and 100% Risk BUSRR: Supplier's HH market share is 5%, so no adjustment. Supplier is not on track with risk specific action plan gives +1 score. Total score is +1 which converts the amber performance BUSRR to a red risk BUSRR</p>
SR0024	NM12 performance: standard 1 = 10,000, standard 2 = 800, standards 3-7 = 100 for each standard	No EFR Activity	RED	AMBER	<p>Performance BUSRR: % MTDs missing at each run type $= \left(\frac{\text{number missing at run type} \times (\text{std 2-7})}{\text{number of live registrations (std 1)}} \right) * 100$ 1% of MTDs missing before RF (Std 6) and 1% after RF (std 7) > 0% = Red Risk BUSRR: Supplier's NHH Market share is 1.5% which gives -1 score. No EFR Activity, so overall calculation is -1 score which converts the red performance BUSRR to an amber risk BUSRR</p>

Example – Answers (3)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR	Comments
SR0025	HM12 performance: standard 1 = 1,000, standards 2-7 = 0 for each standard	No risk specific action plan. 2 related Audit Issues. On track with these action plans	GREEN	GREEN	<p>Performance BUSRR: % MTDs missing at each run type $= \left(\frac{\text{number missing at run type} \times (\text{std } 2-7)}{\text{number of live registrations (std } 1)} \right) * 100$ %0 of D268s are missing which gives a green BUSRR</p> <p>Risk BUSRR: Supplier's HH Market share is 5%, so no adjustment. On track with Audit Issue related Action Plans, so no adjustment. Therefore the green performance BUSRR stays as a green risk BUSRR</p>
SR0028	8% of site visits have a Meter Technical Detail non-compliance	No EFR activity	AMBER	AMBER	<p>Performance BUSRR: % site visits with a Meter Technical Detail non-compliance is between 5% and 10% so performance BUSRR is amber</p> <p>Risk BUSRR: Supplier's HH Market share is 5%, so no adjustment. No EFR Activity so no adjustment. Therefore the amber performance BUSRR stays as a amber risk BUSRR</p>

Example – Answers (4)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR	Comments
SR0086	Supplier's error this month is 50 Mwh. Its threshold is 60 Mwh. Its error last month was 45 Mwh	More or less on track with Risk Specific Action Plan. 3 related Audit issues. On track with two of these plans but not with the other	AMBER	RED	<p>Performance BUSRR: Supplier's error is below its threshold but has increased since last month, so performance BUSRR is amber</p> <p>Risk BUSRR: More or less on track with Risk specific action plan gives 0 score. Not on track with one of the three audit issue action plans gives +1 score. No size adjustment for SR0086. Total score is +1 so amber performance BUSRR adjusted to red risk BUSRR</p>

Example – Answers (5)

Settlement Risk	Relevant Performance Measures	EFR Activity	Performance BUSRR	Risk BUSRR	Comments
Overall BUSRR	(Use all 7 Settlement Risks above) Incomplete data was received for SR0024 and SR0025			RED	As incomplete data was received for SR0024 and SR0025, the risk BUSRRs are treated as red for the purposes of the overall BUSRR calculation. Therefore there are 5 red risks, 1 amber risk and 1 green risk. The calculation is $(0*5/7)+(0.5*1/7)+1*1/7=0.21$. This is <0.32 so gives an overall red BUSRR. Note that if all PARMs data had been received for SR0024 and SR0025, the overall BUSRR would have been Amber (3 red risks, 2 amber risks, 2 green risks gives a score of $(0*3/7)+(0.5*2/7)+(1*2/7)=0.36$)



effectively, efficiently and economically

remaining **independent**

benefit our **customers**
and stakeholders

deliver the BSC

identifying and exploiting new
opportunities

forefront of the **changes**
in energy markets

drive improvements

**leader in the efficient
transformation
of energy markets**

**shared solutions to address
common industry problems**



