

PUBLIC

Annual Performance Assurance Report

2013-2014

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ANNUAL PERFORMANCE ASSURANCE REPORT

CONTENTS

EXECUTIVE SUMMARY	3
Message from the PAB Chair	5
INTRODUCTION	6
Scope	6
Structure of the Annual Performance Assurance Report.....	6
Risk Identification & Evaluation	6
TOP SUPPLIER VOLUME ALLOCATION SETTLEMENT RISKS 2013/14 PERFORMANCE	7
Overall Performance of Supplier Volume Allocation Settlement Risks	12
Central Volume Allocation & Lower Level Settlement risk.....	12
Appointments & Notification Risks.....	13
DEPLOYMENT OF PERFORMANCE ASSURANCE TECHNIQUES 2013/14	18
Error & Failure Resolution (EFR)	18
Supplier Charges	19
Bulk Change of Non Half Hourly Agent	19
Trading Disputes	20
Qualification & Re-Qualification.....	20
Performance Monitoring and Reporting	21
Modifications and Change Proposals.....	22
Balancing and Settlement Code Audit.....	22
Technical Assurance of Metering.....	25
Technical Assurance of Performance Assurance Parties	27
COST OF DELIVERING THE RISK BASED PERFORMANCE ASSURANCE FRAMEWORK	28
PERFORMANCE ASSURANCE BOARD STRATEGY AND FUTURE CONSIDERATIONS	29
Performance Assurance Board (PAB) Strategy	29
Large Erroneous Estimated Annual Consumption and Annualised Advances (EAC/AAs).....	29
Commissioning of Metering Equipment Processes	30
Future Considerations	30
APPENDIX 1 – TOP SETTLEMENT RISKS 2012/13	34
APPENDIX 2 – PERFORMANCE ASSURANCE TECHNIQUES	35

ANNUAL PERFORMANCE ASSURANCE REPORT

EXECUTIVE SUMMARY

The Performance Assurance Board (PAB) is required, by Balancing and Settlement Code (BSC) Section Z 8.1, to prepare an Annual Performance Assurance Report (APAR), which summarises:

- Results from risk evaluation and risk assurance procedures focussing on the outcome of deployment of Performance Assurance Techniques (PATs);
- The costs associated in delivering the Performance Assurance Framework (PAF);
- Recommendations for modifying the PATs; and
- The benefits of any modifications to PATs.

Settlement Risks Performance Highlights

We continue to deliver a more transparent risk based PAF, focusing on the key Settlement Risks affecting BSC Parties. The collaborative approach we employ with our customers to monitor performance assurance has resulted in good performance by BSC Parties and agents against the following top Settlement Risks (SR):

- SR0022¹ - There has been a strong downward trend in the volume of Half Hourly Meter Technical Details (HHMTDs) resubmitted;
- SR0072² - Gross error both pre and post Final Reconciliation (RF) error remains well below the 165 GWh threshold (maximum gross error – 74 GWh);
- SR0074³ - The non half hourly market consistently (363 days out of 365) achieved greater than 97% of its energy settling on actual data at the RF Run;
- SR0024⁴ - On average Non Half Hourly meter Technical details (NHHMTDs) missing after RF is a small percentage (0.07%) of the average number of appointments registered in a 14 month period;
- SR0025⁵ - On average HH MTDs missing after RF is a small percentage (0.20%) of the average number of appointments registered in a 14 month period; and
- SR0028⁶ – During 2013/14 1194 inspection visits were made. In total 86 non-compliances were reported, of which only one was a Category 1.01 non-compliance.

¹ The risk that Half Hourly Data Collectors do not provide correct Meter Technical Details to Half Hourly Data Collectors resulting in Meter readings being misinterpreted or not collected.

² The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter Readings, resulting in erroneous data being entered into Settlement.

³ The risk that Non Half Hourly Data Collectors (NHHDCs) do not collect and/or enter valid Meter Readings resulting in old/default data entering Settlement.

⁴ 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 (NHHDCs) resulting in Meter readings being not collected.

⁵ The risk that Half Hourly Meter Operator Agents (HHMOAs) do not provide Meter Technical Details (MTDs) to the correct Half Hourly Data Collectors (HHDCs) resulting in Meter readings being not collected.

⁶ The risk that Half Hourly Meter Operator Agents make changes to the Metering System and do not inform the Half Hourly Data Collectors resulting in Meter readings being misinterpreted or not collected.

ANNUAL PERFORMANCE ASSURANCE REPORT

Deployment of PATs in 2013/14

Error & Failure Resolution: During 2013/14 the PAB applied the Error and Failure Resolution (EFR) process to 91 BSC Audit issues and 21 non audit issues. By the end of 2013/14 69 plans were put in place to address audit issues were closed.

8 PAPs were removed from the EFR process against top Settlement Risks due to performance improvement.

Supplier Charges: The total uncapped Supplier Charges for 2012/13 was £17.4M and capped Supplier Charges was £2.8M.

BSC Audit: The BSC Audit findings did not exceed the BSC Audit materiality of 1.5 TWh and was therefore not qualified. There has been a reduction in the number of audit issues raised, in 2013/14, from 153 to 72. This follows a reduction in 2012/13 from 181 to 153.

Technical Assurance of Metering: Our response to the Technical Assurance Agent Annual Report addresses issues encompassing commissioning, unresolved category 2 non-compliances, Meter programming errors and Measurement Transformer Certificates.

Technical Assurance of Performance Assurance Parties: We undertook 12 Performance Assurance Reporting and Monitoring System (PARMS) accuracy checks. The full report will be published following its presentation to the PAB in August 2014.

Bulk Change of Agent: There were no applications submitted for Bulk Change of Agent in 2013/14.

Qualifications/Re-Qualifications: The PAB considered and approved 16 applications, 12 Qualifications and 4 re-Qualifications.

Trading Disputes: A total of 72 Trading Disputes were raised during 2013/14. The Trading Disputes Committee (TDC) heard 49 Trading Disputes and upheld 48 with a materiality of ~£17.1 million.

PAB Strategy and Future Considerations

Throughout 2013/14 we undertook work related to the following PAB strategy work streams: Addressing the problems with large/erroneous EAC and AAs, commissioning of Metering Equipment processes, Supplier re-Qualification processes and aged Audit and Market Issues.

The PAB continue to monitor the impact of Smart and Electricity Market Reform (EMR) on the Performance Assurance Framework (PAF).

We are also monitoring a number of issues which may impact the PAF in the future. These are Supplier re-Qualification, P272 'Mandatory Half Hourly Settlement for Profile Classes 5-8' /P300 Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes (DCP179)' and SP08 'Energy and Metering System Identifiers on Actuals' performance.

Financials

The actual cost of delivering the PAF in 2013/14 was 32% (~£1.3m) lower than forecast for the Risk Operating Plan (ROP) 2013/14. This is largely due to the re-procurement of contracts for the BSC Operational Audit and Technical Assurance.

Modifications

During 2013/14, the PAB recommend one Change (CP) Proposal - CP1406 'Electronic version of the Self Assessment Document'. The CP amends BSCP537⁷ to include the additional alternative option to complete and submit the SAD either electronically or via the word document. The PAB endorsed and the Imbalance Settlement Group and the

⁷ Qualification Process for SCA Parties, SVA Party Agents and CVA MOAs.

ANNUAL PERFORMANCE ASSURANCE REPORT

Supplier Volume Allocation Group approved CP1406 for implementation on 26 June 2014 as part of the June 2014 BSC Systems Release and agreed the proposed amendments to BSCP537.

Message from the PAB Chair

The year 2013/14 has been yet another challenging year of change for ELEXON and its customers alike, with the economic pressures and the increasing workload from the Smart Metering programme, Electricity Market Reform as well as Ofgem initiatives.

During the year we continued to see the non half hourly market regularly perform above the 97% target for actual energy. The half hourly market also regularly performed above the 99% target for actual energy. These are two key metrics that measure that Suppliers, in conjunction with Supplier Agents, are continuing to access and process actual meter readings through the Settlement pipeline

The results reported, in the Technical Assurance Agent Annual Report and the BSC Auditors Annual Report, confirm concerns remain over the quality of the commissioning process and meter installations. The implementation of Modification P283 'Reinforcing the Commissioning of Metering Equipment Processes' in November 2014 should go some way to tackle this issues going forward.

2013/14 was the first BSC Auditors Annual Report presented under the new contract. The audit report highlighted audit issues that have been around for a number of years. The BSC Panel are keen to see these old audit issues addressed. That being said we have seen the lowest number of reported high and medium audit issues over the last 10 years.

ELEXON, the Performance Assurance Board, the Technical Assurance Agent and the BSC Auditor will be working together to consider what incentives can be put in place to facilitate reducing the impact of audit issues.

I would encourage you to contact your Operation Support Manager or one of the team if you have any questions or comments about the PAF or the Settlement Risks. We are happy to talk to you at any time.

I appreciate the work that all Performance Assurance Parties have put into resolving issues to make 2013/14 another successful year. Thank you for all your efforts.

ANNUAL PERFORMANCE ASSURANCE REPORT

INTRODUCTION

Scope

The Performance Assurance Board (PAB) is required, as per Balancing and Settlement Code (BSC) Section Z 8.1, to prepare an Annual Performance Assurance Report (APAR), which summarises:

- Results from risk evaluation and risk assurance procedures focussing on the outcome of the deployment of Performance Assurance Techniques (PATs);
- The costs for ELEXON in implementing the PATs and a comparison against the estimated cost in the Risk Operating Plan (ROP) for the previous year, accounting for the discrepancies;
- Recommendations for modifying the PATs or establishing new PATs; and
- The benefits and cost savings of any modification to the PATs.

Structure of the Annual Performance Assurance Report

We've structured the APAR for the 2013/14 as follows:

- A summary of the risk identification/evaluation processes we follow;
- Industry/participants' performance against the top Settlement Risks;
- A review of the deployment of PATs, including our response to the Technical Assurance Agent's (TAA) report and the BSC Auditor's report;
- The cost of delivering PATs; and
- The PAB Strategy and future considerations.

Risk Identification & Evaluation

Section Z Paragraph 5 of the BSC sets out the requirements for the delivery of the Performance Assurance procedures, which includes the Risk Evaluation Methodology (REM) and the Risk Evaluation Register (RER)

The REM describes how the PAB:

- Identifies Settlement Risks;
- Evaluates Settlement Risks; and
- Assesses the materiality of Settlement Risks.

The RER applies the principles of the REM to identify and evaluate Settlement Risks. It sets out the Settlement Risks, and the significance of each risk on Settlement in relation to a specific Performance Assurance Operating Period (PAOP - equivalent to the BSC year, 1 April – 31 March).

Through industry consultation, we identified and assessed the materiality of 134 Supplier Volume Allocation (SVA) and 51 Central Volume Allocation (CVA) Settlement Risks.

Risk Significance Thresholds

The Settlement Risk thresholds represent the PAB and industry's risk appetite.

The thresholds for SVA risks are:

- Net significance below four – low;
- Net significance four to 11 – medium; and

ANNUAL PERFORMANCE ASSURANCE REPORT

- Net significance 12 and above - high.

There are currently 40 SVA risks with a net significance below 4; 84 with a net significance of 4 to 11 and 11 with a net significance of 12 or more.

The next section provides a high-level overview of performance against the top SVA Settlement Risks (those risks with a net significance of 12 and above) over the year. A table showing the top SVA Settlement Risks is included in Appendix 1.

TOP SUPPLIER VOLUME ALLOCATION SETTLEMENT RISKS 2013/14 PERFORMANCE

The PAB monitors industry and participant performance against top Settlement Risks on a monthly basis in the Settlement Risk Report (SRR), where data is available. We assign a risk rating (Business Unit Settlement Risk Rating – BUSRR) to the relevant participants. The BUSRRs have been developed to determine the extent to which a BU’s performance affects Settlement. Industry performance for the top Settlement Risks in 2013/14 is shown below. The risks are discussed in descending order of significance.

SR0022: The risk that Half Hourly Meter Operators (HHMOA) do not provide correct Meter Technical Details to Half Hourly Data Collectors (HHDCs) resulting in meter readings being misinterpreted or not collected. (net significance 20).

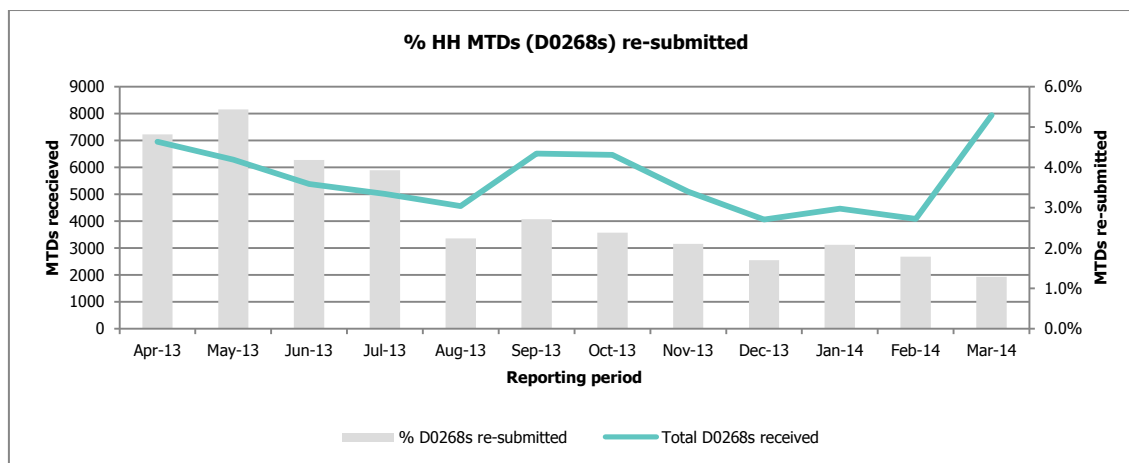


Chart 1: SR0022 – Quality of MTDs (Source: PARMS Serial HM13)

Monitoring performance against this risk is centred on the quality of the HH MTDs that have been submitted by HHMOAs, based on any that have needed to be re-sent with updated information in the key fields⁸.

PARMS⁹ Serial HM13 measures how many times HH MTDs (D0268s) are re-sent with the same Metering System effective from date and there has been a change in a key field of the HH MTDs

Chart 1 shows performance for 2013/14. The data shows a downward trend in the volume of resubmitted HHMTDs. The large increases in the number of MTDs received in April 2013, September 2013, October 2013 and March 2014 was due to contract rounds¹⁰ affecting some HHMOAs and resulting in higher than average registrations.

⁸ Key fields include: outstation ID; Meter ID; outstation number of channels; measurement quantity ID; Meter multiplier; pulse multiplier; CT and/or VT ratios; and access to Metering Equipment at password level 3 (see BSCP514, Appendix 8.2).

⁹ Performance Assurance Reporting and Monitoring System.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0072: The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter Readings, resulting in erroneous data being entered into Settlement (net significance 16).

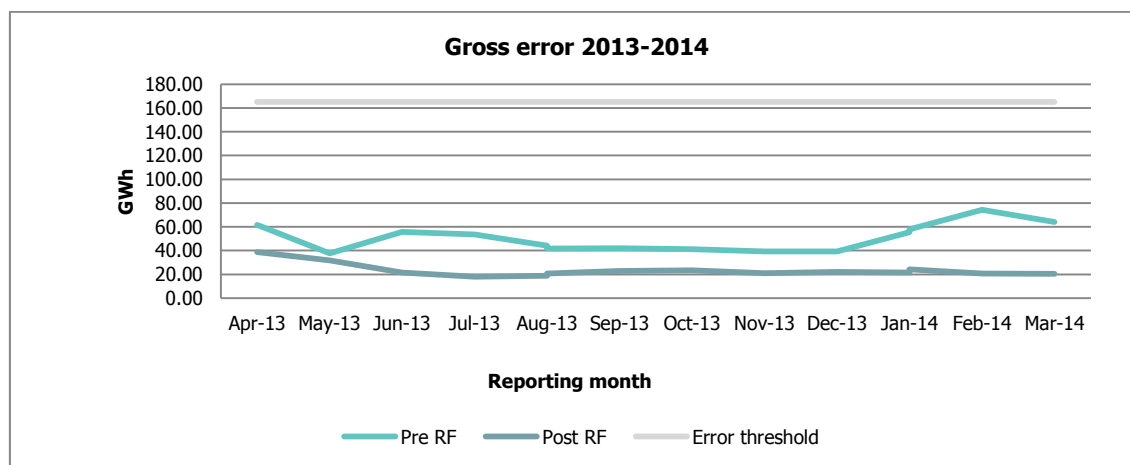


Chart 2: SR0072 Gross error (Source: Material Error Monitoring Data)

Monitoring performance against this risk is centred on NHHDCs' ability to take corrective action against erroneous reads which have entered Settlement. With the closing of the Dispute Final Run (DF), corrective action needs to take place within Final Reconciliation Settlement Run (RF). The PAB monitors a 15 month pre-RF window.

Throughout 2013/14 both pre and post RF gross error remained well below the 165 GWh error threshold. Maximum/minimum pre RF gross error was 74/38 GWh respectively and maximum/minimum post RF gross error was 39/18 GWh respectively.

SR0073: The risk that stolen energy notified by Revenue Protection units is not used in calculations by Suppliers and Non Half Hourly Data Collectors (NHHDCs) resulting in inaccurate data being entered into Settlement (net significance 15).

No regular data is available to monitor either the extent of this risk or those parties who are contributing most.

¹⁰ Around October/November and then again in February/March MOAs tend to have contract rounds where they refresh/start and/or end direct contracts with customers.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0074: The risk that Non Half Hourly Data Collectors (NHHDCs) do not collect and/or enter valid Meter Readings resulting in old/default data entering Settlement (net significance 15).

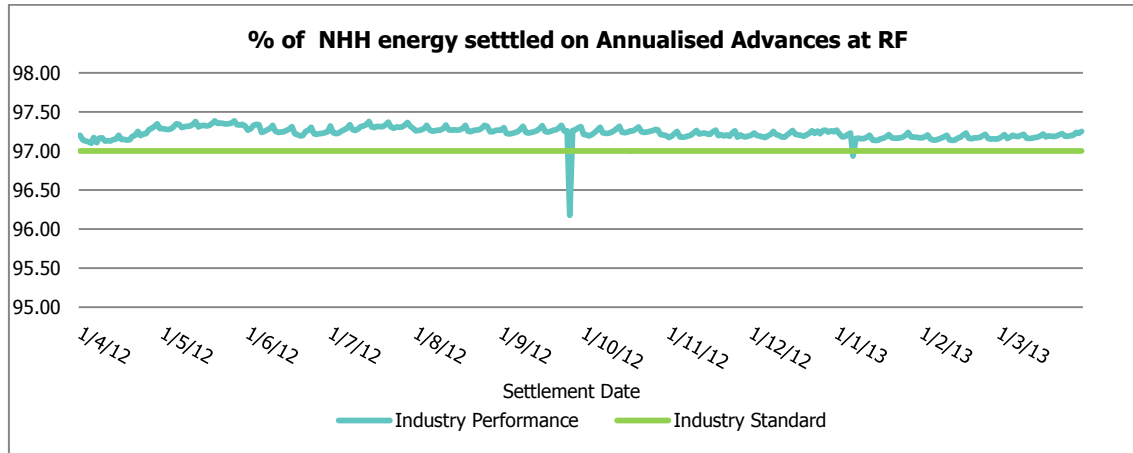


Chart 3: SR0074 Percentage of Energy Settled on AAs at RF (Source: PARMS Serial SP08a)

Industry met the 97% threshold for of NHH energy settled on Annualised Advances (AAs) at Final reconciliation (RF) for 363 out of 365 days crystallising during 2013/14. The dip in September was due to an individual Supplier which had a reporting issue with the Data Transfer Network. It affected all Grid Supply Point Groups in which it was active, incorrectly reporting low Energy Volumes against AAs. The issue was resolved and the data re-submitted resulted in the threshold being met. A smaller dip in January was primarily due to the performance degradation of one Supplier was put in Error Failure and Resolution against this risk.

SR0024: 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 (NHHDCs) resulting in Meter readings being not collected (net significance 12).

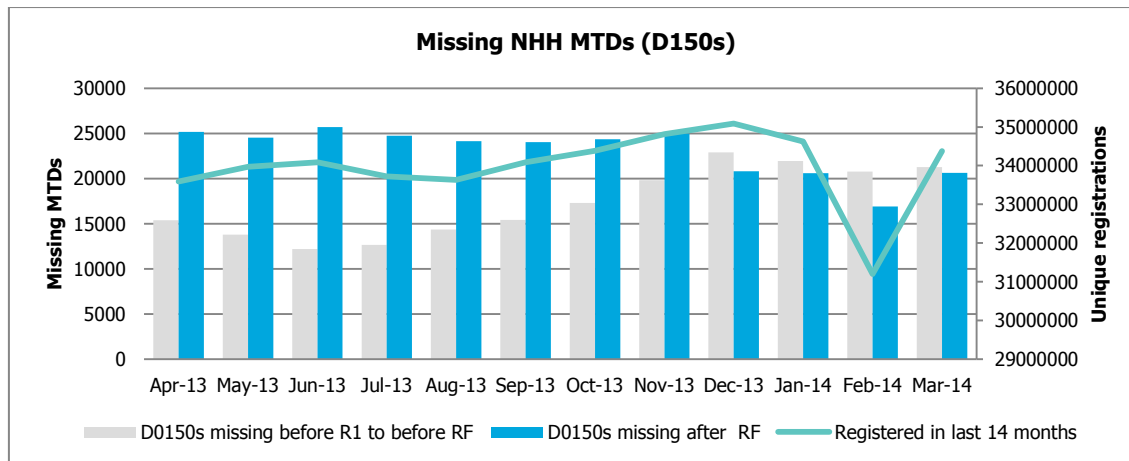


Chart 4: SR0024 Missing NHHDC MTDs (Source: PARMS Serial NM12 as reported by DCs)

This risk focuses on NHHMOAs sending MTDs following a Change of Agent, or Change of Supplier with a concurrent Change of Agent. We use PARMS¹¹ Serial NM12 (Missing NHH MTDs) as reported by DCs to measure this. NHH MTDs (D0150s) are considered missing when a D0155 (Notification of Meter Operator or Data Collector Appointment and Terms) or D0148 (Notification of Change to Other parties) flow has been received but no associated D0150s

¹¹ Performance Assurance Reporting and Monitoring System.

ANNUAL PERFORMANCE ASSURANCE REPORT

have been received. In order to capture instances where NHH MTDs are missing, Agents count the number of unique registrations held over the previous 14 month period and report how many of those do not have a corresponding D0150. Chart 5 shows performance from April 2013. On average MTDs missing after Final Reconciliation is just a small percentage of the average number of appointments registered in a 14 month period (0.07%).

SR0025: The risk that Half Hourly Meter Operator Agents (HHMOAs) do not provide Meter Technical Details (MTDs) to the correct Half Hourly Data Collectors (HHDCs) resulting in Meter readings being not collected (net significance 12).

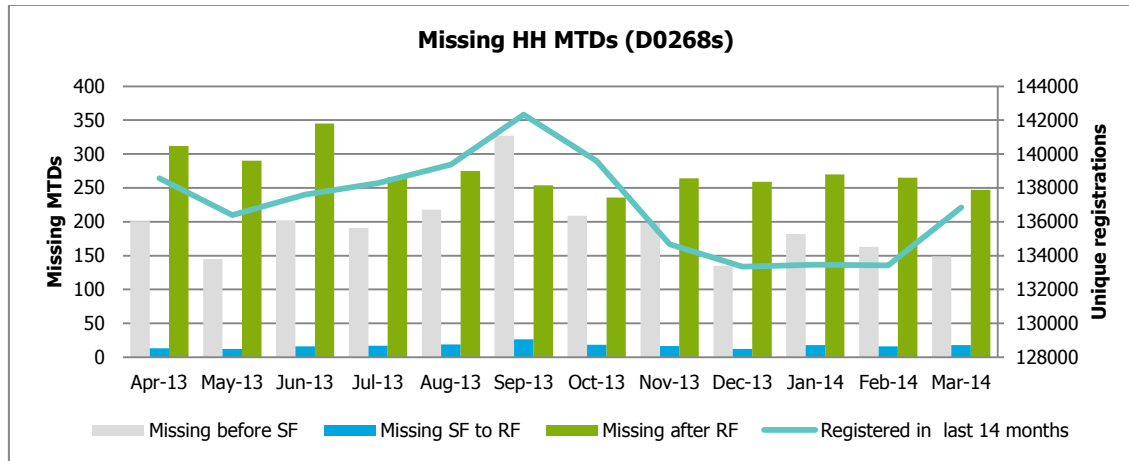


Chart 5: SR0025 Missing HH MTDs (source: PARMS Serial HM12 as reported by DCs)

This risk focuses on the HHMOAs sending MTDs following a Change of Agent, or Change of Supplier with a concurrent Change of Agent. We use PARMS Serial HM12 (Missing HH MTDs) as reported by DCs to measure this. HH MTDs (D0268) are considered missing when a D0155¹² or D0148¹³ flow has been received but no associated HH MTDs¹⁴ have been received. In order to capture instances where HH MTDs are missing, Agents count the number of unique registrations¹⁵ held over the previous 14 month period and report how many of those do not have a corresponding D0268. Chart 6 shows performance since April 2013. On average MTDs missing after RF is just a small percentage of the average number of appointments registered in a 14 month period (0.20%).

SR0028: The risk that Half Hourly Meter Operator Agents (HHMOAs) make changes to the Metering System and do not inform the Half Hourly Data Collectors (HHDCs) resulting in Meter readings being misinterpreted or not collected (net significance 12).

The Technical Assurance of Metering technique requires the Technical Assurance Agent (TAA) to undertake inspection visits to Half Hourly Metering Systems. Any non-compliances are recorded including MTD non compliances. We monitor the MTD non compliances on a monthly basis to measure SR0028.

¹² Notification of Meter Operator or Data Collector Appointment and Terms.

¹³ Notification of Change to Other Parties.

¹⁴ D0268 flow.

¹⁵ Unique Registrations include any Unique D0155/D0148 received and accepted.

ANNUAL PERFORMANCE ASSURANCE REPORT

Types of MTD Non Compliances:

Category 1 non-compliances are deemed to be currently affecting the quality of data for Settlement purposes;

Category 2 non-compliances are deemed to have the potential to affect the quality of data for Settlement purposes (but not currently affecting it)

The TAA identifies MTD non-Compliances using the following codes:

1.01: Incorrect Standing Data held by DC (MTDs);

2.01: Incorrect Standing Data held by MOA (MTDs);

2.02: MTDs do not match (On site & Meter Inspector) after Meter Exchange; and

2.03: MTDs not provided.

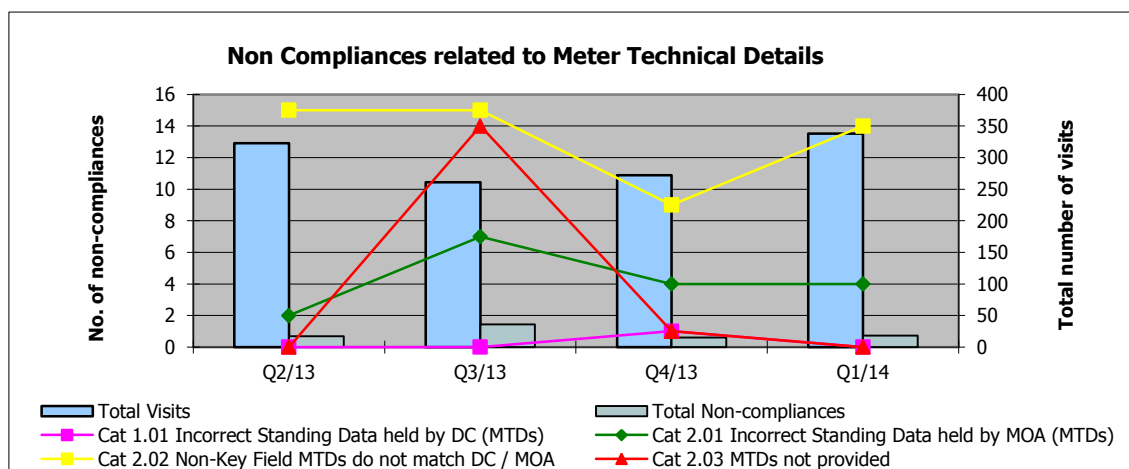


Chart 6: Non-compliances related to MTDs (Source: Technical assurance Agent)

During 2013/14 1194 inspection visits were made. In total 86 non-compliances were reported:

53 Category 2.02 non-compliances;

17 Category 2.01 non-compliances;

15 Category 2.02 non-compliances; and

1 Category 1.01 non-compliance.

This continues to be a high risk area as any errors or inconsistencies with MTDs could have an impact on the accuracy of half hourly Settlement. We continue to manage these issues through the normal Performance Assurance Framework process and are examining further ways to address problems through the actions agreed in response to the TAA and Audit Reports.

SR0111: The risk that Non Half Hourly Metering Systems are tampered with resulting in under-accounting of energy in Settlement (net significance 12).

No regular data extract is available to monitor either the extent of this risk or those parties who contribute to the risk.

SR0112: The risk that Half Hourly Data Collectors use data from faulty Metering Systems resulting in incorrect data entering into Settlement (net significance 12).

No regular data extract is available to monitor either the extent of this risk or those parties who contribute to the risk.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0116: The risk that Half Hourly Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement (net significance 12).

No regular data extract is available to monitor either the extent of this risk or those parties who contribute to the risk.

SR2868: The risk that non Half Hourly Import/Export Metering systems are incorrectly installed/configured resulting in inaccurate data entering Settlement (net significance 12).

No regular data extract is available to monitor either the extent of this risk or those parties who contribute to the risk.

Overall Performance of Supplier Volume Allocation Settlement Risks

Each month we calculate an overall risk rating (BUSRR) for each active Supplier ID. The BUSRR determines the extent to which the performance of a Business Unit (BU) affects Settlement Risks.

Chart 8 shows performance for 2013/14. Throughout this period the number of red BUSRRs remained fairly stable, ranging between 0-2. The number of amber BUSRRs ranged 9-14 and green BUSRRs ranged from 33 to 50.

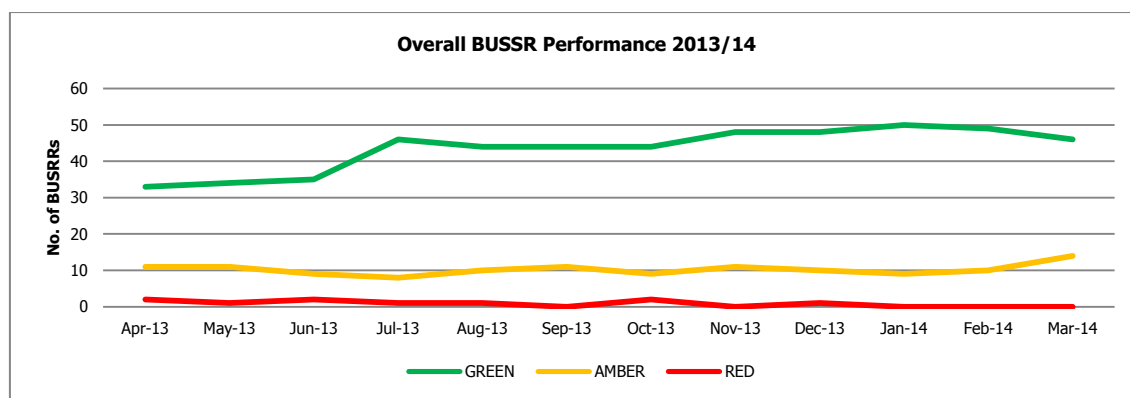


Chart 7: Overall BUSRR Performance in 2013/14

Central Volume Allocation & Lower Level Settlement risk

There are 51 CVA risks which are monitored through the BSC Audit, Qualification and the Technical Assurance of Metering. 84 SVA lower level Settlement Risks (those with a net significance between 4 and 11) are reviewed by the PAB on a less frequent basis than the top Settlement Risks. The PAB monitors the following areas at a market level on a monthly basis through the Settlement Risk Report¹⁶.

Settlement Final¹⁷ (SF), Half Hourly Performance

Settling half hourly energy on actual Meter Readings helps to ensure that the amount of estimated or default data submitted for Settlement is reduced.

Industry has performed consistently above the 99% standard set for Settling on actual Meter Readings for SF in the half hourly market. We noted a slight dip of performance in August and December (6 days out of 365 days which equates to the threshold not being met approximately 1.6% of the time). A full explanation was provided regarding this under performance and remedial action was taken to ensure that later Settlement runs were not affected.

¹⁶ The Settlement Risk Report illustrates market trends and industry performance subject to the availability of data and is presented to the Performance Assurance Board on a monthly basis.

¹⁷ Settlement Final (SF) Run is the first Settlement Run where money changes hands, also known as the Initial Settlement Run this runs at day +16).

ANNUAL PERFORMANCE ASSURANCE REPORT

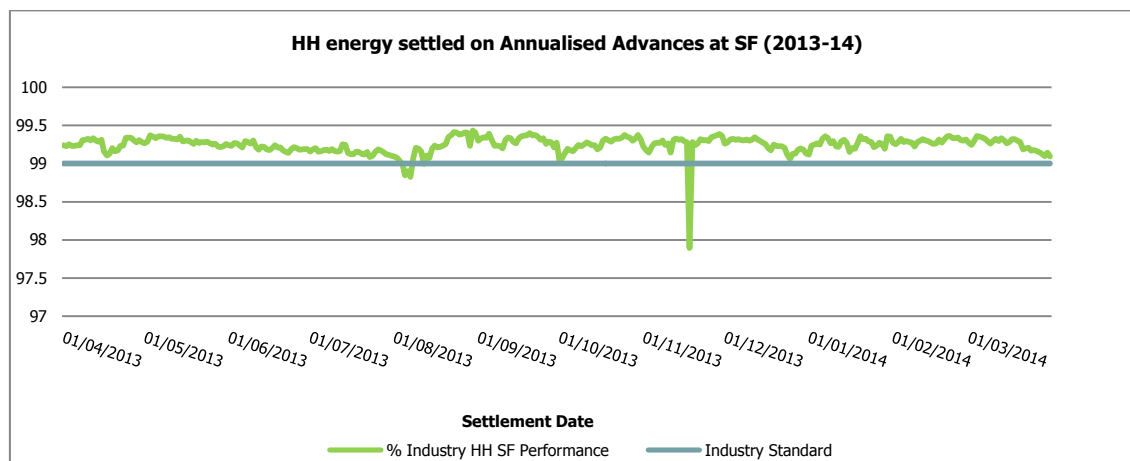


Chart 8: SR0081/89 Percentage of Half Hourly Energy Settled on Actual Meter Readings at Initial Reconciliation (Source: PARMs Serial SP08b)

Appointments & Notification Risks

BSCP514 'SVA Meter Operations for Metering Systems Registered in SMRS'¹⁸ requires Suppliers to notify Meter Operator Agents (MOAs) of a change of Data Collector (DC) to allow the MOA to send the Meter Technical Details (MTDs) to the correct DC. Similarly the Supplier is required via BSCP502 'Half Hourly Data Collection for SVA Metering Systems registered in SMRS' and BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems registered in SMRS' to notify DCs of a change in MOA.

If Suppliers do not appoint agents in a timely manner there is a risk that Meter readings will not be collected and/or default data will be entered into Settlement. Once an agent has been appointed, if Suppliers do not notify associated agents of the change of DC or MOA there is a risk that MTDs will be missing, sent to an incorrect Agent or misinterpreted.

A combination of poor Supplier processes and increased Change of Supply/Agent activity can affect registration and thereby Settlement Performance. We use Performance Assurance Reporting Monitoring System (PARMS) data provided by the relevant agents and Parties to monitor compliance with BSCP514 and 502 and measure any potential impact on Settlement. We then work with appropriate Parties to resolve issues associated with these risks

What we monitor:

- Total number of notifications/MTDs received late/missing;
- The number of notifications/MTDs received late/missing before the SF Run i.e. no impact on Settlement;
- The number of notifications/MTDs received late/missing after SF but before Final Reconciliation (RF) Run i.e. correctable impact on Settlement but potential for impact on SP08¹⁹ performance; and
- The number of notifications/MTDs received late/missing after RF i.e. data correctable only via a Trading Dispute.

Timely Appointment of Agents (SP11)

We use SP11 to monitor the ability of Suppliers to submit notification of appointment to Agents (D0155) prior to the effective from date of the appointment. The table below shows the number of D0155s received before the Effective-from Date (EFD) and the breakdown across Settlement Runs.

¹⁸ Supplier Meter Registration Service.

¹⁹ Energy and Metering System Identifier settled on Actual Data/Annualised Advances.

ANNUAL PERFORMANCE ASSURANCE REPORT

Sent from		Total D0155s received in the reporting period ²⁰	D0155s received before EFD	D0155s received after EFD before SF	D0155s received after EFD and after SF but before RF	D0155s received after EFD and after RF
HHDC	Total	44,370	35,502 (80.01%)	7,766 (17.50%)	950 (2.14%)	152 (0.34%)
	Average	3,698	2,959	647	79	13
	Minimum	2,255	1,633	317	41	1
	Maximum	8,300	7,798	2,186	188	47
HHMOA	Total	39,449	29,069 (73.69%)	6,682 (16.94%)	1,510 (3.83%)	2,167 (5.49%)
	Average	3,287	2,424	557	126	181
	Minimum	1,806	956	330	56	2
	Maximum	8,975	7,604	1,227	273	768
NHHDC	Total	4,864,532	4,281,630 (88.02%)	569,978 (11.72%)	11,385 (0.23%)	1,539 (0.03%)
	Average	405,378	356,803	47,498	949	128
	Minimum	247,477	224,002	19,155	289	25
	Maximum	1,148,308	1,047,532	99,217	2,037	289
NHHMOA	Total	4,044,679	3,730,838 (92.24%)	293,958 (7.27%)	13,577 (0.34%)	6,306 (0.16%)
	Average	337,057	310,903	24,497	1,131	526
	Minimum	232,610	204,193	8,378	417	64
	Maximum	688,271	619,242	68,336	3,048	1,619

Table 1: Timely Appointment of Agents (Source: PARMS Serial SP11)

²⁰ A reporting period is one calendar month.

ANNUAL PERFORMANCE ASSURANCE REPORT

The data indicates:

- Between 74% and 92% of D0155s were received before the EFD, with NHHMOAs/NHHDCs receiving D0155s prior to the effective from date more often than HHMOAs/HHDCs; and
- The number of D0155s received with an effective from date greater than 14 months prior to receiving the appointment flow is small (between 0.03% and 5.49%).

Missing Appointments of Agents (SP15)

We use SP15 to monitor the ability of Suppliers to inform DCs and MOAs of changes to the Supplier hub composition.

The Supplier receives acceptance of appointment from agents and issues a D0148 (Notification of Change to other parties) confirming appointment to DCs and MOAs.

The Supplier then notifies the relevant agents of their appointment with a given effective from date (D0155). The number of D0148s should therefore match the number of D0155s received (i.e. none should be missing). The table below shows the breakdown across Settlement Runs of the missing D0148s.

Sent from		Unique registrations held in previous 14 months	Total D0148s missing	D0148s missing before SF*	D0148s missing after SF, before RF*	D0148s missing after RF*
HHDC	Average	173,049	530 (0.13%)	100 (18.90%)	325 (61.34%)	105 (19.76%)
	Minimum	170,070	432	64	257	88
	Maximum	180,193	634	155	416	123
HHMOA	Average	154,425	1,741 (1.13%)	79 (4.56%)	795 (45.64%)	867 (49.80%)
	Minimum	131,882	1,677	43	676	795
	Maximum	162,237	1,854	122	883	926
NHHDC	Average	35,970,777	45,421 (0.13%)	7,743 (17.05%)	15,454 (34.02%)	22,224 (48.93%)
	Minimum	32,926,681	36,470	2,014	13,349	20,478
	Maximum	36,480,496	80,310	42,139	18,527	24,184
NHHMOA	Average	32,355,319	283,112 (0.88%)	67,121 (23.71%)	27,007 (9.54%)	188,985 (66.75%)
	Minimum	29,756,155	56,583	9,576	21,962	19,748

ANNUAL PERFORMANCE ASSURANCE REPORT

Sent from		Unique registrations held in previous 14 months	Total D0148s missing	D0148s missing before SF*	D0148s missing after SF, before RF*	D0148s missing after RF*
	Maximum	33,567,281	689,040	242,272	30,841	635,099

* These figures show the D0148s missing as a percentage of the total number of missing D0148s.

Table 2: Missing Appointment of Agents (Source: PARMS Serial SP15)

The data indicates:

- The total number of missing D0148s is low – accounting for between 0.13% to 1.13% of unique registrations; and
- Of missing D0148s, those still missing After RF is between 19.76 and 66.75% of the total number of missing D0148s, but in comparison to the volume of unique registrations this is still a small percentage (0.06 and 0.58% respectively).

Timely Sending of Meter Technical Details (MTDs) to Data Collectors (DCs) (NM/HM11)

All MTDs are required to be received by the DC within a certain number of working days of the MTD Effective-from date following a change to or of a Metering System (HH MTDs within 5 working days and NHH MTDs within 10 working days). We use NM/HM11 to monitor when MOAs send MTDs to DCs following such a change.

The table below shows the breakdown of MTDs received by Settlement Run.

Sent from		Total MTDs received in reporting period ²¹	MTDs received due to a change of Metering System before SF	MTDs received due to change of Metering System after SF but before RF	MTDs received due to change of Metering System after RF
NHHMOA	Total	4,087,190	1,649,857 (40.37%)	209,203 (5.12%)	129,303 (3.16%)
	Average	340,599	137,488	17,434	10,775
	Minimum	111,442	93,172	8,520	3,774
	Maximum	1,297,514	248,868	57,962	36,723
HHMOA	Total	57,109	3738(6.55%)	798 (1.40%)	1102 (1.93%)
	Average	4,759	312	67	92

²¹ A reporting period is one calendar month.

ANNUAL PERFORMANCE ASSURANCE REPORT

Sent from		Total MTDs received in reporting period ²¹	MTDs received due to a change of Metering System before SF	MTDs received due to change of Metering System after SF but before RF	MTDs received due to change of Metering System after RF
	Minimum	2,900	221	35	22
	Maximum	9,165	496	100	264

Table 3: Timely Sending of MTDs (Source: PARMs Serials HM/NM11)

The 2013/14 data indicates:

- Between 40.37% and 6.55% of MTDs were received by Data Collectors prior to SF following a change to the Metering System, with NHHMOAs sending MTDs prior to SF more often than HHMOAs.
- MTDs received after RF account for a low percentage of total MTDs received in a reporting period for HHMOAs and NHHMOAs (3.16% vs 1.93% respectively).

Missing Meter Technical Details (MTDs) via NM/HM12

All MTDs are required to be received by the DC within a certain number of working days of the agent's Effective-from date following a Change of Agent (HH MTDs within 15 working days and NHH MTDs within 5 working days). We use NM/HM12 to monitor the performance of MOAs sending MTDs following a Change of Agent (as reported by MOAs and DCs). The number of unique registrations should match the number of MTDs received (i.e. none should be missing).

The table below shows the breakdown of missing MTDs across Settlement Runs.

Sent from		Number of unique registrations received	Total MTDs missing	MTDs missing before SF*	MTDs missing after SF but before RF*	MTDs missing after RF*
NHHMOA	Average	33,963,114	44,579 (0.13%)	4,220 (9.47%)	17,310 (38.83%)	23,049 (51.70%)
	Minimum	31,198,500	40,128	1,894	12,191	16,903
	Maximum	35,083,242	57,033	12,213	22,899	25,699
HHMOA	Average	245,119	7,918 (3.23%)	294 (3.71%)	3,113 (39.32%)	4,512 (56.98%)
	Minimum	220,384	5,243	174	1,693	3,231

ANNUAL PERFORMANCE ASSURANCE REPORT

Sent from		Number of unique registrations received	Total MTDs missing	MTDs missing before SF*	MTDs missing after SF but before RF*	MTDs missing after RF*
	Maximum	257,484	13,809	464	5,693	7,714

* These figures show the MTDs missing as a percentage of the total number of missing MTDs.

Table 4: Missing MTDs (Source: PARMS Serials HM/NM12)

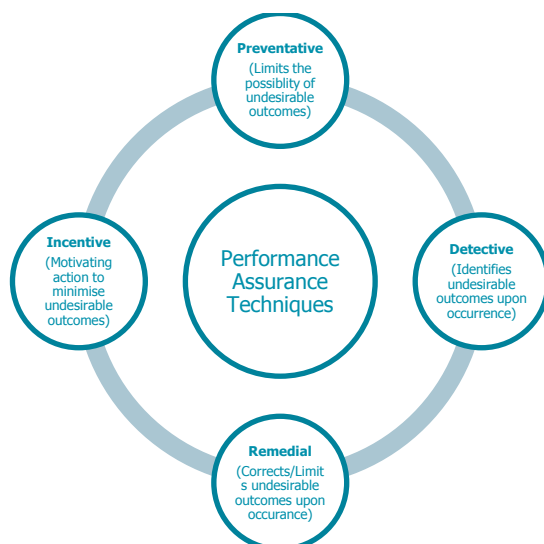
The data above indicates that:

- There is a greater volume of missing MTDs after RF compared to earlier Settlement Runs, however, this is still very small in relation to the total number of Registrations (0.067% of the Total NHH Registrations are missing MTDs after RF, and 1.84% of the total HH Registrations are missing MTDs after RF). Most of this is due to backdated appointments and MTDs not ever received due to the length of appointment being too short to receive MTDs.

DEPLOYMENT OF PERFORMANCE ASSURANCE TECHNIQUES 2013/14

The Performance Assurance Techniques

There are currently 16 Performance Assurance Techniques (PATs), which fall into four categories. Appendix 2 contains further information. This section summarises the outcome of the deployment of PATs and our responses to the BSC Auditor and Technical Assurance Agent (TAA) annual reports.



Error & Failure Resolution (EFR)

EFR is a remedial Performance Assurance Technique used to assure ELEXON, the Performance Assurance Board (PAB) and the rest of the industry that Performance Assurance Parties (PAPs) understand performance issues and have robust plans in place to correct them in a timely manner. The process also includes monitoring to ensure adherence to those plans.

ANNUAL PERFORMANCE ASSURANCE REPORT

In 2013-2014, we required 91 EFR plans to be put in place to address issues identified by the BSC Audit as affecting Settlement. At the end of the 2013/14 the reporting from the BSC Auditor has resulted in 69 of these plans being closed as the issue has either been closed by the auditor or the severity of the issue has substantially been reduced.

21 EFR plans were put in place to address issues not identified by the BSC Audit. Of these: 19 EFR plans were required to address issues pertaining to top Settlement Risks SR0022²², SR0024²³, SR0028²⁴, SR0072²⁵ and two EFR plans related to lower Settlement Risks.

Over the course of the year, the PAB removed eight PAPs from the EFR process against the top Settlement Risks due to performance improvements. 11 PAPs continue to have EFR plans in place.

Chart 9 shows this graphically.

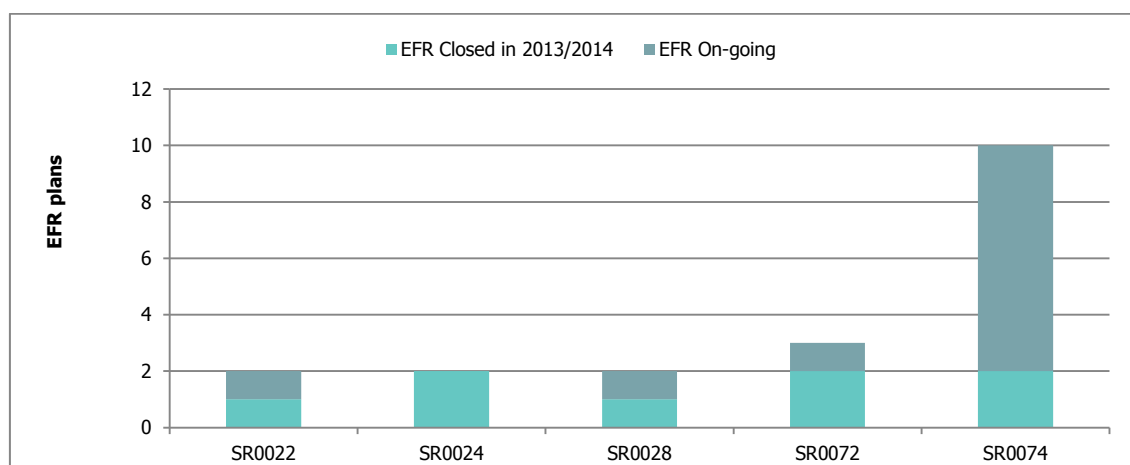


Chart 9: PAPs in EFR for top SVA Settlement Risks in 2013/14

Supplier Charges

Supplier Charges are liquidated damages that Suppliers incur if they fail to meet certain performance levels. They compensate Parties disadvantaged by those who aren't meeting defined Standards. Supplier Charges are subject to a national monthly cap. We calculate the cap across the 14 GSP Groups by its relative annual consumption compared to its total annual consumption for the previous year. The Retail Price Index is used to calculate the revised figures for both the national monthly cap and the individual Supplier cap.

The total Uncapped Supplier Charges for 2013/2014 was £17,437, 446. The total Capped Supplier Charges for the year were £2,829,941.

Bulk Change of Non Half Hourly Agent

Bulk Change of Non Half Hourly Agent is designed to provide assurance that when responsibilities for large volumes of Non Half Hourly (NHH) Metering Systems change, it's done in a controlled way. The process involves checking that the Supplier, Supplier Agent(s) and Supplier Metering Registration Agents (SMRAs) concerned undertake the

²² The risk that HHMOAs do not provide correct Meter Technical Details to HHDCs resulting in Meter readings being misinterpreted or not collected.

²³ The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings not being collected.

²⁴ 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.

²⁵ The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.

ANNUAL PERFORMANCE ASSURANCE REPORT

necessary procedures appropriately so they don't impact other Suppliers. This helps protect the integrity of settlement.

The process is mandatory where the number of NHH Metering Systems planned for the change of agent exceeds the threshold. This threshold is approved by the BSC Panel (see BSC Section J 4.2.5) and is currently set at 20,000 per day per SMRA.

There were no applications submitted for Bulk Change of Agent during 2013/14.

Trading Disputes

The Trading Disputes Committee (TDC) saw a decrease in activity during 2013/14, with Parties raising 72 disputes compared to 125 in 2012/13. The TDC upheld 48 disputes, with an estimated materiality of £17.1 million (upheld disputes in 2012/13 numbered 64 with an estimated materiality of £21 million). A further 39 disputes were closed by ELEXON during the same period. Of those heard by the TDC, 50% involved Meter measurement transformer ratio mismatches, a similar level compared to 53% the previous year. 10% involved shorted Meter Current Transformer (CT) links, while the remaining 40% had unrelated root causes.

The substantial decrease in Trading Disputes raised was due to the conclusion of an auditing project carried out by one particular Licensed Distribution System Operator (LDSO) of all of its half hourly sites in two Grid Supply Points (GSP) Groups.

One Trading Dispute was raised because of the failure to remove the effects of a Metered Volume Reallocation Notification (MVRN) caused by a delay in submitting a Volume Notification Nullification Request (VNNR) form. This delay resulted in large imbalance charges affecting multiple BSC Parties between Settlement Period 1 on 5 June 2013 and Settlement Period 29 on 24 June 2013. This Trading Dispute was referred to the BSC Panel and upheld following an objection to the TDC determination by the Raising Party. As a consequence of this referral the BSC Panel has commissioned a lessons learned project that will report back to the Panel in late summer 2014.

During 2013/14 the TDC approved the resolution of two Trading Disputes by applying Extra-Settlement Determinations (ESDs). The total value of these ESDs was £1.04 million. One Trading Dispute involved a Meter measurement mismatch which missed the Post-Final Settlement Run (PFSR) due to inconclusive information, while the other Trading Dispute involved a number of erroneous Supplier Purchase Matrix Data Files (D0041) being submitted at the PFSR which caused consumption to be overstated in seven GSP Groups. To prevent the submission of erroneous D0041 files in future, ELEXON is exploring the system changes to Supplier Volume Allocation Agent (SVAA) central systems that will be required to implement a more robust validation process.

As of December 2013, the TDC have authorised the exit of all GSP Groups from two longstanding Trading Disputes resolving errors associated with erroneous large Estimated Annual Consumptions (EACs) and Annualised Advances (AAs) in the PFSR. The first Trading Dispute was originally opened in 2000 with the second being opened in 2006 to incorporate Scottish GSP Groups following the British Electricity Trading and Transmission Arrangements (BETTA).

Though all GSP Groups have exited Post-Final Settlement Runs, the two Trading Disputes have remained open for risk of GSP Group(s) re-entering.

A discrepancy between BSC and BSCP processes for authorising PFSR dates and ESDs since November 2010 was identified by ELEXON. The Panel delegated responsibility for authorising the agreement of run dates for PFSRs and ESDs arising from disputes to the TDC.

Qualification & Re-Qualification

Supplier Volume Allocation Qualification & re-Qualification are techniques to ensure that new entrants to the market are compliant with the BSC arrangements and existing agents remain compliant when making major changes.

During 2013/2014, the PAB considered and approved 16 applications.

ANNUAL PERFORMANCE ASSURANCE REPORT

Role	Qual 2013/14	Re-Qual 2013/14
Non Half Hourly Data Aggregator (NHHDA)		
Non Half Hourly Data Collector (NHHDC)		
Half Hourly Data Aggregator (HHDA)		
Half Hourly Data Collector (HHDC)		1
SMRA		
Half Hourly Meter Operator Agent (HHMOA)		1
Non Half Hourly Meter Operator Agent (NHHMOA)		1
Central Volume Allocation Meter Operator Agent (CVAMOA)		
Meter Administrator (MA)		
Supplier	12	
Unmetered Supplies Operator (UMSO)		1
Total	12	4

Table 5: Qual. /re-Qual. approved in 2013/14

Performance Monitoring and Reporting

Performance Assurance Reporting and Monitoring System (PARMS) is a database that contains information about how Suppliers and their Supplier Hubs are performing. PARMS data supports the Performance Monitoring and Reporting technique.

Performance requirements are defined within PARMS Serials. Each Serial defines an area or process for performance measurement and sets out the Standards that are the required to be submitted in order to monitor performance levels within the process. Full details on the PARMS Serials are provided in the [PARMS Serial Guidance Note](#).

To date only one Half Hourly Meter Operator Agent is subject to Error Failure and Resolution (EFR) against the top Settlement Risks which are reported by the PARMS Serials (in this case the Agent is in EFR against SR0022, reported by PARMS serial HM13).

ANNUAL PERFORMANCE ASSURANCE REPORT

Modifications and Change Proposals

During 2013/14, the PAB recommend one Change Proposal - CP1406 'Electronic Version of the Self Assessment Document'. The CP amends BSCP537²⁶ to include the additional alternative option to complete and submit the SAD either electronically or via the word document. The PAB endorsed and the Imbalance Settlement Group and Supplier Volume Allocation Group approved CP1406 for implementation on 26 June 2014 as part of the June 2014 BSC Systems Release and agreed the proposed amendments to BSCP537.

Balancing and Settlement Code Audit

ELEXON's Response to the Auditor's Annual Report

The Balancing and Settlement Code (BSC) Auditors Annual Report ([available on the BSC website](#)) confirmed that the BSC Audit findings did not exceed the BSC Audit Materiality Threshold of 1.5 TWh. Therefore the audit was not qualified.

The auditor's report shows an overall improvement in the number of audit issues being raised. In 2013/14 72 issues were raised compared to 153 issues raised in 2012/13.

The auditor raised a number of recommendations relating to significant issues within the audit report. This section describes how we are addressing those issues.

Errors in the capture of metered data in the half hourly market

The Technical Assurance Agent (TAA) inspects a sample of Half Hourly Metering Systems registered in the Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) markets to determine if Parties are compliant with the requirements as set out in the BSC, the Balancing and Settlement Code Procedures (BSCPs) and Metering Codes of Practice.

The audit review of these findings suggests that the health of the SVA Half Hourly Metering System population is improving as evidenced by a reduction in Category 1 (Settlement affecting) non compliances. There are however ongoing issues in the half hourly SVA market with the instillation and commissioning of Metering Systems.

Actions to be taken

P283 'Reinforcing the Commissioning of Metering Equipment Processes' was approved by Ofgem on 31 July 2013 and will be implemented in November 2014. This Modification places commissioning obligations on the Transmission Company and Licenced Distribution System Operators (LDSOs) in order to improve Metering Equipment commissioning

ELEXON and the Performance Assurance Board (PAB) are developing solutions in order to address further commissioning concerns through the PAB strategy including:

- Devising a program of performance monitoring and management through the Performance Assurance Framework ;
- Completing a Peer Comparison;
- Using Business Unit Settlement Risk Ratings to monitor performance; and
- Using the Technical Assurance of Performance Assurance Parties technique to perform a specific sample test.

Proving tests not being performed and/or communicated

The audit identified problems with proving tests, which are performed to confirm that half hourly meter readings are both accurate and correctly entered into Settlement. The audit report highlights several instances where proving

²⁶ Qualification Process for SCA Parties, SVA Party Agents and CVA MOAs.

ANNUAL PERFORMANCE ASSURANCE REPORT

tests were not being performed or the proving results were not communicated on the commission of half hourly meters.

Actions to be taken

ELEXON and the PAB will work with Suppliers and their agents, focusing on identifying the root causes of these issues.

Energisation status not confirmed to data collectors

The audit identified that the energisation status of Metering Systems, in both the half hourly and non half hourly market, is not being confirmed with data collectors. Analysis undertaken by ELEXON estimates the impact of incorrect energisation on settlement to be 54,000 MWH.

Actions to be taken

An issue group will be created by ELEXON to look at issues around energisation and de-energisation. ELEXON and the PAB will continue to work with Suppliers and their agents, focusing on identifying the root causes of these issues.

Change of Measurement Class

The audit report highlighted that both Half Hourly (HH) and Non Half Hourly (NHH) Meter Operator Agents (MOAs) are still experiencing problems with the processes in place to manage Change of Measurement Class.

Actions to be taken

[Issue 49 'Change of Measurement Class \(CoMC\) process for Advanced Meters'](#) proposed a number of changes to address the problems with the CoMC process. PAB will monitor these changes to determine if any further amendments to the Code are required.

Incomplete or delayed provision of meter reads and Meter Technical Details

The audit established that some MOAs are not providing meter reads and/or Meter Technical Details (MTDs) to Data Collectors (DCs) within the required Settlement timescales or, where they have been provided the data flows are incomplete or inaccurate.

Actions to be taken

The BSC Audit scope for 2013/2014 included a review of the controls for MTD related Settlement Risks, to help the PAB identify the root causes and work with Suppliers and their agents to resolve these issues. Technical Assurance of Performance Assurance Parties site checks are being organised to identify the extent of the issue.

LDSO de-energised processes

The audit identified a number of issues with respect to the disconnection and de-energisation processes operated by LDSOs, which impact on their ability to pass complete and timely information into Settlement.

Actions to be taken

ELEXON, with support from the PAB and the Supplier Volume Allocation Group, will develop and publish guidance to Suppliers, MOAs and LDSOs to ensure that a consistent approach is taken across the market. An issue group will be created by ELEXON to look at issues around energisation and de-energisation.

Metering System Faults not resolved in a timely manner

The audit identified issues where MOAs are not resolving metering system faults or sending the correct data flows to other BSC Parties and BSC Party Agents. In some cases there are backlogs in outstanding metering faults that have been resolved.

ANNUAL PERFORMANCE ASSURANCE REPORT

Actions to be taken

ELEXON and PAB intend to work with Suppliers and their agents, focusing on identifying the root causes and resolving these issues.

Non Half Hourly Data Aggregator (NHHDA) D0095 exception report

NHHDA D0095 exception report provides Suppliers with details of anomalies in data provided to NHHDA Agents by NHHDCs and SMRS Agents. The audit identified instances where Suppliers' processes are not sufficient to ensure that D0095 exceptions are being resolved. Although a significant number of Suppliers do have processes and procedures in place to address D0095 backlogs, many have a backlog of exceptions awaiting review or do not review all exemption codes on the report.

Actions to be taken

ELEXON will conduct further analysis around D0095s and the processes used by Suppliers to address them. ELEXON will work with individual Suppliers to develop an understanding of the underlying issues related to these codes.

Large/Erroneous EACs and AAs

The audit found that a number of Metering Systems had been identified with erroneous values of Estimated Annual Consumption and Annualised Advances (EAC/AAs) values that are in excess of reasonable or expected levels.

Actions to be taken

The PAB and ELEXON continue to focus on this issue working towards a better understanding of root causes, assessing where the BSC requirements can be improved and continuing to support Performance Assurance Parties (PAPs).

ELEXON is working with PAPs, to assess the level of potential error below the current reporting thresholds. As a result the current thresholds in which this issue is monitored have been adjusted.

Issues with the Long Term Vacant (LTV) process

The LTV process is an optional process that allows Suppliers to enter a zero EAC for energised MPANs that are not consuming electricity for an extended period of time. For Suppliers that have elected to use the LTV process the audit showed that:

- Zero EACs were being entered into Settlement despite the MPAN being in LTV;
- The effective date upon exiting or entering LTV status was incorrect; and
- Regular proactive attempts to contact customers were not being made as required by the BSCPs.

Actions to be taken

ELEXON and PAB intend to work with Suppliers and their agents, focusing on identifying the root causes and resolving these issues.

D0023 Exception Report

D0023 exception reports contain data rejected by NHHDCs from NHHDCs and Supplier Meter Registration Service (SMRS) Agents. The audit showed a number of MSIDs which had a relatively large backlog of D0023s. CP1376 'Issues with Reporting Failed Instructions (D0023) Flows' was implemented in the June 2013 release. CP1376 facilitates improved D0023 reporting from the NHHDA software, more accurate reporting of material exceptions and requires lower risk exceptions to be reported on separately. Testing indicates that the backlogs of these flows still exist.

Actions to be taken

The issue will continue to be monitored by ELEXON and the PAB.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0022²⁷/SR0072²⁸ Controls Reporting

The results of the testing and enquires indicate that there is considerable variability in the nature and extent of controls employed across the industry's HHMOAs and NHHDCs.

Action to be taken

ELEXON, PAB and the Panel will continue to work with Suppliers and their BSC Party Agents in this area to develop an appropriate control framework in order for Suppliers and their BSC Party agents to develop a control environment that addresses not only SR0022 and SR0072, but also other key settlement risks identified by ELEXON.

The PAB noted the report in relation to controls and will review the BSC Audit scope again in September 2014 and consider including other Settlement Risks.

Conclusion

The BSC Audit has identified that significant issues are still occurring, despite an overall improvement. The BSC Audit continues to provide valuable information for Settlement Risk evaluation. These findings help us to confirm or re-assess, as appropriate, the probability and impact of higher rated risks, so that the PAB is focussed on the key Settlement Risks affecting the industry.

Technical Assurance of Metering

ELEXON's Response to the Technical Assurance Agent's Annual Report

The Technical Assurance of Metering technique monitors compliance with the Half Hourly Metering System requirements, as documented in the BSC and its subsidiary documents which include BSCPs and metering Codes of Practice (CoPs). When Half Hourly Metering Equipment is first registered, it must comply with the requirements which are set out in the relevant CoP in place at that time. ELEXON contracts a Technical Assurance Agent (TAA) to facilitate the Technical Assurance of Metering technique.

The TAA's annual report for 2013/14 was presented to the PAB in May 2014 and to the BSC Panel in June 2014. The main findings are summarised here.

The table below shows an overview of the inspection visits made by the TAA.

Sample type	Sample volume	Comments
Supplier Volume Allocation (SVA) Main Sample	1,254	1,254 standard inspection visits, including 1 re-visit to check the resolution of a Category 1 non-compliance. In total approximately 1% of the SVA Metering System population.
SVA Targeted Sample	2	Where the TAA suspected non-compliance.
Central Volume Allocation (CVA) Main Sample	50	Randomly selected to provide a 5% representative sample of the CVA metering population.

²⁷ The risk that Half Hourly Data Collectors (HHDCs) do not use the correct Meter Technical Details (MTDs) resulting in Meter readings being misinterpreted or not collected.

²⁸ The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter Readings, resulting in erroneous data being entered into Settlement.

ANNUAL PERFORMANCE ASSURANCE REPORT

Sample outcome	Market type	Outcome volume/Comments
Category 1 Non-Compliances	SVA	16 Category 1 non-compliances (1.3% of the main sample). Of these, all 16 have been managed to resolution.
	CVA	2 CVA Category 1 non-compliances. Of the 2 non-compliances, 1 has been rectified, while the other is rectified pending confirmation.
Category 2 Non-Compliances	SVA	2,451 Category 2 non-compliances. Approximately 71% had no or incomplete commissioning records.
	CVA	179 Category 2 non-compliances. 32 commissioning records non-compliances.

Table 6: 2013/14 Summary of inspection visits

How we are addressing the four significant issues reported by the TAA

Commissioning process and commissioning records

The TAA, the BSC Auditor and the BSC Panel continue to report serious concerns about industry experience in regards to the commissioning process and the provision of commissioning records.

Actions to be taken

ELEXON will develop a program of performance monitoring and management through the Performance Assurance Framework (PAF). A form of peer comparison will be created which will be presented to the PAB on a regular basis. By monitoring this peer comparison ELEXON can take action through the Error Failure and Resolution (EFR) technique to manage poor performance and to give visibility of issues associated with under-performance to the PAB and/or the Panel.

Technical Assurance of Performance Assurance Parties (TAPAP) checks on commissioning are in scope for 2014/15, and we will consider options to conduct a specific sample if necessary. If required this would be carried out in 2016/2017 when a sufficient sample of newly registered Metering Systems is available post implementation of Modification P283²⁹.

Unresolved Category 2 Non-Compliances

ELEXON and the TAA continue to report a steady rise in the number of unresolved Category 2 non-compliances. Approximately 50% of outstanding category 2 non-compliances relate to missing Meter calibration and CT/VT certificates. Approximately 30% of the unresolved non-compliances are linked to overall accuracy and miscellaneous. The majority of these non-compliances could not be rectified without evidence of commissioning and valid certificates which in some cases may be irretrievable. This leaves 20% of the unresolved non-compliances that should be more straightforward to rectify.

Actions to be taken

ELEXON will continue to work with the TAA regarding Category 2 non-compliances. ELEXON will target the more straight forward unresolved non-compliances, and will utilise the Technical Assurance of Metering Expert Group (TAMEG) and industry to create an action plan to rectify the remaining historic unresolved non-compliances including the Measurement Transformer Certificate related issues.

²⁹ Reinforcing the Commissioning of Metering Equipment Processes.

ANNUAL PERFORMANCE ASSURANCE REPORT

Meter programming errors (Current/Voltage Transformer (CT/VT) ratios)

Incorrectly programmed ratios pose a serious risk to Settlement, especially where they are associated to metering points with significant levels of energy transfer.

The number of Category 1.04 non-compliances (HHMS with incorrectly programmed CT/VT ratios) has increased year on year for the last five years. Between 1 April 2013 to 31 March 2014, 23 out of 49 disputes (47%) heard by the Trading Disputes Committee related to CT ratio mismatches. This equates to £720k in CT error materiality or £31k per dispute.

Actions to be taken

ELEXON has suggested three possibilities regarding CT/VT Meter Programming Errors:

- Include checks on CT/VT ratios within the scope for the commissioning TAPAP checks;
- Carry out a specific sample of around 100 sites with dual ratio CTs; and
- Carry out analysis into the changes that made LDSOs send out a D215 (Provision of Site Technical Details) to the MOP automatically from the CP1225's³⁰ implementation date (November 2008).

Measurement Transformer Certificates and Overall Accuracy

In 2013/14 a total of 410 instances of non-compliance for missing Measurement Transformer Certificates (274 CT and 136 VT) in the SVA market were recorded. Data that is recorded on the certificates is used to calculate the overall accuracy of the Metering System. The knock on impact is that 339 non-compliances for overall accuracy (Category 2.06) were recorded.

Actions to be taken

ELEXON will work with the TAMEG and industry members to expand further the National Measurement Transformer Error Statement (NMTES) via the process available in BSCP515 Licenced Distribution to help to address instances of non-compliance for missing measurement transformer certificates.

ELEXON will work with industry to ensure that updates can be made efficiently to the NMTES such as changes to the common categories of non-compliance, and will ask the PAB to endorse the approach by the TAMEG following future discussions on how the NMTES can be expanded.

Technical Assurance of Performance Assurance Parties

The aim of the Technical Assurance of Performance Assurance Parties (TAPAP) technique is to detect where parties are not meeting the BSC obligations and to identify any weaknesses in the BSC processes (and other processes as appropriate).

Technical Assurance checks are targeted at key market performance and risk areas on an annual basis. These are approved by the PAB.

The TAPAP scope of work is designed to address market issues, including those identified by other PATs such as:

- Error and Failure Resolution (BSCP538);
- SVA Qualification (BSCP537);
- Technical Assurance of Half Hourly Metering Systems (BSCP27);
- PARMS Techniques (BSCP534); and
- The BSC Audit (BSC Section H).

³⁰ Review of D0215 'Provision of Site Technical Details' and surrounding processes'.

ANNUAL PERFORMANCE ASSURANCE REPORT

The scope of work can also cover:

- Gap Areas – BSC requirements where minimal assurance is gained by the other PATs e.g. Disaster Recovery arrangements and Change Control procedures;
- Recently Introduced Requirements – New obligations may be introduced under the BSC change process. As a result, a check may be included within the scope of work for TAPAP to ensure parties fulfil these additional obligations; and
- Market Issues – Compliance issues may be identified by ELEXON, the BSC Auditor, or other Performance Assurance Parties (PAPs). This can lead to TAPAP checks being included in the scope of work for relevant groups of PAPs.

The scope of work is published on the [TAPAP webpage](#). The PAB can approve within-period revisions to the scope if necessary based on the output of other PATs.

Last year we performed:

- 12 PARMS accuracy checks associated with CP1387³¹.

The checks on PARMS accuracy were designed to validate the changes to the PARMS Serials following implementation of CP1387 and ensure that PARMS data providers have appropriately reviewed their PARMS reporting and implemented all changes required to provide accurate and complete PARMS data. The full report will be published on ELEXON's website following its presentation to the PAB in August 2014.

COST OF DELIVERING THE RISK BASED PERFORMANCE ASSURANCE FRAMEWORK

The cost of delivering the Performance Assurance Framework (PAF) is set out in the table below.

Cost Type	2013/14 Actual (£)	ROP 2013/14 Forecast (£)
Operational	878,800	913,468
Contractual	1,814,646	3,059,339
Total	2,693,446	3,972,807

Table 7: Cost of Delivering PAF in 2013/14

Total Costs

Actual spend in 2013/14 was 32% (~£1.3m) lower than forecast for the Risk Operating Plan (ROP) 2013/14. This is largely due to the re-procurement of contracts for the BSC Operational Audit and Technical Assurance. Further details are given below.

Operational Costs

The operational costs shows an under spend of 3.8%, £34,668, from the ROP 2012-13 forecast. This is due to one less Full Time Equivalent and streamlining of PAF processes.

Contracted Costs

The contracted costs cover outsourced provision of the following:

³¹ Clarifications to BSCP533 and Appendices. The CP incorporated ELEXON guidance, clarity and consistency in interpretation of BSCP533 'PARMS' and its appendices.

ANNUAL PERFORMANCE ASSURANCE REPORT

- Annual BSC Audit;
- Technical Assurance of Metering technique delivery by the Technical Assurance Agent (TAA);
- The Qualification Service;
- Support and maintenance for Performance Assurance software; and
- Support and maintenance of the Performance Assurance Reporting and Monitoring System software.

The difference between ROP forecasted contractual spend for 2013/14 and actual contractual spend is predominantly due to the following:

- Funds allocated to the BSC Operational Audit not spent in 2013/14 (~£906k):
 - The new operational audit contract achieved savings on the old contract and renegotiation resulted in the inclusion of costs that weren't previously included such as debriefs, issue documents and committee attendance.
- Funds allocated to Technical Assurance not spent in 2012/13 (~42k):
 - Renegotiation of this contract resulted in the inclusion of costs that weren't previously included such as meeting attendance and reporting.
- Funds allocated to Qualification and Re-Qualification not spent in 2013/14 (~£284k):
 - Spending on Qualification and re-Qualification is demand led. There were fewer applications for Qualification and re-Qualification than was forecast initially.

PERFORMANCE ASSURANCE BOARD STRATEGY AND FUTURE CONSIDERATIONS

Performance Assurance Board (PAB) Strategy

Throughout 2013/14 we undertook work related to the following PAB strategy work streams: Addressing the problems with large/erroneous EAC and AAs, commissioning of Metering Equipment processes, Supplier re-Qualification processes and aged Audit and Market Issues.

The PAB continue to monitor the impact of Smart and EMR on the Performance Assurance Framework.

Large Erroneous Estimated Annual Consumption and Annualised Advances (EAC/AAs)

Background

Two instances of erroneously large EAC/AA values >1TWh highlighted that Suppliers and their agents can, on rare occasions, fail to correct these extremely large values before they reach NHH Data Aggregators (NHHDA). Centrally-supported Supplier Agent software and industry data flows were not designed to preclude a Supplier from entering such values. The issue was brought to the attention of the TDC who see all reported error in a given month. They were concerned about the impact of such large erroneous values entering Settlement and asked PAB and Supplier Volume Allocation Group to explore potential preventative measures.

What are we doing now?

We identified three additional controls to address the issue. The SVG ([SVG156/03](#)) agreed to progress the first option³² since it would prevent all extremely large erroneous values entering Settlement. In order to progress this option Change Proposal (CP) [1408 'Excessively Large EAC/AA Control Points'](#) was raised and approved. It introduces

³² Change the NHHDA system to reject any EAC/AA that exceeds a certain consumption threshold and to generate a Failed Instruction (D0023) flow.

ANNUAL PERFORMANCE ASSURANCE REPORT

changes to the NHHDA System to reject any EAC/AA that exceeds a certain consumption threshold entering Settlement. The CP will be implemented on 6 November 2014.

Commissioning of Metering Equipment Processes

Background

At the May 2013 meeting of the PAB the TAA presented its annual report for 2012/13. The findings highlighted that failures to provide commissioning documents continued to account for a large proportion of non-compliances in both the CVA and SVA markets. This could indicate that either commissioning was either never done or was done but the associated documentation is no longer available.

The BSC Auditor expanded on the TAA findings taking the view that, had the number of non-compliances (and the level of error associated with these non-compliances) been representative of the entire HH market, this would have resulted in a qualified BSC Audit opinion as the total error would have exceeded the current 1.5 TWh materiality threshold.

What are we doing now?

We have developed an action plan to address the problems with commissioning. We are currently progressing the following actions:

- Talk to Ofgem about what current incentives there are in place to support the commissioning process, outside of the BSC;
- Educate industry (MOAs, Suppliers / Registrants, LDSOs) on P283³³, providing guidance and best practice; this will include the guidance for CoP4³⁴ and the education structure will also form the basis of a TAPAP check that we will undertake to ensure that P283 has been implemented effectively.;
- Investigate the potential for a central repository to receive, store and hold electronic version of the commissioning records for parties to source from;
- Investigate how we may be able to improve other associated processes (e.g. measurement transformer certificates, complex site supplementary information forms & Meter Technical Details (MTDs)); and
- Assess the output of the increased CVA main sample size at the end of the 2014/2015 audit year.

Future Considerations

Supplier Re-Qualification

Background

We presented a paper to the PAB in 2013 which highlighted a need for further Supplier assurance. The paper focused on developing options for:

- Addressing the sometimes excessive amount of time between a Supplier gaining the PAB's approval and becoming operational; and
- Third Parties seeking the PAB's approval for off-the-shelf Suppliers that could end up operating differently compared to their original Qualification assessment.

The PAB agreed to use elements of the three options presented:

- Revocation of SVA Qualification;

³³ Reinforcing the Commissioning of Metering Equipment Processes.

³⁴ Code of Practice 4: The Calibration, Testing and Commissioning Requirements of Metering Equipment for Settlement Purposes.

ANNUAL PERFORMANCE ASSURANCE REPORT

- Qualification health check; and
- Controlled Market Entry.

ELEXON was directed by the PAB to undertake further development of these options. Following this, ELEXON recommended to the PAB that a Modification be raised to add extra Qualification assurance for Suppliers. The Modification proposal set out three additional controls for the PAB to use to monitor Suppliers following Qualification. These included: revocation of SVA Qualification; Qualification Health Check; and Supplier re-Qualification.

PAB agreed to the Modification and it was presented to the Panel for approval in January 2014 ([Panel paper 220/04](#)). The Panel considered the merits of the proposed Modification but did not approve it. Instead they recommended seeking wider consideration of the issue via an Issue Group. The PAB agreed to continue to discuss the issues internally and consider an Issue Group at a later stage.

What are we doing now?

We continue to work together with the PAB to better quantify the problem and consider additional solutions. The PAB asked us to summarise the powers available to them to monitor Suppliers. We will present our findings to the PAB at its meeting in August 2014.

P272 Mandatory Half Hourly Settlement for Profile Classes 5-8 / P300 Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes (DCP179)

Background

[P272 'Mandatory Half Hourly Settlement for Profile Classes 5-8'](#) was raised on 20 May 2011, and proposed to mandate Half Hourly (HH) Settlement for all Metering Systems within Profile Classes (PCs) 5-8 from 1 April 2014. The P272 Workgroup developed an Alternative Modification which would move implementation by one year to 1 April 2015, with all other aspects identical to the Proposed Modification.

The Authority noted a minded-to position to approve the P272 Alternative Modification as it considered that a decision was contingent on the approval of [DCUSA Change Proposal \(DCP\) 179 'Amending the CDCM tariff structure'](#). Part of the proposed solution to DCP179 requires additional Measurement Classes to be created under the BSC. In response to the DCUSA Change Proposal, [P300 'Introduction of new Measurement Classes to support Half Hourly DCUSA Tariff Changes \(DCP179\)'](#) was raised. It proposes to divide existing Measurement Class E into three Measurement Classes E, F and G to provide for the requirements of DCP179. P300 is currently undergoing assessment by a Workgroup, and its Assessment Report is due to be presented to the Panel at its meeting on 8 August 2014.

What are we doing now?

There are a number of Performance Assurance Techniques that may be impacted by the implementation of these modifications. We are currently mindful of the following:

1. BSC Audit

The PAB are monitoring the progression of P272, P300 and DCP179. P272 may create a shift in the number of BSC Agents to be audited (e.g. Non Half Hourly Meter Operator Agents (NHHMOAs) may apply to qualify as Half Hourly Meter Operator Agents (HHMOAs), alternatively they may choose to retain NHH customers only). This will impact the scope of the audit. PAB will reflect such impacts as part of the review of the audit scope (undertaken each February and September).

2. Performance Assurance Reporting and Monitoring Systems

We do not expect there to be any impact on the criteria of the PARMs Serials as they currently stand.

ANNUAL PERFORMANCE ASSURANCE REPORT

The Business Unit Settlement Risk Ratings will not be affected, other than to possibly show a downward swing in the performance of SR0074³⁵ at the Third Reconciliation Run (R3) and Final reconciliation (RF). This may occur if it is found that Profile Class 05-08 Meters (Automatic Meter Reading) meters are no longer supporting the 80% performance at R3 and 97% performance at RF as these Actual Reads are moved into Half Hourly Settlement. This is yet to be properly forecast though and further investigation into this is required.

3. Qualification/Re-Qualification

Initial work has been done to confirm which Suppliers and Agents would be impacted by the Modification. Impacted Suppliers and Agents will be contacted to ensure that they understand the change and the options available to qualify in the HH market or perform a Change of Agent/Change of Supplier.

4. Technical Assurance of Metering

There is no immediate impact on Technical Assurance of Metering as the PAB has chosen to focus only on mandatory HH metered sites (Measurement Class C). If P300 is approved this will be reassessed, and we will be mindful of how to manage any other Measurement Classes as agreed by the PAB.

5. Technical Assurance of Performance Assurance Parties

We anticipate additional assurance requirements may be a result of the increased number of HH metering; therefore this will need to be considered for the Risk Operating Plan³⁶.

6. Supplier Charges

P300 may lead to us needing to re-define SP08C. Its current definition (Percentage of non-mandatory HH Energy Settled on Actual Readings) would become redundant as in effect there would be no more / very few elective HH Metering Systems - Measurement Class E Metering Systems (HH Metering Under 100kWh).

The amended definition would need to include the aforementioned Measurement Class E Metering systems and two new Measurement Class Metering Systems: - Whole Current (WC) and Current Transformer HH Metering Systems for Domestic and WC Non-Domestic HH Metering Systems with Aggregated Distribution Use of System Billing.

There may also be a requirement to amend the standards of SP08C to include additional settlement run types.

SP08 'Energy and Metering System Identifiers on Actuals' Performance

Background

We have noted an increase in the number of Suppliers showing HH Settlement Performance degradation across the Settlement Runs for the same Settlement Dates. This implies that Suppliers are removing actual reads and replacing them with estimated reads in later Settlement Runs. The PAB have also noted that HH performance is markedly volatile and performance often drops below the 99% standard in individual GSP Groups due to just one or two Metering System Identifiers.

Upon investigation it was noted that the causes behind the underperformance and degradation of performance for HH is almost always attributed to the actions of Party Agents.

What are we doing now?

We are currently examining the use of existing Settlement Risks relating to this issue, in order to fully understand any potential impact on Settlement, report on it in a logical and clearly defined way and provide greater assurance to industry.

³⁵ The risk that NHHDCs do not collect and/or enter valid Meter readings resulting in old/default data entering Settlement.

³⁶ The ROP sets out how the PAB will manage Settlement Risks by establishing which Performance Assurance Technique(s) to use for each Risk.

ANNUAL PERFORMANCE ASSURANCE REPORT

We are also investigating the materiality of the estimated data being submitted across the Settlement Runs. Depending on the outcome of this work, we will consider reviewing the net significance of the associated Settlement Risks.

ANNUAL PERFORMANCE ASSURANCE REPORT

APPENDIX 1 – TOP SETTLEMENT RISKS 2012/13

Settlement Risk Number	Settlement Risk Title	Net Significance
SR0022	The risk that HHDCs do not use the correct Meter Technical Details resulting in Meter readings being misinterpreted or not collected.	20
SR0072	The risk that NHHDCs process incorrect Meter readings, resulting in erroneous data being entered into Settlement.	16
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
SR0074	The risk that NHHDCs do not collect and /enter valid Meter readings resulting in old/default data entering Settlement.	15
SR0024	The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings being not collected.	12
SR0025	The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings being not collected.	12
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
SR0111	The risk that NHH Metering Systems are tampered with resulting in under-accounting of energy in Settlement.	12
SR0112	The risk that HHDCs use data from faulty Metering Systems resulting in incorrect data being entered into Settlement.	12
SR0116	The risk that Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement.	12

ANNUAL PERFORMANCE ASSURANCE REPORT

APPENDIX 2 – PERFORMANCE ASSURANCE TECHNIQUES

Preventative Techniques: Limiting the Possibility of an Undesirable Outcome

Education: Provides guidance at an industry level on market-wide issues.

Supplier Volume Allocation (SVA) Qualification: Provides assurance against the impact on Settlement from new entrants being non-compliant with the provisions of the BSC.

SVA Re-Qualification: Provides assurance that Qualified Persons continue to meet the Qualification Requirements.

Bulk Change of Agent: Mitigates the risk to Settlement of large numbers of Supplier Agent changes.

Detective Techniques: Identifying Undesirable Outcomes that have Occurred

Performance Monitoring & Reporting: The monthly collection and reporting of industry process key performance indicators, providing metric information on five top Settlement Risks.

Material Error Monitoring: Estimates Settlement Error relating to market-wide issues (erroneously large AA/EAC values, Unmetered Supplies and Energisation Status).

Technical Assurance of Metering: Provides assurance that Half Hourly SVA and Central Volume Allocation Metering Systems are installed properly and recording consumption accurately.

BSC Audit: Provides assurance that calculations and allocations performed during the period are in line with the BSC.

Technical Assurance of Performance Assurance Parties: Provides assurance that Performance Assurance Parties are compliant with the BSC in specific areas.

Remedial Techniques: Correcting Undesirable Outcomes that have Occurred

Supplier Charges: Provides a mechanism for applying liquidated damages to Suppliers failing to meet applicable performance levels set out in the BSC.

Trading Disputes: Enables Settlement calculations to be re-performed with more appropriate data in certain circumstances.

Error and Failure Resolution: Provides assurance that issues identified by other techniques are understood and addressed in a timely manner by Performance Assurance Parties.

Change Mechanism: The PAB can direct ELEXON to raise a Change Proposal to address a Settlement Risk or to make a recommendation to the Panel to raise a Modification Proposal.

Incentive Techniques: Motivating Action to Avoid Undesirable Outcomes

Peer Comparison: Provides a mechanism for the publication of Suppliers' performance against a distinct sub set of Performance Assurance Reporting and Monitoring System (PARMS) Serials at a Grid Supply Point Group level where applicable.

Removal of Qualification: Provides a governance regime for the timely rectification of outstanding issues by Supplier Agents, and ultimately removes the problem element if issues persist.

Breach and Default: Provides a governance regime for the timely rectification of material issues by BSC Parties, and ultimately limits the activities of the BSC Party or removes the problem element from the market if issues persist.