

PUBLIC

Annual Performance Assurance Report

2014-2015

Melinda Anderson
PAB175/04
27 August 2015

ANNUAL PERFORMANCE ASSURANCE REPORT

CONTENTS

| | |
|--|-----------|
| MESSAGE FROM THE PERFORMANCE ASSURANCE BOARD (PAB) CHAIR..... | 3 |
| EXECUTIVE SUMMARY | 4 |
| INTRODUCTION..... | 6 |
| Structure of the Annual Performance Assurance Report..... | 6 |
| Risk Identification & Evaluation | 6 |
| TOP SUPPLIER VOLUME ALLOCATION SETTLEMENT RISKS (SVA) 2014/15 PERFORMANCE | 7 |
| Overall Performance of Supplier Volume Allocation Settlement Risks | 13 |
| Central Volume Allocation (CVA) & Lower Level Settlement Risk | 13 |
| Appointments and Notifications | 13 |
| DEPLOYMENT OF PERFORMANCE ASSURANCE TECHNIQUES 2014/15..... | 16 |
| Balancing and Settlement Code (BSC) Audit | 17 |
| Breach and Default | 19 |
| Bulk Change of Non Half Hourly Agent | 20 |
| Change Mechanism..... | 20 |
| Education | 20 |
| Error & Failure Resolution (EFR) | 21 |
| Material Error Monitoring (MEM) | 23 |
| Peer Comparison | 23 |
| Performance Monitoring and Reporting | 23 |
| Qualification, Re-Qualification and Removal of Qualification..... | 23 |
| Supplier Charges | 24 |
| Technical Assurance of Metering (TAM)..... | 24 |
| Technical Assurance of Performance Assurance Parties | 28 |
| Trading Disputes | 30 |
| COST OF DELIVERING THE RISK BASED PERFORMANCE ASSURANCE FRAMEWORK | 31 |
| PERFORMANCE ASSURANCE BOARD STRATEGY AND FUTURE CONSIDERATIONS | 32 |
| Mandatory Half Hourly Settlement for Profile Classes 5-8 | 32 |
| Peer Comparison for Party Agents..... | 32 |
| Register of Systems Connection Points and/or Boundary Points | 33 |
| Electricity Balancing Significant Code Review | 33 |
| Data Transfer Network (DTN)..... | 34 |
| FURTHER INFORMATION | 34 |
| APPENDIX 1: TOP SETTLEMENT RISKS | 35 |

ANNUAL PERFORMANCE ASSURANCE REPORT

MESSAGE FROM THE PERFORMANCE ASSURANCE BOARD (PAB) CHAIR

The year 2014/15 has again seen many challenges for ELEXON and its customers. The migration of Profile Class 5-8 customers to trade in the half hourly market, has demanded significant attention. We expect to see around 140,000 Meters go through the Change of Measurement Class process, which is recognised as complex. All this migration activity must be completed by 1 April 2017.

Non half hourly market performance fell below the 97% target during the final seven months of the year. This is due to one Party experiencing processing issues following the implementation of a new IT system. ELEXON is working closely with the Party and providing the PAB with monthly updates.

In July 2014, the PAB agreed to monitor half hourly market performance as we had seen performance drop below the 99% standard. We continue to engage with poor performing Suppliers and provide a monthly update to the PAB.

2014/15, saw the BSC Auditor give an unqualified opinion. This is good news as the materiality of the errors found was below the acceptable threshold of 1.5TWh.

Despite the introduction of Modification P283 'Reinforcing the commissioning of Metering Equipment processes' in November 2014, the findings reported in the Technical Assurance Agent Annual Report were disappointing. We will conduct further technical assurance checks during September/October 2015 to measure the level of compliance with P283.

We have undertaken an audit of Systems Connection Points and Boundary Points at Grid Supply Points (GSPs). This is to confirm that all 1,500 Systems Connection Point circuits and Boundary Points are captured in Aggregation Rules. We have completed 13 of the 14 GSP Groups and have built a register that we will maintain going forward. Unfortunately, we have been unable to obtain the relevant Site Responsibility Schedules from one GSP to complete this exercise.

I would encourage you to contact your Operation Support Manager or one of the team if you have any questions or comments about the Performance Assurance Framework 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 during 2014/15. Thank you for all your efforts.

ANNUAL PERFORMANCE ASSURANCE REPORT

EXECUTIVE SUMMARY

The Performance Assurance Board (PAB) is required, by the 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 associated in delivering the Performance Assurance Framework (PAF);
- Recommendations for modifying the PATs; and
- The benefits of any modifications to the PATs.

Settlement Risks Performance Highlights

We strive to deliver a transparent risk based PAF, focusing on the key Settlement Risks affecting BSC Parties. We employ a collaborative approach with our customers to monitor their performance against BSC obligations. This has resulted in good performance during 2014/15 with BSC Parties and Party Agents achieving the following:

- SR0022¹ -the number of re-submitted Half Hourly Meter Technical Details (HH MTDs) remains low, averaging 2.1% (136) of HH MTDs received per reporting period;
- SR0024² - On average 0.13% (37,382) of Non Half Hourly Meter Technical Details (NHH MTDs) were missing after Final Reconciliation Settlement Run (RF) per reporting period³;
- SR0025⁴ - On average 0.7% (913) of HH MTDs were missing after RF per reporting period;
- SR0028⁵ -The total number of non-compliances reported by the Technical Assurance Agent (TAA) was almost half that for 2013/14 (44, compared with 86). Only one was a Category 1.01 non-compliance i.e. deemed to be currently affecting Settlement; and
- SR0072⁶ - Gross error post Final Reconciliation (RF) remains well below the 165 GWh threshold (maximum gross error recorded in 2014/15 was 29 GWh);

Although industry performance against SR0074⁷ and SR0081⁸ deteriorated during 2014/15 (failing to meet industry standards for 215 days and 155 days respectively), we have identified root causes and taken action to help BSC Parties and Party Agents resolve issues.

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

² The risk that Non Half Hourly Meter Operator Agents (NHHMOAs) do not provide MTDs to the correct NHHDCs resulting in Meter readings being not collected.

³A reporting period is typically one month.

⁴ The risk that Half Hourly Meter Operator Agents (HHMOAs) do not provide MTDs to the correct HHDCs resulting in Meter readings being not collected.

⁵ 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.

⁶ The risk that NHHDCs process incorrect Meter Readings, resulting in erroneous data being entered into Settlement.

⁷ The risk that NHHDCs do not collect and/or enter valid Meter Readings resulting in old/default data entering Settlement.

⁸ The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement.

ANNUAL PERFORMANCE ASSURANCE REPORT

Deployment of PATs in 2014/15

Error & Failure Resolution: During 2014/15, we applied the Error and Failure Resolution (EFR) process to 36 BSC Audit issues. By the end of 2014/15, the auditor had closed or reduced the severity rating of 24 of these plans allowing us to take the Performance Assurance Parties out of EFR.

We applied the EFR process to 33 non-audit issues. By the end of 2014/15, we had closed six of these plans because of improved performance.

Three PAs had plans on going from 2013/14.

Supplier Charges: The total uncapped Supplier Charges for 2014/15 was £8.9m and capped Supplier Charges was £4.3m.

BSC Audit: The BSC Audit findings did not exceed the BSC Audit materiality of 1.5 TWh and was therefore not qualified. The BSC Auditor raised 87 audit issues (up from 72 in 2013/14) of which 32 were high and medium issues (down from 35 in 2013/14). Key areas of concern were issues relating to Metering and data quality in the NHH market.

Technical Assurance of Metering: In response to the TAA annual report, we addressed issues encompassing major timing issues, commissioning and commissioning records, Meter programming errors, unresolved Category 2 non-compliances, measurement transformer certificates and overall accuracy, Licensed Distribution Systems Operator (LDSO) attendance at audits and 'no access'.

Technical Assurance of Performance Assurance Parties⁹: We undertook 31 P283¹⁰ commissioning process Technical Assurance of Performance Assurance Parties (TAPAP) checks. We have taken steps to address issues raised with respect to the new obligations brought in by P283. This includes introducing a P283 guidance document, including the commissioning process in the BSC Audit scope for 2015/16, and providing contact details for all BSC Parties and Party Agents involved in commissioning. We are currently working on timescales for request/receipt of commissioning information and introducing new data flows to inform relevant Parties and Party Agents.

Bulk Change of Agent: We received no applications for Bulk Change of Agent in 2014/15.

Qualifications/Re-Qualifications: The PAB considered and approved 24 applications: 19 for Qualification and 5 for re-Qualification.

Trading Disputes: 79 Trading Disputes were raised during 2014/15. The Trading Disputes Committee (TDC) upheld 48 with a materiality of ~£10.3 million.

PAB Strategy and Future Considerations

Throughout 2014/15, we undertook a significant amount of work on the introduction of mandatory half hourly Settlement of Profile Classes 5-8 Meters and ensuring Parties migrate affected Meters successfully.

The PAB approved the use of Performance Assurance Reporting and Monitoring System (PARMS) Serial SP11 'Timely appointment of agents' for the Peer Comparison technique.

We completed an audit of Systems Connection Points and Boundary Points at Grid Supply Points (GSPs) to confirm that all 1,500 Systems Connection Point circuits and Boundary Points are captured in Aggregation Rules.

We are exploring the use Data Transfer Network (DTN) data as a more effective source for Performance Assurance Reporting and Monitoring.

⁹ A "Performance Assurance Party" is a Supplier, Meter Operator Agent, Data Collector, Data Aggregator, Meter Administrator, Licensed Distribution System Operator and/or a Registrant.

¹⁰ Modification to the BSC implemented in November 2014 to reinforce the commissioning process of Metering Equipment.

ANNUAL PERFORMANCE ASSURANCE REPORT

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

Financials

The actual cost of delivering the PAF in 2014/15 was ~£556,000 lower than our forecast for the Risk Operating Plan (ROP) 2014/15. This is largely due to forecasted expenditure for some ad hoc and demand-led items not being required.

Modifications

During 2014/15, the PAB recommended one Change Proposal - CP1441 'Allowing the Peer Comparison technique to be reported at Supplier Agent level'.

INTRODUCTION

Structure of the Annual Performance Assurance Report

We have structured the APAR for 2014/15 as follows:

- A summary of the risk identification/evaluation processes we follow;
- Industry/participants' performance against the top measurable 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

The requirements for the delivery of performance assurance procedures are set out in Section Z Paragraph 5 of the BSC, 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.

We apply the principles of the REM to the RER to identify and evaluate Settlement Risks. The RER is a record of 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 135 Supplier Volume Allocation (SVA) and 50 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; 83 with a net significance of 4 to 11 and 12 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 (SVA) 2014/15 PERFORMANCE

The PAB monitors industry and participant performance against top SVA Settlement Risks on a monthly basis in the Settlement Risk Report (SRR), where data is available. We assign a Business Unit Settlement Risk Rating (BUSRR) to the relevant participants. We have developed the BUSRRs in order to determine the extent to which a BU's performance affects Settlement. We report on Industry performance for the top Settlement Risks in 2014/15 below.

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

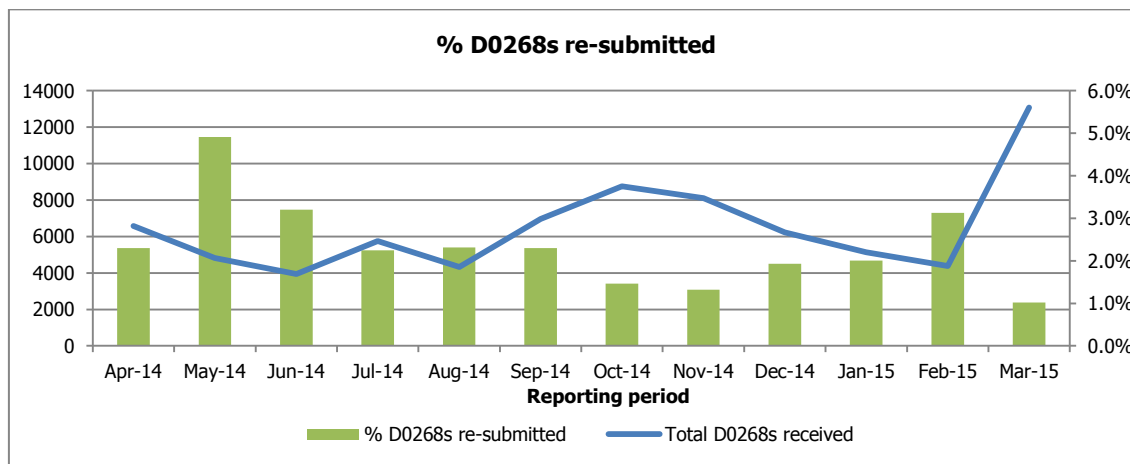


Chart 1: SR0022 – Quality of MTDs (Source: PARMS Serial HM13)

We use PARMS¹¹ Serial HM13¹² to measure how many times HHMOAs re-send HH MTDs (D0268s). Where HHDCs receive HHMTDs with a key data field change but the same Metering System Effective-from Date (i.e. a backdated correction), we assume that the HMOA did not provide correct MTD the first time.

Chart 1 shows industry performance for 2014/15. The numbers of re-submitted MTDs remains low. On average 6,503 MTDs were received per reporting period of which 2.1% (136) were re-submitted with a change in a key field. The highest number of re-submissions for the period was 237 in May following contract rounds resulting in higher than average registrations.

¹¹ Performance Assurance Reporting and Monitoring System.

¹² Quality of HH MTDs.

ANNUAL PERFORMANCE ASSURANCE REPORT

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).

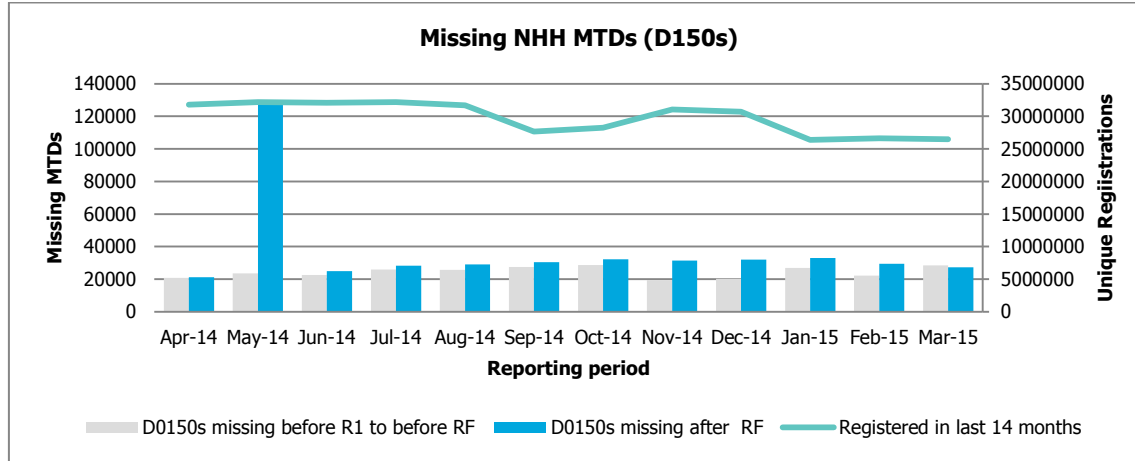


Chart 2: SR0024 Missing NHHDC MTDs (Source: PARMS Serial NM12 as reported by DCs)

We use PARMS Serial NM12¹³ (as reported by the NHHDC) to monitor the transfer of MTDs from NHHMOAs following a Change of Agent, or Change of Supplier with a concurrent Change of Agent. If NHHDCs do not receive NHH MTDs, Meter readings may not be collected. 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 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 2 shows performance for 2014/15. On average, the number of registrations with missing MTDs was small (0.23% or 68,326, per reporting period¹⁴). After the Final Reconciliation Run (RF), the average number of MTDs that remained outstanding was 0.13% (37,382). The spike in numbers of missing MTDs (after RF) that occurred in May 2014 was a result of incorrect reporting by a single Party. ELEXON raised this with the Party who resolved the issue for the following period.

¹³ Missing NHH MTDs.

¹⁴ This is below the compliance threshold of 0.5%.

ANNUAL PERFORMANCE ASSURANCE REPORT

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).

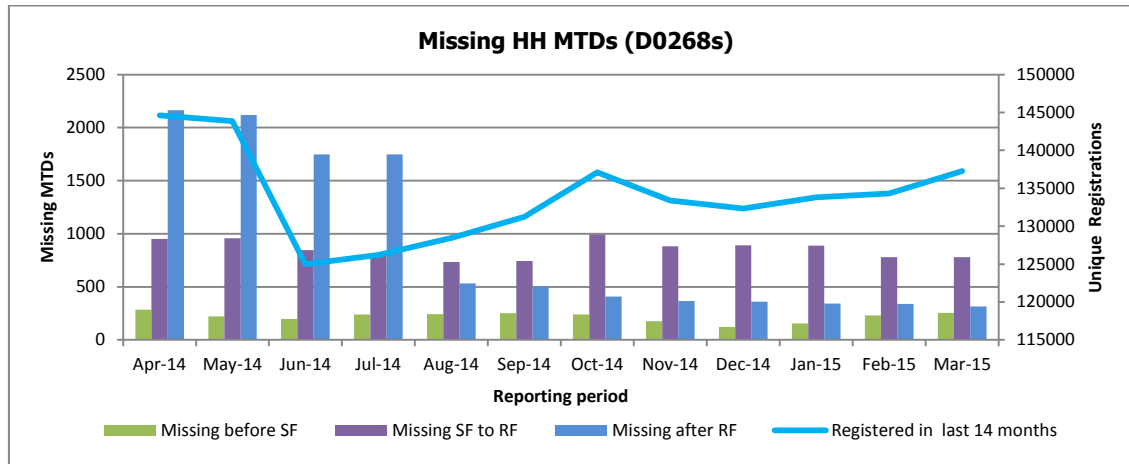


Chart 3: SR0025 Missing HH MTDs (source: PARMS Serial HM12 as reported by DCs)

We use PARMS Serial HM12¹⁵ (as reported by HHDCs) to monitor the transfer for MTDs from HHMOAs following a Change of Agent, or Change of Supplier with a concurrent Change of Agent. We consider HH MTDs (D0268) to be missing when a D0155 or D0148 flow has been received but no associated HH MTDs have been received. In order to capture instances where HH MTDs are missing, Agents count the number of unique registrations¹⁶ held over the previous 14-month period and report how many of those do not have a corresponding D0268.

Chart 3 shows performance since April 2014. On average, the number of MTDs missing at registration was 0.7% (1,985 per reporting period). After RF, this number declined to an average of 913 per reporting period. The high number of reported missing MTDs seen for April through to July 2014 was due to poor appointment processes and subsequent reporting issues by a Party. ELEXON highlighted the issue to the Party who then reviewed its processes and resolved the reporting issue.

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).

This risk focuses on the HHMOAs sending MTDs following a change to a Metering System. We monitor this risk using data provided by the Technical Assurance Agent (TAA) on MTD non-compliances following inspection visits to Half Hourly Metering Systems.

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);

¹⁵ Missing HH MTDs.

¹⁶ Unique Registrations include any Unique D0155/D0148 received and accepted.

ANNUAL PERFORMANCE ASSURANCE REPORT

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

2.03: MTDs not provided.

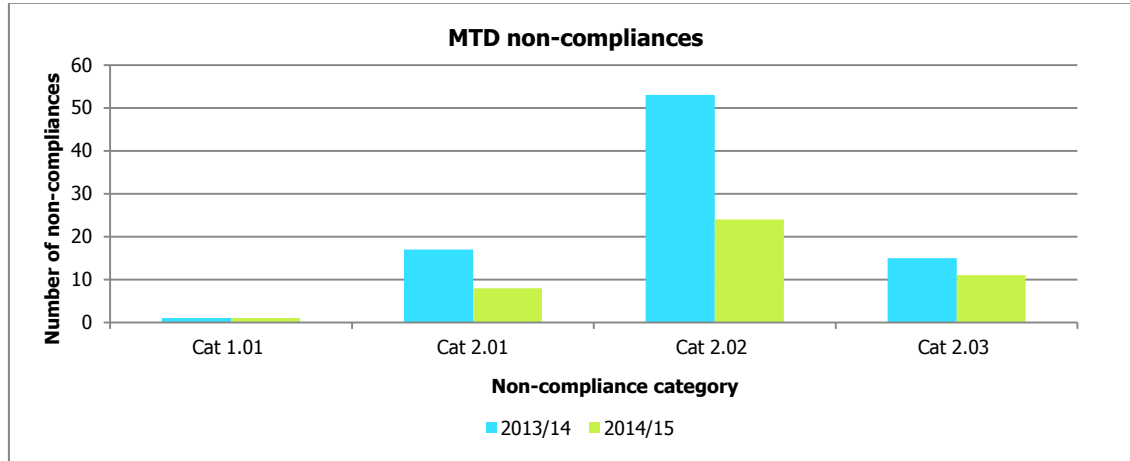


Chart 4: MTD non-compliances reported by the TAA

During 2014/15, the Technical Assurance Agent made 1330 inspection visits, 136 more than in 2013/14. In total, it reported 44 non-compliances, compared with 86 in 2013/14:

- 1 Category 1.01 non-compliances – no change from 2013/14;
- 8 Category 2.01 non-compliances – down from 17 in 2013/14;
- 24 Category 2.02 non-compliances – down from 53 in 2013/14; and
- 11 Category 2.03 non-compliances – down from 15 in 2013/14.

Despite the reduction in reported non-compliances, this continues to be a high risk area. Any errors or inconsistencies with MTDs could have an impact on the accuracy of HH Settlement. We continue to manage these issues through the normal Performance Assurance Framework process.

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).

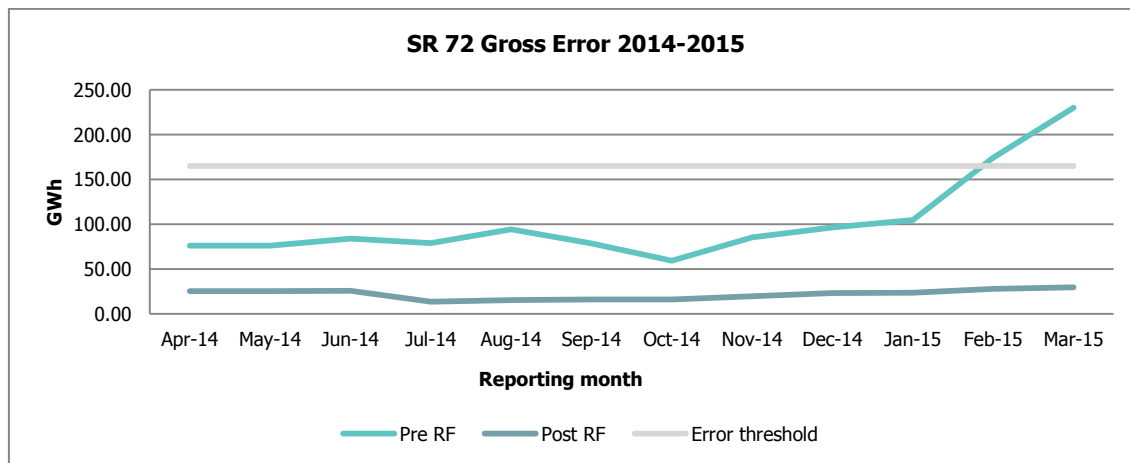


Chart 5: SR0072 Gross Error (Source: Material Error Monitoring Data)

ANNUAL PERFORMANCE ASSURANCE REPORT

We monitor performance against this risk focusing on the NHHDCs' ability to take corrective action against Parties who submit erroneous reads into Settlement. Corrective action needs to take place within the Final Reconciliation Settlement Run (RF).

Chart 5 shows performance in 2014/15. Industry remained below the gross error threshold of 165 GWh between April 2014 and January 2015. In February and March 2015, the industry threshold was exceeded. Further investigation by ELEXON revealed that the increase in gross error had occurred due to a system error by a single Party. The Party exceeded the threshold for two further consecutive months (April and May 2015¹⁷) after which we deployed the Error Failure and Resolution process. We are working with the Party to resolve its issues.

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.

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).

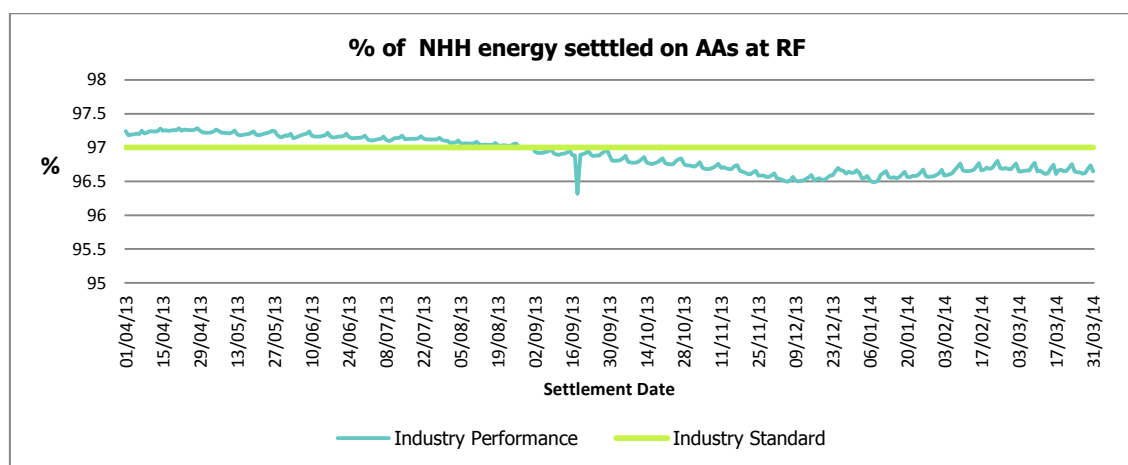


Chart 6: SR0074 Percentage of Energy Settled on AAs at RF (Source: SVAA)

To measure performance against this risk we apply the standard in the BSC¹⁸ that states that by the Final Reconciliation Settlement Run (RF) Suppliers should settle 97% of energy on Annualised Advances (AAs). We obtain the energy volumes settled on AAs at RF from the Supplier Volume Administration Agent (SVAA).

Industry met the 97% standard for NHH energy settled on Annualised Advances (AAs) at RF up until Settlement Date 28 August 2013. Since then industry has not met the standard (215 days). The decline in overall performance is directly related to a Party experiencing system errors caused by a migration to a new IT system. We placed the Party into the Error Failure and Resolution (EFR) process and continue to work with it to resolve issues. We provide further information in the section on EFR, p.22.

¹⁷ Although outside of the APAR reporting period we have included this information for completeness.

¹⁸ Annex S-1 paragraph 2.2.1.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0081: The risk that Half Hourly Data Collectors (HHDCs) do not process valid HH readings resulting in estimated data being entered into Settlement (net significance 12).

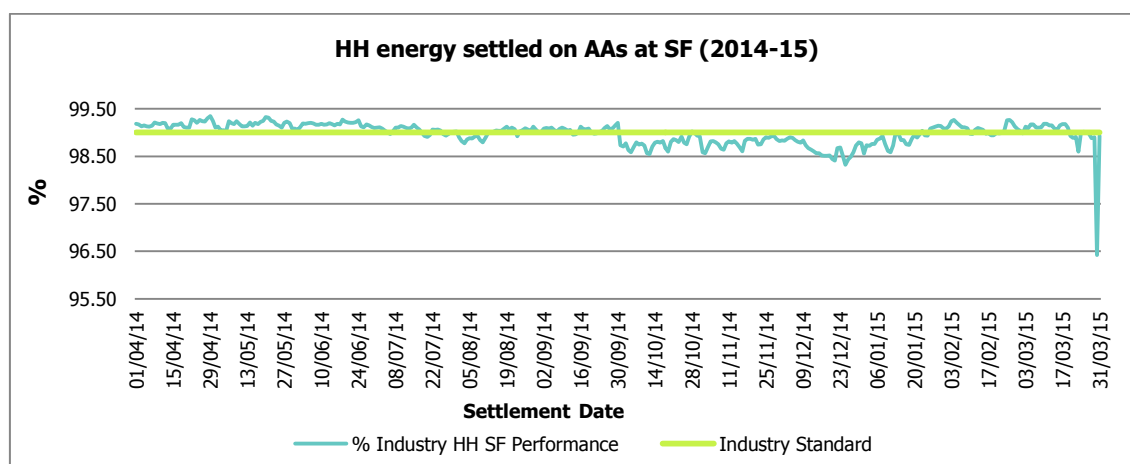


Chart 7: SR0081 Percentage of Half Hourly Energy Settled on Actual Meter Readings at Initial Reconciliation Settlement Run (SF) (Source: SVAA)

We measure performance against this risk using the standard in the BSC^[1] that states that by the Initial Settlement Run (SF) Suppliers should settle 99% of energy on actual Meter reads. We use data from the Supplier Volume Administration Agent (SVAA) to calculate Suppliers' HH Settlement Performance.

During 2014/15, we saw industry performance decline for settling HH energy on actual meter reads. In July 2014, the PAB agreed to monitor industry against SR0081 for a trial period of six months. Following continued poor industry performance the Performance Assurance Board (PAB) approved our recommendation to make SR0081 a top Settlement Risk (effective from 26 February 2015). During 2014/15 the 99% threshold was not met on 155 days. We continue to monitor Parties on a monthly basis and report our findings to the PAB. If Parties underperform for three consecutive months we can consider putting them into the Error Failure and Resolution process, through which we work with them to resolve underlying issues.

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.

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.

SR0188¹⁹: The risk that non Half Hourly Import/Export Metering systems are incorrectly installed/configured resulting in inaccurate data entering Settlement (net significance 12).

^[1] Annex S-1 paragraph 2.2.4.

ANNUAL PERFORMANCE ASSURANCE REPORT

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 the top monitorable Settlement Risks.

Chart 8 shows performance for 2014/15. Throughout this period, the number of red BUSRRs remained stable, ranging between 0-2. The number of amber BUSRRs ranged 5-19 and green BUSRRs ranged from 47 to 58.

We provide further information on the BUSRRs in the [BUSRR guidance](#).

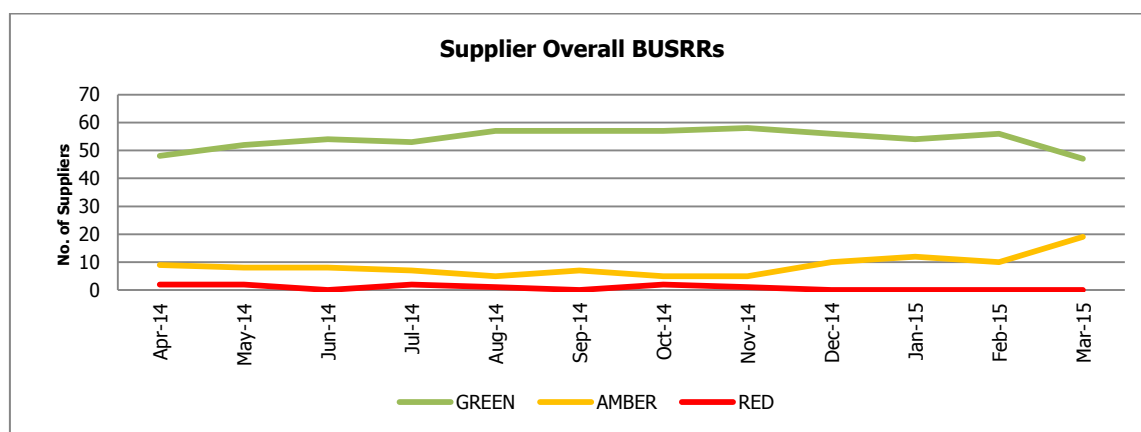


Chart 8: Overall BUSRR Performance in 2014/15

Central Volume Allocation (CVA) & Lower Level Settlement Risk

We monitor CVA risks through the BSC Audit, Qualification and the Technical Assurance of Metering.

There are 83 lower level Supplier Volume Allocation (SVA) Settlement Risks (those with a net significance between 4 and 11) that the Performance Assurance Board (PAB) reviews on a less frequent/ad hoc basis than the top Settlement Risks.

Appointments and Notifications

We monitor the appointment of Supplier Agents and the notification of missing Meter Technical Details (MTDs) on a monthly basis and report our findings to the PAB on a monthly basis. We monitor these activities (and the associated lower level Settlement Risks) to detect any problems early on in the Settlement process and understand root causes of non-compliance against top Settlement Risks.

The focus of our monitoring is:

- The number of notifications and MTDs received before the Effective-from date (EFD) i.e. compliant with BSC obligations;
- The number of notifications and MTDs received after EFD and before the Initial Settlement Run (SF) i.e. no impact on Settlement;
- The number of notifications/MTDs received after SF but before the Final Reconciliation Settlement Run (RF) i.e. correctable impact on Settlement but potential for impact on SP08 performance (**orange text**); and
- The number of notifications/MTDs received after RF i.e. data correctable only by a Trading Dispute (**red text**).

¹⁹ Previously SR2868. We have renumbered this risk for consistency within the Risk Evaluation Register.

ANNUAL PERFORMANCE ASSURANCE REPORT

Timely Appointment of Agents (SP11) – SR0002²⁰, 0003²¹, 0005²², 0006²³

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 in a timely manner. We use SP11 to monitor the ability of Suppliers to submit notification of appointment to Agents (D0155) prior to the EFD of the appointment. Data Collectors (DCs) and Meter Operator Agents (MOAs) provide the data.

| 2014/15 | HHDC | HHMOA | NHHDC | NHHMOA |
|---|--------|--------|-----------|-----------|
| Total D0155s received | 41,625 | 42,550 | 3,737,850 | 3,890,195 |
| D0155s received before EFD | 34,222 | 34,492 | 3,461,119 | 3,710,152 |
| % | 82.22 | 81.06 | 92.60 | 95.37 |
| After EFD and before SF | 6,232 | 6,662 | 260,384 | 167,420 |
| % | 14.97 | 15.66 | 6.97 | 4.30 |
| After EFD and after SF but before RF | 1,087 | 1,337 | 15,206 | 11,739 |
| % | 2.61 | 3.14 | 0.41 | 0.30 |
| After EFD and after RF | 84 | 40 | 1,141 | 884 |
| % | 0.20 | 0.09 | 0.03 | 0.02 |

Table 1: Timely appointments of Agents

Missing Appointments of Agents (SP15) – SR0001²⁴, 002, 003, 004, 005, 006, 0182²⁵, 0183²⁶, 0184²⁷

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

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 EFD (D0155). The number of D0148s should therefore match the number of D0155s received (i.e. none should be missing).

²⁰ The risk that Suppliers do not appoint NHHDCs resulting in default data being entered into Settlement.

²¹ The risk that Suppliers do not appoint HHDCs resulting in default data being entered into Settlement.

²² The risk that Suppliers do not appoint HHMOAs resulting in the inability to maintain Metering Systems and associated technical details and may result in default data being entered into Settlement.

²³ The risk that Suppliers do not appoint NHHMOAs resulting in the inability to maintain the Metering System and associated technical details and may result in default data being entered into Settlement.

²⁴ The risk that Suppliers do not notify change of MOA to other associated agents resulting in the HHDCs rejecting updated Meter Technical Details and Meter readings being misinterpreted or not collected.

²⁵ The Risk that Suppliers do not notify change of DC to other associated agents resulting in the HHMOAs not sending MTDs to the right DCs and meter readings being misinterpreted or not collected.

²⁶ The Risk that Suppliers do not notify change of DC to other associated agents resulting in the NHHMOAs not sending MTDs to the right DCs and meter readings being misinterpreted or not collected.

²⁷ The Risk that Suppliers do not notify change of HHDA to other associated agents resulting in the HHDCs not sending consumption data to the correct HHDA resulting in default data being entered into Settlement.

ANNUAL PERFORMANCE ASSURANCE REPORT

| | HHDC | HHMOA | NHHDC | NHHMOA |
|--|---------|---------|------------|------------|
| Average D0155s received in last 14 months | 173,249 | 160,968 | 30,697,160 | 31,452,315 |
| Average missing D0148 | 660 | 1,863 | 79,211 | 113,649 |
| % | 0.38 | 1.16 | 0.26 | 0.36 |
| Missing before SF | 144 | 139 | 37,471 | 44,827 |
| % | 21.79 | 7.47 | 47.30 | 39.44 |
| Missing after SF before RF | 404 | 797 | 16,794 | 40,949 |
| % | 61.25 | 42.76 | 21.20 | 36.03 |
| Missing after RF | 112 | 927 | 24,947 | 27,873 |
| As % of average missing | 16.96 | 49.77 | 31.49 | 24.53 |

Table 2: Missing Appointments of Agents

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

The BSC requires that all MTDs be received by the DC within a certain number of working days of the MTD EFD 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 figures below note the volumes of MTDs received from MOAs reported by DCs.

| | NHHMOA | HHMOA |
|---|-----------|-------|
| Total MTDs received due to change of Metering System | 1,641,059 | 5,057 |
| Received before SF | 1,395,936 | 3,800 |
| % of D0150s received due to change of MS Before SF | 85.06 | 75.14 |
| Received after SF but before RF | 181,174 | 666 |
| % of D0150s received due to change of MS After SF to Before RF | 11.04 | 13.17 |
| Received after RF | 63,949 | 591 |
| % of D0150s received due to change of MS After RF | 3.90 | 11.69 |

Table 3: Timely sending of MTDs

Missing Meter Technical Details (MTDs) (NM/HM12)

Where there is a Change of Agent (CoA) MTDs must be transferred in a timely manner between agents. Where there is a change of MOA, the old MOA must transfer MTDs to the new MOA. The new MOA must then send MTDs to the current DC. Where there is a change of DC, the current MOA must send MTDs to the new DC. Where MTDs are not sent on a CoA or Meter installation it can result in a risk to Settlement.

ANNUAL PERFORMANCE ASSURANCE REPORT

We also use the HM/NM12 PARMS Serial as reported by MOAs, in root cause analysis of missing MTDs reported by DCs (SR0024/25). The figures below note the volumes of missing MTDs reported by MOAs.

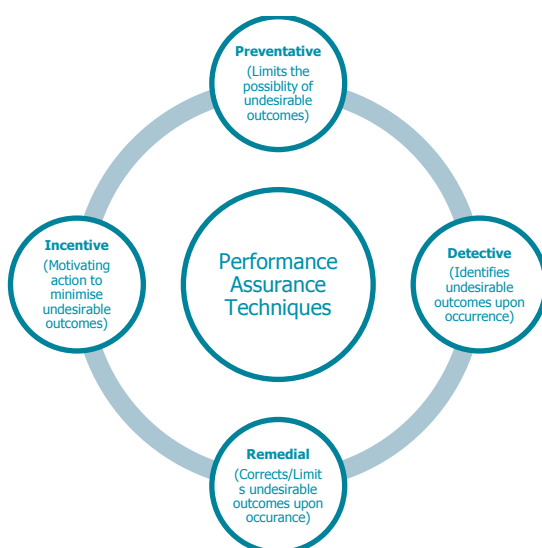
| | NHHMOA | HHMOA |
|---|------------|---------|
| Average registered in last 14 months | 26,475,257 | 134,898 |
| Average registered without D0150 (missing) | 201,783 | 13,192 |
| Missing as % of average registered in last 14 months | 0.76 | 9.78 |
| Missing before R1 | 11,682 | 283 |
| % | 5.79 | 2.14 |
| Missing after R1 to before RF | 28,944 | 6,931 |
| % | 14.34 | 52.54 |
| Missing after RF | 161,157 | 5,979 |
| As % of average missing | 79.87 | 45.32 |

Table 4: Missing MTDs

DEPLOYMENT OF PERFORMANCE ASSURANCE TECHNIQUES 2014/15

The Performance Assurance Techniques

There are currently 16 Performance Assurance Techniques (PATs), which fall into four categories: Preventative, Detective, Incentive and Remedial. This section summarises the outcome of the deployment of PATs and our responses to the Balancing and Settlement (BSC) Auditor and Technical Assurance Agent (TAA) annual reports.



ANNUAL PERFORMANCE ASSURANCE REPORT

Balancing and Settlement Code (BSC) Audit

The BSC Audit is a detective technique used to provide assurance that calculations and allocations performed during the year are in line with the BSC.

ELEXON's Response to the Auditor's Annual Report

The BSC Auditor presented the BSC [Auditor's Report](#) for 2014/15 to the Performance Assurance Board (PAB) in June 2015. The BSC Auditor's findings did not exceed the BSC Audit materiality threshold of 1.5 TWh. Therefore, the audit was not qualified.

The auditor raised 87 audit issues in 2014/15 compared to 72 in 2013/14. However, the number of high and medium issues raised was less, 32 compared to 35 in the previous year.

In its 'Statement of Significant Matters', the auditor identified two areas of key concern, issues relating to metering, and data quality issues in the non half hourly market. These are detailed below with the actions required to address them:

1. Issues Relating to Metering

Errors in the Capture of Metered Data in the Half Hourly Market

The Technical Assurance Agent (TAA) selects a sample of Half Hourly (HH) Metering Systems registered in the Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) markets, and performs procedures on these to determine if BSC Parties and Party Agents are compliant with the requirements of the BSC, BSC Procedures (BSCPs) and Metering Codes of Practice. The aim of the TAA's work is to provide assurance that Metering Systems, installed and commissioned for Settlement purposes, correctly record the consumption of electricity.

The auditor's review of the TAA's findings for 2014/15 suggests that the health of the SVA HH Metering Systems population appears to be deteriorating as evidenced by an increase in 'Category 1' (Settlement affecting) non-compliances, up from 16 last year to 25 this year.

Actions:

ELEXON will be addressing the issue in line with the TAA's recommendations²⁸.

Proving Tests not Performed and/or Communicated

As in prior audits, there were several instances where Meter Operator Agents (MOAs) had either not performed the proving tests or had not communicated the proving test results (on the commissioning of HH and CVA Meters) to Data Collectors.

Actions:

ELEXON will be setting up an industry Workgroup with market participants to identify root causes of the issues and potential solutions. In addition, a Change Proposal (CP) might be required to clarify timescales for Party Agents in the CVA market.

Change of Measurement Class (CoMC)

In line with the findings of the prior year, 2013/14, the auditor's assurance work has continued to highlight that the Meter Operator Agents (MOAs) have difficulty in successfully managing the CoMC process in line with the BSCP requirements. The issues identified have affected both HH MOAs and Non Half Hourly (NHH) MOAs.

Our principal findings were that these Party Agents are not always able to identify a CoMC scenario because of other Party Agents not providing them with sufficient information.

²⁸ Refer to section on ELEXON's response to the TAA Annual Report.

ANNUAL PERFORMANCE ASSURANCE REPORT

Actions:

ELEXON has developed a new [guidance note on CoMC](#) that it published in December 2014. ELEXON will continue to issue further education in light of P322²⁹ and the heightened CoMC activity, including holding an education day for industry.

With P322, the PAB will also be able to monitor the activity in the market and provide any additional guidance for the industry.

Incomplete or Delayed Provision of Meter Reads and Meter Technical Details (MTDs)

The audit identified several instances of MOAs not providing Meter reads and/or MTDs to Data Collectors (DCs) in line with BSCP requirements. This year saw an increase in material audit issues raised across both HH and NHH MOAs.

In some instances, delays were caused by engineers not submitting manual paperwork for processing. Many MOAs do have processes in place to monitor and action the return of completed paperwork by engineers.

Actions:

The BSC Auditor has raised this as a market issue since 2002. ELEXON has committed to gather industry views on how to address this and will be holding an industry Workgroup on how to take this forward. In addition, the PAB has indicated that a CP adding a BSCP obligation for MOAs to quality check MTDs ahead of sending them might reduce the issue. ELEXON will be investigating this proposal in 2015 to explore the benefits of raising such a CP.

Metering System Faults not Resolved in a Timely Manner

In 2014/15, 8 audited entities received Settlement affecting audit issues in this area, compared to 2 in the previous year. The issues with Metering System faults were not isolated to MOAs, and the auditor has noted instances where HHDCs and Suppliers are not resolving metering system faults or sending the correct data flows to other BSC Parties and Party Agents. In many cases, this has resulted in an increased backlog of outstanding metering faults that have not been resolved.

Actions:

ELEXON held a fault investigation Workgroup meeting in May 2015. The Workgroup identified a number of actions and ELEXON will be raising a CP to address some of the root causes identified with BSCP514 'SVA Meter Operations for Metering Systems registered in SMRS³⁰'. ELEXON will continue to work on this issue and monitor the market to identify more root causes.

2. Data Quality Issues in the Non Half Hourly Market

Non Half Hourly Data Aggregator (NHHDA) D0095 Exception Report

Overall, the auditor has seen an improvement across the industry with respect to the resolution of D0095s³¹, both in terms of the number of material audit issues raised, and the level of estimated error in MWh across the market.

Actions:

ELEXON will continue to work with market participants that have outstanding backlogs of D0095s and support efforts in reducing backlogs through Error and Failure Resolution and other Performance Assurance Techniques.

Erroneously Large EACs and AAs

²⁹ P322 'Revised Implementation Arrangements for Mandatory Half Hourly Settlement for Profile Classes 5-8'

³⁰ Supplier Meter Registration Service.

³¹ Non Half Hourly Data Aggregation Exception Report

ANNUAL PERFORMANCE ASSURANCE REPORT

A number of Metering Systems have again been identified via the audit with values of Estimated Annual Consumption (EAC) and Annualised Advance (AA) that are in excess of reasonable or expected levels for their Profile Class. Based on analysis of crystallised error performed by ELEXON over 2014/15 approximately 29,000 MWh (2014: 21,000 MWh) is unlikely to be corrected (i.e. has passed Final Reconciliation (RF)). The increase since the previous year was attributable to two Suppliers.

Actions:

The PAB and ELEXON continue to focus on this issue working towards gaining a better understanding of root causes and continuing to support Performance Assurance Parties (PAPs). ELEXON is undertaking a review of the level of potential error below the current reporting thresholds. Following this review, we may adjust the current thresholds used for monitoring.

Issues with the Long Term Vacant (LTV) Process

The LTV process allows Suppliers to enter a zero EAC for energised Metering Point Administration Numbers (MPANs) that are not consuming electricity for an extended period.. For a number of Suppliers who have elected to use the LTV process, testing performed in 2014/15 revealed instances where:

- Zero EACs were not 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 by Suppliers to contact customers were not being made as required by the BSCP, potentially resulting in occupied premises remaining classified as LTV and no consumption entering Settlement.

Actions:

ELEXON notes that the extent of the issue has reduced this year. However, ELEXON will continue to investigate these issues and look for ways of mitigating them. If specific best practice emerges from this work, ELEXON will look into updating the current guidance with it.

Non Half Hourly Data Flow and Meter Reading Backlogs

Backlogs across several Party Agents and Suppliers have increased since the previous audit, in particular with respect to the level of D0004s³² at Suppliers.

Actions:

ELEXON will be working with the BSC Auditor and market participants to identify why the level of D0004s and Meter reading backlogs has been rising. ELEXON will also be monitoring the impact of this issue through the Settlement Risk Report and Supplier performance against the 97%³³ performance target.

Breach and Default

Breach and Default is an incentive technique. The PAB may provide formal notification to a BSC Party of a persistent or material breach of the BSC. A failure by a Party to address such a breach may constitute a 'Default'. The BSC Panel may apply specific provisions to Defaulting Parties including (but not limited to):

- Notifying each other Party of such Default;
- Suspending the right of the Party to submit: Energy Contract Volume Notifications, Metered Volume Reallocation Notifications, Bid-Offer Pairs;
- Suspending the right to register further Metering Systems and Balancing Mechanism Units; or

³² Notification of Failure to Obtain Reading

³³ Suppliers should settle 97% of their NHH Meters on actual reads by RF run.

ANNUAL PERFORMANCE ASSURANCE REPORT

- Expelling the Party from the BSC.

We did not place any Party into Breach and Default during 2014/15.

Bulk Change of Non Half Hourly Agent

Bulk Change of Non Half Hourly (NHH) Agent is a preventative technique designed to provide assurance that when responsibilities for large volumes of NHH Metering Systems change, it is managed in a controlled way. The process involves checking that the Supplier, Supplier Agent(s) and Supplier Metering Registration Agents (SMRAs) concerned undertake the necessary procedures appropriately so they do not affect 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 (20,000 per day per SMRA). This threshold requires approval by the BSC Panel (see BSC Section J 4.2.5).

There were no applications submitted for Bulk Change of Agent during 2014/15.

Change Mechanism

The Change Mechanism is a remedial technique that the Performance Assurance Board (PAB) can use to direct ELEXON to raise a Change Proposal to address a Settlement Risk or make a recommendation to the Panel to raise a Modification Proposal.

During 2014/15, the PAB recommend one Change Proposal - CP1441 'Allowing the Peer Comparison technique to be reported on a Supplier Agent level'. The CP amends BSCP533³⁴ to allow ELEXON to perform Peer Comparison at Supplier Agent level. Whilst the associated Performance Assurance Reporting and Monitoring System (PARMS) Serials all aggregate data to a Supplier level, it is the Supplier Agents who undertake the activities some of the serials monitor. The purpose of reporting Supplier Agent performance through the Peer Comparison technique is to incentivise good performance and effectively delivery performance assurance.

CP1441 is due to be implemented on 5 November 2015 as part of the November 2015 BSC Systems Release.

Education

Education is a preventative technique. ELEXON publishes guidance on common (market) issues identified and the best ways to address them. This may include a view of root causes of these issues. It may also reference other areas of the BSC that may help in monitoring or controlling the issue in some way. In addition, ELEXON assigns an Operational Support Manager (OSM) to each BSC Party and Party Agent when it accedes to the BSC. The OSM provides a first point of contact and is able to provide support and guidance regarding the BSC arrangements.

During 2014/15, we provided the following performance assurance related training/educational days:

- 4 Technical Assurance of Metering educational sessions;
- 3 Performance Assurance Framework educational sessions;
- 6 Performance Assurance Reporting and Monitoring System educational sessions;
- 5 Trading Disputes educational sessions; and
- 1 Supplier Charges educational session.

³⁴ PARMS data provision reporting and publication of Peer Comparison data.

ANNUAL PERFORMANCE ASSURANCE REPORT

Error & Failure Resolution (EFR)

EFR is a remedial Performance Assurance Technique. We use the technique to provide assurance to the industry that Performance Assurance Parties (PAPs) understand the reason for poor performance and have robust plans in place to correct root causes in a timely manner. We call these plans EFR plans and we closely monitor them in conjunction with the Performance Assurance Board (PAB).

ELEXON can consider placing a PAP in EFR (turning EFR on) when we identify any Settlement issue. During 2014/15, we have used the technique to address:

- Medium and higher rated audit issues;
- Poor performance of PAP's against our top risk monitoring;
- Issues identified by other industry participants that present us with sufficient evidence of non-compliance. EFR will only be required after we have encouraged the organisations to resolve the matter between themselves first; and
- Non-compliances identified during Technical Assurance of Performance Assurance Parties (TAPAP) checks.

EFR Applied to Audit Issues.

During the 2013/14 period, we required 36 EFR plans to be put in place to address issues the Balancing and Settlement Code (BSC) Audit judged as a significant risk to Settlement. By the end of the period, the BSC Auditor had closed or reduced³⁵ the severity ratings of 24 of these issues and the associated Parties exited EFR.

We entered one PAP into the EFR escalation process for not make satisfactory progress with its audit issue plans. We required a senior manager to attend a PAB meeting to explain the actions they had put in place to address the audit issue. The PAP made substantial progress after this meeting.

EFR Applied to Top Settlement Risks (SRs).

For top Settlement Risks we consider turning on the EFR technique following three months of poor performance against the relevant measurement standard. During 2014/15 we required 21 EFR plans be put in place to address the following top Settlement Risks (SRs).

SR0022³⁶, SR0024³⁷ and SR0025³⁸.

During 2014/15, we did not routinely apply EFR for poor performance against these risks. This was because we had concerns that the data sent to us from some PAPs was not accurate. We confirmed these concerns when we completed TAPAP checks and found that 10 PAPs were not following the correct reporting process. We waited for PAPs to address the reporting issues before using the data to determine whether we should apply EFR.

We placed one PAP into EFR against SR0022 in September 2013. This was due to persistent very poor performance. The PAP's performance has improved significantly since then but has not yet met the requirements to exit EFR.

³⁵ To a lower issue or management letter point.

³⁶ The risk that Half Hourly Data Collectors do not use the correct Meter Technical Details resulting in Meter readings being misinterpreted or not collected.

³⁷ The risk that Non Half Hourly Meter Operator Agents do not provide Meter Technical Details to the correct Non Half Hourly Data Collectors resulting in Meter readings being not collected.

³⁸ The risk that Half Hourly Meter Operator Agents do not provide Meter Technical Details to the correct Half Hourly Data Collectors resulting in Meter readings being not collected.

ANNUAL PERFORMANCE ASSURANCE REPORT

SR0028³⁹

During 2014/15, no PAPs entered EFR against this risk. However, one PAP remained in EFR from the previous year due to poor performance.

SR0072⁴⁰

During 2014/15, we turned EFR off for one PAP when it completed all its EFR actions. The PAP had also performed to a high standard for three consecutive months.

This was the only plan required for this risk during the period.

SR0074⁴¹

During 2014/15, we turned EFR off for four PAPs because they completed all the actions in their EFR plans. They had also performed to a high standard for three consecutive months.

Eight PAPs had EFR turned on during the period. Two of these PAPs (both operated by the same organisation) did not make satisfactory performance against their EFR plans and their performance continued to drop. ELEXON and the PAB considered this a significant risk to Settlement. Consequently, these PAPs entered the EFR escalation process.

As part of the escalation process, we required that these PAPs send a senior manager to attend a PAB meeting and set out PAP's improvement actions. We then required these PAPs to attend a PAB meeting on a quarterly basis to report on progress. The performance of both PAPs' began to improve by the end of 2014/15.

During 2014/15, two PAPs had plans that were on going from the previous period due to poor performance against this risk.

Issues Identified by Other Industry Participants

During 2014/15, we turned EFR off for one PAP. This was because it had completed all actions in its EFR plan and we had received verification from the party that had raised the concern with us that the issue had improved.

Two PAPs (both operated by the same organisation) had the EFR technique turned on after multiple industry participants reported an issue to ELEXON. The PAPs did not make satisfactory performance against their EFR plan over the period. In April 2015⁴², we entered both PAPs into the EFR escalation process in order to address their performance.

EFR Plans to Address Non-compliances Identified at TAPAP Checks.

During 2014/15, we turned EFR on for 10 PAPs following a TAPAP check that highlighted issues of inaccurate data provided for SR0022, SR0024 and SR0025.

During the period, we had concerns that one PAP was not making significant enough progress against its plan. ELEXON discussed this with a senior manager at the organisation. The situation has since improved.

³⁹ 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.

⁴⁰ The risk that Non Half Hourly Data Collectors (NHHDCs) process incorrect Meter readings, resulting in erroneous data being entered into Settlement.

⁴¹ The risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.

⁴² This is just outside of the 2014/15 APAR reporting period but we have included for completeness.

ANNUAL PERFORMANCE ASSURANCE REPORT

Material Error Monitoring (MEM)

The MEM process is a detective technique that complements the Balancing and Settlement Code (BSC) Audit, Technical Assurance and Trading Disputes processes.

We use the MEM process to analyse Settlement data and supplementary data to estimate and track identified material errors. We can model and communicate the impact of identified Settlement errors to the Performance Assurance Board and/or Trading Disputes Committee to help them make decisions. It also enables us to provide estimated error contribution to customers confidentially so they can monitor their progress in resolving errors.

We currently use MEM to monitor Settlement Risk 0072: 'The risk that NHHDCs process incorrect Meter Readings, resulting in erroneous data being entered into Settlement'. We provide further information on SR0072 in the section entitled 'Top Supplier Volume Allocation Settlement Risks 2014/15 Performance', p.22.

Peer Comparison

Peer Comparison is an incentive technique designed to encourage performance improvement and compliance with the BSC. We publicise named [Peer Comparison data](#) on the BSC website.

We use Performance Assurance Reporting and Monitoring System (PARMS) Serial data to show comparative performance across Suppliers and Supplier Agents. We send a copy to all participants who appear on the graphs.

There is recognition that Supplier Agents heavily impact overall Settlement performance and there are concerns that the Supplier Hub principle does not provide sufficient incentives to drive improvement. During 2014/15, we introduced two tables for peer comparison of Meter Operator Agents (MOAs) performance against SR0024/0025. The Performance Assurance Board (PAB) is monitoring these confidential tables. MOAs are able to monitor their performance within industry. The PAB may consider Supplier Agents that consistently underperform for the Error and Failure Resolution process.

Performance Monitoring and Reporting

Performance Monitoring and Reporting is a detective technique in ELEXON's Performance Assurance Framework. It complements other techniques (such as Error and Failure Resolution, Peer Comparison and Supplier Charges) through providing quantitative data designed to identify performance at certain points in the Settlement processes.

We define performance requirements within the Performance Assurance Reporting and Monitoring System (PARMS) Serials. Each Serial defines an area or process for performance measurement and sets out the Standards that we require Parties and Party Agents to submit in order to monitor performance levels within the process. We provide full details on the PARMS Serials in the [PARMS Guidance Note](#).

Qualification, Re-Qualification and Removal of Qualification

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

Removal of Qualification is an incentive technique that allows the Performance Assurance Board (PAB) to remove the qualifications of Party Agents based on historic poor performance and non-compliance with the BSC.

During 2014/2015, the PAB considered and approved 24 applications for Qualification and re-Qualification. PAB did not remove qualifications for any Supplier Agents.

ANNUAL PERFORMANCE ASSURANCE REPORT

| Role | Qual 2014/15 | Re-Qual 2014/15 |
|---|--------------|-----------------|
| Non Half Hourly Data Aggregator (NHHDA) | | |
| Non Half Hourly Data Collector (NHHDC) | | 2 |
| Half Hourly Data Aggregator (HHDA) | | |
| Half Hourly Data Collector (HHDC) | | |
| Supplier Metering registration Agent (SMRA) | 1 | |
| Half Hourly Meter Operator Agent (HHMOA) | | |
| Non Half Hourly Meter Operator Agent (NHHMOA) | 1 | 2 |
| Central Volume Allocation Meter Operator Agent (CVAMOA) | | |
| Meter Administrator (MA) | | 1 |
| Supplier | 16 | |
| Unmetered Supplies Operator (UMSO) | 1 | |
| Total | 19 | 5 |

Table 5: Qual. /re-Qual. approved in 2014/15

Supplier Charges

Supplier Charges is a remedial technique that provides a mechanism for applying liquidated damages to Suppliers failing to meet applicable performance levels set out in the BSC. The charges compensate Parties disadvantaged by those who are unable to meet the defined Standards. Supplier Charges are subject to a national monthly cap. We calculate the cap across the 14 Grid Supply Point (GSP) Groups by its relative annual consumption compared to its total annual consumption for the previous year. We use the Retail Price Index to calculate the revised figures for both the national monthly cap and the individual Supplier cap.

The total Uncapped Supplier Charges for 2014/2015 was £8,942,533. The total Capped Supplier Charges for the year were £4,352,102.

Technical Assurance of Metering (TAM)

The Technical Assurance of Metering technique is a detective technique used to provide assurance that Half Hourly Metering Systems are installed and recording consumption accurately. ELEXON contracts a Technical Assurance Agent (TAA) to facilitate the TAM technique.

The TAA presented its annual report for 2014/15 to the Performance Assurance Board (PAB) in May 2015 and to the Balancing and Settlement Code (BSC) Panel in June 2015. We summarise the main findings in our 'response to the TAA annual report'.

ANNUAL PERFORMANCE ASSURANCE REPORT

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 | 1,273 | 1,273 standard inspection visits, including two re-visits to check the resolution of Category 1 non-compliances. In total approximately 1% of the SVA Metering System population. |
| SVA Targeted Sample | 0 | No targeted site visits took place this year. |
| Central Volume Allocation (CVA) Main Sample | 116 | Randomly selected to provide a 14.75% representative sample of the CVA metering population, including one re-visit to check the resolution of a Category 1 non-compliance. |
| Sample outcome | Market type | Outcome volume/Comments |
| Category 1 Non-Compliances ⁴³ | SVA | 25 Category 1 non-compliances (1.96% of the main sample). Of these, 21 have been managed to completion, one has been rectified pending confirmation and three remain outstanding. The TAA and ELEXON will continue to work with the relevant Parties to ensure the resolution of the outstanding non-compliances. |
| | CVA | One CVA Category 1 non-compliance was identified and remains outstanding. The TAA are in contact with the Registrant for the resolution of the non-compliance. |
| Category 2 Non-Compliances ⁴⁴ | SVA | 2,378 Category 2 non-compliances. 803 Commissioning record non-compliances were identified. |
| | CVA | 376 Category 2 non-compliances. 81 commissioning records non-compliances were identified. |

Table 6: 2014/15 Summary of inspection visits

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

Major Timing Issues

During 2014/15, the TAA reported a sudden increase in major timing issues (Category 1.03 non-compliances⁴⁵), 12 compared to four reported in 2013/14.

Further investigation carried out by the TAA highlighted a Half Hourly Data Collector (HHDC) operational process failing, which was causing Meters to record a time drift in excess of two minutes from Coordinated Universal Time.

⁴³ A non-compliance has been identified which is deemed to be currently affecting the quality of data for Settlement purposes

⁴⁴ A non-compliance has been identified which is deemed to have the potential to affect the quality of data for Settlement purposes.

⁴⁵ Timing Error (Major) - Outstation clock outside agreed tolerance.

ANNUAL PERFORMANCE ASSURANCE REPORT

Actions:

The HHDC concerned has now introduced new procedures to prevent this issuing occurring going forward, and to date (13th July 2015), none reported so far in 2015/16.

ELEXON is happy for the TAA to continue to monitor instances of major time drift, and will provide support should any instances similar to this occur in the future.

In addition, we will be introducing checks into the BSC Audit scope to audit the HHDC processes in relation to clock trimming.

Commissioning 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:

We have included further Technical Assurance of Performance Assurance Parties (TAPAP) checks on commissioning in the TAPAP scope for 2015/16. We will also conduct a specific sample in 2015/16 when a sufficient sample of newly registered Metering Systems is available.

ELEXON is to investigate the possibility of Half Hourly Meter Operator Agents (HHMOAs) self-reporting to the PAB on the sites they hold full commissioning records for, as well as investigating whether a timescale can be set for clearing the existing Category 2.15⁴⁶ non-compliances.

Meter Programming Errors (Current/Voltage Transformer (CT/VT) ratios)

The issue of Meter programming errors also feeds into the issue of commissioning and commissioning records. There is a potential risk that there could be a mismatch between the actual transformer ratios and how a Meter is programmed. If commissioning has taken place correctly, any such mismatch should not exist.

In 2013/14, the TAA reported a steady climb year on year of Half Hourly Metering Systems where the CT/VT ratios did not match with the actual Meter setup. In 2014/15, the TAA reported a slight improvement, but the estimated material impact on Settlement for those non-compliances identified has increased from 2,600 MWh last year to 14,517 MWh this year. The increase in the estimated impact on Settlement accuracy is primarily linked to higher consumption measured for those Half Hourly Metering Systems where we identified meter programming errors.

Actions:

It is ELEXON's view that this is an issue that needs to be addressed due to the potentially large material impact this could have on Settlement if mismatches occur and remain undetected.

The PAB has approved a specific sample of around 100 sites with dual and multi ratio CTs to be carried out by the TAA during 2016/17. This was supported by the Trading Disputes Committee (TDC) that presided over 120 Trading Disputes raised by a Licenced Distribution Network Owner (LDSO) for sites with a mismatch between the CTs and Meter programming. We will continue to monitor the Category 1.04 non-compliances as they are identified and will raise Trading Disputes to correct historic volumes in Settlement where possible.

Unresolved Category 2 Non-Compliances

ELEXON and the TAA continue to report a steady rise in the number of unresolved Category 2 non-compliances. The majority of those that remain outstanding relate to certificate and commissioning issues.

During the 2014/15, a combined effort by ELEXON and the TAA has resulted in more than 1,300 outstanding Category 2 non-compliances being resolved. However, there remain in excess of 12,000 Category 2 non-compliances outstanding.

⁴⁶ Non-compliances raised for instances of incorrect, incomplete or missing commissioning records.

ANNUAL PERFORMANCE ASSURANCE REPORT

Actions:

We will continue to work with the TAA to ensure that Category 2 non-compliances are resolved. We will target the more straightforward 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.

Measurement Transformer Certificates and Overall Accuracy

Data recorded on measurement transformer certificates is used to calculate the overall accuracy of Metering Systems. In 2014/15, 418 non-compliances were recorded for missing measurement transformer certificates (288 CT and 130 VT) in the SVA market. This compares with 410 non-compliances recorded in 2013/14.

Actions:

The TAMEG are considering removing the requirement for measurement transformer certificates. The TAMEG have questioned the value of the certificates as non-compliances currently number in the thousands. In recent years, there has been no evidence to suggest that missing certificates are causing an impact to Settlement (unlike an incorrect CT Ratio) and there is no suggestion that they are masking large errors.

ELEXON will work with industry to ensure that LDSOs can more efficiently update the National Measurement Transformer Error Statement (NMTES). We will ask the PAB to endorse the approach by the TAMEG following future discussions on the NMTES.

Additional TAM Actions for 2015/16

LDSO Attendance at Audits

During the 2014/15, ELEXON issued a letter to Registrants regarding their responsibility to comply with BSCP27⁴⁷ in affording access to all Metering Equipment including High Voltage (HV) systems.

Of the main SVA sample inspections undertaken, approximately 15% of the HH Metering Systems use remote CTs and VTs. Of those installations, the TAA estimate that they were unable to access approximately 40% of the CTs/VTs for the HH Metering Systems inspected this year (70 inspections).

ELEXON has recommended we change the Technical Assurance Agent Management Tool (TAAMT) to provide greater granularity into the reporting of remote rating plates and issues with access (including allowing the TAA to record visits where no access was available as 'incomplete'). We will roll out the changes during 2015/16.

No Access

Throughout the year the TAA visit a number of HH Metering Systems where, due to varying circumstances, they are unable to access the Metering Equipment to complete a TAA inspection.

This year, the TAA were pleased to report that the number of visits for which they were unable to gain access in the SVA market has fallen from 9% in 2013/14 to 7% (94 inspections) in 2014/15.

We changed the process for dealing with 'no access' at the beginning of 2014/15, and we now send a letter each month to Registrants letting them know their 'no access' percentage for the month against their number of planned inspections.

We will continue this process during the 2015/16, and at the recommendation of the TAMEG send a letter to those Registrants at 0% no access to congratulate their performance.

⁴⁷ Technical Assurance of HH Metering Systems for Settlement Purposes.

ANNUAL PERFORMANCE ASSURANCE REPORT

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 Balancing and Settlement Code (BSC) obligations and to identify any weaknesses in the BSC processes (and other processes as appropriate).

We target Technical Assurance (TA) checks at key market performance and risk areas on an annual basis. The Performance Assurance Board (PAB) approves the checks. We design the TAPAP scope of work to address market issues, including those identified by other PATs such as:

- Error and Failure Resolution ([BSCP538](#));
- Supplier Volume Allocation (SVA) Qualification ([BSCP537](#));
- Technical Assurance of Half Hourly (HH) Metering Systems ([BSCP27](#));
- Performance Assurance Reporting and Monitoring System (PARMS) Techniques ([BSCP534](#)); and
- The BSC Audit ([BSC Section H](#)).

The scope of work can also cover:

- Gap areas – BSC requirements where minimal assurance is gained by the other Performance Assurance Techniques (PATs) e.g. Disaster recovery arrangements and change control procedures;
- Recently introduced requirements – Any new obligations introduced under the BSC change process may be included within the scope of work for TAPAP to ensure parties fulfil these additional obligations; and
- Market issues – Compliance issues identified by ELEXON, the BSC Auditor, or other Performance Assurance Parties (PAPs) can be included in the scope of work for TAPAP for relevant groups of PAPs.

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

Part of the scope for 2014/15 was to perform TA checks in line with the P283⁴⁸ commissioning process.

We audited:

- 11 Half Hourly Meter Operator Agents (HHMOAs) with new appointments for Half Hourly measurement class Metering Systems energised on or after 6 November 2014;
- 16 System Operators (comprising 14 Licensed Distributions System Operators (LDSOs) and two Independent Distribution Network Operators (IDNOs)) with new equipment installed for HH measurement class C Metering Systems on or after 6 November 2014; and
- Four Suppliers with at least 30⁴⁹ new appointments for HH measurement class C Metering Systems energised on or after 6 November 2014.

We designed the checks to investigate the respective responsibilities of each Party/Agent, with a view to gaining a clear overall picture of how well the P283 process is working, and to identify any breakdown in the process at an early stage.

⁴⁸ Modification P283 "Reinforcing the commissioning of Metering Equipment Processes" was implemented on 6 November 2015. The Modification placed commissioning obligations on the equipment owner, shifting responsibility for commissioning of Measurement Transformers from the Meter Operator Agent (MOA) to the Licensed Distribution System Operator (LDSO) (or Transmission Company where applicable). It also placed an obligation on the MOA to inform the Registrant of the commissioning status of each Metering System.

⁴⁹ Under P283, the Supplier should act when notified of a gap in commissioning. Notifications from the MOA can take weeks to filter through to the Supplier, so the volume of commissioning in the period on a sample of less than 30 was not judged to be sufficient.

ANNUAL PERFORMANCE ASSURANCE REPORT

The most important elements for the efficient working of the P283 commissioning process are as follows:

- There must be a well-defined, formalised and agreed process for the commissioning of Metering Systems;
- There must be good communication between the parties involved;
- There must be good quality information in the investigation of a gap in the commissioning process;
- There must be adequate expertise to investigate;
- There must be good quality information coming out of the result of the investigation; and
- Involved Parties will be communicated the outcome of the investigation.

Through our review of this process, we found specific non-compliances against individual role types. We published the full report on the BSC website following its presentation to the PAB in April 2015. Here are some of the key highlights:

Quality of Information

The TAA noted issues with the quality of information across the market, with HHMOAs, System Operators and Suppliers all raising concerns during the checks.

- Data flows: Information within the D0215 data flow, specifically the voluntary field Current Transformers (CT) ratio field not completed;
- Measurement transformer commissioning records: Parties showed a lack of knowledge where CT certificates were accepted as commissioning records; and
- Information provided on a request for commissioning record: System Operators were asked by counterparties to provide commissioning information on Meter Systems installed before the P283 implementation date.

Communication

There were communication problems reported in a number of areas between all Parties. This was mainly where a Party had sent a request for commissioning records and had not received a response.

Lack of Expertise in the Market

In our opinion, one of the major risks to the process is the lack of expertise needed to investigate gaps in the Commissioning process and to determine the level of risk presented by such gaps. Some Parties were new to the P283 process and were not prepared for the risk evaluation process that comes where there is missing commissioning documentation.

Use of Third Party Contractors

The checks uncovered an issue with the use of Third Party contractors by LDSOs, in the lead up to P283. At the time of contracting these service providers, the contract agreements did not cover the commissioning of the measurement transformers. In one case, the Third Party contractor is refusing to provide commissioning records to the LDSO. All of the affected LDSOs are now working to rectify this.

Summary

During the course of the TAPAP checks, we realised that not all Parties were ready for the new obligations introduced by P283. We chose to do the checks soon after implementation in order to incentivise Parties and their Agents to refine their internal processes, exposing gaps and weaknesses, which we can now address at the initial stages of the new process.

We saw encouraging evidence that all Parties/Agents involved had been working to identify internal issues in following the process, and in most cases that process were in place to identify the Meter Points that fall under the scope of P283 and to take appropriate action on them.

ANNUAL PERFORMANCE ASSURANCE REPORT

Next Steps

We have undertaken a number of steps to address issues around P283 as outlined below:

- Part of the scope for 2015/16 is to repeat the set of TAPAP checks on the P283 process implementation done in April 2015;
- P283 commissioning process is in scope for the BSC Audit from 2015/16;
- We created a P283 contact list, hosted on the ELEXON Portal, to provide up to date contact information for all parties involved in HH commissioning;
- Improving the Half Hourly commissioning process:
 - We produced a P283 guidance document (implemented in November 2014);
 - We are introducing timescales for request/receipt of commissioning information into BSC documentation (in progress); and
 - We are considering introducing a new data flow (or adapting an obsolete commissioning flow that is currently not in use) to communicate commissioning information between MOA, LDSO & Supplier businesses.
- Education:
 - ELEXON will hold a P283 education day to explain to industry the timescales we are introducing to the process;
 - We have recommended that MOAs, System Operators and Suppliers provide training and education to their operational staff on the P283 obligation; and
 - ELEXON will continue to provide assistance with training requirements where necessary.

Trading Disputes

Trading Disputes is a remedial technique that enables Settlement calculations to be re-performed with more appropriate data in approved circumstances.

During 2014/15, the Trading Disputes Committee (TDC) saw a level of activity similar to 2013/14. Parties raised 79 disputes compared to 72 in 2013/14. The TDC upheld 48 disputes, with an estimated materiality of £10.3 million (upheld disputes in 2013/14 also numbered 48 with an estimated materiality of £17.1 million). A further 32 disputes were closed by ELEXON during the same period. Of those heard by the TDC, 37% involved Meter measurement transformer ratio mismatches compared to 50% the previous year. Faulty Metering Equipment accounted for 18% of disputes, while the remaining 45% had unrelated root causes.

Of the 79 Trading Disputes raised in 2014/15, ELEXON raised 34. This compares to six raised by ELEXON in 2013/14. This increase is a result of non-compliances identified by the Technical Assurance Agent (TAA) during its annual audit of the Half Hourly (HH) market.

A single Trading Dispute contributed 61% of the total materiality over the 2014/15 period. This Trading Dispute was caused by the Supplier Volume Allocation Agent (SVAA) making a manual error that affected the Post-Final Settlement Run for 41 Settlement Days. This resulted in an underestimation of 144,000 MWh to HH consumption, causing Non-Half Hourly (NHH) Suppliers to overpay in Trading Charges by £6.3 million. A Party referred the Trading Dispute to the Panel following the TDC's determination. On 22 January 2015, the Panel upheld the TDC's determination. ELEXON has since conducted a lessons learned activity. The TDC and Panel approved a number of recommendations to mitigate such errors going forward.

ANNUAL PERFORMANCE ASSURANCE REPORT

ELEXON has reviewed and has improved the process by which it communicates to SVAA concerning Trading Disputes rectified through the Post-Final Settlement Run. This allows SVAA greater visibility of the Post-Final Settlement Run files it is expecting from Data Aggregators and declines any unauthorised changes it receives.

During 2014/15, the TDC approved the resolution of three Trading Disputes by applying Extra-Settlement Determinations (ESDs). The total value of these ESDs is £538k, with a single Trading Dispute contributing £500k. This Trading Dispute related to the application of an incorrect Line Loss Factor to the volumes of a wind farm.

All Grid Supply Point (GSP) Groups remain exited from two longstanding Trading Disputes resolving errors associated with erroneous large Estimated Annual Consumptions (EACs) and Annualised Advances (AAs) in the Post-Final Settlement Run. ELEXON raised the first Trading Dispute in 2000 and the second in 2006 to incorporate Scottish GSP Groups following the British Electricity Trading and Transmission Arrangements (BETTA).

ELEXON has continued to monitor the error associated with this issue, and although all GSP Groups remain exited from blanket level Post-Final Settlement Runs, the two Trading Disputes have remained open for risk of GSP Groups re-entering.

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 | 2014/15 Actual (£) | ROP 2014/15 Forecast (£) |
|-------------|--------------------|--------------------------|
| Operational | 982,956 | 913,500 |
| Contractual | 1,833,261 | 2,459,100 |
| Total | 2,816,217 | 3,372,600 |

Table 7: Cost of Delivering PAF in 2014/15

Total Costs

Total actual spend in 2014/15 ~£556k lower than forecast for the Risk Operating Plan (ROP) 2014/15. This is largely because actual spend on ad hoc and demand led activities was lower than forecast. We provide further details below.

Operational Costs

The operational costs show an increase in expenditure of ~£69k from the ROP 2014-15 forecast. This is because the ROP 2014/15 forecast did not include the graduate placements. In addition, we have included input from Change Management, Market Design and Analysis and Service Management to provide greater clarity on expenditure on Performance Assurance.

Contracted Costs

The contracted costs cover outsourced provision of the following:

- Annual Balancing and Settlement Code (BSC) Audit;
- Delivery of the Technical Assurance of Metering (TAM) by the Technical Assurance Agent (TAA);
- The Qualification Service;

ANNUAL PERFORMANCE ASSURANCE REPORT

- Support and maintenance for the ATLAS database; and
- Support and maintenance of the Performance Assurance Reporting and Monitoring System software.

The difference between ROP forecasted contractual spend for 2014/15 and actual contractual spend is ~£626k predominantly due to the following:

- Funds forecast for the BSC Operational Audit not spent in 2014/15 (~£447k). This is due to revisions made to reflect demand led and ad hoc expenditure not required;
- Funds forecast for the TAM not required in 2014/15 (~£32k). This is because ad hoc expenditure was not required;
- Funds forecast for Qualification and Re-Qualification not spent in 2014/15 (~£134k). This is demand led expenditure and reflects less Parties going through Qualification and/or re-Qualification than anticipated; and
- An additional £13k not was required on database and system maintenance and meeting attendance. This is a combination of demand led and ad hoc expenditure.

PERFORMANCE ASSURANCE BOARD STRATEGY AND FUTURE CONSIDERATIONS

Throughout 2014/15, we undertook work related to the Performance Assurance Board (PAB) strategy work streams that will impact the way we provide performance assurance to Settlement. Much of our attention has been and will continue to be:

- Mandatory Half Hourly Settlement for Profile Classes 5-8;
- Peer Comparison for Party Agents;
- Register of Systems Connection Points and/or Boundary Points;
- Electricity Balancing Significant Code Review ; and
- The Data Transfer Network (DTN) project.

The PAB and ELEXON continue to monitor the impact of Smart and Electricity Market Reform on the Performance Assurance Framework.

Mandatory Half Hourly Settlement for Profile Classes 5-8

On the 3 August 2015, Ofgem approved Modification [P322](#), which allows a phased approach to mandatory half hourly Settlement for Profile Classes 5-8 Meters, from 5 November 2015, to 1 April 2017.

On 5 March 2015, we raised a Modification [P320](#), to propose a stand-alone bespoke report to monitor the migration of Profile Class Meters 5-8. This format will provide the PAB with greater flexibility to amend or terminate the report as appropriate. It removes the need for the PAB to address non-compliances with Supplier Charges. If Ofgem approves the Modification, the PAB will use the findings of the report to determine non-compliances and consider non-compliant Parties for placement in the Error and Failure Resolution (EFR) process.

Peer Comparison for Party Agents

In January 2015, the PAB approved the use of SP11⁵⁰ for the public Peer Comparison technique. This followed Technical Assurance of Performance Assurance Parties (TAPAP) checks, conducted in 2014, due to the implementation of [CP1387](#)⁵¹. We reported a number of non-compliances against SP11.

⁵⁰ SP11 monitors the timely appointment of Data Collectors and Meter Operator Agents in the half hourly and non half hourly markets. This Serial relates to the obligation for 100% of Supplier Agents to be appointed prior to the

ANNUAL PERFORMANCE ASSURANCE REPORT

We have included details of the performance metric planned for use in the Peer Comparison in the paper we presented to the PAB ([PAB168/08A](#)). Reporting commenced in July 2015. We will publish updated SP11 Peer Comparison reports on a monthly basis on the ELEXON website. We may consider Parties that perform poorly against this obligation for the Error and Failure Resolution process.

Register of Systems Connection Points and/or Boundary Points

In May 2011, we established the root cause of a Trading Dispute to be due to the Central Data Collection Agent incorrectly applying Aggregation Rules. Consequently and at the request of the Trading Disputes Committee, we undertook an audit of the Aggregation Rules for England and Wales, and Scottish sites registered since the BETTA⁵² go-live date of 01/04/2005.

The audit identified six material errors with a combined materiality in excess of £30 million, and 61 non-compliances. The audit also identified the absence of any register of Systems Connection Points and/or Boundary Points. We believed that a register would give a further level of assurance that each connection to the Transmission System is correct in Settlement.

We undertook an audit, in 2014, of the Site Responsibility Schedules (SRS) and schematic diagrams for each GSP. Our audit confirmed that all 1,500 Systems Connection Point circuits and Boundary Points are included in the Aggregation Rules. We have completed 13 of the 14 GSP Groups and have built a register that we can maintain going forward.

Unfortunately, we have been unable to obtain the relevant Site Responsibility Schedules from one GSP to complete this exercise. We will continue to try to obtain this information from the relevant Party.

Electricity Balancing Significant Code Review

Background

In August 2012, Ofgem launched its Electricity Balancing Significant Code Review (EBSCR) to look at imbalance prices, in order to address long-standing concerns that it had raised in 2010 within its [Project Discovery report](#). In particular, Ofgem expressed concerns that imbalance prices are not creating the correct signals for the market to balance, which could undermine efficiency in balancing and security of supply.

[P305 'Electricity Balancing Significant Code Review Developments'](#) was raised to implement changes to support the review's conclusions ahead of winter 2015/16 and proposed:

- A reduction in the Price Average Reference (PAR) and Replacement PAR (RPAR) values to better reflect the marginal cost of balancing energy for a given Settlement Period;
- A single imbalance price using the existing Main Price calculation;
- Introduction of a Reserve Scarcity Price (RSP) function for Short Term Operating Reserve (STOR) actions to better reflect the prevailing scarcity in the market at the time of their use; and
- Introduction of Demand Control actions into the imbalance price, priced at the Value of Lost Load (VoLL), and an imbalance volume correction process to amend participants' positions to account for such actions.

The Authority approved the P305 Proposed Modification on 2 April 2015 for implementation on 5 November 2015 as part of the November 2015 Release. The Modification places significant new obligations on BSC Parties and Party Agents. We are currently drafting changes to the Code Subsidiary Documents (CSDs) to support this Modification.

agent Effective From Date. Late appointments can result in Meter Technical Details being rejected and Meter readings being misinterpreted or not collected.

⁵¹ Clarifications to BSCP533 (PARMS Calculation Guidelines) and Appendices.

⁵² British Electricity Trading and Transmission Arrangements.

ANNUAL PERFORMANCE ASSURANCE REPORT

We will monitor the progression of the proposed changes to the CSDs and assess for any impact on Settlement and performance assurance.

Data Transfer Network (DTN)

Using DTN data as a source for Performance Assurance Reporting and Monitoring may lead to a reduced reporting burden on Parties and Party Agents and could result in the provision of more consistent information, if proven effective. We are currently exploring the potential for this data source to report on Meter Technical Details, Change of Meters, Change of Agent and Change of Supply including provision of Meter Technical details, agent appointments, Meter installation flows and Meter Readings.

FURTHER INFORMATION

If you have any questions or require further information on the Annual Performance Assurance Report, please contact:

Melinda Anderson
Email: melinda.anderson@elexon.co.uk
Telephone: 020 7380 4019

ANNUAL PERFORMANCE ASSURANCE REPORT

APPENDIX 1: TOP SETTLEMENT RISKS

| 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 |
| 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 |
| 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 |
| SR0081 | The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement | 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 |
| SR0188 (Prev. SR2868) | The risk that non Half Hourly Import/Export Metering Systems are incorrectly installed/configured resulting in inaccurate data entering Settlement. | 12 |