

ELEXON

QUARTERLY PERFORMANCE ASSURANCE REPORT

Quarter 4 – 2021/22

Public

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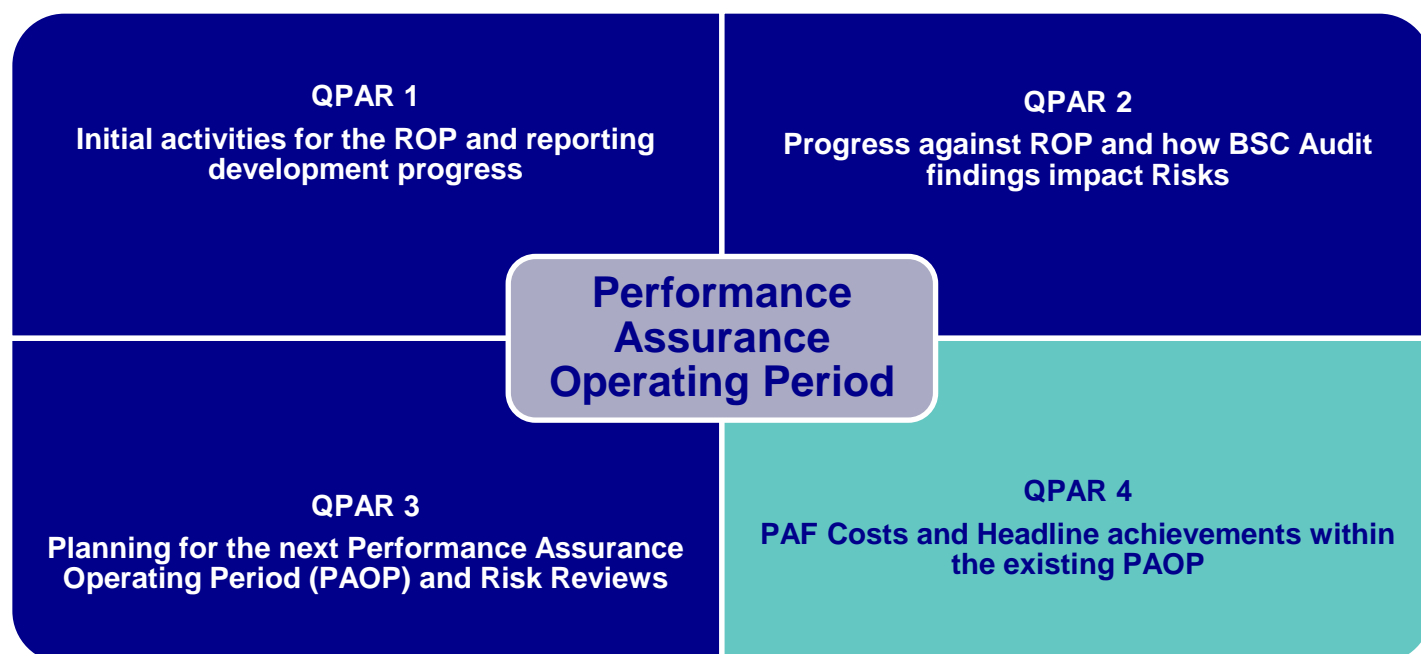
Overview

The Performance Assurance Board (PAB) is required, by Balancing and Settlement Code (BSC) Section Z 8.1¹, to prepare an Annual Performance Assurance Report (APAR). Following a recommendation from the PAF Review, Elexon provides a Quarterly Performance Assurance Report (QPAR), which includes:

- Results from Risk evaluation and Risk assurance procedures focussing on the outcome of deployment of Performance Assurance Techniques (PAT);
- Recommendations for modifying the Performance Assurance Techniques.

In addition, the content of the QPAR will focus on the Performance Assurance activities that have been undertaken within the previous quarter and that are planned for the next quarter.

Within each QPAR, the content and information provided will have a specific focus in line with the activities undertaken. Elexon will, over the course of the four quarterly reports, cover the full scope of the Performance Assurance Framework and our Risk Operating Plan. As a guide, we anticipate the four quarterly reports to have focus on the following areas:



¹ <https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/bsc-sections/>

Risk Manager Update

- Our Risk Evaluation Register (RER) contains a total of 34 Risks. 18 Risks relate to Supplier Volume Allocation (SVA) processes, and 16 to Central Volume Allocation (CVA). Our Risk management approach focuses on prioritising Risk areas and individual Risks in accordance with changes in how they impact the market.

We have produced our [Risk Operating Plan \(ROP\)](#), detailing how Risks that are in focus will be managed in the 2022/23 Performance Assurance Operating Period (PAOP), by deploying Performance Assurance Techniques (PATs) and additional assurance activities.

- During the next quarter, we will begin to implement the 2022/23 ROP, which places additional focus on the following Risk areas:
 - 1. Post-COVID-19 pandemic market recovery**
 - 2. Processes associated with SoLR events**
 - 3. Providing additional Performance Assurance within the CVA Market**

Key Achievements for the 2021/22 Performance Assurance Operating Period

Exelon has made significant progress against its [Risk Operating Plan 2021/22](#). In addition to deploying PATs and delivering assurance activities that were planned, the Risk Team made the following key achievements:

- Developed six new Risk Dashboards
- Switched off Participant Reported Performance Assurance Reporting and Monitoring System (PARMS) Serials to save cost to the industry
- Progressed Modification P427² to enable the publication of Risk and performance data
- Supported the development of Assurance arrangements for P375³
- Developed automated monitoring for Grid Supply Point (GSP) consumption and export volumes in order to identify step changes

Summary of Costs for Delivering Performance Assurance

The Costs for delivering Performance Assurance for the 2021/22 PAOP:

Cost Type	2021/22 Forecast (£k)	2021/22 Actual (£k)
Operational	£1,164	£944
Contractual	£2,638	£2,339
Total	£3,602	£3,299

Forecasted costs for 2022/23

Cost Type	2022/23 Forecast (£k)
Operational	£1,034
Contractual	£2,670
Total	£3,704

Exelon has forecast a small increase in the Operational costs, due to the vacancies within the Assurance team now being filled, along with the expectation of additional work that will be required to support and adapt the PAF for the Market-wide Half Hourly Settlement (MHHS) Programme changes.

The Contracted costs remain in line with the original 2021/22 budget, noting that some areas have been reduced (such as a reduction in the BSC Audit costs as SVA MOAs will no longer be in scope of BSC Assurance following the

² Publication of Performance Assurance Parties' impact on Settlement Risk'

³ 'Settlement of Secondary BM Units using metering behind the site Boundary Point'

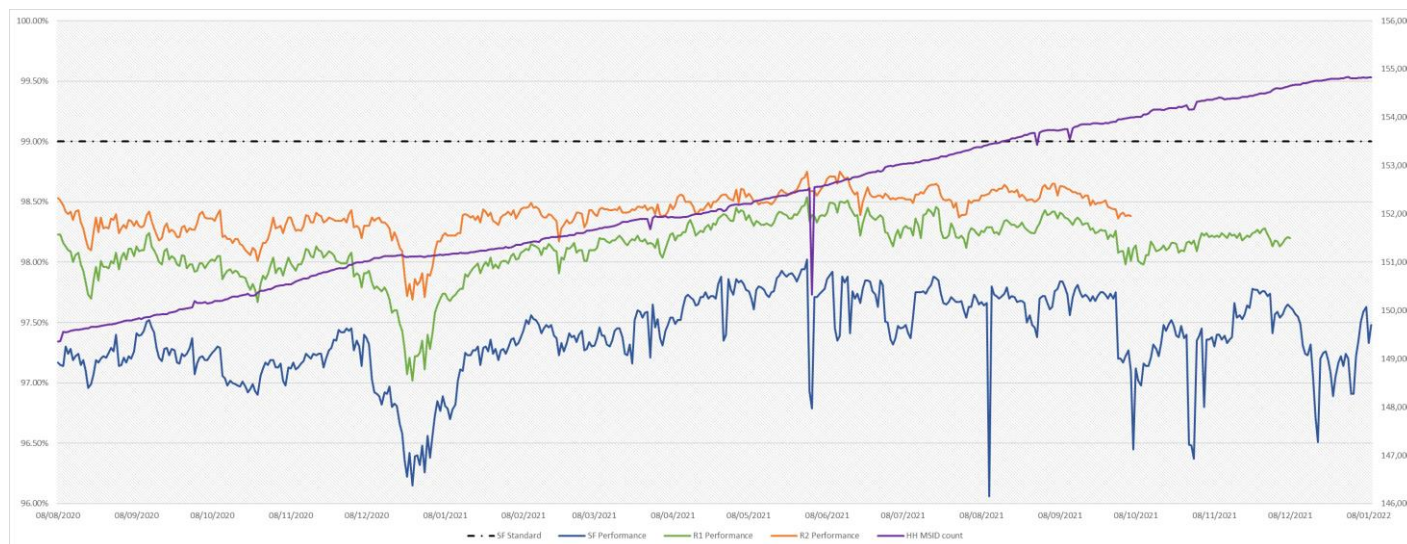
Quarterly Performance Assurance Report

implementation of the Retail Energy Code (REC)) and others increased (such as Qualification, in anticipation of more Parties showing interest in joining the marketplace ahead of MHHS).

Key Industry Metrics

Elexon has provided a high-level overview of the Market Performance across the most recent quarter of settled dates at each Settlement Run, for the Half Hourly (HH) Measurement Class C Market, the Sub-100kWh Half Hourly Market, and the Non-Half Hourly (NHH) Market. For a detailed analysis of the Market performance across each month, please find the recent [Risk Reports: Insight and Guidance on Settlement](#) available on the Elexon website.

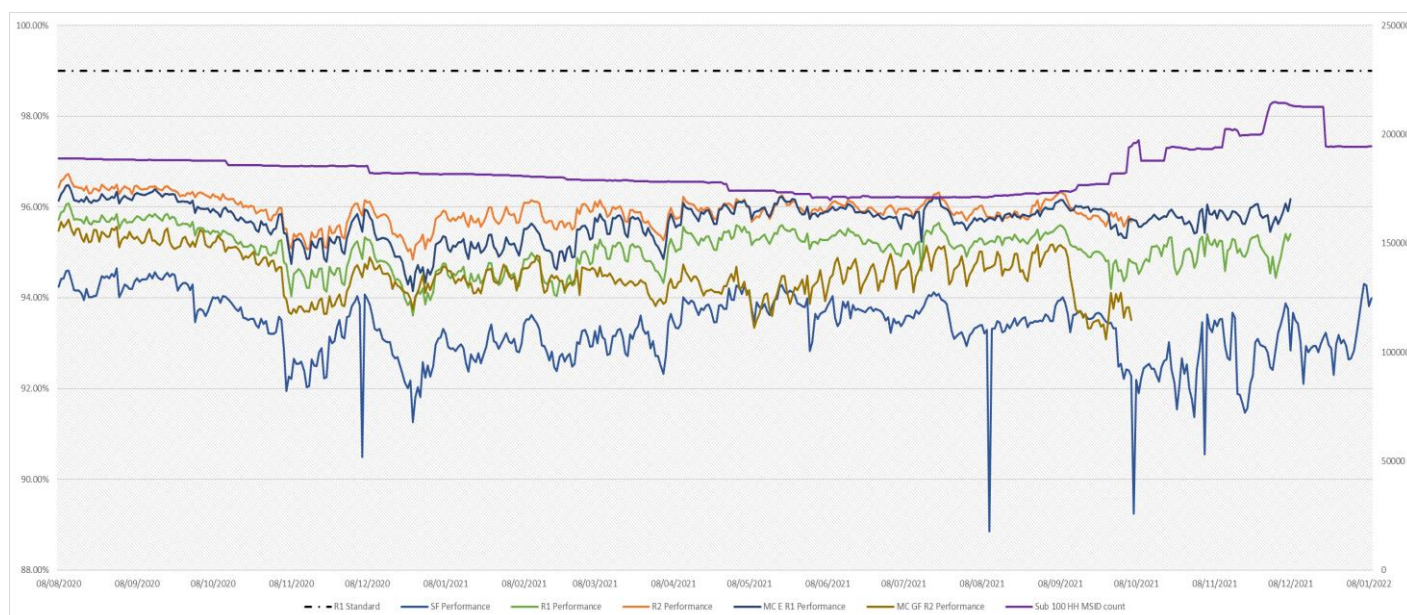
HH Market



The HH Market performance improved in the fourth quarter of the 2021/22 PAOP. The performance range for each of the runs is detailed below, including the Settlement dates on which the lowest and highest performance was achieved between 31 December 2021 and 31 March 2022.

Settlement Run	Lowest Performance	Date achieved	Highest Performance	Date achieved
SF	95.76%	10 January 2022	97.8%	28 January 2022
R1	97.77%	1 January 2022	98.34%	7 January 2022

Sub-100kWh HH Market



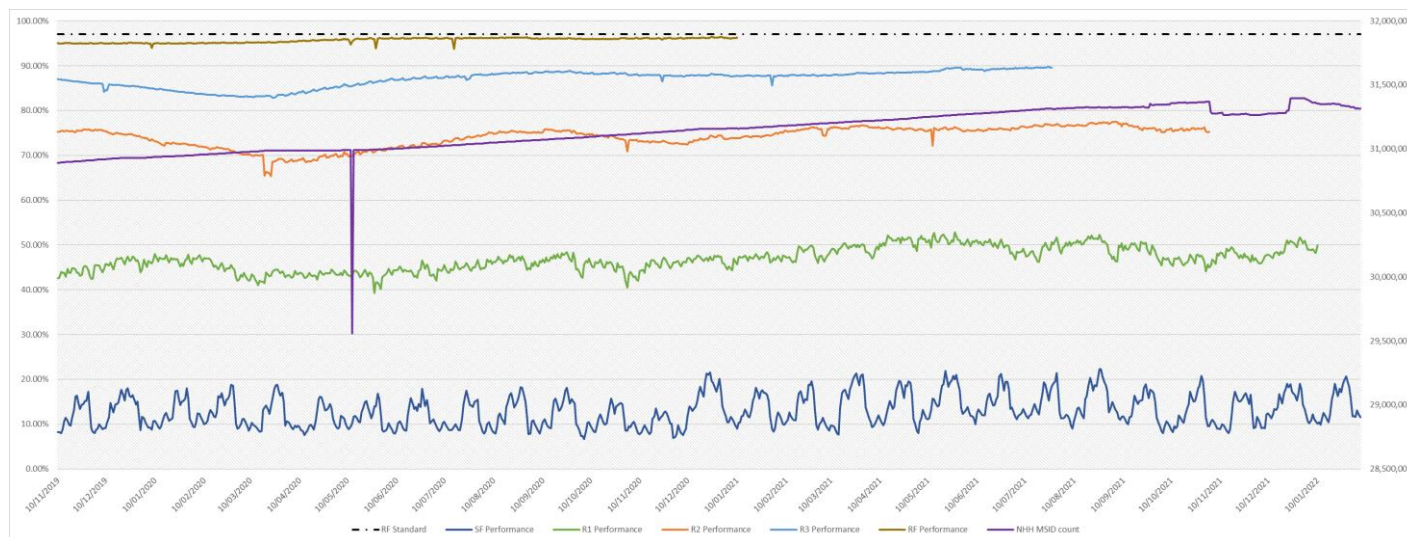
The Sub-100kWh HH Market performance improved in the fourth quarter of the 2021/22 PAOP.

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The performance range for each of the runs is detailed below, including the Settlement dates on which the lowest and highest performance was achieved between 31 December 2021 and 31 March 2022.

Settlement Run	Lowest Performance	Date achieved	Highest Performance	Date achieved
SF	92.11%	13 December 2021	94.58%	26 January 2022
R1	94.43%	13 December 2022	95.89%	6 January 2022

NHH Market



The NHH Market recorded an improvement in performance in the fourth quarter of the 2021/22 PAOP.

The performance range for each of the runs is detailed below, including the Settlement dates on which the lowest and highest performance was achieved between 31 December 2021 and 31 March 2022.

Settlement Run	Lowest Performance	Date achieved	Highest Performance	Date Achieved
R1	45.9%	5 December 2022	51.64%	30 December 2021
R2	75.1%	2 November 2021	77.15	12 September 2021
R3	88.83%	15 June 2021	89.77%	25 July 2021
RF	95.86%	24 November 2020	96.44%	25 December 2020

Focussed Risk Event Overview

CVA Assurance Improvements

Elxon is focusing on Central Volume Allocation (CVA) Risks, to improve and strengthen Assurance processes in line with Elxon's proactive and transparent assurance programme following the Performance Assurance Framework Review.

The Risks identified for focused support within this area are:

- Risk 20 – CVA Metering Equipment installation, programming, maintenance and Commissioning;
- Risk 21 – CVA Retrieval and processing of Metered Data;
- Risk 22 – CVA Notification of change to Metering Equipment; and
- Risk 23 – CVA Fault Resolution.

Following the sharing of CVA Fault statistics with the Performance Assurance Board (PAB) and CVA Workshop we have seen a significant reduction in the number of outstanding CVA Faults with the number currently being tracked through the CVA Fault Log being at a record low.

Elxon is also compiling lessons learned from previous CVA faults for discussion at the next CVA Workshop which will be held in early May 2022. Here Elxon will also discuss potential improvements to Central Data Collection Agent (CDCA) KPIs and CVA processes.

As noted under the ADR section later in this report, Elxon is also exploring opportunities to leverage the data we have available to predict and identify potential errors including through the application of machine learning techniques.

CVA Registrants are now formally included within the BSC Audit Scope following a successful trial of Registrant audits in the 2021/22 audit period. The 2021/22 BSC Audit Report (to be published in June 2022) will provide more details on this.

Addressing actions arising from Market Issues identified within the BSC Audit

Elxon is focusing on addressing the actions to be taken against Market Issues identified within the BSC Audit in order to resolve long standing and historic Market Issues.

The Risks identified for focused support within this area:

- Risk 3 – Metering Equipment installation, programming, maintenance and Commissioning.
- Risk 4 – Notification of change to Metering Equipment.
- Risk 6 – Meter Technical Details transfer and processing.
- Risk 8 – Processing of Metered Data.
- Risk 11 – Unmetered Supplies.
- Risk 13 – Manual adjustments.
- Risk 18 – Revenue protection.
- Risk 20 – CVA Metering Equipment installation, programming, maintenance and Commissioning

The Risk Team has ownership of the delivery of actions raised relating to market issues. This is part of the wider Risk Operating Plan delivery ensuring that issues are progressed, resolved or re-assessed during the PAOP.

There are 10 open Market Issues assigned to Risk Owners. Two Issues are recommended to be closed this Quarter:

- Data fixes required to resolve Post-RF D0023 rejection records – Risk Owner and SME have published a new guidance note as recommended.
- Elective Half Hourly Market Issue – SME and Risk Owner instruction.

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Further information on Market Issues including the actions taken to close the Issues can be found on the [Elexon website](#).

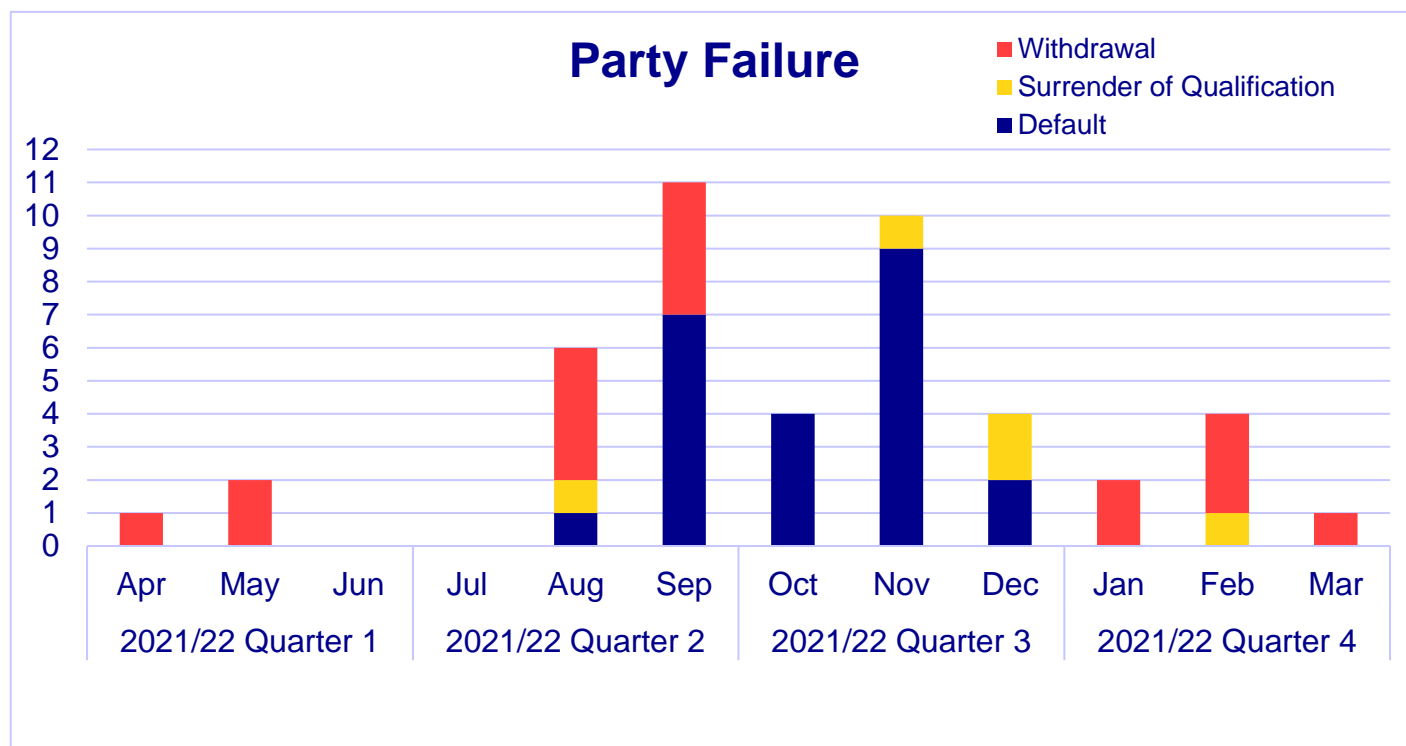
Transition of Assurance to the Retail Energy Code (REC)

We have established a good working relationship with the REC Code Manager with monthly engagement to ensure any areas of concern arising from the transition are highlighted and resolved.

Other Notable Risk Updates

Party Failure

Elxon processed 11 Party Withdrawals, 23 Party Defaults, and four Surrender of Qualification applications in the first three quarters of the 2021/22 PAOP. Elxon processed six Party Withdrawals and one Surrender of Qualification application in the fourth quarter of the 2021/22 PAOP.



Annual Demand Ratio Monitoring and Investigation

During Quarter 4, Elxon continued to pursue all available avenues to investigate the potential issues highlighted by the Annual Demand Ratio (ADR) KPI. This has included increasing the priority being placed on these investigations internally and the development and implementation of new tools to support analysts' investigation of potential ADR issues. We are also continuing to refine our processes and exploring new technologies and solutions to support earlier identification of potential Metering errors.

South Wales (_K), Yorkshire (_M) and North Western (_G) continue to remain above the upper ADR threshold, with North Scotland (_P), South Eastern (_J) and London (_C) all being below the lower ADR threshold. Note that East Midlands (_B) has returned back below the upper threshold since mid-October 2021.

Issues have been identified in South Eastern (_J) and London (_C), and are in the process of being corrected. Revised metered volumes will appear in future Settlement Runs, and should return the ADR measures for these two GSP Groups back within tolerances. Impacted Parties have been contacted directly where the monetary impact exceeds agreed thresholds.

Elxon will continue to update industry, and the relevant Elxon committees, on a regular basis, with feedback from committees taken into account in our investigations.

Elxon is working with NGET to improve lines of communication and to work with them to help us more quickly identify potential Meter Faults.

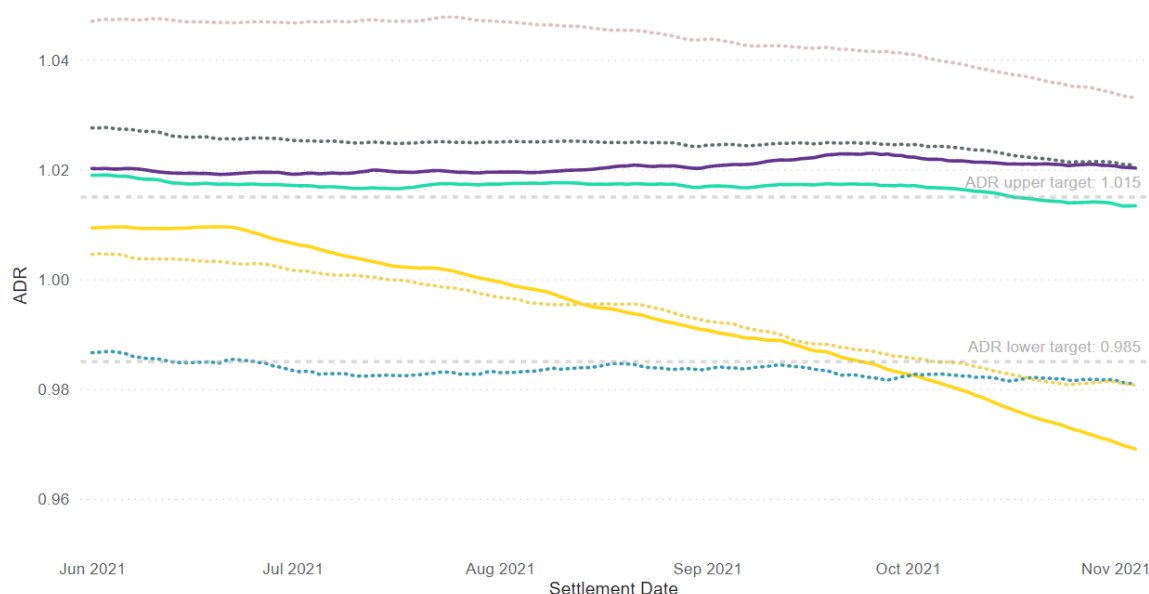
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Elxon will also continue to deploy the TAA to undertake site inspections in tranches where available data indicates a potential error. While a blanket approach was taken to the use of site inspections for _J, _K and _M, experience indicates that targeted visits have a much greater likelihood of identifying errors. Given that TAA visits were undertaken of all GSP Metering within J, K and M and a root cause was only identified for _J through those visits.

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Annual Demand Ratio based on Settlement Run type R2 or later

GSP Group — _B — _C — _G — _J — _K — _M — _P



Issue 97 – Meter shortage risk driven by global materials availability and supply chain challenges

The Issue 97 Workgroup was established to discuss potential challenges linked to the global semi-conductor and electronic component shortage, which is impacting on the availability of Meters.

The primary impact of these challenges on electricity Settlement is in respect of:

- **New connections** - where a Meter is not available to be installed
- **Fault resolution** - where a replacement Meter is required to address a fault and is not available

Three Issue 97 Workgroup meetings have taken place in September 2021, November 2021 and March 2022. For information, the slides from both meetings have been published on [the Issue 97 webpage](#). At the third meeting the Workgroup voted to close the BSC Issue and transition monitoring to a BAU Assurance activity.

The final Issue report will be published when it is presented to the [BSC Panel](#) at its May 2022 meeting.

Data Submissions

At the third Issue 97 Workgroup meeting, Elxon took the Workgroup through the updated Request for Information (RFI) responses and explained that apart from Smart Meters (which had a high number of no impact responses), there was an even spread of high, medium and low impacts across all the other Meter types.

The Workgroup concluded that the previous forecasts (received via RFIs in November 2021) that predicted how quickly things might improve, had been too optimistic. The latest responses show that impacts have worsened across all Meter types.

Workgroup members noted that the new format for entering data for the RFI was an improvement and requested that Elxon continue using the new format going forwards.

When the RFI responses regarding the impact of meter availability becomes available on the website Elxon will include notification in Newscast.

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Final Workgroup Meeting Voting

The group voted on whether to close the Issue group with the assumption that Elexon would continue to publish RFI data routinely. Issue group members would also form an expert group for the Issue in case a meeting was needed in the future. The group voted in favour of closing the issue 14 votes to two.

The group agreed through a vote that a final further derogation (a derogation against the requirement to install Check Meters) will be progressed if the majority of RFI responses forecast a high impact for Faults and New Connections for a forthcoming three-month period.

The group voted 11 votes to 3 in favour of this derogation to be rolled out by Code of Practice (CoP).

The group unanimously voted for further quarterly reporting from Meter Manufacturers and further monthly reporting for all other Market Participants.

Elexon will continue to report the data collected via RFIs to the PAB via the Risk Report on a routine basis.

Updates on Meter Availability

In March 2022 Elexon recently issued a Certificate of Compliance for two new Meter types which can be used for CoPs 1, 2, 3 and 5 (CVA and SVA) and CoP10 circuits (SVA only). Elexon has also issued a Certificate of Protocol Approval for each so at least one DC can dial each of these new Meter types for Settlement purposes.

The [CoP Compliance and Protocol Approval list and List of Valid Outstation types](#) have been updated to reflect the new approvals.

Risk 15 - Reference Data

Participant Management Product (PMP) is pleased to confirm that the large scale change to Market Domain Data (MDD) sets for Ofgem's Targeted Charging Review (TCR) has been successfully delivered in time for the April 2022 implementation deadline. MDD Version 321 is the last version to include TCR changes, which went live on 16 March 2022.

For the past two years we have worked together with Licensed Distribution System Operators (LDSOs) and Independent Distribution Network Operators (IDNOs) to process the necessary changes to MDD. These will be used to identify the new network charging categories under the TCR.

Overall, PMP has processed approximately 15,000 new Line Loss Factor Classes (LLFCs) and approximately 200,000 valid set combinations for the successful implementation of Ofgem's Targeted Charging Review.

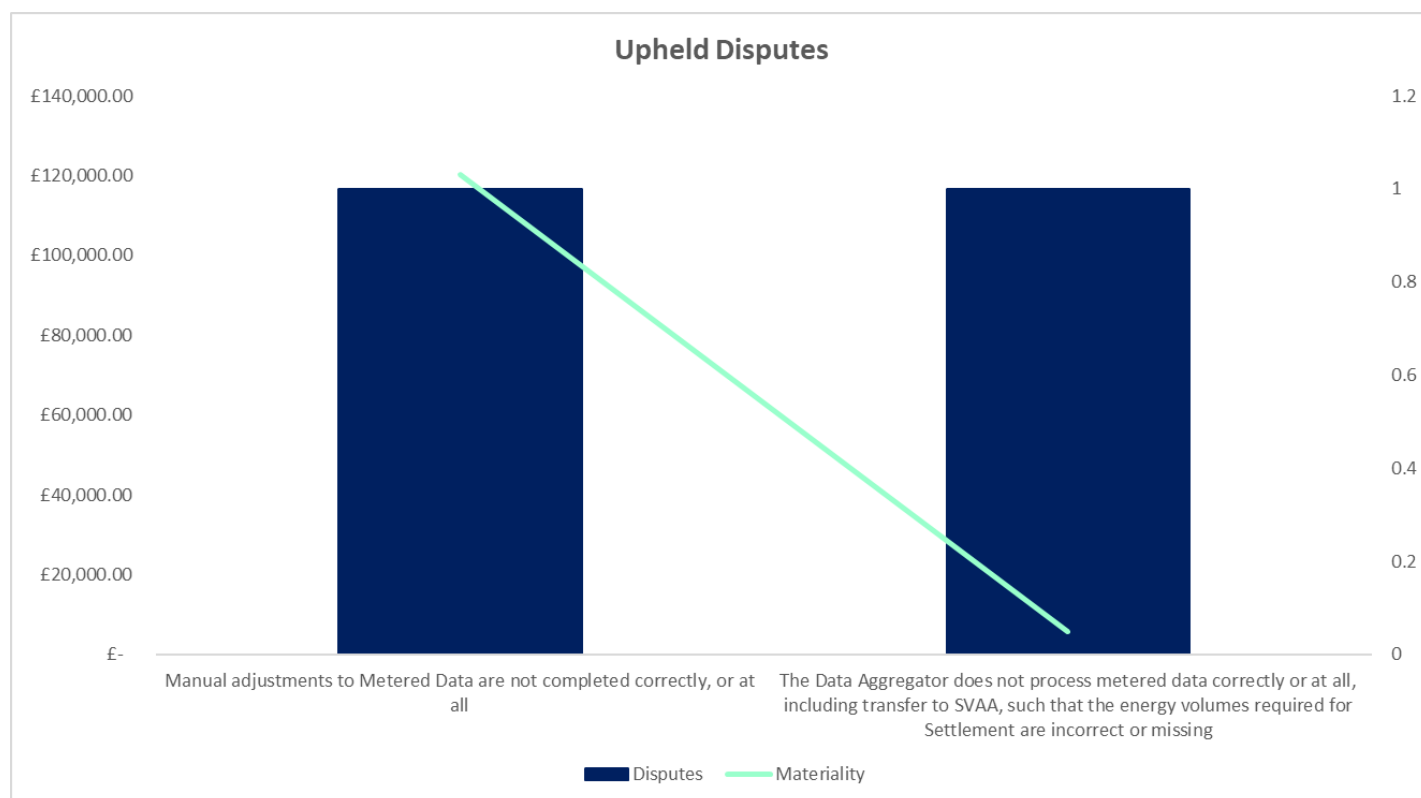
Technique Updates

Trading Disputes

Elexon resolved 5 Trading Disputes between January and March 2022. The Trading Disputes Committee (TDC) upheld 2 of the Trading Disputes, noting the material impact to Settlement of £125,708. Three were found to be invalid and were closed by Elexon. In addition, one Manifest Error claim was raised and upheld.

None of the Trading Disputes upheld by the TDC in this quarter were related to Risk 003⁴.

The Trading Dispute Team's focus over the next three months will be on progressing an additional 31 Trading Disputes that remain outstanding. The team will also be continuing work on the Trading Disputes Review project, with focus on the Internal Review and Market Wide Half Hourly Settlement.



Error and Failure Resolution

Elexon and the PAB are reviewing their approach to managing the Settlement Performance standards on a quarterly basis. The last review took place at the February 2022 PAB meeting with the next review taking place in May 2022. Elexon provided the latest recommendations in the Performance Thresholds Review, which is available to read [here](#).

The latest performance review resulted in Suppliers with a non-compliant volume of estimation of 2,000MWh at RF in the NHH market, or 1,500MWh for the HH Measurement Class (MC) C and HH Sub 100 kWh (MCs E, F and G) market being in focus and likely to have EFR applied.

A Supplier will remain in EFR until it is beneath the EFR exit criteria, which is currently set at 1,000MWh a month of non-compliant estimated energy for the NHH market or 750MWh of non-compliant estimation a month for the HH markets.

The following table highlights the current view of the numbers of Suppliers in EFR for issues with their performance against the standards.

⁴ <https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-processes/003-sva-risk-metering-equipment-installations-are-incorrect/>

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Market Area	Number of focus Suppliers within EFR technique	Suppliers are in EFR but have met exit criteria this quarter
HH MC C	10	0
HH sub 100kW	8	0
NHH	13	0

Elexon has also turned on EFR for the 11 High and Medium-rated Audit Issues following the pre-Christmas BSC Audit. Elexon will work with these BSC Parties to provide them with assistance to improve their processes.

Technical Assurance of Metering

Mandatory Desktop Audits, Central Volume Allocation (CVA) onsite Inspection Visits and Supplier Volume Allocation (SVA) onsite Inspection Visits continue following their successful resumption in Quarter 2.

As detailed elsewhere, a Targeted Inspection carried out by the TAA at a CVA site in GSP Group _C was instrumental in identifying and rectifying a metering error causing significant error to Settlement.

Technical Assurance Agent Management Tool (TAAMT)

Testing and development for the next phase of continuous improvement for the TAAMT system, focussing on the system's usability and accessibility, has now been completed and the changes were successfully rolled out on 24 March.

Elexon has run several sessions with TAAMT users to solicit feedback for further improvements and have begun work with our service provider, C&C, on scoping the next release.

Supplier Charges

The Supplier Charges Technique remains suspended.

Technical Assurance of Performance Assurance Parties

The TAPAP technique is continuing to operate, but only where Parties are able to facilitate the checks and with the consideration of prioritising BAU.

Supplier Agent Management Check

Elexon presented to the PAB at its August 2021 meeting ([PAB247/05](#)) a TAPAP scope for approval of a check on Supplier Agent Management.

At the June 2020 PAB Meeting, the Performance Assurance Framework (PAF) Review provided recommendations to the TAPAP technique ([PAB233/11](#)), including a TAPAP Audit of the actions taken by Suppliers regarding appointed Supplier Agents' BSC Audit Issues.

This TAPAP will:

- Provide Assurance of Suppliers' management of their individual Supplier Hub; and
- Assess the appropriateness and efficacy of actions taken by Suppliers in order to address BSC Audit Issues raised against their appointed Supplier Agents.

This check is not being undertaken with a view to raising specific non-compliances against Suppliers for failing to take action, but will instead feed into Elexon's view of Risk, by improving visibility of which Risk areas Suppliers are putting pressure on Supplier Agents to address and which are being de-prioritised.

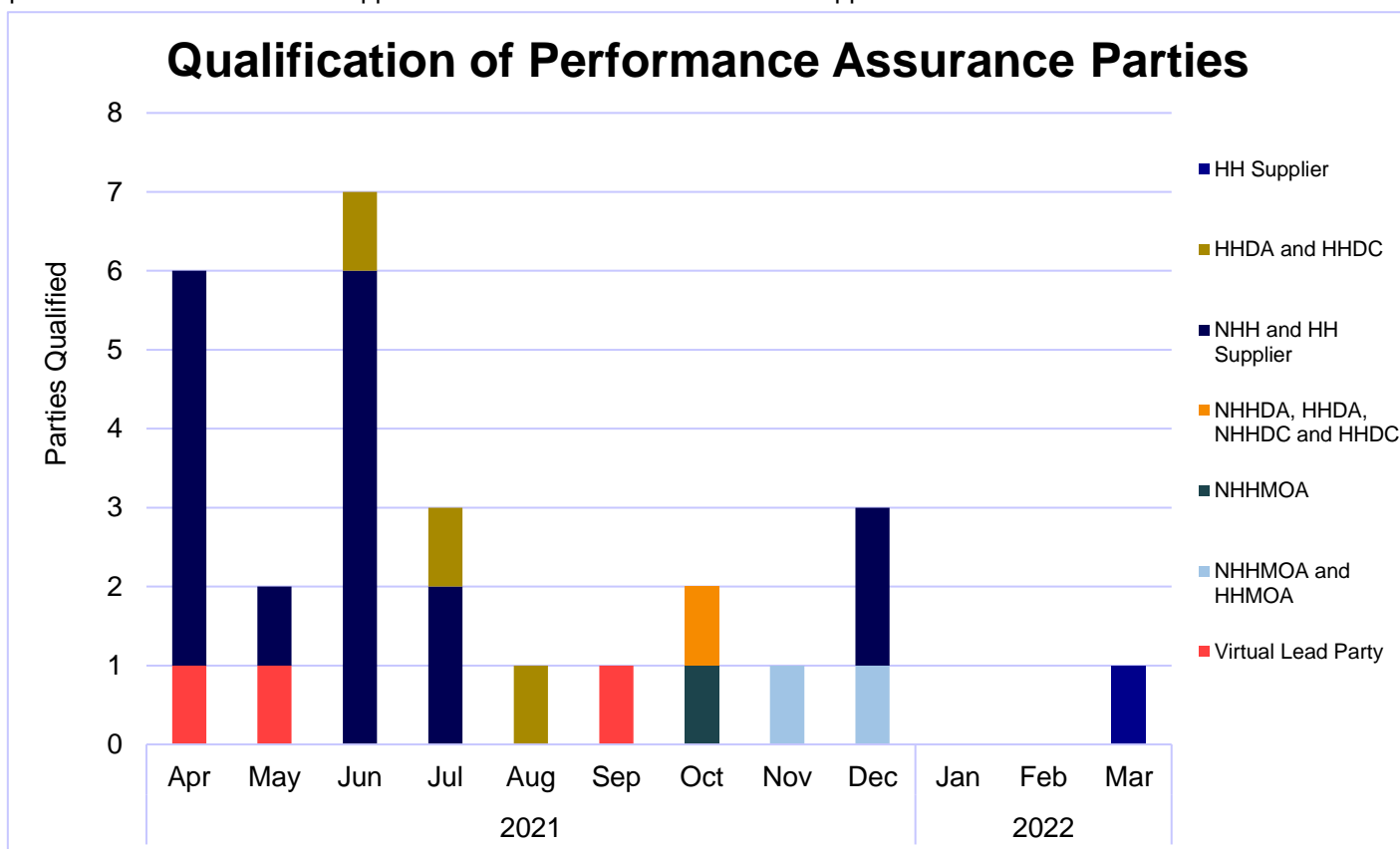
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The check was performed as a remote audit and did not contain an MPAN sample, but process questions for Suppliers around the management of its appointed Agents. The checks are completed for the 2021/22 PAOP. The findings will be reported to the PAB in April 2022.

Qualification

The Qualification process aims to provide assurance that an Applicant's systems and processes have been developed in line with BSC requirements and good practice. Qualification also helps check that systems won't pose a risk to Settlement.

Elexon processed 24 Qualifications in the first three quarters of the 2021/22 PAOP. In the fourth quarter, Elexon has processed and the PAB has approved the Qualifications of one HH Supplier.



Plans for Next Quarter

Focus on Improving Assurance in the CVA Market

Elexon has committed to providing detailed and regular updates to the market on any issues as they arise, within the CVA Market. In Quarter 1 of the 2022/23 PAOP, Elexon will focus on the CVA risks and consider further ways to monitor and mitigate error in the market.

Addressing Market Issues identified within the BSC Audit

Elexon will be presenting the potential new Market Issues as identified through the BSC Audit to the PAB in the first Quarter of the 2022/23 PAOP.