

PAB200/09 ATTACHMENT C – ELEXON AND INDUSTRY RECCOMENDATIONS FOR BSC AUDIT APPROACH

1. Purpose

- 1.1 This attachment sets out feedback related to the approach taken to the operation of BSC Audit testing and investigation received through the engagement ELEXON undertook with respect to this review of the BSC Audit Scope Document and BSC Audit assurance arrangements. This feedback has been collated for continued consideration by ELEXON and the BSC Auditor and will be reviewed in order to derive potential improvements to the approach taken to the operation of the BSC Audit.

2. General

Scripts and DTN Testing

- 2.1 ELEXON has received feedback from the Software Technical Advisory Group (STAG) that some of the scripts provided by KPMG for Supplier Agents to run do not constrain the date range for which data is extracted. The data is subsequently filtered to exclude data that falls outside of the BSC Audit period. This ties into feedback from Data Aggregator's (DA's) received during the 2016/17 BSC Audit spot checks that one of the scripts from the BSC Auditor could not be run as it took too long on the DA's system.
- 2.2 In order to try and address the feedback received with respect to invalid exceptions that are being on occasion identified through the BSC Audit DTN testing, and determine potential improvements in DTN testing, ELEXON proposes that test scripts and DTN testing will be reviewed by subject matter experts (SMEs) within ELEXON's Design and Delivery department. In this way ELEXON will be able to contribute to the development and improvement of the approach taken to testing through the BSC Audit.

Review of Data Flow Backlogs

- 2.3 In its present form the BSC Auditor's testing looks at data flow backlogs in the context of aggregate totals. It has been proposed by SMEs within ELEXON that in the majority of cases it would be more appropriate to group data flows or exceptions by MSID. Doing so will give a view of the number of unique sites to which the data flows or exceptions relate. This would provide a better view as to the associated risk (a greater number of MSID's will usually indicate higher aggregate consumption, the Measurement Class needing to be considered where appropriate).

Commissioning

- 2.4 A Party proposed that if the BSC Auditor was able to issue samples relating to Commissioning ahead of site visits it might save time spent on site by allowing Parties more time to determine whether or not relevant Commissioning records are held and to collate evidence demonstrating that all reasonable steps have been taken to comply with P283¹. This would ensure delivering greater efficiency during site work.
- 2.5 A PAB member suggested that where possible samples should be issued in advance. However, it has been noted that such an approach could result in parties just fixing the data they know will be audited instead of fixing their process so that all data is compliant.
- 2.6 ELEXON agrees with the approach proposed. Noting that the dates of actions taken by the PAP should be considered in order to mitigate the risk noted by the PAB member with respect to incentivising corrective action only with respect to the sample to be audited.

¹ Reinforcing the Commissioning of Metering Equipment Processes

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End to End or 'Meter to Bank' Testing of MSID Sample

- 2.7 The PAB member noted that such an approach would better enable the identification of failure points and mitigate the expectation that other Parties should act as a safety net, policing and chasing missing actions on an ongoing basis. Such an approach might prove more informative by presenting a review of the end-to-end process so time lags, dependencies and impacts can be better understood.
- 2.8 It is ELEXON's view that this piece of work could be more easily and usefully undertaken against a small sample of MSIDs directly by ELEXON rather than through the BSC Audit. Depending on the outcome and success of this piece of work it maybe that this could subsequently feed into the BSC Audit Approach.
- 2.9 A PAB member noted that they agreed this piece of work would not sit appropriately within BSC Audit. It was noted that TAPAP would likely be more appropriate.

Controls Based Approach to Unchanged Systems/Automated Processes

- 2.10 A Party has proposed that where a process is reviewed year on year and the system and methodology remain static (such as may often be the case with the calculation of EAC, AA, deemed advances or the application of profile information), the BSC Auditor could simply confirm that the system and methodology hadn't changed since the last audit rather than undertaking a full sample of testing each year.
- 2.11 The BSC Auditor has noted that it would need to log the version of the system being used to ensure that no changes were made. Additionally it would need to be able to gain comfort over the general IT control environment and the control environment governing the relevant process in order to gain assurance that changes made to another system, data source or process would not be made without consideration being given to the potential impact on the system/process being audited.
- 2.12 The BSC Auditor was of a view that it had originally proposed taking a more controls based approach to audit when it originally bid for the BSC Audit contract. This controls based approach was not supported by the PAB. However, it was noted through the engagement undertaken as part of this review that some industry stakeholders and SMEs are in support of a more controls based approach being taken with respect to the BSC Audit.
- 2.13 It is ELEXON's view that if such an approach were to be taken (which might not be possible under the BSC Audit assurance arrangements) it could not be based on a PAPs say so and would instead need some robust means of confirmation that no changes had been made which might impact the process or system to be audited. ELEXON also notes that such an approach would only be appropriate where a system or process is mostly automated and requires little or no manual/human intervention.

Review of BSCP Obligations in respect to PC 5 to 8 Sites

- 2.14 A Party noted that the BSC Auditor should consider where obligations within the HH BSCPs do and do not apply to Profile Class (PC) five to eight sites newly migrated into the HH market.
- 2.15 ELEXON notes that this would be a useful piece of work, mitigating potential conflicts upon testing and raising Audit Issues with respect to these sites.

Log of Issues Raised by OSMs and Performance Assurance Technique (PAT) Owners to Feed into BSC Audit Entity Selection

- 2.16 Specific issues raised by Operations Support Managers (OSMs) and PAT owners should be logged throughout the year, with the BSC Auditor's testing adjusted through the entity selection process to capture these specific issues.

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2.17 ELEXON has now implemented such a log which will be updated regularly and passed to the BSC Auditor ahead of the entity selection process. The BSC Auditor will then feedback to ELEXON indicating where testing has been introduced to address the specific issues raised.

Materiality of D0095's to feed into Entity Selection

- 2.18 A PAB member has proposed that ELEXON and the BSC Auditor investigate whether or not it might be possible to include the quantifiable materiality of [D0095](#)² exceptions/backlogs as a consideration within the entity selection process. This would facilitate focusing greater audit intensity on Party Agents contributing the greatest quantified Materiality.
- 2.19 The BSC Auditor has noted that most of the D0095 issues would fall on Suppliers, which are always tested at full scope. Where NHHDC was affected, the D0095 testing is under all scopes so would be tested regardless of intensity.
- 2.20 Using it as an indicator of potential issues may be possible for entity selection for NHHDC. The BSC Auditor noted that this would require a breakdown of D0095s by NHHDC. The BSC Auditor advised it receives these flows direct from agents as part of data requests but that if it was being used for entity selection, a central extract should be considered in order to ensure consistency.
- 2.21 ELEXON will investigate if it is able to provide this breakdown of D0095s.

EFR Exit Process

- 2.22 ELEXON proposes that audited PAPs should have the opportunity to close Audit Issues being monitored through EFR on an ad-hoc basis by undertaking exit checks operated by ELEXON rather than waiting for the next BSC Audit cycle.
- 2.23 ELEXON suggests that Audit Issues in EFR should be treated in the same way as issues in EFR identified through TAPAP or other means (through exit checks undertaken by ELEXON). This would mean that fewer full intensity audits would be required. Instead of undertaking a medium or full intensity audit for every PAP with a number of Medium or High Audit Issues being addressed through EFR, the audit entity selection process could focus on proportionality and rotation. This would result in reducing the cost to industry both in terms of BSC Audit invoicing and internal resource. PAPs would also have the opportunity to close BSC Audit issues at the point they believe they have been resolved rather than having to wait for the next BSC Audit cycle. This process change would make the EFR exit process more efficient.
- 2.24 ELEXON notes the following key considerations with respect to the implementation of such an approach:
- i) Ensuring ELEXON's appraisal of the issue during exit checks is consistent with that of the independent BSC Auditor;
 - ii) Ensuring as co-ordinated an approach as possible; and
 - iii) The number of checks that would need to be undertaken, and what impact would this have on resourcing at ELEXON.
- 2.25 ELEXON would ensure to be mindful of the approach the auditor took to raising the issue and follow an equivalent methodology when undertaking the relevant exit check. ELEXON could work directly from the

² Non Half Hourly Data Aggregation Exception Report

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relevant BSC Auditor work paper and emulate the sampling or DTN testing methodology which identified the issue to keep things consistent.

- 2.26 ELEXON notes it would need to do some investigation/analysis to come up with a figure as to the number of issues. ELEXON envisages that it should be able to procure this from the BSC Auditor as their entity selection master spreadsheet should indicate where they have selected a PAP for audit or upgraded them to full intensity audit on the basis that they have outstanding Medium or High Audit Issues open. ELEXON considers that even if an additional FTE was to be procured to manage the additional exit checks, it would still be a cost effective shift in approach.
- 2.27 In terms of the format of the checks ELEXON would want to manage these remotely wherever possible, either through use of DTN data or data submitted by PAPs. However, it might be that in some cases ELEXON would need to attend sites to undertake these exit checks. The consistency of approach could be addressed through ELEXON ensuring testing undertaking is equivalent to that which would have been undertaken by the BSC Auditor.
- 2.28 ELEXON consulted the BSC Auditor on this potential process change relating to closing of the Audit issues. The BSC Auditor has advised that in most cases where a PAP has been upgraded to full intensity audit where they wouldn't otherwise have been, this would most frequently be done in order to clear Low rated Audit Issues. As such the overlap with instances where the PAP is in EFR for the same issue would be minimal.
- 2.29 The BSC Auditor has also noted that it would not be able to accept ELEXON's undertaking of an exit check as criteria for its closing an Audit Issue. The BSC Auditor is happy for ELEXON to manage the EFR exit process as it views it as sitting outside of the BSC Audit. This means that the open Audit Issue that triggered EFR would remain open despite a successful EFR exit check result. This would create a discrepancy between open High and Medium Audit Issues and open EFR plans, and dramatically limit the benefit in terms of cost/resource.
- 2.30 As such ELEXON is going to table this consideration for the time being as it does not appear that such a change would be justifiable in terms of the benefit presented.

Aggregate Volume of Data Flows to Steer Audit Intensity

- 2.31 A Party Agent queried if the total volumes of data flows could be considered when determining the intensity of testing. This could be done through the DTN in order to typify flow volumes for each role. An example given is that a Supplier Agent operating as a NHH and HH DC and MOA may receive only around ten D0150 flows from LDSO's each year while they will receive tens of thousands of data flows for other processes which are scrutinized at the same level by the BSC Audit.

Better Co-ordination between EFR and BSC Audit

- 2.32 A Party Agent raised the proposal that where possible BSC Audit testing could be reduced or removed where EFR is already in place. This will be considered on a case by case basis.
- 2.33 It is ELEXON's view that conceptually the idea that time spent undertaking BSC Audit activity where a PAP is in EFR for the same issue might be a duplication (and occasionally a waste) of effort is a valid one. ELEXON agrees with this view in principle and will consider it going forward, likely through a review of existing EFR plans over the next year in order to identify opportunity for reduced or re-directed BSC Audit work. ELEXON notes however that in the case of P283 the BSC Auditor has identified non-compliances relating to P283 and even sets of data which were not reported by the audited PAP through their EFR monitoring. As such in the case of P283 ELEXON has seen value in undertaking the audit work in addition to EFR activity, as in the case

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of P283 ELEXON is reliant on PAPs own reporting in order to monitor their compliance. ELEXON is confident that, in cases where EFR is monitored through DTN data, it would be possible to reduce or remove audit testing (contingent on the assurance arrangements (and associated standard if any) allowing for this).

- 2.34 The BSC Auditor noted, in relation to this proposal, that in principle it could look into this, but it would have to be careful that all risks were being picked up as part of the EFR plan (e.g. the EFR may cover a specific portion of the process, which does not address all potential failure points in that process that the BSC Auditor samples). In addition, as with other areas the BSC Auditor would need to be cautious with the quantification approach. Careful consideration would be required over how the BSC Auditor achieved comfort with the data provided by parties (potentially could use DTN in some cases to validate) to ensure the correct estimate for quantification impact was calculated.

Market Issues

- 2.35 Market Issues should be quantified, with evidence provided to indicate why each has been raised as a Market Issue. ELEXON plans to work with the BSC Auditor in order to try and achieve this.

Shift in Focus from NHH to HH

- 2.36 The Supplier audit is currently focused on NHH (with NHH Supplier audits involving more testing and a review of a greater number of processes). With the growth of the HH market (due to the rolling out of mandatory HH settlement and the anticipated growth of elective HH) it seems appropriate that more focus is put on HH as the energy volume within HH is increasing. An example of this being that testing is done around D0004s³ but there is not an equivalent piece of testing undertaken for HH to investigate where Suppliers are not receiving HH reads, the root causes for such failure and actions taken by Suppliers to mitigate the associated risk.

3. Meter Operation

Operational controls in relation to Meter Technical Details changes and the validation of changed Meter Technical Details provided to Suppliers and Data Collectors

- 3.1 ELEXON notes that it already undertakes monitoring of the transfer and timeliness of MTDs through its PARMs reporting. ELEXON proposes that BSC Audit activity with respect to the timeliness and transfer of MTDs could be targeted based on PAP performance against the relevant PARMs serials:
- NM12 – The timeliness of NHH MTDs (SR0024)
 - HM12 – The timeliness of HH MTDS (SR0025)
- 3.2 Targeting BSC Audit testing around the transfer of MTDs in this way would ensure that testing is undertaken at participants proportionate to their aggregate performance against these Settlement Risks.
- 3.3 The BSC Auditor noted that it would only be able to rely on PARMs in this manner (in order to steer testing undertaken against the transfer of MTDs) under assurance arrangements whereby the BSC Audit is split out into multiple opinions. Under the existing arrangements this approach would require too many caveats with respect to what is covered by the BSC Audit opinion.

³ Notification of Failure to Obtain Reading

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CVA MOA Entity Selection to be based on Aggregate Consumption

- 3.4 ELEXON is presently investigating the possibility of providing the BSC Auditor with aggregated energy volumes for all of the sites each CVA Agent is appointed to. This will allow the BSC Auditor to consider this factor in its entity selection process and ensure that BSC Audit intensity reflects the proportionate risk to Settlement each CVA Agent poses based on the consumption volumes of the sites they are appointed for.

4. Licensed Distribution System Operation

Disconnection of Metering Systems

- 4.1 A PAB member suggested that the [D0132](#)⁴ flow is seldom used and thus questioned the value in its inclusion in BSC Auditor testing.
- 4.2 The BSC Auditor noted that D0132 flows are only tested at LDSO, for MOA it tests the [D0142](#)⁵ only as a sample. At MOA, the BSC Auditor does ask for backlogs of data on all received flows- so D0132s may be part of this data (although the BSC Auditor noted that it does not sample from this, instead only looking for areas of concern where large volumes of flows are not being processed).
- 4.3 A PAB member has agreed that testing of D0132's at LDSO's should be removed.
- 4.4 ELEXON's view is that testing of D0132 flows should be replaced with investigation into LDSO's disconnections process to ensure it is compliant with BSCP515, 3.7 'Disconnection of a SVA Metering System', and that there does not exist material risk to Settlement in the operation of this process within the LDSO being audited.

Commissioning

- 4.5 An LDSO commented that it is currently subject to multiple audits and queried whether there could be any consolidation of the tests undertaken for TAA, the TAM and the BSC as they appear to be looking at the same things, i.e. in all cases there is a random selection of MPANs from each licence area and the audited entity is asked to demonstrate that it has provided the MOA with a copy of the CT/VT test certificates, a copy of the CT/VT commissioning results, and provide evidence that it has completed this within the requisite timescales. In other words, the LDSO is essentially having the same audit carried out three times over.
- 4.6 Having reviewed this query with the TAA analyst, ELEXON can confirm that the TAA presently only looks at the Commissioning process from a MOA's perspective and will not directly audit LDSO's, nor can it raise non-compliances against LDSO's (though this is being investigated to determine the appropriateness of this arrangement). The BSC Audit on the other hand is looking more at the back office processes associated with Commissioning (while the TAA looks at the 'front office' processes). The BSC Auditor does not make an assessment of the quality or accuracy of Commissioning records which the TAA does. As such while there may regrettably be some overlap within the TAA and BSC Auditor checks, neither could provide assurance over both back and front office on their own. It is the intention that they are looking at different aspects of P283 compliance.
- 4.7 ELEXON will look into the specifics of the testing done by both to see if there is any overlap that could be reduced.

⁴ Details of Disconnection of Supply.

⁵ Request is being made and information provided to allow removal, replacement or installation of a meter.

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Quality of Information Following Reports that a Site has been Demolished

- 4.8 ELEXON will investigate whether this could be incorporated into the testing already undertaken around de-energisation and disconnection.
- 4.9 ELEXON notes that TAMEG might have undertaken a piece of analysis/investigation which might help to substantiate the risk associated with this issue. ELEXON will review this analysis in order to determine whether or not the associated risk would warrant further monitoring through the BSC Audit. ELEXON also notes that it might be outside of the BSC Auditor's facility to provide assurance in this area, as on site work such as that undertaken by the TAA, might be more appropriate. If this is determined to be the case, ELEXON will feed this proposal into the TAA for consideration for inclusion in the TAA scope.
- 4.10 This was further discussed with the TAMEG at the July meeting. A representative from an LDSO agreed to look into examples of sites registered as de-energised and report to TAMEG in October whether any were actually energised.
- 4.11 ELEXON will review the analysis undertaken by TAMEG in order to determine the appropriateness of inclusion within the BSC Audit.

5. Supplier

Review of D0004 Backlogs

- 5.1 A BSC Party has proposed that D0004 backlogs should only be considered for Metering Systems where a read has not been received for ten months.
- 5.2 The Supplier has noted that there is no value in looking at D0004 data flows where reads are being received regularly as these instances are unlikely to have an impact on Settlement accuracy as there is a good chance that a read will be received in the following month. The Supplier has proposed that targeting the BSC Auditor's testing with respect to D0004's which are received for Metering Systems that have not been read successfully for a number of months will add greater value in terms of mitigating risk to Settlement.
- 5.3 The BSC Auditor noted that it may want to consider if other types of D0004s could pose additional risk e.g. Long Term Vacant (LTV) notification, safety notifications, etc.
- 5.4 The BSC Auditor noted that some parties with good reporting capabilities will split out their D0004 backlogs as part of their normal BAU processes. Usually this would be done by SVCC⁶ codes and the associated prioritization approach. Where this is the case, the BSC Auditor is able to look at this data rather than just an overall backlog volume figure. This gives greater insights into whether there is a growing risk with the D0004 population not being worked in a timely manner. However, many smaller Suppliers however are not able to provide data at such granular level. The BSC Auditor noted that the costs on 40+ parties to write new scripts would need to be weighed against the benefits such an approach would present. If parties can supply the data at a more granular level, then the testing would be more accurate from the Party's and the BSC Auditors perspective.
- 5.5 ELEXON proposes that where parties are able to provide this more granular view then the backlogs should be considered with these additional criteria in mind. However where parties are not able to provide this more granular view then overall backlogs could continue to be considered.

⁶ Site Visit Check Codes

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For more information, please contact:

Jason Jackson, Compliance Analyst

Jason.Jackson@elexon.co.uk

020 7380 4187