PUBLIC

Technical Assurance of Performance Assurance Parties

Missing Meter Technical Details (MTDs)



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FINDINGS REPORT

This report outlines the findings from the Technical Assurance audit ELEXON undertook on the transfer of Meter Technical Details by Performance Assurance Parties (PAPs).

1. Background

- 1.1 February 2017 Performance Assurance Board (PAB) Meeting (PAB193/24)
- 1.2 ELEXON presented the PAB strategy update in February 2017, which provided analysis of the prevalence of missing MTDs throughout Market. PAB requested Data Transfer Network (DTN) analysis to be provided in June 2017.
- 1.3 June 2017 PAB Meeting (PAB197/14)
- 1.4 ELEXON provided the PAB with the DTN analysis undertaken, concluding that MTD transfer failures are most prevalent in Meter Operator Agent (MOA) to MOA MTD transfer. Whilst analysis undertaken by ELEXON did not indicate a settlement impacting, industry-wide issue, the analysis portrayed wide-scale non-compliance by a subset of PAPs.

2. Issues with transfer of Meter Technical Details

- 2.1 ELEXON provided a breakdown of the number of instances for each category of missing MTDs in the Half Hourly (HH) and Non-Half Hourly (NHH) market. Based on this analysis, the PAB agreed that ELEXON should further investigate the following most prevalent categories of missing MTDs:
 - i) **No D148¹ (HH and NHH market) -** The expected cause was that the new Supplier did not provide the new MOA with the details of the previously appointed MOA.
 - ii) **New MOA no D170² (NHH Market only) -** The expected cause was that the new MOA did not request MTDs from the old MOA as required on a change of MOA.
 - iii) **Old MOA (held MTDs HH and NHH market) -** The expected cause was the old MOA did not send MTDs despite evidence that it held a set during its appointment.
 - iv) **Old MOA (unknown if held MTDs HH and NHH market) -** The expected cause was that the old MOA did not send MTDs, but it did not receive a set during its appointment.

3. Scope of Technical Assurance Audit

3.1 **PAP Selection**

- 3.2 ELEXON used DTN data to produce a breakdown of each PAP's contribution to each category of missing MTDs. Based on this breakdown ELEXON proposed that PAPs were checked for each category of missing MTDs as follows:
 - No D148 Four HH Supplier MPIDs, Six NHH Supplier MPIDs
 - New MOA no D170 Four NHHMOA MPIDs



¹ Notification of Change to Other Parties

² Request for Metering System Related Details

- Old MOA (held MTDs) Four HHMOA MPIDs, Five NHHMOA MPIDs
- o Old MOA (unknown) Four HHMOA MPIDs, Five NHHMOA MPIDs
- 3.3 Preliminary analysis undertaken in <u>PAB197/14</u> highlighted PAPs as candidates for TAPAP selection. The PAPs selected have been identified based on the number and percentages of instances in each category of missing MTDs.
- 3.4 **Audit Approach**
- 3.5 The TAPAP Audit was conducted in line with BSCP535³. A random sample of MSIDs per missing MTD category was audited on site at each selected PAP. ELEXON walked through the Change of MOA process and concurrent Change of Supplier (CoS) and Change of MOA events for these MSIDs in line with BSCP514⁴ to determine compliance, as well as assessing whether good practice and controls around the processes are in place.



³ BSCP535 'Technical Assurance'

⁴ BSCP514 'SVA Meter Operations for Metering System Registered in SMRS'

4. Technical Summary

Overview of Findings

Our audit site work covered 11 Performance Assurance Parties (PAPs) and 22 Market Participant Ids (MPIDs).

With non-compliances identified across all MPIDs audited, our site work has supported the analysis originally undertaken which drove the undertaking of these checks. Our findings indicated widespread non-compliance with the processes assessed with respect to a small number of PAPs. The key non-compliances identified across each role audited are detailed below in 'Section 5' of this report.

We have found that while the non-compliances identified across each role are fairly consistent and in line with the categories highlighted by ELEXON's initial analysis, there exist a wide range of specific root causes contributing to these non-compliances.

The root causes can broadly be grouped into:

System issues;

Issues with staff training;

Poorly documented processes; and

A lack of robust controls and monitoring.

Our site work has also highlighted concerns around the Change of Measurement Class (CoMC) processes set out in BSCP514 and in particular its impacts on the transfer of flows necessary to facilitate the timely transfer of MTDs and processing of agent appointments.

ELEXON encountered an alternate interpretation of BSCP514 processes relating to agent de-appointment where an objection has been received terminating a new registration during the CoS process (detailed within Section 6 of this report).

While subject matter experts within ELEXON agree on the intention of the Code, this concern has been highlighted as a number of PAPs have be found to hold this alternate interpretation of the Code.

Impact on Industry Processes

Failure in the timely transfer of D0148⁵, D0155⁶ and D0151⁷ flows by Suppliers as part of Change of Agent and CoS processes can lead to confusion amongst agents. While this is a concern, in the context of the other known issues within the market it is unlikely to be one of the biggest direct contributors to poor Settlement performance and inaccurate data. However this confusion leads to inefficiency in how these processes are operated. These failures also appear to be one of the key factors contributing to the non-compliances we have seen through our audits of MOAs.

Failure in responding to D0170s or transferring MTDs by agents contributes to the risk that Meter readings are not being collected or that the readings processed are invalid.

Across the MSID sample audited (268 MSIDs)⁷, 85%⁸ were settling on actual readings based on additional analysis undertaken by ELEXON. This indicates that failures with respect to the processes audited (even where these non-compliances have been validated through on-site testing) do not prevent the collection and processing of readings in the majority of instances. This is in-line with ELEXON's findings where it compared the SR0024⁹ and SR0025¹⁰ Business Unit Settlement Risk Ratings (BUSRRs) for Suppliers to those for SR0074¹¹ and SR0081¹² which report on NHH and HH Settlement performance respectively. In this instance, the results highlighted that whilst there is some correlation between

¹² The risk that HHDCs do not process valid HH readings resulting in estimated data being entered into Settlement.



⁵ Notification of Change to Other Parties

⁶ Notification of Meter Operator or Data Collector Appointment and Terms

⁷ Termination of Appointment or Contract by Supplier

⁸ Actual readings received over the past 14 months. Vertically integrated Suppliers and agents have been excluded.

⁹ The risk that NHHMOAs do not provide Meter Technical Details to the correct NHHDCs resulting in Meter readings not being collected.

¹⁰ The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings not being collected.

¹¹ The risk that NHHDCs do not collect and / or enter valid Meter readings resulting in old/default data entering Settlement.

the missing MTDs and poor Settlement performance, based purely on the BUSRRs this was by no means conclusive.

Where MTDs and agent details are not successfully transferred fully and accurately there exists the risk that the DC may hold old or invalid MTDs. This can result in incorrect readings being processed into Settlement which can in some instances result in significant Trading Disputes. ELEXON notes, that at least with respect to the HH market the Technical Assurance Agent (TAA) identified no Category 1 non-compliances where the root cause was that the DC held invalid or old MTDs in 2016/17. There have been instances identified in 2017/18, however these constituted only 6 out of the 42 Category 1 non-compliances identified. It is anticipated that upon further investigation it may be found that some or all of these six instances resulted from the DC sending the incorrect MTDs to the TAA while using the correct MTDs for Settlement. This was the case with the all of the instances identified in 2016/17. This indicates that, while this risk exists, it is not a risk which frequently materialises.

While MOA to MOA transfer of MTDs appears not to have a significant impact on Settlement it does increase the risk of the DC holding incorrect MTDs or not holding MTDs at all.

ELEXON notes that the sub-100kw market is performing poorly in terms of Settlement and that this same group of MSIDs also performs poorly in terms of the transfer of MTDs (MOA to MOA and MOA to DC) which might indicate that there is an impact and that the associated risks are being realised to some extent.

Part of the challenge is that under the existing risk register each of these risks is considered individually when the real risk is likely that the processes between Supplier, MOP and DC fall down. This process failure results in the DC not holding MTDs or not holding the correct MTDs. As we currently consider all of these relationships/processes to be separate risks we end up with a view that certain processes are lower risk because they are not the point at which the errors/non-compliances are having a direct impact on Settlement. It is therefore worth noting that even where a process is not the point of direct impact, errors/non-compliances in these processes may still very well be driving errors/non-compliances in those processes which DO have a direct impact on Settlement performance.

The table below sets out the output of analysis completed to ascertain indicative figures for actual read performance within each sample by role. A detailed explanation of the analysis is provided within Appendix B. Vertically integrated Suppliers and agents have been excluded as their figures may not be representative:

Role	MSID Sample Size (Exc. Vertically Integrated)	Number of MPIDs	Number of PAPs	Settling on Actual Reads by RF	% Settling on actual reads by RF
HH Supplier	80	4	3	66	82%
NHH Supplier	140 (80)	7	6	71	89%
нн моа	100 (50)	4	4	47	94%
NHH MOA	174 (58)	6	4	45	78%
Total	268	21	17	229	85%

'Pct. Settling on actual reads by RF' indicates actual readings processed by DC over the past 14 months as of 17 May 2018. A full breakdown of actual read performance by MPID and role across a number of date ranges is provided in Appendix B of this document and Attachment B (Confidential).



5. Audit Findings – Non-Compliances, Root Causes and Settlement Impact

- 5.1 The primary focus of the Technical Assurance audit was on the participants who undertook the processes where the compliance issues were noted, i.e. MOAs and Suppliers. Our site work confirmed the compliance issues identified through our analysis and we raised associated non-compliances at all seven Suppliers and all four MOAs audited. We made a number of observations where processes could be re-enforced and where non-compliances were the result of the actions of another participant.
- 5.2 Below is a summary of the non-compliances identified, their associated root causes and our initial assessment of their Settlement impact, broken down by role. At the time this report was published all 11 PAPs (covering 21 MPIDs) checked have agreed the findings within their reports.
- 5.3 The 'Ref' indicated within the tables below (e.g. 'HHS-A') are consistent across each role. There references are provided to link the non-compliances identified against each audited role with the associated root causes and the potential Settlement impact of each non-compliance. The Settlement impact has been assessed based on the nature of the process with which the non-compliance has been identified and the actual read performance analysis performed against each MPID's sample. Actual read performance statistics provided within Appendix B.

HH Supplier

5.4 **HH Supplier Non-Compliances**

Ref	Non-Compliances	MPIDs	
HHS-A	Not sending the D0148 'Notification of Change to Other Parties' flow following a successful Meter Operator Agent (MOA) appointment.	4	
	This is non-compliant with:		
	BSCP514 5.2.1.6 Change of HHMOA (No Change of Metering System or Change of Supplier); and		
	BSCP514 5.2.4.6 Concurrent Change of Supplier and HHMOA (No change to Metering System).		
HHS-B			
	This is non-compliant with:		
	BSCP514 5.2.1.4 Change of HHMOA (No Change of Metering System or Change of Supplier); and		
	BSCP514 5.2.4.4 Concurrent Change of Supplier and HHMOA (No change to Metering System).		
HHS-C	Not sending correct information within a D0155 flow 'Notification of Meter Operator or Data Collector Appointment and Terms'.		
	This is non-compliant with:		
	BSCP514, 5.2.4.1 Concurrent Change of Supplier and HHMOA (No change to Metering System).		
	BSCP514, 5.2.1.1 Change of HHMOA (No Change of Metering System or Change of Supplier)		



BSCP514, 5.2.1.6 Change of HHMOA (No Change of Metering System or Change of Supplier)

HH Supplier Root Causes 5.5

Ref	Root Cause	Category	MPIDs
HHS-A	Previous Supplier completed a Change of Measurement Class (CoMC) prior to the new Supplier completing its registration (as part of P2725). In these instances the previous Supplier did not send a D02056 to update Meter Point Administration Service (MPAS)	Incorrectly Processed CoMC	1
HHS-A	System issue resulting in the flow appearing to have been sent but not being generated. Manual workaround in place.	System Issue	1
HHS-A	MOA sent a rejection flow on the same day as an acceptance flow causing Supplier's system to process the rejection flow first and not process a D0148.	Flow Order System Issue	1
HHS-A	The D0148 did not reach the Data Transfer Network (DTN) so it was never sent to the recipient. Process is in place to capture these issues but for some reason this MPAN was not included in the exception reporting.	System Issue	1
HHS-A	Multiple incorrect MOA appointments so no D0148 sent, incorrect appointments also not backed out.	Multiple Appointments	1
HHS-A	Old agents with historic details were appointed, no D0148 was sent to get MTDs confirmed.	MTDs Already Held	1
HHS-A	Non-compliances resulted from processes being worked manually whereby no exception reporting appears to be in place to pick up errors.	Training / Staffing Issue	2
HHS-A	Worked item got stuck in system. Issue not widespread.	System Issue	1
HHS-B	Supplier did not send a D0151 to back out invalid appointments caused by the registration being terminated via a D0093 ¹³ . Supplier noted that when it receives a D0093 before it receives a D0011 ¹⁴ from the DC, Data Aggregator (DA) and MOA it can prevent the D0151 from being sent to the MOA. It will be managing the issue manually and a system change to address the issue will be implemented in autumn 2018.	D0093 Issue	1
HHS-B	Supplier did not send a D0151 to back out invalid appointments caused by an objection made by the incumbent Supplier during the change of supply process. Changes since made to processes for these types of sites. The standard procedure now is to wait for the objection window	CoS Objection	1



 $^{^{13}}$ D0093 – 'Advice to a New Supplier of a Change of Supply Registration Deletion' 14 D0011 – 'Agreement of Contractual Terms'

	to pass before appointing the new MOA. This will prevent any future invalid appointments where the change of supply will no longer go through.		
HHS-B	Multiple appointments in place not all appointments backed out as appropriate.	Multiple Appointments	1
HHS-C	Manual change of agent was processed. A D0155 was sent by a new starter but they unfortunately had incorrectly input MOA effective date and registration dates. Training has taken place to address any gaps in the knowledge for any staff that perform the process.	Training / Staffing Issue	1
HHS-C	The D0155 and D0148 contained different or incorrect registration dates so information contained in the flows and between the D0155 and D0148 did not match.	Flow Details Mismatch	1

5.6 **HH Supplier Settlement Impact**

5.7 Assumptions made based on the likely impact of the associated processes, number of instances of noncompliance and the actual read performance of the audited PAP's sample.

Ref			
	Low Risk to Settlement	Medium Risk to Settlement	High Risk Settlement Impact
HHS-A	1	3	0
HHS-B	2	0	0
HHS-C	0	1	0



NHH Supplier

5.9 **NHH Supplier Non-Compliances**

Ref	Non-Compliances	MPIDs
S-A	Not sending the D0148 'Notification of Change to Other Parties' flow following a successful Meter Operator Agent (MOA) appointment.	5
	This is non-compliant with:	
	BSCP514 6.2.4.6 Concurrent Change of Supplier and NHHMOA;	
	BSCP514, 6.2.4.7 Concurrent Change of Supplier and NHHMOA; and	
	BSCP514 6.2.1.7 Change of NHHMOA.	
S-B	Not sending the D0151 'Termination of appointment or contract by Supplier' flow following an incorrect appointment.	5
	This is non-compliant with:	
	BSCP514 5.2.1.4 Change of HHMOA (No Change of Metering System or Change of Supplier);	
	BSCP514, 6.2.1.4 Change of NHHMOA (No change of Metering System or Change of Supplier); and	
	BSCP514 5.2.4.4 Concurrent Change of Supplier and HHMOA (No change to Metering System).	
S-C	Sending a D0148 'Notification of Change to Other Parties' before notification of an accepted appointment (D0011).	1
	This is non-compliant with:	
	BSCP514, 6.2.4 Concurrent Change of Supplier and NHHMOA; and	
	BSCP514 6.2.1 Change of NHHMOA.	

5.10 NHH Supplier Root Causes

Ref	Root Cause	Category	MPIDs
S-A	System issue resulting in the flow appearing to have been sent but not being generated. Manual workaround in place.	System Issue	1
S-A	D0148 sent for a previous appointment of the same agent.	Multiple Appointments	2
S-A	Old agents with historic details were appointed, no D0148 was sent to get MTDs confirmed.	MTDs Already Held	1
S-A	Details required to send flow not correctly processed by system.	System Issue	1
S-A	Flows rejected due to errors with flows generated by a service provider. The Supplier has since changed its service provider and migrated its portfolio.	Flow Details Mismatch	1
S-A	D0148 was sent for a change of supply event which had been objected to.	CoS	1



	When the site was re-registered for the same effective date, no subsequent/new flows were sent for the new appointment.	Objection	
S-A	System sent a D0148 but it went to an incorrect MOA. Issue since rectified	System Issue	1
S-B	HH Supplier did not send a D0151 to back out invalid appointments caused by the registration being terminated via a D0093. Supplier noted that when it receives a D0093 before it receives a D0011 from the DC, Data Aggregator (DA) and MOA it can prevent the D0151 from being sent to the MOA. It will be managing the issue manually and a system change to address the issue will be implemented in autumn 2018.	D0093 Issue	1
S-B	Sample picked up an MPAN that had a different registration date to that of the MOA effective date in the appointment.	Flow Details Mismatch	1
S-B	Multiple appointments in place not all incorrect appointments backed out as appropriate.	Multiple Appointments	1
S-B	Multiple appointments in place not all appointments backed out as appropriate.	Multiple Appointments	1
S-B	Supplier did not send a D0151 to back out invalid appointments caused by an objection made by the incumbent Supplier during the change of supply process.	CoS Objection	1
S-C	D0148s were processed manually as the agent had requested that the D0155 and D0148 should be issued at the same time. Automated process controls now in place to prevent recurrence.	Training / Staffing Issue	1

5.11 NHH Supplier Settlement Impact

5.12 Assumptions made based on the likely impact of the associated processes, number of instances of noncompliance and the actual read performance of the audited PAP's sample.

Ref	Number of MPIDs			
	Low Risk to Settlement	Medium Risk to Settlement	High Risk Settlement Impact	
S-A	2	2	1	
S-B	2	3	0	
S-C	1	0	0	



HH Meter Operator Agents

5.14 HHMOA Non-Compliances

Ref	Non-Compliances	MPIDs
ННМ-А	Failure to send a D0268 'Half Hourly Meter Technical Details' following a D0170 'Request for Meter Technical Details' on a Change of HHMOA.	1
	This is non-compliant with:	
	BSCP514 5.2.1.8 (Change of Half Hourly Meter Operator Agent (HHMOA) with No Change of Metering System or Change of Supplier)	
ННМ-В	Failure to send a D0268 following a D0170 on a concurrent Change of Supplier and HHMOA.	
	This is non-compliant with:	
	BSCP514 5.2.4.8 (Concurrent Change of Supplier and HHMOA)	
ннм-с	Failure to send a D0268 'Half Hourly Meter Technical Details' following a D0170 'Request for Meter Technical Details' on a CoA.	1
	This is non-compliance with:	
	BSCP514 5.2.4.8, Footnote 13	
	This footnote states that when any D0170 has been received, if the Party is able to complete all of the required information in section 01A of the MTD flow, then the flow should be sent.	
HHM-D	Not sending Meter Technical Details within 5WD of a request to send Meter Technical Details.	3
	This is non-compliant with:	
	BSCP514 5.2.1.8 Change of HHMOA (No Change of Metering System or Change of Supplier) and	
	BSCP514 5.2.4.8 Concurrent Change of Supplier and HHMOA (No change to Metering System).	

5.15 HHMOA Root Causes

Ref	Root Cause	Category	MPIDs
ННМ-А	D0268 data flows not processed due to a training issue with staff.	Training / Staffing Issue	1
ННМ-А	A system error stopped the D0170 flows from being processes so a subsequent D0268 was not sent.	System Issue	1
ННМ-А	A contract was held directly with the customer to act as MOA. When the MOA was de-appointed by the Supplier it did not follow the CoA process as it believed it was still correctly appointed.	Customer Appointed Agent	1
ннм-а	A D0268 was not sent as the D0170 was deleted due to system errors.	System Issue	1



ННМ-А	MSIDs were not found in the HHMOA system due to system errors relating to a Change of Measurement Class (CoMC).	System Issue	1
ННМ-В	A D0170 was received via the MOAs online portal but was not transferred to its main system so a D0268 was not sent.	System Issue	1
ннм-в	The D0170 was received but was deleted before it could be processed so no D0268 was sent.	System Issue	1
ННМ-С	A D0268 was not sent when there was a concurrent CoS and CoA even though a D0170 was received.	System Issue	1
ННМ-С	A D0170 was received but a D0268 was not sent as a D0151 was not received.	Flow Order System Issue	1
HHM-D	The MOA's internal system had an issue where on receipt of a request to send MTDs, the system would issue these MTDs to the last known active MOA held in the system. Which would usually be the MOA of the previous appointment as opposed to the MOA (or Supplier) that had requested the MTDs. Subsequent requests for MTDs were not actioned.	System Issue	1
HHM-D	The internal system had an issue where it required the receipt and processing of a D0151 before sending MTDs on receipt of a request to send MTDs.	Flow Order System Issue	1
ННМ-D	MTDs had not been sent due to issues with incorrect de-appointments, where on re-appointment, the MTDs held in the system were not "reapplied" to the next active appointment meaning MTDs were not held against the MSID in the internal system. This meant that on future losses MTDs were not issued.	System Issue	1
HHM-D	A system error led to the system failing to create the D0268 because of a missing mandatory item.	Flow Details Mismatch	1
HHM-D	A system error caused MTDs to be sent using an incorrect Meter Point ID (MPID).	System Issue	1
HHM-D	The D0313 (Auxiliary Meter Technical Details) was missing following the Change of Measurement Class (CoMC) from NHH to HH, and so the system failed to create the D0268.	Incorrectly Processed CoMC	1
HHM-D	D0170 flows had been received although were not processed in the MOP system as the D0170 flow was held in a holding area. The holding area had not been reviewed and a significant number of flows were held within.	System Issue	1
HHM-D	HH MTDs were supplied to the new HHMOA, however these flows had been sent outside of the five working days timeframe.	System Issue	1
HHM-D	The outgoing HH MTDs had been sent out of the MOP system but subsequently failed gateway validation, and were therefore not transferred to the new HHMOA across the Data Transfer Network (DTN).	System Issue	1
HHM-D	HH MTDs had not been sent as the MOP system erroneously reported	System Issue	1



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	an exception noting that MTDs had not been received on MOA appointment. Further investigation the MTDs were located in the MOP system.		
HHM-D	Half Hourly Meter Technical Details had not been sent due to a system timing issue.	System Issue	1
HHM-D	The D0170 request for MTDs was not responded to.	System Issue	1

5.16 HHMOA Settlement Impact

5.17 Assumptions made based on the likely impact of the associated processes, number of instances of non-compliance and the actual read performance of the audited PAP's sample.

Ref	Ref Number of MPIDs Low Risk to Settlement Medium Risk to Settlement High Risk Settlement Impact					
ННМ-А	1	0	0			
ннм-в	1	0	0			
ннм-с	1	0	0			
HHM-D	2	1	0			



NHH Meter Operator Agents

5.19 NHH MOA Non-Compliances

Ref	Non-Compliances	MPIDs
M-A	Not sending a request for Meter Technical Details (MTDs) to the old NHHMOA via a D0170 'Request for Metering System Related Details' following a receipt of a D0148 'Notification of Change to other Parties'.	3
	This is non-compliant with:	
	BSCP514 6.2.4.8, Concurrent Change of Supplier and NHHMOA	
М-В	Not sending MTDs to the new NHHMOA within 5WD of receipt of a D0170 'Request for Metering System Related Details' from the new NHHMOA.	6
	This is non-compliant with:	
	BSCP514 6.2.1.9: Change of NHHMOA; and	
	BSCP514 6.2.4.9 Concurrent Change of Supplier and NHHMOA	

5.20 NHH MOA Root Causes

Ref	Root Cause	Category	MPIDs
M-A	NHHMOA did not request a set of MTDs from the old NHHMOA despite receiving a D0148 from the Supplier.	System Issue	1
М-А	Already held MTDs from a previous appointment so did not request the most recent set of details. MOA instead used the currently held information.	MTDs Already Held	2
M-A	Was the designated Meter Asset Manager (MAP) so believed to have held the current and correct details so did not sent a D0170 to validate the ones already maintained.	MTDs Already Held	1
M-A	D0170s were sent using incorrect MPID.	System	2
М-В		Issue	
M-A	Human error resulted in the D0170 not being sent.	Training / Staffing Issue	1
М-В	Did not send the new HHMOA a set of MTDs following receipt of a D0170 'Request for Metering System Related Details'.	System Issue	2
М-В	Advised that they had received the flows outlined in BSCP514 but in an incorrect order. For example the D0170 had been received prior to the de appointment flow (D0151 'Termination of Appointment or Contract by Supplier').	Flow Order System Issue	2
М-В	An account where it had previously needed manual intervention in order to	Training / Staffing	2



	set up the account correctly.	Issue	
М-В	'Implied flows' are used rather than sending flows through the Data Transfer Network (DTN).	System Issue	1
М-В	The offshore exceptions processes where exceptions were not processed correctly and/or in a timely fashion.	Training / Staffing Issue	2
М-В	The sending of de-energised D0150s to a new MOA appears problematic. This is because unless there is an MTD flow the system will not create one to send.	System Issue	1
М-В	One issue was identified as an engineer error. A Meter was incorrectly updated as 'not used'. In this situation the system will not send a required flow.	Training / Staffing Issue	1
М-В	MTDs were not sent for two MSIDs. This was an issue that arose during a system migration.	System Issue	1
М-В	Did not send MTDs because the Meter was not live. However, it should have sent MTDs as required in BSCP514 6.2.4.9.	Training / Staffing Issue	1
М-В	HHMOA said it did not have updated MTDs so it had none to send on.	Flow Order System Issue	1
М-В	For one MSID the system was unable to issue a blank MTD.	System Issue	1
М-В	D0170 flows had been received although were not processed in the MOP system as the D0170 flow was held in a holding area.	System Issue	1
М-В	A D0170 was received but because MOA did not hold complete MTDs and an associated meter serial number, therefore the MTDs were not sent.	Flow Order System Issue	1
М-В	Did not send the new HHMOA a set of MTDs following receipt of a D0170 'Request for Metering System Related Details'. For all of these non-compliant MSIDs, there had been some form of manual intervention. Any manual intervention it prevents any future automated processes from working.	System Issue	1
М-В	D0170 was received but because MOA did not hold complete Meter details, the MTDs were not sent. The MSIDs were also set up as 'de-energised' on the customer accounts within the 'CS'; system. MOA was unable to confirm if the system failed to send them because of it being a de-energise site or if there was another reason.	System Issue	1
М-В	The MOA's internal system had an issue where on receipt of a request to send MTDs, the system would issue these MTDs to the last known active MOA held in the system. Which would usually be the MOA of the previous appointment as opposed to the MOA (or Supplier) that had requested the MTDs. Subsequent requests for MTDs were not actioned.	System Issue	1



5.21 NHH MOA Settlement Impact

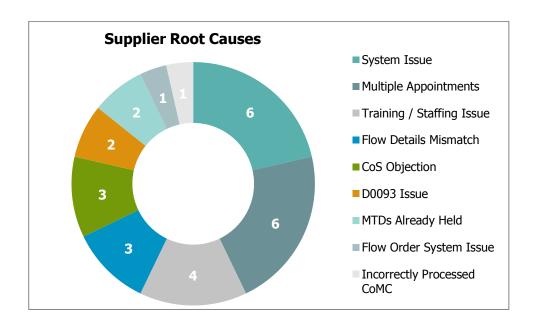
5.22 Assumptions made based on the likely impact of the associated processes, number of instances of non-compliance and the actual read performance of the audited PAP's sample.

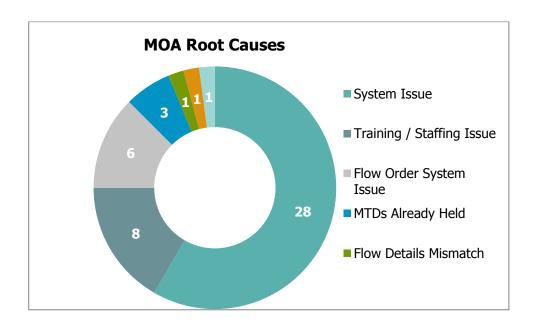
Ref	Number of MPIDs						
	Low Risk to Settlement Medium Risk to Settlement High Risk Settlement Impact						
M-A	1	2	0				
М-В	1	5	0				



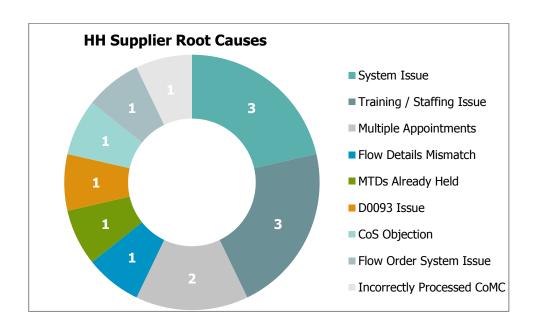
Commonality in Root Causes

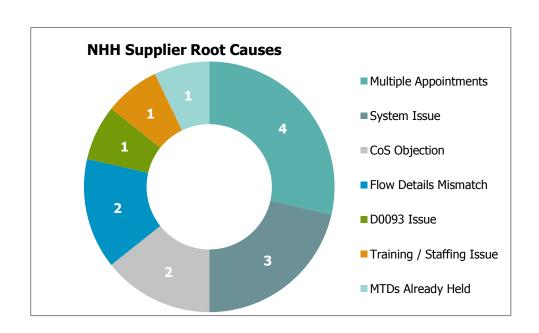
5.24 In order to provide insight into the key drivers of the non-compliances identified and, to help indicate the most appropriate/effective remedial activity, the root causes identified through this audit have been categorised.



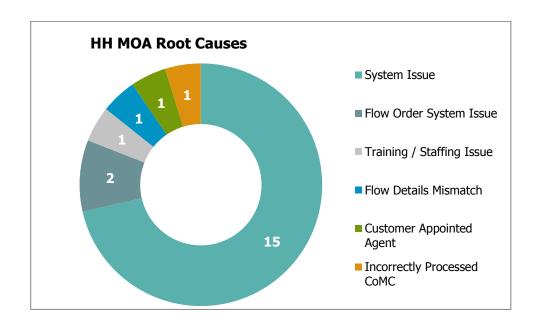


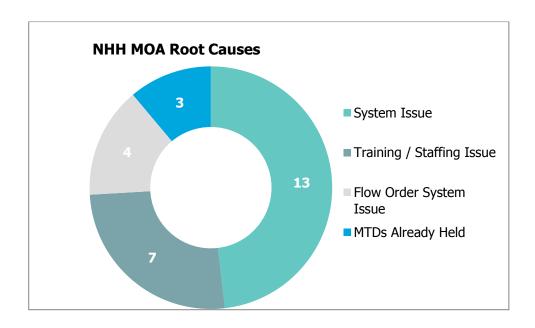














6. Audit Findings – Additional Considerations

6.1 In addition to the key non-compliances identified in 'Section 5' of this report, a number of other issues were highlighted through our investigation:

Concerns around Timescales in CoMC Processes

- 6.2 Issues raised around the timescales for D0148s being sent with respect to CoMC processes (BSCP514 7 'Interface and Timetable Information — Change of Measurement Class'). With respect to these processes the D0148 is only required to be sent 5 WD after the de-appointment of the NHH MOA has been issued via the D0151. This is to ensure that where the newly appointed HH MOA requests MTDs from the NHH MOA (via the D0170) the NHH MOA will process this request rather than rejecting it on the basis that it believes it is the current appointed agent.
- 6.3 This presents a challenge as the CoMC process set out in BSCP514 doesn't have a defined timescale for the issuing of the D0151 de-appointment flow as part of the CoMC process. This in turn may have an impact on the transfer of MTDs where the Supplier does not do so in a timely manner.
- 6.4 Additionally, while it appears that the intention of the CoMC process set out in BSCP514 is that Suppliers should appoint MOAs with Effective From Dates (EFDs) and Effective To Dates (ETDs) which do not overlap, this is not explicitly stated within the BSCP. This means that where Suppliers have processed CoMCs with overlapping appointment periods we cannot raise specific non-compliances.
- 6.5 BSC Section J 4.1.2 indicates that there should not be two agents of the same type appointed.

"The identity of each Party Agent for which a Party is responsible shall be determined by that Party save that:

- a. There must always be one and no more than one effective appointment of the relevant type of Party Agent (as applicable) at any time in relation to a particular Metering System in respect of any particular period..."
- 6.6 ELEXON has engaged with its legal department and confirmed that NHH and HH MOAs are not defined as separate roles. Both Section J and X of the Code define Meter Operator Agent as a role but make no reference to a HH or NHH variant as is defined for NHH and HH, DCs and DAs.
- 6.7 It appears that the intention of the Code (that there should not be overlapping appointments) is supported by the obligation above (Section J 4.1.2). However based on the existing CoMC process there are instances where a NHH and HH MOA will both be appointed at the same time (in many instances the Supplier then retrospectively de-appoints the old MOA from the date of the CoMC and the same date that the new MOA appointment was effective from). Provided the Supplier communicates its intentions and how it is operating this process clearly to its agents there should be limited impact on Settlement. However the risk exists that where Suppliers do not, two MOAs might be appointed without being aware of the other which could cause a number of issues, some of which might impact Settlement.

Differing Interpretations of BSCP514

- 6.8 A number of the PAPs checked through this TAPAP have noted they hold a different interpretation of the code with respect to a Supplier's obligation to send a D0151 de-appointment flow where an objection has been received subsequent to the D0155 appointment flows being sent.
- 6.9 These Suppliers have made the argument that the wording within BSCP514 indicates that it is the current Supplier's responsibility to send de-appointment flows and that the objection being received terminating their registration means that they are not the 'current Supplier'.



6.10 ELEXON's interpretation is that from the perspective of the agent, which has received the D0155 appointing them, the appointing Supplier is the current Supplier. ELEXON also notes that failing to de-appoint an agent where the Supplier has not taken the supply will result in multiple agents thinking they are appointed to the same MSID which contravenes Section J of the Code. Such instances could impact Settlement where an erroneously appointed agent undertakes a site visit or processes readings. ELEXON will consider how this obligation might be made clearer in order to address this differing interpretation.

Requirement to Send D0148 on Re-appointment/Re-registration Unclear

6.11 In instances where a NHH Supplier was found not to have sent a D0148 where initial appointments or registrations had been terminated and the appointment or registration had been re-processed, the Supplier noted that BSCP514 6.2.4.7 (below) is not sufficiently clear that for a re-appointment/re-registration attempt the appointment process should commence from the beginning again. ELEXON agrees that the BSC is not sufficiently clear on this matter and will consider the best way to improve clarity on this issue. The Supplier noted it would be happy to be engaged in any consequent review of the obligations.

REF	WHEN	ACTION	FROM	то	INFORMATION REQUIRED	METHOD
6.2.4.7	On appointment of NHHMOA and within 1 WD of 6.2.4.3 ¹⁵	Send notification of NHHDC and current NHHMOA.	New Supplier	New NHHMOA / NHHDC	D0148 Notification of Change to Other Parties. D0302 Notification of Customer Details.	Electronic or other method, as agreed.
6.2.4.8	Within 1 WD of 6.2.4.7	Request MTD.	New NHHMO A	Current NHHMOA	D0170 Request for Metering System Related Details.	Electronic or other method, as agreed.

¹⁵ Note that if there is also a concurrent Change of NHHDC and/or NHHDA, and the Supplier waits for all D0011 flows before sending a D0148, the New Supplier shall send the D0148 within 1 WD of the receipt of all applicable D0011 flows.



7. Recommended Next Steps

- 7.1 ELEXON's recommendations with respect to Error and Failure Resolution (EFR), along with the rationale for these recommendations are detailed within a confidential attachment to this report (Attachment B).
- 7.2 ELEXON has made its recommendations regarding Error and Failure Resolution (EFR) with a view to applying remedial activity proportionate to risk and impact.
- 7.3 As such EFR has been recommended to be applied to Performance Assurance Parties (PAPs) only where the non-compliances and/or root causes identified have been found to have a significant impact on Settlement performance or other PAPs' processes.
- 7.4 Following the TAPAP check, ELEXON recommends:
 - The that the net significance of the associated Settlement Risks (SR0024, SR0025, SR0033¹⁶ and SR0034¹⁷) should be considered by ELEXON's Risk Evaluation Work Group and reassessed as appropriate with any changes following the standard procedure for within period revisions. Any changes approved would be reflected in changes to the monitoring and reporting ELEXON completes against these Settlement Risks such as through the associated BUSRRs.
 - PAB should comment on the 'Additional Considerations' identified within this report.
 - Upon receipt of final Audit Issues lists for the 2017/08 BSC Audit ELEXON will review individual PAPs TAPAP findings against their BSC Audit, Audit Issues to validate alignment.
 - The findings of this TAPAP report and any additional work completed with respect to re-assessing the associated Settlement Risks will be considered in the context of the wider PAF Review.
 - No additional TAPAP audits of these specific processes are required at this time.
 - This on the basis of the issues and insight achieved through this tranche of audits; and on the basis
 of the coverage achieved over the PAPs contributing to these issues most significantly as validated
 by the confidential attachment to PAB200/15 MTD TAPAP Scope (see Attachment C to this paper).

¹⁷ Settlement Risk SR0034 - 'The risk that old HHMOAs do not send Meter Technical Details to the new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required'.



¹⁶ Settlement Risk SR0033 - 'The risk that old NHHMOAs do not send Meter Technical Details to the new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required'.

8. Appendices

Appendix A - Non-compliance Statistics by Role

Supplier:

Organisation	MPID	Role	Sample Size	No of MSIDs Not-compliant	% of Sample Non-compliant
		HH Su	ıpplier		
Organisation 1	MPID 1	HH Supplier	20	19	95%
Organisation 2	MPID 2	HH Supplier	20	11	55%
Organisation 2	MPID 3	HH Supplier	20	14	70%
Organisation 3	MPID 4	HH Supplier	20	20	100%
		NHH S	upplier		
Organisation 4	MPID 5	NHH Supplier	20	17	85%
Organisation 4	MPID 6	NHH Supplier	20	0	0%
Organisation 1	MPID 7	NHH Supplier	20	20	100%
Organisation 3	MPID 8	NHH Supplier	20	19	95%
Organisation 5	MPID 9	NHH Supplier	20	15	75%
Organisation 6	MPID 10	NHH Supplier	20	16	80%
Organisation 6	MPID 11	NHH Supplier	20	15	75%
Organisation 7	MPID 12	NHH Supplier	20	11	55%



V1.0

MOA:

Organisation	MPID	Role	Sample Size	No of MSIDs Not-compliant	% of Sample Non-compliant
		НН	MOA		
Organisation 1	MPID 1	ННМОА	25	12	48%
Organisation 2	MPID 3	НН МОА	25	22	88%
Organisation 3	MPID 4	ННМОА	25	20	80%
Organisation 4	MPID 5	ННМОА	25	9	36%
		NHH	MOA		
Organisation 1	MPID 2	Old NHHMOA	22	13	59%
Organisation 1	MPID 2	New NHHMOA	7	0	0%
Organisation 3	MPID 6	NHHMOA	29	22	76%
Organisation 3	MPID 7	NHHMOA	29	28	97%
Organisation 4	MPID 8	NHHMOA	29	26	90%
Organisation 4	MPID 9	NHHMOA	29	21	72%
Organisation 5	MPID 10	NHHMOA	29	27	93%



Appendix B – Actual Read Performance by MPID and Role

- 8.1 ELEXON has undertaken additional analysis following the audit site work completed in order to ascertain the Settlement impact of the non-compliances identified. This analysis has only looked at the MSIDs included within the sample checked during the on-site audit of each MPID covered by this audit.
- 8.2 This analysis was completed for indicative purposes and vertically integrated Suppliers and agents have been excluded as their figures are likely not representative due to flows not being passed over the DTN in all instances. The figures below were arrived at by completing analysis of D0010¹⁸ flows (for NHH MSIDs) and D0036¹⁹ flows (for HH MSIDs) sent over the DTN.

NHH read performance indicated by:

- D0010 flows sent by NHHDC;
- Read type = 'A','C','R' or 'X'; and
- BSC Validation Status = 'V'.

HH Read performance indicated by:

- D0036 flows sent by HHDC; and
- Actual/Estimated Indicator = `A'.
- 8.3 These scripts were run on 17 May 2018, looking for valid reads being processed by DCs for Settlement dates after:
 - 1 January 2018; and
 - 17 March 2017 (RF).
- 8.4 Looking across these date ranges is intended to provide a view of where MSIDs are not currently Settling and where they are impacting RF.
- 8.5 This analysis has indicates that while there may be some degree of Settlement impact as a result of the non-compliances identified the direct impact of these non-compliances appears to be limited.



PAB208/05

¹⁸ Meter Readings.

¹⁹ Validated Half Hourly Advances for Inclusion in Aggregated Supplier Matrix.

MOA Actual Read Performance

ННМОА

Organisation	MPID	MSID	Percentage Actual			
		Count	From 01/01/2018	From 17/03/2017 (RF)		
Organisation 1	MPID 1	25	100%	100%		
Organisation 2	MPID 2	25	84%	88%		
Organisation 3	MPID 3	25	80%	96%		
Organisation 4	MPID 4	25	84%	92%		
Grand total ²⁰		50	82%	94%		

NHHMOA

Organisation	MPID		Percentage Actual		
		Count	From 01/01/2018	From 17/03/2017 (RF)	
Organisation 1	MPID 1	29	62%	83%	
Organisation 2	MPID 2	29	55%	72%	
Organisation 2	MPID 3	29	66%	86%	
Organisation 3	MPID 4	29	52%	79%	
Organisation 3	MPID 5	29	72%	93%	
Organisation 4	MPID 6	29	34%	72%	
Grand total ²¹	•	58	48%	78%	



Excluding vertically integrated organisations.Excluding vertically integrated organisations.

Supplier Actual Read Performance

HH Supplier

Organisation	MPID	MSID	Percentage Actual	
		Count	From 01/01/2018	From 17/03/2017 (RF)
Organisation 1	MPID 1	20	80%	85%
Organisation 2	MPID 2	20	85%	90%
Organisation 3	MPID 3	20	85%	85%
Organisation 3	MPID 4	20	50%	70%
Grand total		80	75%	82%

NHH Supplier

Organisation	MPID	MSID Count	Percentage Actual	
			From 01/01/2018	From 17/03/2017 (RF)
Organisation 1	MPID 1	20	35%	80%
Organisation 2	MPID 2	20	45%	85%
Organisation 3	MPID 3	20	30%	45%
Organisation 3	MPID 4	20	55%	65%
Organisation 4	MPID 5	20	55%	95%
Organisation 5	MPID 6	20	55%	65%
Organisation 6	MPID 7	20	85%	95%
Grand total ²²	'	80	55%	89%



 $^{^{\}rm 22}$ Excluding vertically integrated organisations.

Appendix C - Associated Settlement Risks and Balancing and Settlement Code (BSC) Sections

Settlement Risk SR0024

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

Settlement Risk SR0025

'The risk that HHMOAs do not provide Meter Technical Details to the correct HHDCs resulting in Meter readings not being collected'

Settlement Risk SR0033

'The risk that old NHHMOAs do not send Meter Technical Details to the new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required'.

Settlement Risk SR0034

'The risk that old HHMOAs do not send Meter Technical Details to the new MOAs resulting in new MOAs not having the Meter Technical Details for the Metering Systems to send on or use as required'.

BSC Section L Metering

- 2.4 Meter Technical Details states;
 - 2.4.1 The Registrant of each Metering System shall, in accordance with the relevant BSC Procedures:
 - (a) establish and maintain Meter Technical Details in respect of the Metering Equipment;
 - (b) ensure that such Meter Technical Details are true, complete and accurate;
 - (c) provide such Meter Technical Details to the CDCA or (as the case may be) to the relevant Data Collector

BSCP514, SVA Meter Operations for Metering Systems Registered in SMRS

- 5.2.1 Change of HHMOA (No Change of Metering System or Change of Supplier)
- 5.2.4 Concurrent Change of Supplier and HHMOA (No change to Metering System)
- 6.2.1 Change of NHHMOA (No change of Metering System or Change of Supplier)
- 6.2.4 Concurrent Change of Supplier and NHHMOA

